

ISOLAB

Laborgeräte GmbH

one stop shopping
for laboratories



2016 - 2017



Dear customer,

We have prepared a “colorful” and “cheerful” catalogue supported by perfect products. We are proud to deliver our new catalogue to you.

Best regards, ISOLAB family...

What have we done in the new catalogue? We have added hundreds of new products that were delicately selected to ease your daily work.



We have categorized the products according to their subjects and created visual differences by using different colors among sections.

We have targeted easy and fast access to products by creating a new index according to catalogue numbers beside the standard product index.



More importantly, we have started and almost finished working on a new product range (laboratory fine chemicals) under ISOLAB brand.

22 years
of
enthusiasm

The larger picture becomes different on the basis of on the angle which we look from.

For us, the only invariable in this picture is quality.

No matter how time may shape us, our product quality, service quality, man-force quality, and management quality will never change.



Our compass always directs us to perfection.

German sensibility and perfectionism are two important components of our entire business life.

Our main rule is to deny the word "impossible". We have no place in our vocabulary such as "impossible".

In contrast, we have opportunity, solution, flexibility.

"There is always a way out" for those who want success as much as we do.



We consider our customers as the sole judge in this game that we have been playing with enthusiasm.

Customer satisfaction is the only criteria that determine our victory.



Beginning with our first step up to today, we wanted the word “trust” to gleam immediately next to our name. And it is actually what happened.

Our belief is that everything starts with trust, and the way something starts, it is bound to go on the same way.

We embrace evolution.
We escalate our operation capacity in order to advance one step further.

The essential part of this is technology.
We have never fallen behind in technology required by time.

At our each and every step, we use top level technology.



It is our sincere belief that we were all born from the same mother.

We are always respectful to the mother nature, to the environment and the world we live in.

We know that there isn't a more valuable heritage that we can leave for the future generations.

For many years now, we have been working for science extending beyond boundaries.

We have been successfully exporting to 79 countries in the world.



highlights

plastic injection production



ISOLAB is also a well known plastic labware manufacturer. Latest technologies approved production techniques and high capacity machinery park are held to serve the best **sterile** and **non sterile** products.

ISOLAB plastic production consists of experienced staff, high capacity injection moulding technology and premium grade raw material. Most of the ISOLAB plastic products are certified with **CE - Invitro Diagnostic Directive**, council directive 98/79/EC, concerning in vitro diagnostic instruments.

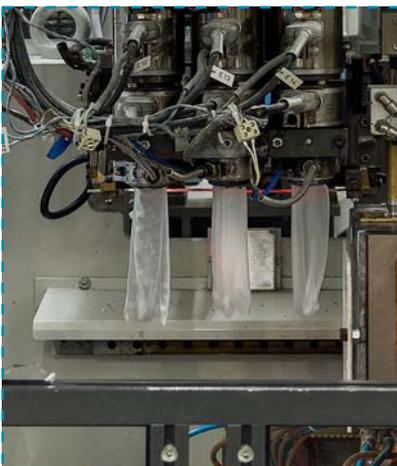
Raw materials are carefully chosen according to their **MFI** (melt flow index) value, **OIT** (oxidative induction time) value, density and humidity.

All plastic injection process is held environmentally friendly machines which use natural sources at a very minimum level.

All European made moulds and auxiliary equipment provide high quality products and fast service for customers.

highlights

plastic blowing production



Thanks to the latest technology, ISOLAB became one of the best Plastic Blowing Producer in labware industry.

Fully automated blowing machines, European made moulds and auxiliary, Premium grade raw material and experienced staff, provide a stable and seamless labwares, such as; bottles, pipettes etc.

ISOLAB is using very sensitive control units, such as patented parison controls from 300 different points.

This helps to control the wall thickness in all sections of a product and resulting a continuous quality level.

Proposed in a wide range of products, ISOLAB blow molding production covers a variety of labwares from bottles to containers, blown from approved polyolefins.

plastic sterile production



ISOLAB sterile production plants are well equipped clean rooms with **HEPA filters** and positive pressure areas which are supplied with air locked doors.

Clean rooms are validated according to international **DIN** and **ISO** standards.

In order to avoid any contamination through human contact, the entire process is automated.

Raw material is automatically fed from silos to moulding machines, through vacuum loaders.

The moulding machines are automatically connected to loading machines. The entire machinery is constantly monitored by advanced software.

Clean room staff is equipped with appropriate, protective clothes, in order to diminish the contamination risks.

quality control & certification

The biotech industry needs certification for the plastics they use. The market trends indicate a need for **DNase**, **RNase** and **pyrogen-free** products.

ISOLAB **certified plastics** are a result of an ongoing quality control process.

The process begins with the inspection of raw materials to monitoring the final product and ends with testing each lot after production for contaminants.

ISOLAB laborgeräte GmbH **DNase/RNase CERTIFIED**

Testing protocols used in ISOLAB Quality Assurance material specs & pressure test

Tubes are manufactured from virgin Polypropylene; caps are manufactured from virgin high density Polyethylene. Raw materials are heavy metal free (acc. to CONEG reg.) color concentrate and meet USP and Class VI requirements for plastic containers and closures. Product design has successfully passed the 50 kPa (14 psi) pressure test as referenced in the IATA dangerous goods regulation. This product lot has been gamma irradiated and dosimetrically released based on the sterilization of healthcare requirements with sterility assurance level of SAL 10⁻⁵.

Endotoxin (Pyrogen) & RNase/DNase testing

Products have been tested and have met the criteria established in ANSI/AAMI ST 72:2002(R) 2010: bacterial Endotoxins – Test methodologies, routine testing and alternative to batch testing with results less than 0.1 EU/ml. Products in this pack have also been tested and are free of any detectable RNase/DNase contamination. This production lot has been sampled and tested in accordance with standard operating procedures and has been released by quality assurance with the following characteristics

Product sterilization

Manufactured at a class 10,000 sterile room under germ-free aseptic conditions and then re-sterilized by gamma radiation. This product lot has been gamma irradiated (in a dosage level range between 12-25 kGy) and dosimetrically released based on the sterilization of healthcare requirements with sterility assurance level of SAL 10⁻⁵.

Endotoxin (Pyrogen) detection

Samples are extracted in endotoxin-free water and tested for endotoxins using the kinetic turbidimetric method of the Limulus Amoebocyte Lysate (LAL) test according to the USP standard with minimum detection level 0.05 EU/ml.

Nuclease detection

Samples are flushed in 20µl vessel containing 1µl of 7.5 kb Poly(A)-tailed RNA with a buffer containing NaCl and MgCl₂. Reaction later been incubated (1 hour / 37 °C) then visualized in an agarose gel. The final results are then compared to negative and positive controls. The resulting reaction must not show any level of degradation of the DNA and RNA fragments.

DNA contamination

Samples are extracted with sterile, DNA-free water. A portion of extract is added to a PCR reaction containing thermostable polymerase, a primer set to amplify a mammalian gene, and dNTPs. Negative control reactions and positive control reactions (containing 1 picogram of Human Genomic DNA) are also created. All reactions are thermocycled for 40 cycles, after which the results are visualized by agarose gel electrophoresis. The absence of PCR signal in the sample reactions indicates the product is free of DNA contamination.

ISOLAB laborgeräte GmbH **DNase/RNase CERTIFIED**

CERTIFICATE of COMPLIANCE and "BioClean" QUALITY

Product Name	
Catalog Number	
Product Lot No	
Material Used	
Production Date	
Expiration Date	

This package contains a **gamma irradiated** high quality product manufactured in a PCR-clean and germ-free Class 10,000 clean room (according to U.S. Federal Standard 209D) environment.

This certificate is issued to confirm that this lot of products had been manufactured and tested under a registered and audited ISO 9001 quality system and conforms the below mentioned material specs and passed all tests successfully.

Test Procedure	Results
Leak Test	Pass
Centrifuge Test	Pass
Visual attributes	Pass
Packaging	Pass
Endotoxin - Pyrogen	Free
Human DNA - DNase	Free
RNase - PCR inhibitor	Free

ISOLAB laborgeräte GmbH **DNase/RNase CERTIFIED**





The enthusiasm of our business is continuously increasing.

Laboratory chemicals have been added into our portfolio of products. In this way, we have completed the third leg of the tripod.

We are proud to present our products in a triplet as laboratory materials, instruments and chemicals.

We are aware of the trust you put in us. We promise to never break that trust.

We are thankful in advance for the trust and support you will put in us.



“Quality” is our absolute standard. The direction of our compass shows allways to quality and presicion.

We always trust in our brand and to our quality.

We promise to change any ISOLAB-branded chemical with any other brand at your will.



Our new products (laboratory chemicals and reagent) are allways under ISOLAB brand quality assurance.

The price & quality ratio is perfect as usual. 😊

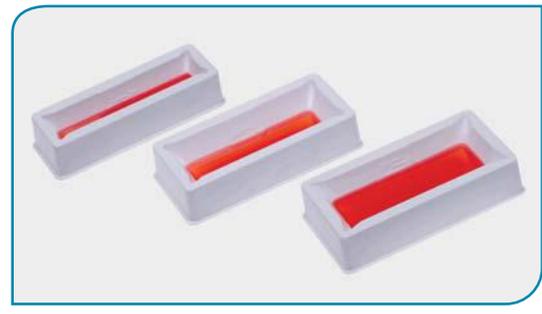
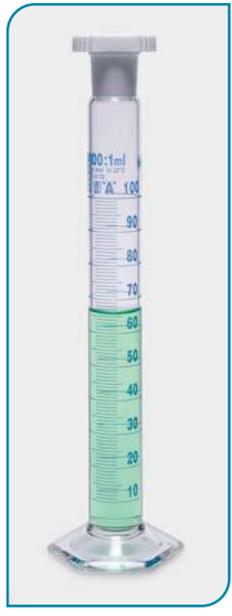
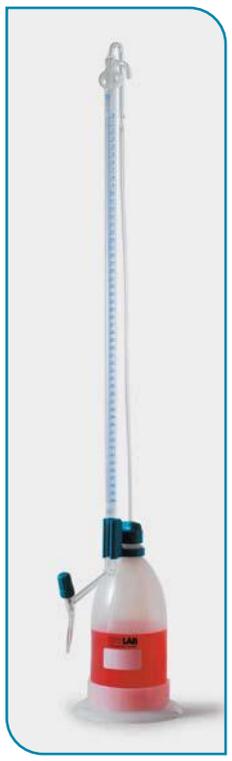
We will offer top quality laboratory chemicals with the most affordable prices.



ISOLAB
Laborgeräte GmbH



*volumetric measurement
& liquid handling*



volumetric measurement & liquid handling

blank production



State of the art automatic welding and attaching machines are used for connecting the glass parts to each other.

ISOLAB is one of the few manufacturers that produces its own blank products.

Glass tubes are blown by highly skilled blowers to ensure the uniform wall thickness, exact shape and dimensions according to DIN standards.

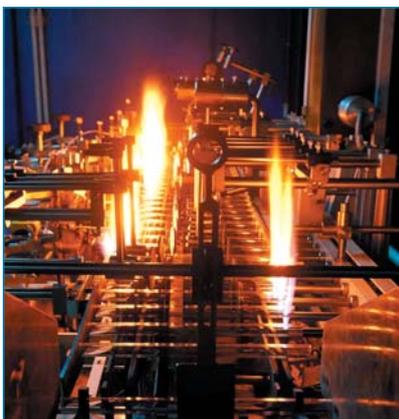
After rigorous controls, all blanks are sent to tunnel furnaces where the stress on the blanks is eliminated under controlled heating and cooling process.

This process ensures the optimum mechanical stability and inhibits the effect of temperature fluctuations.



Glass tubes are blown by highly skilled blowers to ensure the uniform wall thickness, exact dimensions according to DIN standards.

joint production



All joints are manufactured by automatic forming machines for consistent quality and guaranteed uniformity.

ISOLAB manufactures all joints with automatic machines with guaranteed uniformity.

During the grinding process, only diamond tools are used to ensure perfect results.

The taper of the joints are tested with precise taper angle control machine to ensure the taper quality.

This process ensures ending up with accurately tapered, smoothly finished, absolutely leak-proof and interchangeable ground joints

The tightness also tested with vacuum test machines.



Grinding steps are performed by diamond reamers assuring best results with highest precision.

calibrated tubing production



Glass tubings are slowly and gradually heated up to half-melting level. Then they are shrunk around steel rods with precise diameter.

Most of the burette manufacturers use ordinary tubings which are more tolerant in terms of wall thickness and inside diameter.

ISOLAB burette tubings are manufactured by using vacuum technology to maintain inside diameter of the burette tubings uniform all over their length.

First tubings are slowly and gradually heated up to half-melting level.

Then they are shrunk around steel rods with precise diameter under vacuum condition for uniform wall thickness and diameter.



Burette tubings are manufactured by using vacuum technology to maintain diameter of the burette tubings uniform all over their length.

volumetric measurement & liquid handling

printing process

ISOLAB uses the most advanced printing machines for achieving the highest printing quality.

These machines guarantee high contrast and sharp printing providing precise reading.

All used screen stencils are stretchable.

The stretchable screen stencils easily stretched to match the calibration marks so that the volume precision is maintained at all volume levels.

Specially formulated blue, white or amber colored enamels are used during printing process.



Only high contrasted and fine printing allows precise reading of scaled products such as cylinders, burettes, pipettes etc.

ISOLAB **A** In 20°C **2000 ml** **0.000** **MS 2832-8080 3.3** **DE-M 16**

According to DIN standards the information listed hereunder is required to be printed on the bodies of products.

- Brand name
- Nominal capacity
- Class degree
- Calibration temperature
- Matching standards
- Possible error limits
- Batch numbers
- Production date
- Warnings, etc

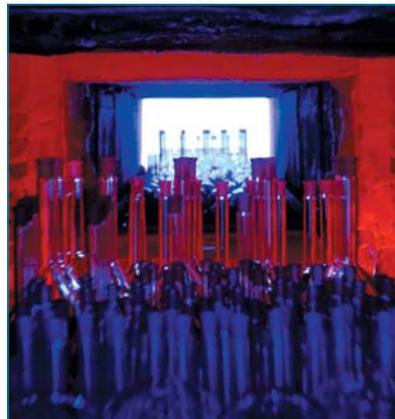
annealing process

Furnacing process is the last step to reach a perfect product.

In order to achieve, stress-free products with highest level of printing quality precise controlled gradual heating and cooling is essential.

At **ISOLAB**, all heating and annealing steps are carried with state-of-art temperature controlled tunnel furnaces.

For these reasons all **ISOLAB** glassware are stress-free, mechanically strong and ever lasting printed.



In order to achieve the best results, the furnace has a precise temperature control all-over the thermal heating zone



Furnace is entirely controlled by electronic panel for guaranteed temperature control at all steps.

packing process

ISOLAB is perfectly aware that the products used in laboratory should be very clean and excellently packed.

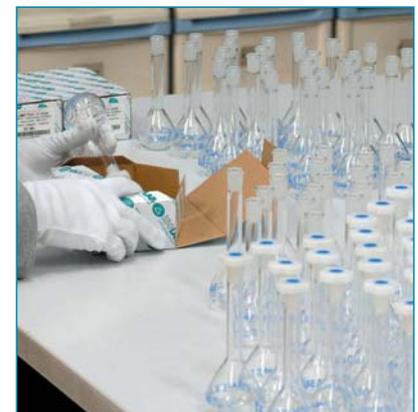
All glassware are washed in industrial scale ultrasonic cleaning machines for removing all the dirt and left over particles.

Our staff responsible for the final quality control of the packaging is extremely qualified and well experienced.

High quality packing materials are used to ensure break-free delivery of the products.



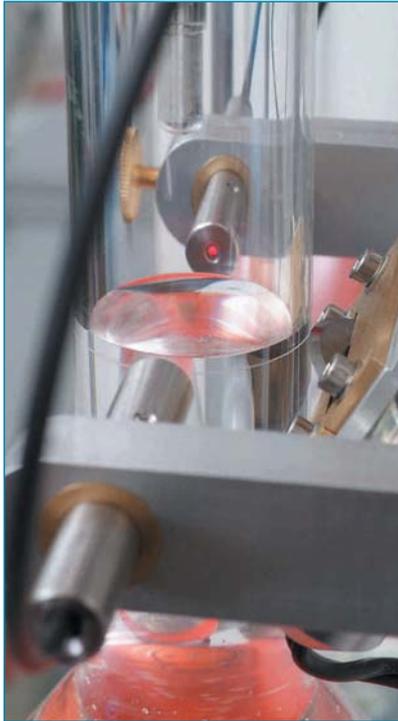
Modern industrial scale ultrasonic cleaning machines guarantees perfect removal of all remaining dirt and particles.



The final step of the packing is also the final step of quality control process.

volumetric measurement & liquid handling

calibration



Meniscus is determined automatically at the exact lowest level by a laser beam.

Manual calibration done by an operator carries high risk of mistakes and not reliable.

All calibration steps are carried out with fully automatic robots.

These robotic machines guarantees the highest level of precision and accuracy.

Although during the calibration process the room temperature environment is kept stable at 20°C any slight change in the room temperature is automatically compensated by the machines.

Meniscus is automatically determined at the exact lowest level by a laser beam.

Application of the meniscus ring line is done by stretching the glass surface for longer persistence with the help of a diamond tool. Later the stretched ring line is stained with either blue or white enamel paint for easy observation of meniscus line.



Filling the blank products with water is done automatically by the calibration machines.

quality control



Steps such as filling the water, finding the meniscus line and controlling the volume are done automatically.

Manual quality control of volumetric products is also very complex and time consuming. Also, manual quality control done by an operator carries high risk of mistakes and is not reliable.

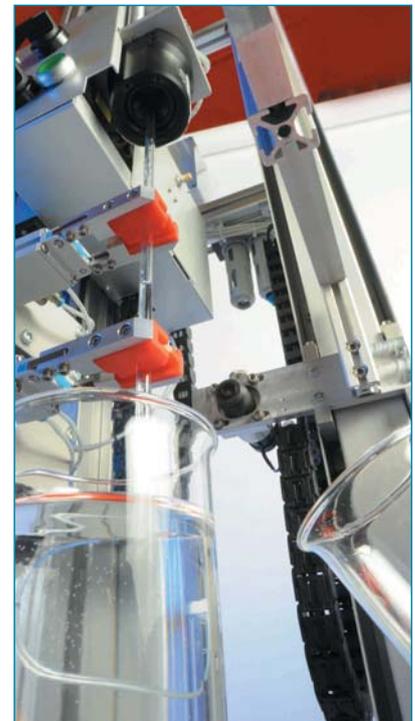
In order to avoid above mentioned risks and to achieve the best reliable results quality control steps are carried out with fully automatic robots which are only used by very few selected manufacturers.

Quality control robot is featured with a high resolution camera and image processing system for the most precise meniscus level control.

Steps such as filling the water, finding the meniscus line and controlling the volume are done automatically.

The balances and the electronic calibrated thermometers are in-line connected to the system for online data transfer.

The operator simply mounts the volumetric glass to the quality control robot and waits for the precision guaranteed outcome.



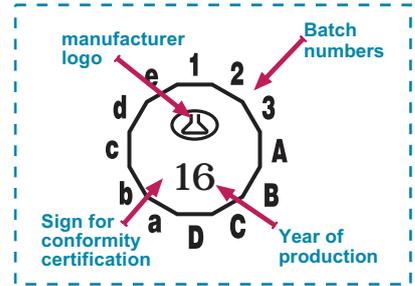
The operator simply mounts the volumetric glass to the quality control robot and waits for the precision guaranteed outcome.

“**Conformity**” is the compliance of the product with the exact and legal standards defined by German Federal Weights and Measures (Eichordnung) Regulation

The “conformity testing and certification” is described in detail on **DIN 12600** standard.

According to German law of metrology, only listed accredited manufacturers such as **ISO LAB** with a guaranteed quality assurance are allowed to certify the conformity by printing the conformity logo (**DE-M**) on self manufactured volumetric products.

The manufacturers logo should also be printed along with the conformity logo. We are very proud of having this logo printed on our related products as a guarantee of conformity according to **DIN 12600** standard starting from day one.



“**Batch certificate**” shows the determined mean value of the controlled standard deviation and tolerance of volumetric products batch to batch.

After the production of each batch, the mandatory minimum quantity is randomly tested and certified according to **DIN 12600** standard.

The “**batch certificate**” comprises the date of production, mean value, standard deviation, permitted tolerance and other information.

By tracking the batch number user can reach the related batch certificate.

Batch numbers and related certificates can be downloaded from our **ISO LAB** web site. Users can print the “**batch certificate**” online with the following steps:

- For downloading the certificate please enter www.isolab.de web site, and
- select “downloads/support” from the menu ➤ select the product code number from “obtain certificates” section ➤ select the batch number printed on the body ➤ certificate page comes automatically ➤ print the page by selecting “printer version” on the left corner.



An “**individual quality certificate**” can also be issued for volumetric products.

“**Quality certificate**” shows the final and ultime tested factors of the volumetric products.

Such a certificate is always well accepted worldwide since it should be prepared by a worldwide accredited test laboratory.

The selected product is individually tested in the most precise way and controlled as defined by German Federal Weights and Measures (Eichordnung) Regulation and according to **DIN 12600** standard.

Individually prepared and printed quality certificate comprising the date of production, mean value, standard deviation, permitted tolerance and other informations.



volumetric measurement & liquid handling

classification

All volumetric products are always calibrated as **to contain (In)** or **to deliver (Ex)**.

They are classified in two groups; **Class "B"** or **Class "A"** or **"AS"**.

Class "A" and **"AS"** carries exactly the same error and tolerance limits.

The difference is in their "delivery" and "waiting times". "S" means quick (swift) delivery.

The classification as **"A"** or **"B"** indicates the degree of accuracy of related parameters.

Class "A" or **"AS"** volumetric products carries highest level of accuracy and specially well accepted by laboratories looking for quality.

The error limits, accuracy and variations are always according to related **ISO** or **DIN** standard limits.

delivery time

Delivery time is the time needed to deliver the liquid from the starting level to the final level.

For burettes and pipettes final level is generally the tip of the product.

waiting time

The waiting time starts after complete transfer is finalised.

After the transfer of the liquid usually liquid continues to flow down from the burette or pipette wall.

For accurate volume measurement attention must be paid to the waiting time.

Specially with pipettes the residual drop accumulated at the tip should be considered.

meniscus line

A simple definition of meniscus is the curve on the surface of the liquid.

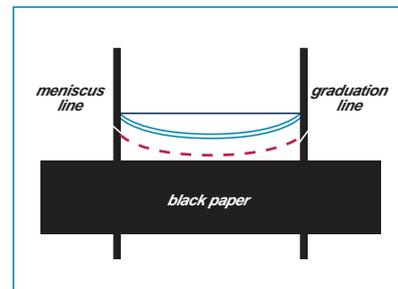
According to **DIN, ISO** and most other standards volume should be read at the lowest liquid level.

The lowest level of the meniscus has to touch the upper edge of the graduation mark.

On the volumetric glassware the form of the meniscus is concave.

For the exact and most precise results, the eye of the observer must be exactly at the same level of meniscus line.

To have a better, faster and more accurate reading and measurement, a black strip should be held at the back side, just below of the graduation mark and meniscus line.



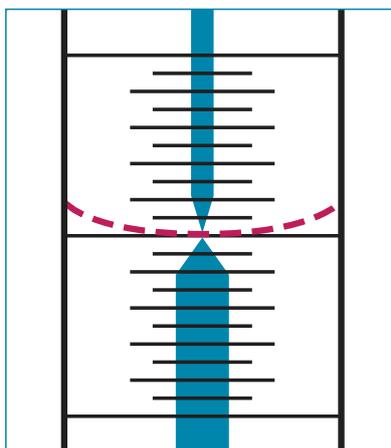
schellbach stripe

The schellbach stripe is a narrow blue band which takes place at the center of a wider white band on the burette tube background.

Mostly printed at the backside of the burette tube for easier observation of meniscus line.

The penetrated light fraction two arrow head points that appear at the meniscus line.

Exact meniscus line is exactly where two arrow heads touch each other.



volumetric measurement & liquid handling

how to use volumetric flasks

- Volumetric flasks are mainly used for preparation of highly accurate solutions.
- First add the exact weight of the product inside the flask. Fill the flask about half the volume and mix the content.
- Then fill again until the level reaches a bit lower than calibration ring mark.
- Adjust the temperature of flask and the content to 20°C.
- Add a little more liquid so that the meniscus will be exactly at the same level of the ring mark.
- Pay attention to read the meniscus at the eye level also not to wet the inner neck wall above the ring mark.

how to use measuring cylinders

- Cylinders are mainly used for the exact measurement of liquid volumes.
- First fill the cylinder with liquid and wait until the residual liquid on the wall will filter down.
- Then read the volume level from the cylinders volume graduation chart.
- Pay attention to read the volume level at the eye level. Do not wet the inner neck wall above the calibration mark.

how to use mixing cylinders

- Mixing cylinders are mainly used for the exact measurement of liquid volumes.
- First fill the cylinder with liquid and wait until the residual liquid on the wall will filter down.
- Then read the volume level from the cylinders volume graduation chart.
- Later add the precise weight of the substance and dissolve it by shaking the cylinder.

how to use burettes

- Fill the burette a bit higher than the "0" level.
- To activate the stopcock, drain the solution but never below the "0" mark.
- Pay attention there will be no air bubbles left in the burette.
- Fill more solution above 10 mm of the "0" mark. Do not wet the burette wall above the liquid level.
- By focusing the meniscus at eye level drain the solution to the exact "0" mark.
- Wipe off the drops at the stopcock tip and slowly start the titration. When color changes stop the titration and wait for the 30 seconds.
- Wipe off the remaining drop since this is also the part of the measured volume.

how to use pipettes

- Fill the liquid max 5 mm above the volume mark. Wipe off the outer surface of the pipette.
- Hold the pipette at eye level and place the tip to the wall of a beaker with a slight angle.
- Discharge the access volume until the meniscus reaches the calibration mark.
- When the level of the liquid reaches to the tip wait according to waiting time.
- When the waiting time is over, wipe the tip gently pulling upwards on the beaker wall and transfer the liquid.
- If there is still any residual liquid left in the tip, never blow out.

how to use density bottles

- Carefully weigh the empty and well dried density bottle.
- Fill the bottle up to 2/3 of the neck level while avoiding air bubbles.
- Adjust the bottle temperature to 20°C in a thermostatic bath. Insert the stopper of the bottle carefully. The capillary of the stopper will discharge the liquid.
- Dry the body of the bottle and the stopper carefully by wiping with a tissue paper. Pay attention not to remove any liquid from the capillary tube.
- The liquid inside of the bottle should exactly be at the same level with the upper end of the capillary tube.
- Final step is weighing the filled density bottle and calculating the density.



VOLUMETRIC FLASKS - "glass" - "clear" - "class A"

- Manufactured from borosilicate 3.3 glass according to DIN EN 1042 and DIN 12664-2 standards.
- Calibrated according to DIN/ISO Class "A" standard.
- Featured with a ("H" / "DE-M") conformity mark according to German federal weights and measures regulations.
- Individual calibration carried out by automatic robots eliminate possible deviations from nominal values.
- Conformity mark and batch number printed on the body surface. Batch certificate can be downloaded from the website.
- Inscriptions on the flask body are printed with blue enamel.
- Diamond grinded meniscus ring mark offers longer persistence.
- Blue colored meniscus ring mark enables easy observation of meniscus level.
- Supplied with a leak-proof P.P stopper which ensures perfect closure.

catalogue number	volume	neck NS size	pack quantity
013.01.005	5 ml	10/19	2 pieces
013.01.010	10 ml	10/19	2 pieces
013.01.020	20 ml	10/19	2 pieces
013.01.025	25 ml	10/19	2 pieces
013.01.026	25 ml	12/21	2 pieces
013.01.050	50 ml	12/21	2 pieces
013.01.051	50 ml	14/23	2 pieces
013.01.100	100 ml	12/21	2 pieces
013.01.101	100 ml	14/23	2 pieces
013.01.150	150 ml	14/23	2 pieces
013.01.200	200 ml	14/23	2 pieces
013.01.250	250 ml	14/23	2 pieces
013.01.300	300 ml	14/23	2 pieces
013.01.400	400 ml	19/26	2 pieces
013.01.500	500 ml	19/26	2 pieces
013.01.901	1000 ml	24/29	2 pieces
013.01.902	2000 ml	29/32	2 pieces
013.01.905	5000 ml	34/35	1 piece
013.01.910	10000 ml	45/40	1 piece

150, 300, 400 and 10000 ml are in addition to DIN range.



Alternative to supplied P.P stopper a glass stopper can be selected from catalogue page 106.



VOLUMETRIC FLASKS - "glass" - "amber" - "class A"

- Manufactured from borosilicate 3.3 glass according to DIN EN 1042 and DIN 12664-2 standards.
- Calibrated according to DIN/ISO Class "A" standard.
- Featured with a ("H"/"DE-M") conformity mark according to German federal weights and measures regulations.
- Individual calibration carried out by automatic robots eliminate possible deviations from nominal values.
- Conformity mark and batch number printed on the body surface. Batch certificate can be downloaded from the website.
- Inscriptions on the flask body are printed with white enamel.
- Diamond grinded meniscus ring mark offers longer persistence.
- White colored meniscus ring mark enables easy observation of meniscus level.
- Supplied with a leak-proof P.P stopper which ensures perfect closure.

catalogue number	volume	neck NS size	pack quantity
014.01.005	5 ml	10/19	2 pieces
014.01.010	10 ml	10/19	2 pieces
014.01.020	20 ml	10/19	2 pieces
014.01.025	25 ml	10/19	2 pieces
014.01.026	25 ml	12/21	2 pieces
014.01.050	50 ml	12/21	2 pieces
014.01.051	50 ml	14/23	2 pieces
014.01.100	100 ml	12/21	2 pieces
014.01.101	100 ml	14/23	2 pieces
014.01.200	200 ml	14/23	2 pieces
014.01.250	250 ml	14/23	2 pieces
014.01.500	500 ml	19/26	2 pieces
014.01.901	1000 ml	24/29	2 pieces
014.01.902	2000 ml	29/32	2 pieces



Alternative to supplied P.P stopper a glass stopper can be selected from catalogue page 106.

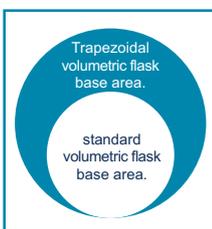


VOLUMETRIC FLASKS "trapezoidal" - "clear" - "class A"

- Manufactured from borosilicate 3.3 glass according to DIN EN ISO 1042 and DIN 12664-2 standards.
- Trapezoidal body form offers much higher stability and avoids fall over risk.
- Calibrated according to DIN/ISO Class "A" standard.
- Featured with a ("H"/"DE-M") conformity mark according to German federal weights and measures regulations.
- Except the body form all technical specifications are identical to classical form volumetric flasks.
- Supplied with a leak-proof P.P stopper which ensures perfect closure.

Small size flasks with standard body shape can fall over very easily due to their smaller center of gravity.

Trapezoidal volumetric flasks have at least twice base area for higher stability.



VOLUMETRIC FLASKS "trapezoidal" - "amber" - "class A"

- Manufactured from borosilicate 3.3 glass according to DIN EN ISO 1042 and DIN 12664-2 standards.
- Trapezoidal body form offers much higher stability and avoids fall over risk.
- Calibrated according to DIN/ISO Class "A" standard.
- Featured with a ("H"/"DE-M") conformity mark according to German federal weights and measures regulations.
- Except the body form all technical specifications are identical to classical form volumetric flasks.
- Supplied with a leak-proof P.P stopper which ensures perfect closure.

Small size flasks with standard body shape can fall over very easily due to their smaller center of gravity.

Trapezoidal volumetric flasks have at least twice base area for higher stability.



VOLUMETRIC FLASKS "P.P" - "clear" - "class B"

- Manufactured according to DIN EN ISO 1042 standard from polypropylene with thick walls that eliminates distortion and deformation.
- Featured with high transparency, best chemical and head tolerance.
- Calibrated according to DIN/ISO Class "B" standard.
- Inscriptions on the flask body are printed with blue enamel specially formulated for plastic surfaces.
- For consistent accuracy should not be used with liquids over 60°C or kept under direct sunlight for long periods.
- Supplied with a leak-proof P.P stopper which ensures perfect closure.

catalogue number	volume	neck NS size	pack quantity
013.13.001	1 ml	07/16	2 pieces
013.13.002	2 ml	07/16	2 pieces
013.13.003	3 ml	07/16	2 pieces
013.13.004	4 ml	07/16	2 pieces
013.13.005	5 ml	07/16	2 pieces
013.13.010	10 ml	10/19	2 pieces
013.13.020	20 ml	10/19	2 pieces
013.13.025	25 ml	10/19	2 pieces
013.13.050	50 ml	12/21	2 pieces

catalogue number	volume	neck NS size	pack quantity
013.15.001	1 ml	07/16	2 pieces
013.15.002	2 ml	07/16	2 pieces
013.15.003	3 ml	07/16	2 pieces
013.15.004	4 ml	07/16	2 pieces
013.15.005	5 ml	07/16	2 pieces
013.15.010	10 ml	10/19	2 pieces
013.15.020	20 ml	10/19	2 pieces
013.15.025	25 ml	10/19	2 pieces
013.15.050	50 ml	12/21	2 pieces

catalogue number	volume	neck NS size	pack quantity
014.03.025	25 ml	10/19	1 piece
014.03.050	50 ml	12/21	1 piece
014.03.100	100 ml	14/23	1 piece
014.03.250	250 ml	14/23	1 piece
014.03.500	500 ml	19/26	1 piece
014.03.901	1000 ml	24/29	1 piece



CYLINDERS - "measuring" - "glass" - "class A" - "tall form"

- Manufactured from borosilicate 3.3 glass according to DIN EN ISO 4788 standard.
- Calibrated according to DIN/ISO Class "A" standard.
- Featured with a ("H"/"DE-M") conformity mark according to German federal weights and measures regulations.
- Individual calibration carried out by automatic robots eliminate possible deviations from nominal values.
- Conformity mark and batch number printed on the body surface. Batch certificate can be downloaded from website.
- Inscriptions on the cylinder body are printed with blue enamel.
- Flawless spout design assures pouring without any drips.
- Hexagonal base with strengthened knobs ensures increased stability.

catalogue number	volume	pack quantity
015.01.005	5 ml	2 pieces
015.01.010	10 ml	2 pieces
015.01.025	25 ml	2 pieces
015.01.050	50 ml	2 pieces
015.01.100	100 ml	2 pieces
015.01.250	250 ml	2 pieces
015.01.500	500 ml	2 pieces
015.01.901	1000 ml	2 pieces
015.01.902	2000 ml	1 piece



Hexagonal base with strengthened knobs ensures increased stability.



Flawless spout design assures pouring without any drips.



CYLINDERS - "mixing" - "glass" - "class A"

- Manufactured from borosilicate 3.3 glass according to DIN EN ISO 4788 standard.
- Calibrated according to DIN/ISO Class "A" standard.
- Featured with a ("H"/"DE-M") conformity mark according to German federal weights and measures regulations.
- Individual calibration carried out by automatic robots eliminate possible deviations from nominal values.
- Conformity mark and batch number printed on the body surface. Batch certificate can be downloaded from website.
- Inscriptions on the cylinder body are printed with blue enamel.
- Hexagonal base with strengthened knobs ensures increased stability.
- Supplied with a leak-proof P.P stopper which ensures perfect closure.

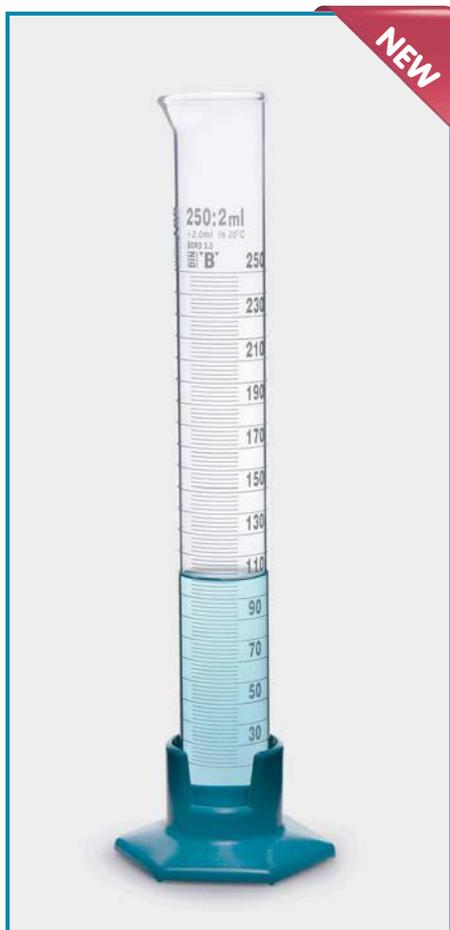
catalogue number	volume	pack quantity
016.01.010	10 ml	2 pieces
016.01.025	25 ml	2 pieces
016.01.050	50 ml	2 pieces
016.01.100	100 ml	2 pieces
016.01.250	250 ml	2 pieces
016.01.500	500 ml	2 pieces
016.01.901	1000 ml	1 piece



Alternative to supplied P.P stopper a glass stopper can be selected from catalogue page 106.



Hexagonal base with strengthened knobs ensures increased stability.



CYLINDERS - "measuring" "glass" - "class B" - "tall form"

- Manufactured from borosilicate 3.3 glass according to DIN/ISO Class "B" standard.
- Inscriptions on the cylinder body are printed with white enamel.
- Flawless spout design assures pouring without any drips.
- Thick and durable polypropylene base reduces the risk of breakage during use and cleaning.
- Base perfectly fits the cylinder body and can easily be dismantled.



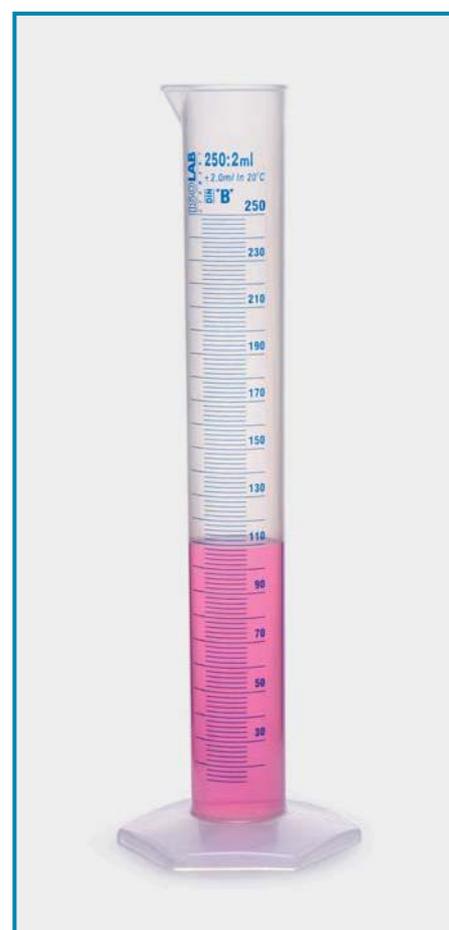
Polpropylene base perfectly fits the cylinder body and can easily be dismantled.

catalogue number	volume	pack quantity
016.07.010	10 ml	2 pieces
016.07.025	25 ml	2 pieces
016.07.050	50 ml	2 pieces
016.07.100	100 ml	2 pieces
016.07.250	250 ml	2 pieces
016.07.500	500 ml	2 pieces
016.07.901	1000 ml	2 pieces



CYLINDERS - "P.P." "class B" - "embossed scale"

- Manufactured according to DIN/ISO Class "B" standard from polypropylene with thick walls that eliminates distortion and deformation.
- Featured with high transparency, best chemical and remarkable heat tolerance.
- Calibrated according to DIN/ISO Class "B" standard.
- Flawless spout design assures pouring without any drips.
- Thick hexagonal base with strengthened knobs ensures increased stability.
- For consistent accuracy, should not be used with liquids over 60°C or kept under direct sunlight for long periods.
- Inscriptions and nominal values on the body are in embossed scale.



CYLINDERS - "P.P." "class B" - "blue print scale"

- Manufactured according to DIN/ISO Class "B" standard from polypropylene with thick walls that eliminates distortion and deformation.
- Featured with high transparency, best chemical tolerance and remarkable heat tolerance.
- Calibrated according to DIN/ISO Class "B" standard.
- Flawless spout design assures pouring without any drips.
- Thick hexagonal base with strengthened knobs ensures increased stability.
- For consistent accuracy, should not be used with liquids over 60°C or kept under direct sunlight for long periods.
- Inscriptions are printed with specially formulated blue enamel.

catalogue number	volume	pack quantity
016.06.010	10 ml	1 piece
016.06.025	25 ml	1 piece
016.06.050	50 ml	1 piece
016.06.100	100 ml	1 piece
016.06.250	250 ml	1 piece
016.06.500	500 ml	1 piece
016.06.901	1000 ml	1 piece

BURETTES - "straight" - "clear" - "class AS"



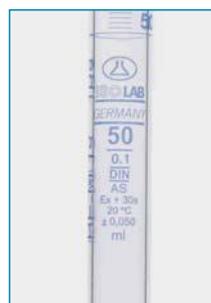
- Manufactured from pre-vacuum calibrated borosilicate 3.3 tubing according to ISO 385 standard.
- Calibrated according to DIN/ISO Class "AS" standard.
- Featured with a schellbach stripe for easier and accurate meniscus reading.
- Featured with a ("H" / "DE-M") conformity mark according to German federal weights and measures regulations.
- Individual calibration carried out by automatic robots eliminate possible deviations from nominal values.
- Conformity mark and batch number printed on the body surface.
- Batch certificate can be downloaded from the website.
- Supplied with an interchangeable PTFE stopcock which does not require greasing during cleaning.
- Inscriptions and nominal values are printed with blue enamel.



Supplied with an interchangeable PTFE stopcock which does not require greasing at all.

The unique form of stopcock guarantees the best drop control. Can be closed with a gentle turn and enables leak-proof closure.

Identical keys needs no "matching the pairs" during cleaning.



Inscriptions and nominal values are printed with blue enamel.

catalogue number	volume	pack quantity
017.02.010	10 ml	1 piece
017.02.025	25 ml	1 piece
017.02.050	50 ml	1 piece



BURETTES - "straight" - "clear" - "class AS" with "schellbach"

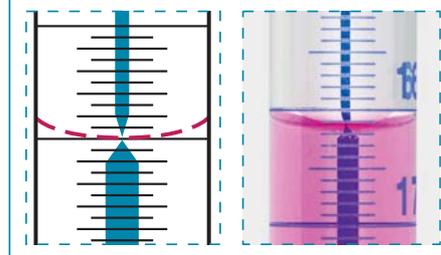
- Manufactured from pre-vacuum calibrated borosilicate 3.3 tubing according to ISO 385 standard.
- Calibrated according to DIN/ISO Class "AS" standard.
- Featured with a schellbach stripe for easier and accurate meniscus reading.
- Featured with a ("H" / "DE-M") conformity mark according to German federal weights and measures regulations.
- Individual calibration carried out by automatic robots eliminate possible deviations from nominal values.
- Conformity mark and batch number printed on the body surface.
- Batch certificate can be downloaded from the website.
- Supplied with an interchangeable PTFE stopcock which does not require greasing at all. Stopcock guarantees the best drop control. Identical keys needs no "matching the pairs" during cleaning.
- Inscriptions and nominal values are printed with blue enamel.

features of schellbach stripe

For easier reading the schellbach stripe is printed at the back wall side of the burette.

Featured with a narrow blue band which is at the center of the larger white band.

The light fraction creates two arrow head points which appear at the meniscus line level. Meniscus reading point is exactly where these two arrow heads meet each other.



catalogue number	volume	pack quantity
017.01.010	10 ml	1 piece
017.01.025	25 ml	1 piece
017.01.050	50 ml	1 piece

BURETTES - "straight" - "amber" - "class AS"

- Manufactured from pre-vacuum calibrated borosilicate 3.3 tubing according to ISO 385 standard.
- Calibrated according to DIN/ISO Class "AS" standard.
- Featured with a ("H"/"DE-M") conformity mark according to German federal weights and measures regulations.
- Individual calibration carried out by automatic robots eliminate possible deviations from nominal values.
- Conformity mark and batch number printed on the body surface.
- Batch certificate can be downloaded from the website.
- Supplied with an interchangeable PTFE stopcock which does not require greasing at all. The unique form guarantees the best drop control. Can be closed with a gentle turn and enables leak-proof closure. Identical keys needs no "matching the pairs" during cleaning.
- Inscriptions and nominal values are printed with white enamel.



Supplied with an interchangeable PTFE stopcock which does not require greasing at all.

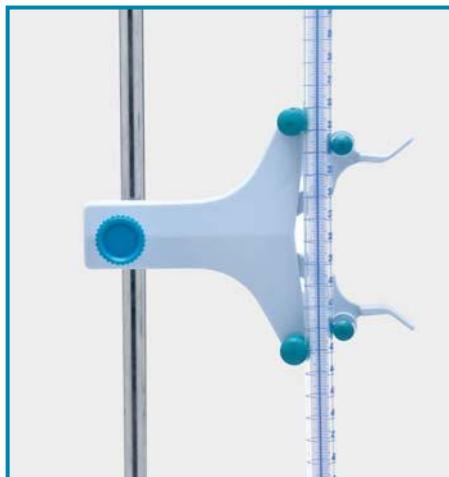
The unique form of stopcock guarantees the best drop control. Can be closed with a gentle turn and enables leak-proof closure.

Identical keys needs no "matching the pairs" during cleaning.



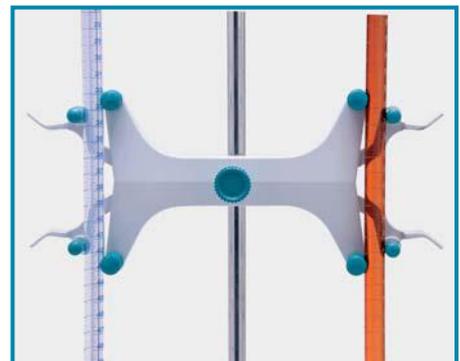
Inscriptions and nominal values are printed with white enamel.

catalogue number	volume	pack quantity
018.01.010	10 ml	1 piece
018.01.025	25 ml	1 piece
018.01.050	50 ml	1 piece



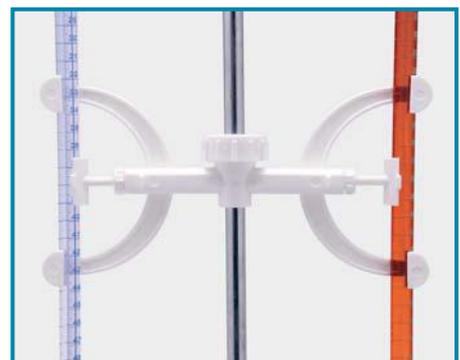
BURETTE CLAMPS "steel"

- Manufactured from steel to hold one or two straight burettes at a time.
- Unique design guarantees firm hold of the burettes and offers an un-interrupted easy observation of volume graduations.
- **Other technical specifications can be seen at catalogue page no 77.**



BURETTE CLAMPS "polypropylene"

- Manufactured from polypropylene to hold one or two straight burettes at a time.
- Unique design guarantees firm hold of the burettes and offers an un-interrupted easy observation of volume graduations.
- **Other technical specifications can be seen at catalogue page no 77.**



volumetric measurement & liquid handling



BURETTES - "automatic" - "clear" - "class AS" - "schellbach"

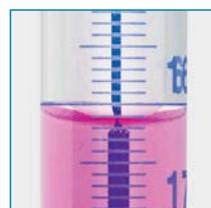
- Manufactured from pre-vacuum calibrated borosilicate 3.3 tubing according to ISO 385 standard.
- Calibrated according to DIN/ISO Class "AS" standard.
- Featured with a schellbach stripe for easier and accurate meniscus reading.
- Featured with a ("H" / "DE-M") conformity mark according to German federal weights and measures regulations.
- Individual calibration carried out by automatic robots eliminate possible deviations from nominal values.
- Conformity mark and batch number printed on the body surface.
- Batch certificate can be downloaded from the website.
- Featured with an intermediate PTFE stopcock for fast and accurate measurement.
- Supplied with a PTFE "needle" valve stopcock which does not require greasing at all.
- Inscriptions and nominal values are printed with blue enamel.



Supplied with a PTFE "needle" valve stopcock which does not require greasing at all. The unique "needle" key form guarantees the best drop control. Can be closed with a gentle turn and enables leak-proof closure.



Featured with an intermediate PTFE stopcock for reliable fast and accurate measurement.



Featured with a schellbach stripe for easier and accurate meniscus reading.

catalogue number	volume	pack quantity
019.01.010	10 ml	1 piece
019.01.025	25 ml	1 piece
019.01.050	50 ml	1 piece

Supplied without bottle and bellow



BURETTES - "automatic" - "amber" - "class AS"

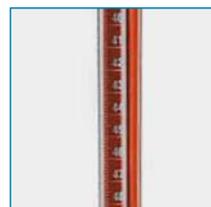
- Manufactured from pre-vacuum calibrated borosilicate 3.3 tubing according to ISO 385 standard.
- Calibrated according to DIN/ISO Class "AS" standard.
- Featured with a ("H" / "DE-M") conformity mark according to German federal weights and measures regulations.
- Individual calibration carried out by automatic robots eliminate possible deviations from nominal values.
- Conformity mark and batch number printed on the body surface.
- Batch certificate can be downloaded from the website.
- Featured with an intermediate PTFE stopcock for fast and accurate measurement.
- Supplied with a non-greasing PTFE "needle" valve stopcock which does not require greasing at all.
- Inscriptions and nominal values are printed with white enamel.



Supplied with a PTFE "needle" valve stopcock which does not require greasing at all. The unique "needle" key form guarantees the best drop control. Can be closed with a gentle turn and enables leak-proof closure.



Featured with an intermediate PTFE stopcock for reliable fast and accurate measurement.



Inscriptions and nominal values are printed with white enamel.

catalogue number	volume	pack quantity
019.05.010	10 ml	1 piece
019.05.025	25 ml	1 piece
019.05.050	50 ml	1 piece

Supplied without bottle and bellow

BURETTES - "Schilling" - "clear" - "class AS" - "schellbach"



- Manufactured from pre-vacuum calibrated borosilicate 3.3 tubing according to ISO 385 standard.
- Calibrated according to DIN/ISO Class "AS" standard.
- Featured with a schellbach stripe for easier and accurate meniscus reading.
- Featured with a ("H"/"DE-M") conformity mark according to German federal weights and measures regulations.
- Individual calibration carried out by automatic robots eliminate possible deviations from nominal values.
- Conformity mark and batch number printed on the body surface.
- Batch certificate can be downloaded from the website.
- Supplied with a PTFE "needle" valve stopcock which does not require greasing at all. The unique "needle" key form guarantees the best drop control. Can be closed with a gentle turn and enables leak-proof closure.
- Inscriptions and nominal values are printed with blue enamel.

features of Schilling burettes

Schilling burettes are described as an alternative automatic burette specially suitable for field analysis where there is always a risk of breakage.

Schilling burette set consists of a burette tubing similar to glass automatic burette and a polyethylene reservoir bottle with a stabilising stand.

Offers a rapid filling by squeezing the polyethylene reservoir bottle and fast titration through valve stopcock.



Supplied with a PTFE "needle" valve stopcock which does not require greasing at all.

The unique "needle" key form guarantees the best drop control.

Can be closed with a gentle turn and enables leak-proof closure.

catalogue number	volume	pack quantity
020.03.010	10 ml	1 piece
020.03.025	25 ml	1 piece
020.03.050	50 ml	1 piece

BURETTES - "Schilling" - "amber" - "class AS"



- Manufactured from pre-vacuum calibrated borosilicate 3.3 tubing according to ISO 385 standard.
- Calibrated according to DIN/ISO Class "AS" standard.
- Featured with a ("H"/"DE-M") conformity mark according to German federal weights and measures regulations.
- Individual calibration carried out by automatic robots eliminate possible deviations from nominal values.
- Conformity mark and batch number printed on the body surface.
- Batch certificate can be downloaded from the website.
- Supplied with a PTFE "needle" valve stopcock which does not require greasing at all. The unique "needle" key form guarantees the best drop control. Can be closed with a gentle turn and enables leak-proof closure.
- Inscriptions and nominal values are printed with white enamel.

features of Schilling burettes

Schilling burettes are described as an alternative automatic burette specially suitable for field analysis where there is always a risk of breakage.

Schilling burette set consists of a burette tubing similar to glass automatic burette and a polyethylene reservoir bottle with a stabilising stand.

Offers a rapid filling by squeezing the polyethylene reservoir bottle and fast titration through valve stopcock.



Supplied with a PTFE "needle" valve stopcock which does not require greasing at all.

The unique "needle" key form guarantees the best drop control.

Can be closed with a gentle turn and enables leak-proof closure.

catalogue number	volume	pack quantity
020.05.010	10 ml	1 piece
020.05.025	25 ml	1 piece
020.05.050	50 ml	1 piece

volumetric measurement & liquid handling



BOTTLE - "burette" - "clear"

- Manufactured from thick glass to be used with automatic burettes.
- Grinded neck with NS 29/32 socket size perfectly fits to burette's cone.

catalogue number	bottle volume	pack quantity
020.07.010	2000 ml	1 piece



BOTTLE - "burette" - "amber"

- Manufactured from thick glass to be used with automatic burettes.
- Grinded neck with NS 29/32 socket size perfectly fits to burette's cone.

catalogue number	bottle volume	pack quantity
020.07.025	2000 ml	1 piece



BELLOW - "for aut. burettes"

- Manufactured from best quality of natural rubber.
- Tube diameter perfectly fits to the air intake connector of the automatic burette.

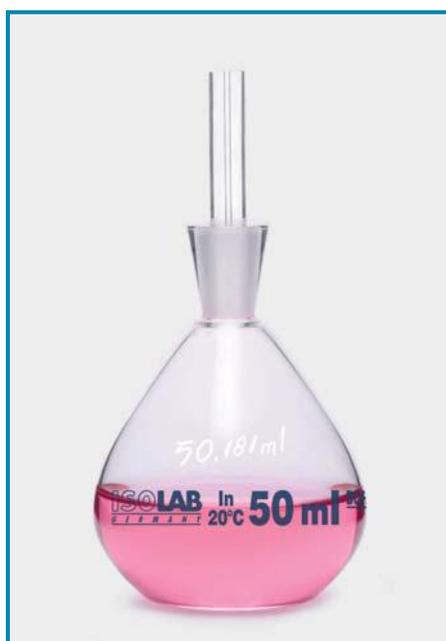
catalogue number	bulb type	pack quantity
020.08.001	single	1 piece



DENSITY BOTTLES "non - calibrated"

- Manufactured according to ISO 3507.
- For easy differentiation, both the body and the stopper carries the same identification code number.
- Featured with a stopper with excellently polished upper and lower ends.
- Nominal volume and inscriptions are printed with blue enamel.

Other technical specifications can be seen at catalogue page no 204.



DENSITY BOTTLES "calibrated"

- Manufactured according to ISO 3507.
- For easy differentiation, both the body and the stopper carries the same identification code number.
- Calibrated with a precision of 0,001 ml. Net volume is engraved on the body.
- For easy differentiation both the body and the stopper carries the same identification code number.

Other technical specifications can be seen at catalogue page no 204.

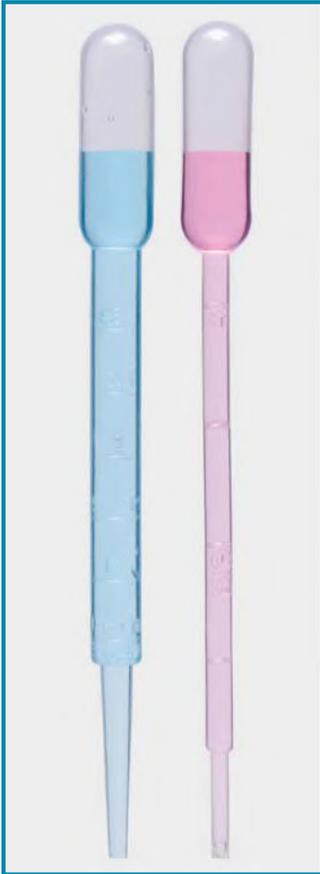


DENSITY BOTTLES "calibrated with thermometer"

- Manufactured according to ISO 3507.
- Featured with a thermometer of scale range +10°C to +40°C, with scale 0,5°C.

Other technical specifications can be seen at catalogue page no 204.

PIPETTES - "pasteur" - "polyethylene"



- Manufactured from low density polyethylene as an alternative to glass pasteur pipettes. No danger breakage with the risk of infectious material escape.
- Ideal for transferring and dispensing liquids safely in all types of laboratories eliminating the risk of cross contamination.
- The low affinity of the surface reduces the loss of cells and valuable proteins through binding.
- Long and flexible stem can be bent to draw liquids from narrow and small size vessels.
- Clearly visible volume level by external embossed graduation marks on the body.
- Uniform wall thickness guarantees uniform suction force at all times and offers reproducible drop sizes for each use.

➤ Pipette bulb requires very small pressure force for application and eliminates the risk of cross contamination.

➤ Alternative 2 products: ➤ non-sterile pipettes
➤ gamma sterile pipettes

catalogue number	volume	product descriptions	packing specifications	pack quantity
084.02.001	3 ml	non-sterilized	in box	500 pieces
084.22.001	3 ml	sterilized	single pack	100 pieces
084.02.003	1 ml	non-sterilized	in box	500 pieces
084.22.003	1 ml	sterilized	single pack	100 pieces

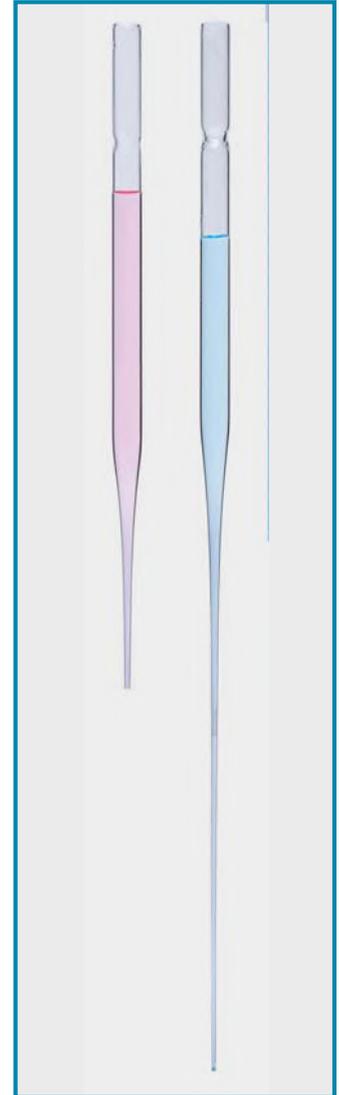
DISPENSER BOX - "for P.E pasteur pipettes"



- Manufactured from acrylic with excellent field of vision.
- Ideal for storing and dispensing pasteur pipettes.
- Featured with an hinged lid. Once opened, the lid stands open for easy dispensing.
- Box offers safe and clean storage of pipettes without been effected from dust, moisture and other effects.
- Featured with non-skid silicone feet for stable stand.

All other technical specifications can be seen at catalogue page no 69.

PIPETTES - "pasteur" - "glass"



- Manufactured from neutral glass according to ISO 7712 standard.
- Ideal for transferring and dispensing liquids safely in all types of laboratories eliminating the risk of cross contamination.
- Thick walls provide extra strength eliminating the risk of breakage during application.
- Featured with a long drawn capillary tip. The design of the suction part allows cotton plugging.
- Since manufactured by fully automatic system they offer reproducible drop sizes.



Pipette tip provides reproducible drop sizes at all times.

catalogue number	length	pack quantity	box quantity
084.01.001	145 mm	250 pieces	4 packs
084.01.002	225 mm	250 pieces	4 packs

BULB - "for glass pasteur pipettes"

- Manufactured from natural rubber particularly to be used with glass pasteur pipettes.
- They accelerate the working speed and also prevent cross contamination.

catalogue number	pack quantity
084.03.001	100 pieces



PIPETTES - "serological" - "polystyrene"

➤ Manufactured from virgin polystyrene with excellent optical transparency.

➤ Sterilized with gamma irradiation. Free of RNase, DNase, DNA and pyrogene.

➤ Unique design offers a smooth interior which prevents cell-hanging and clumping inside the pipette wall.

➤ Stable and break-resistant pipette tip offers constant the reproducible flow in each time.

➤ Optimised mouthpiece perfectly fits to all types of pipette pumps and balls.

➤ Filter plug at the mouthpiece prevents overflow of liquid and also eliminates contamination.

➤ Color coded ring mark at suction stem allows fast identification and sourcing.

➤ The sharp, black, highly visible permanent graduations prevent ambiguity and guarantee precise reading and accurate dispensing.

➤ Reverse graduations show actual removed or remaining volumes on all pipettes larger than 1 ml volume.

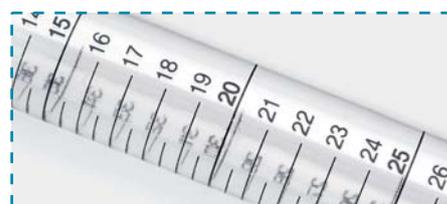
➤ Pipettes are supplied individually wrapped in fiber-free color coded paper as easy-to-open packing.



Volume identification by color coding on pipette enables easy volume identification during working.



Filter plug at the mouthpiece of the pipette prevents exterior effects and minimize contamination.



Accurate volume identification by highly visible bidirectional graduation printed on pipette side body.

Ascending and descending scales facilitate reading both dispensing and remaining volume.

catalogue number	pipette volume	color code	pack quantity	box quantity
083.03.001	1 ml	yellow	200 pieces	800 pieces
083.03.002	2 ml	green	150 pieces	600 pieces
083.03.005	5 ml	blue	100 pieces	400 pieces
083.03.010	10 ml	orange	100 pieces	400 pieces
083.03.025	25 ml	red	50 pieces	200 pieces
083.03.050	50 ml	purple	40 pieces	160 pieces

RACK - "for pipettes"

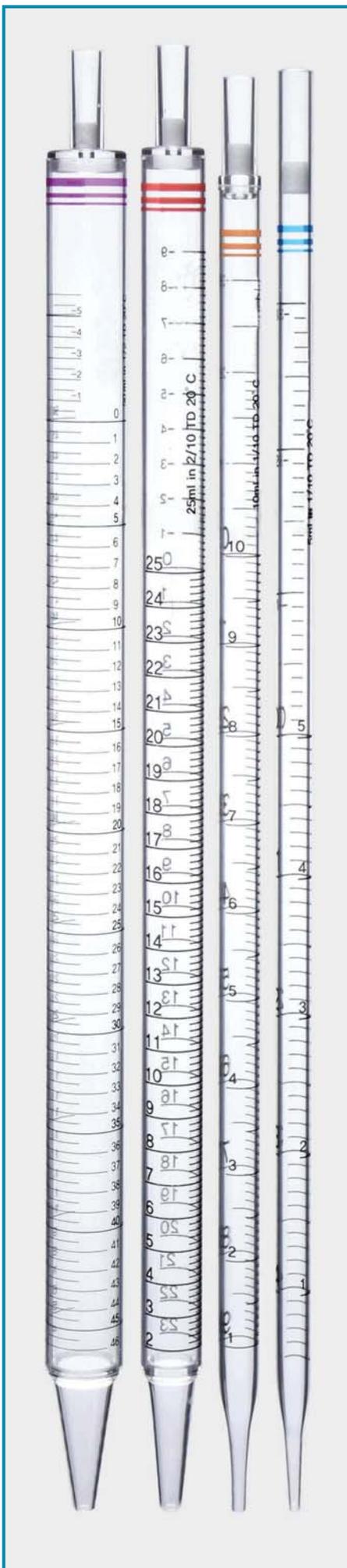
➤ Manufactured from acrylic for easy organisation of all kind of pipettes.

➤ 4 shelves guarantee easy and fast reach of all pipettes between 1 ml to 50 ml size within arm's reach.

➤ Angled design of the pipette shelves prevents the risk of pipettes falling out even the shelf is fully filled.

➤ Dimensions: 290x90x400 mm

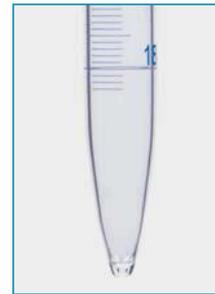
Other technical specifications can be seen at catalogue page no 20.



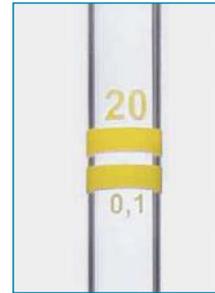
PIPETTES - "glass" - "graduated" - "class AS"



- Manufactured from neutral tubing according to ISO 835 and DIN 12699 standards.
- Calibrated according to DIN/ISO Class "AS" standard.
- Featured with a ("H"/"DE-M") conformity mark according to German federal weights and measures regulations.
- Individual calibration carried out by automatic robots eliminate possible deviations from nominal values.
- Conformity mark and batch number printed on the body surface.
- Batch certificate can be downloaded from the website.
- Carefully formed and bevelled tips ensure proper flow rate.
- Color coded ring mark at suction stem allows fast identification and sourcing.
- Inscriptions and nominal values are printed with blue enamel.



Carefully formed and bevelled tips ensure proper flow rate.



Color coded ring mark at suction stem allows fast identification and sourcing.

catalogue number	volume	pack quantity
021.01.001	1 ml	10 pieces
021.01.002	2 ml	10 pieces
021.01.005	5 ml	10 pieces
021.01.010	10 ml	10 pieces
021.01.020	20 ml	10 pieces
021.01.025	25 ml	10 pieces
021.01.050	50 ml	10 pieces

PIPETTES - "glass" - "volumetric" - "class AS"



- Manufactured from neutral tubing according to ISO 648 and DIN 12687 standards.
- Calibrated according to DIN/ISO Class "AS" standard.
- Featured with a ("H"/"DE-M") conformity mark according to German federal weights and measures regulations.
- Individual calibration carried out by automatic robots eliminate possible deviations from nominal values.
- Conformity mark and batch number printed on the body surface.
- Batch certificate can be downloaded from the website.
- Carefully formed and bevelled tips ensure proper flow rate.
- Color coded ring mark at suction stem allows fast identification and sourcing.
- Inscriptions and nominal values are printed with blue enamel.



Carefully formed and bevelled tips ensure proper flow rate.



Color coded ring mark at suction stem allows fast identification and sourcing.

catalogue number	volume	pack quantity
021.05.001	1 ml	10 pieces
021.05.002	2 ml	10 pieces
021.05.003	3 ml	10 pieces
021.05.004	4 ml	10 pieces
021.05.005	5 ml	10 pieces
021.05.010	10 ml	10 pieces
021.05.011	11 ml	10 pieces
021.05.015	15 ml	10 pieces
021.05.020	20 ml	10 pieces
021.05.025	25 ml	10 pieces
021.05.050	50 ml	10 pieces

volumetric measurement & liquid handling



STAND - "for pipettes" - "carrousel"

➤ Manufactured from polypropylene for holding up to 94 pipettes vertically.

➤ The round carrousel stand can rotate 360° around stand axis enabling easy reach to each pipette.

➤ The grid patterned upper disc which is concentric with the carrier plate keeps the pipettes in vertical and correct position.

➤ The carrier plate consists of four concentric troughs with tapered sides and open bottoms which cradle the pipette tips protectively.

➤ Drained liquid is collected by a stationary rack at the bottom part.

➤ Stability is guaranteed by 49 cm total height and 23 cm base diameter.

catalogue
number

022.01.001

pack
quantity

1 piece



The grid patterned upper disc which is concentric with the carrier plate keeps the pipettes in vertical and correct position.



The carrier plate consists of four concentric troughs with tapered sides and open bottoms which cradle the pipette tips protectively.



Drained liquid is collected by a stationary rack at the bottom part.



RACK - "for pipettes"

➤ Manufactured from acrylic for easy organisation of all kinds of pipettes.

➤ 4 shelves guarantee easy and fast reach of all pipettes between 1 ml to 50 ml size with in arm's reach.

➤ Angled design of the pipette shelves prevents the risk of pipettes falling out even the shelf is fully filled.

➤ Featured with magnetic clamps on both sides for arrangement of multiple box assembly.

catalogue
number

022.06.001

dimensions

290x90x400 mm

pack
quantity

1 piece



STAND - "pipettes" - "linear"

➤ Manufactured from polypropylene for holding up to 12 pipettes horizontally.

➤ Offers ideal storage of pipettes without any pressure on pipette tips.

➤ Easily dismantable for storage and cleaning purposes.

catalogue
number

022.02.001

dimensions

210x155x230 mm

pack
quantity

1 piece

TRAY - "for pipettes"

➤ Manufactured from polystyrene for easy organisation of all kind of pipettes.

➤ Cranated design enables safe holding of large size pipettes in longitudinal direction and short size pipettes in transverse direction.

➤ Can also be used in drawers as well as on bench tops.

catalogue
number

022.03.001

dimensions

280x215x40

pack
quantity

1 piece



BOX - "for pipettes" - "aluminium" - "adjustable height"

➤ Manufactured from pure aluminium with cylindrical body form.

➤ Designed to carry pipettes with different volume and height during autoclave sterilisation process. The total box height is adjustable.

➤ Unique construction guarantees the entrance of steam into the box and optimizes the autoclaving process.

➤ Box consists of two parts; the bottom base part and a telescopic lid. The lid height can be adjusted by soft slide of the lid onto the base part. By this mean, the box can be used with pipettes of different volume and height.

➤ Each box is supplied with a silicone pad that fits to the box base.

➤ Silicone pad acts as a shock absorber and prevents the risk of breakage during under even most inconvenient conditions.



adjustable height

Box consists of two parts; the bottom base part and a telescopic lid.

The lid can be height adjusted by soft slide of the lid onto the base part.

By this mean, the box can be used with pipettes of different volume and height.



Silicone pad supplied with the box acts as a shock absorber and prevents the risk of breakage of pipettes.

catalogue number	box diameter	min. & max. box height	pack quantity
022.03.002	60 mm	145-235 mm	1 piece
022.03.003	60 mm	280-420 mm	1 piece

**BOX - "for pipettes" - "stainless steel" - "fix height"**

➤ Manufactured from corrosion resistant, AISI 304 stainless steel with rectangular form.

➤ Designed to carry pipettes with different volume and height during sterilisation process.

➤ The total box height is not adjustable.

➤ Box consists of two parts; the box bottom base part and a lid.

➤ Each box is supplied with a silicone pad that fits to the box base.

➤ Silicone pad acts as a shock absorber and prevents the risk of breakage during under even the most inconvenient conditions.



Box consists of two parts; the box bottom base part and a lid. The total box height is not adjustable.



Silicone pad supplied with the box acts as a shock absorber and prevents the risk of breakage of pipettes.

catalogue number	box base dimensions	box height	pack quantity
022.04.001	70x70 mm	210 mm	1 piece
022.04.002	70x70 mm	430 mm	1 piece



Various supplementary products such as manual and ultrasonic pipette washers can be selected from catalogue page no 177.



volumetric measurement & liquid handling



PIPETTE FILLERS - "pi-pump"

- A simple yet practical pipette filler for graduated and volumetric pipettes from 1 ml to 25 ml volume range.
- Ergonomic body design perfectly fit to any hand form and offers both left or right handers an easy operation.
- Pipette stem smoothly fits to the flexible silicone chuck and are firmly hold in position.
- Rotating the existing handwheel on the body upwards draws the liquid precisely to the desired level.
- Rotating the handwheel downwards lets the liquid in the pipette discharge partially. Even very small volumes can be dispensed precisely.
- A slight pressure applied to the fast release lever lets the liquid flow-out for complete delivery.
- Can be quickly and easily dismantled for safe and fast cleaning.

catalogue number	for pipette volume	color code	pack quantity
011.01.002	up to 2 ml	blue	1 piece
011.01.010	up to 10 ml	green	1 piece
011.01.025	up to 25 ml	red	1 piece



Drawing the liquid

Rotate the handwheel upward and draw the liquid to the desired position. Piston remains in the desired position after stopping the rotation of the handwheel.



Discharge the liquid

Partial or complete delivery can be achieved by totaling the handwheel downward. Even very small volumes such as half a drop can be discharged precisely.



Blow-out the liquid

A slight pressure applied to the fast release lever opens the release valve and lets the liquid to flow-out freely assuring complete emptying of the pipette content.



PIPETTE FILLER - "maxi"

- Advance yet easily controllable pipette filler for graduated and volumetric pipettes from 1 ml to 100 ml volume range. Even unexperienced users can adjust the meniscus precisely.
- The optimised valve system allows easy draw of liquid without excess pressure.
- Very easy to use; before attaching the pipette first squeeze the silicone bulb and release the air inside. Attach the pipette.
- Move the pipetting knob upward for filling, downward for discharging. For blow-out just push the discharge below.
- Ergonomic body design perfectly fits to any hand form and offers both left or right handers an easy operation.
- Pipette stem smoothly fits to the flexible silicone chuck and are firmly hold in position.
- A replaceable hydrophobic membrane filter in the intake cone prevents cross contamination and stops the penetration of impurities.

catalogue number	product descriptions	pack quantity
011.02.003	pipette filler	1 piece
011.02.003.3	spare filter	1 piece



Before attaching the pipette compress the suction below for vacuum formation.



Drawing or discharge of the liquid can be controlled precisely by moving the pipetting knob up or downward.



Residual liquids can be expelled by pressing the expel button.



Membrane filter in the intake cone prevents cross contaminations.

volumetric measurement & liquid handling



PIPETTE FILLER - "macro" - "standard"

- Bulb manufactured from natural rubber. Most common pipette filler for all types of pipette up to 10 ml volume.
- Evacuation can be easily done by pressing the related automatic valves.
- Offers an easy single hand use. Pressing the valve the liquid is drawn-up to the desired level, dispensed partially or blown-out.

catalogue number	pack quantity
011.02.001	1 piece



For evacuation of the air in the body just press the bulb and valve "A" simultaneously. For drawing the liquid with desired speed press the valve "S". For draining the liquid partially or completely simply press valve "E".



PIPETTE FILLER - "macro" - "universal"

- Bulb manufactured from natural rubber. Most common pipette filler for all types of pipette up to 100 ml volume.
- Evacuation can be easily done by pressing the related automatic valves.
- Offers an easy single hand use. Pressing the valve the liquid is drawn-up to the desired level, dispensed partially or blown-out.

catalogue number	pack quantity
011.02.002	1 piece



For evacuation of the air in the body just press the bulb and valve "A" simultaneously. For drawing the liquid with desired speed press the valve "S". For draining the liquid partially or completely simply press valve "E".



PIPETTE FILLER

- Simple and easily controllable pipette filler for all pipettes up to 15 ml volume.
- Featured with a white polypropylene attachment containing a silicone conical adapter that gently seals the pipette without twisting and reducing breakage.
- Very easy to use: Before attaching the pipette first squeeze the bulb and release the air inside. Then attach the pipette.
- Slowly release the bulb pressure and fill the pipette. For discharge, squeeze the bulb again.



Supplied with a handy elastic band for hanging the filler on a bottle or around the wrist.

catalogue number	pack quantity
011.04.001	1 piece



PIPETTE FILLER

- Manufactured from natural rubber. Ideal for simple pipetting applications. Offered with three different volume capacity.
- Very easy to use: Before attaching the pipette first squeeze the bulb and release the air inside. Then attach the pipette.
- Slowly release the bulb pressure and fill the pipette. For discharge, squeeze the bulb again.



Contoured body shape and heavy wall enables increased grip for better handling.

catalogue number	suction volume	pack quantity
011.04.003	max 3 ml	10 pieces
011.04.005	max 5 ml	10 pieces
011.04.010	max 10 ml	10 pieces



PIPETTE PUMP - "electrical"

- Can be used with all kinds of pipettes from 0,1 ml to 100 ml volume range.
- Ergonomic, light weight and well balanced body offers full comfort and fatigue-free pipetting for extended hours.
- Powerful yet quiet pump can fill a 25 ml pipette under 4 seconds.
- Pump speed can be adjusted to 8 different levels for precise control of the speed. LCD display visually shows the selected speed. Also offers gravimetric drain.
- Easily changeable lithium-ion batteries provide 8 hours continuous use. LCD display provides visual confirmation of remaining battery power.
- The high-tech charger prevents over charging and provides long life cycle. Approximately 2-3 hours is required for full charge.
- Silicone adapter in the intake cone holds firmly the pipettes in position. Replaceable hydrophobic 0,45µm PTFE filter secures cross contamination.
- Supplied with a wall mounting stand and a dual-position desk stand.

catalogue number	for pipettes	speed range	pack quantity
010.01.005	0,1 - 100 ml	adjustable	1 piece



Large LCD display provides visual confirmation of remaining battery power and selected filling speed.

Desired speed can be selected by pressing the speed adjustment button. Speed can be adjusted to 8 different levels.



Concave padded triggers ensures the filler to perform many hours of stress-free filling and dispensing.



Replaceable hydrophobic 0,45 µm PTFE filter secures cross contamination.
Catalogue No: 610.01.005

Silicone adapter in the intake cone holds firmly the pipettes in position.



Supplied with a wall mounting stand and a dual-position desk stand.

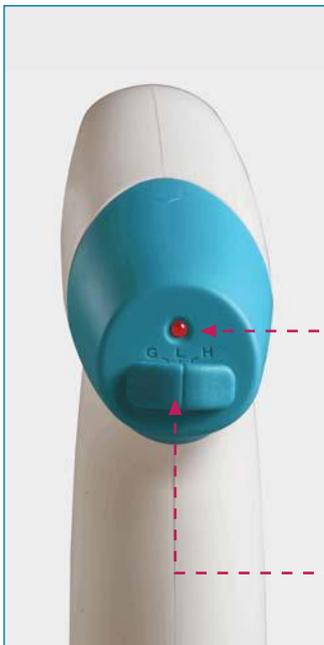


PIPETTE PUMP - "electrical"

- Can be used with all kinds of pipettes from 0,1 ml to 100 ml volume range.
- Ergonomic, light weighted and well balanced body offers full comfort and fatigue-free pipetting for extended hours.
- Powerful yet quiet pump can fill a 25 ml pipette under 4 seconds.
- Pump speed can be selected as high and low speed modes. Also offers gravity drain option if necessary.
- Easily changeable lithium-ion batteries provide 8 hours continuous use.
- Featured with a visual red bulb low battery indicator.
- The intelligent charger prevents over charging. Very short charging time (approximately 2-3 hours) required for full charge.
- Safety check valve and replaceable hydrophobic 0,45 µm PTFE filter provides double protection against fluid penetration.
- Supplied with a wall mounting stand and a single-position desk stand.



catalogue number	for pipettes	speed range	pack quantity
010.01.006	0,1 - 100 ml	adjustable	1 piece



Featured with a visual red bulb low battery indicator.

Pump speed can be selected as high and low speed modes. Also offers gravity drain option if necessary.



Concave padded triggers ensures the filler to perform many hours of stress-free filling and dispensing.

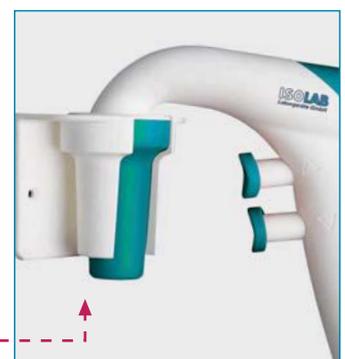


Replaceable hydrophobic 0,45 µm PTFE filter secures cross contamination.
Catalogue: 610.01.006

Silicone adapter in the intake cone holds firmly the pipettes in position.



Supplied with a wall mounting stand and a single-position desk stand.



volumetric measurement & liquid handling



BURETTE - "digital" - "manuel control"

- Guarantees reliable measuring results with bubble-free dispensing and consistent delivery.
- Discharge tube can be turned to any desired position since the body can rotate 360° round the axis.
- The angled, large and 4 digit LCD display clearly shows the titration values till to 99,99 ml and eliminate meniscus level errors.
- Continuous display of dispensed volume with zero reset feature for multiple titrations.
- PTFE plunger and borosilicate glass barrel allow dispensing of most aggressive solutions.
- Visible glass barrel shows allows inspection of the liquid before and during dispensing.
- Precision valve ensures easy priming and minimum waste with no back leakage into the reservoir bottle.
- Supplied with a battery with a lifetime for 60.000 titrations. Featured with a low battery indicator on the LCD display.
- Featured with a height adjustable telescopic intake tube that can fit to variable heights of different reservoir bottles.
- Supplied with an individual calibration certificate and various rezervoir bottle neck adaptors.



The angled, large and 4 digit LCD display clearly shows the titration values till to 99,99 ml and eliminate meniscus level errors.

catalogue number	volume range	volume accuracy	pack quantity
007.01.001	50 ml	0,01 ml	1 piece



BURETTE - "digital" - "motor driven"

- The most advanced digital burette featured with motor controlled piston movement. Conforms ISO 8655.
- Guarantees reliable measuring results with bubble-free dispensing.
- High quality motor activates the piston ensuring excellent precision and accuracy.
- Re-circulation system allows quick purging without loss of reagent.
- User friendly TFT control touchscreen guides the user for a quick and accurate titration. System also avoids manual disturbance and human errors.
- Three dispensing speeds allow the user to achieve titration end point precisely.
- Dispensing can be performed by a touch at the screen and stops immediately when the touch is removed.
- PTFE plunger and borosilicate glass barrel allow dispensing of most aggressive solutions.
- Precision valve ensures easy priming and minimum waste with no back leakage into the reservoir bottle.
- Discharge tube can be turned to any desired position since the body can rotate 360° round the axis.
- 20 results can be stored at the memory bank.
- Featured with a height adjustable telescopic intake tube that can fit to variable heights of different reservoir bottles.
- Supplied with an individual calibration certificate and various rezervoir bottle neck adaptors.

catalogue number	volume range	volume accuracy	pack quantity
007.01.002	10 ml	0,001 ml	1 piece
007.01.003	25 ml	0,005 ml	1 piece
007.01.004	50 ml	0,01 ml	1 piece

DISPENSER - "repetitive"

- Ergonomically designed and light weight dispenser for fast and simple serial dispensing of liquids.
- Perfect tool for applications where repetitive dispensing is a must and where time is valuable.
- Very easy to use; first fill the dispenser tip with the liquid similar to a syringe. Then press the pipet button for each dispensing step.
- All functions can be controlled only by three control mechanisms.
- Offers 5 volume settings and 7 different dispenser tip sizes results with 35 alternative different volumes. Depending on the size & volume of the tip used – it is possible to dispense between 0,5 ml to 50 ml liquid in multi intervals.
- Works on the positive displacement principle which enables routine, fast and accurate dispensing of even high density and high vapour liquids.
- Offers smooth and fatigue free operations for long working hours.
- Guarantees precise volume setting, clearly visible volume adjustment, precise gear mechanism for reproducible and accurate pipetting.
- Exchange of dispenser tips is safe and easy.
- Dispensing volume can be selected from the volume scale mounted on the dispenser body.

catalogue
number

008.06.001

pack
quantity

1 piece



Dispensing volume can be selected from the volume scale mounted on the dispenser body.

TIPS - "for repetitive dispensers"

- Dispenser tips are manufactured from clear polypropylene.
- 7 different tip size offers 35 alternative different volumes.
- It is possible to dispense between 0,5 ml to 50 ml liquid in multi intervals depending on the selected tip.
- Graduation on the side of the tips enables visual confirmation of the volume.
- Adapter for 25 & 50 ml tip should be ordered separately **Cat. No: 008.06.002**

catalogue number	dispenser tip volume	pack quantity
008.06.005	0.50 ml	10 pieces
008.06.012	1.25 ml	10 pieces
008.06.025	2.50 ml	10 pieces
008.06.050	5.00 ml	10 pieces
008.06.125	12.50 ml	10 pieces
008.06.250	25.00 ml	10 pieces
008.06.500	50.00 ml	10 pieces
008.06.002	adapter for 25 & 50 ml	



Graduation on the side of the tips enables visual confirmation of the volume.



volumetric measurement & liquid handling



DISPENSERS - "without re-circulation valve"

- Guarantees reliable results with autoclavable bodies bubble-free dispensing of liquids.
- Fully autoclavable body provides high precision with consistent delivery.
- Available in 6 volume ranges covering a range from 2,5 ml to 100 ml.
- Individually calibrated according to ISO 8655 standard and supplied with a calibration certificate.
- All wetted parts are PTFE, FEP and borosilicate glass ensuring highest degree of chemical resistance.
- Springless PTFE valve manifold ensures excellent chemical compatibility and leak-proof functioning.
- PTFE piston and viton "O" ring guarantees fatigue-free, smooth, effortless piston movement and high accuracy.
- This also ensures wiper like movement of the piston making it suitable for crystalline liquids.
- Dosing cylinder is protected against breakage by a polypropylene sleeve preventing glass spillage in case of any accidental breakage.
- Specially designed calibration tool is provided with each dispenser for convenient and fast user re-calibration.

catalogue number	volume	increment	accuracy ± % ± ml	pack quantity
008.02.002	0.3 - 2.5 ml	0.05 ml	0.6 0.015	1 piece
008.02.005	0.5 - 5 ml	0.10 ml	0.5 0.025	1 piece
008.02.010	1.0 - 10 ml	0.20 ml	0.5 0.050	1 piece
008.02.030	2.5 - 30 ml	0.50 ml	0.5 0.150	1 piece
008.02.060	5.0 - 60 ml	1.00 ml	0.5 0.300	1 piece
008.02.100	10.0 - 100 ml	2.00 ml	0.5 0.500	1 piece



Large volume scale guarantees fast, easy and precise volume settings.



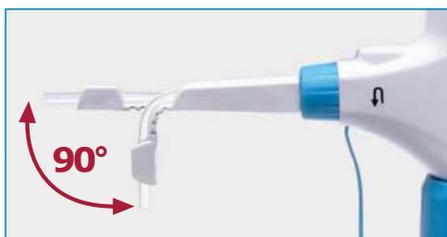
Adapter rotates freely 360° on the bottle neck and redirects the discharge to the desired position.



Fast, easy and reliable volume setting with 180° rotating volume adjustment knob.



Discharge tube cap reduces contact with the air and prevents drying. Also prevents accidental dropping.



Flexible discharge tube provides easy adjustment with any desired angle.

Supplied with 5 adaptors (28/30/32/36 and 40&45 mm diameter) to fit almost all available reservoir bottle necks.



DISPENSERS - "with re-circulation valve"

- Guarantees reliable results with bubble-free dispensing of liquids. Fully autoclavable body provides high precision with consistent delivery.
- Available in 6 volume ranges covering a range from 2,5 ml to 100 ml.
- Reagent loss during purging is avoided with the built-in recirculation valve.
- Individually calibrated according to ISO 8655 standard and supplied with a calibration certificate.
- All wetted parts are PTFE, FEP and borosilicate glass ensuring highest degree of chemical resistance. Springless PTFE valve manifold ensures excellent chemical compatibility and leak-proof functioning.
- PTFE piston and viton "O" ring guarantees fatigue-free, smooth, effortless piston movement and high accuracy.
- This also ensures wiper like movement of the piston making it suitable for crystalline liquids.
- Dosing cylinder is protected against breakage by a polypropylene sleeve preventing glass spillage in case of any accidental breakage.
- Specially designed calibration tool is provided with each dispenser for convenient and fast user re-calibration.

catalogue number	volume	increment	accuracy ±% ±ml	pack quantity
008.05.002	0.3 - 2.5 ml	0.05 ml	0.6 0.015	1 piece
008.05.005	0.5 - 5 ml	0.10 ml	0.5 0.025	1 piece
008.05.010	1.0 - 10 ml	0.20 ml	0.5 0.050	1 piece
008.05.030	2.5 - 30 ml	0.50 ml	0.5 0.150	1 piece
008.05.060	5.0 - 60 ml	1.00 ml	0.5 0.300	1 piece
008.05.100	10.0 - 100 ml	2.00 ml	0.5 0.500	1 piece



Reagent loss during purging is avoided with the built-in recirculation valve.



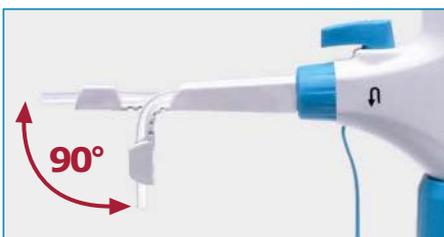
Adapter rotates freely 360° on the bottle neck and redirects the discharge to the desired position.



Fast, easy and reliable volume setting with 180° rotating volume adjustment knob.



Discharge tube cap reduces contact with the air and prevents drying. Also prevents accidental dropping.



Flexible discharge tube provides easy adjustment with any desired angle.



Supplied with 5 adaptors (28/30/32/36 and 40&45 mm diameter) to fit almost all available reservoir bottle necks.

DISPENSERS - "with re-circulation" & re-filling functions"



➤ This unique model offers 4 modes of operation in a single dispenser.

➤ Unique revolutionary design guarantees the filling of the reservoir bottle without the need of dismounting of the dispenser body.

➤ Guarantees reliable results with bubble-free dispensing of liquids. Fully autoclavable body provides high precision with consistent delivery.

➤ Available in 6 volume ranges covering a range from 5 ml to 100 ml.

➤ Individually calibrated according to ISO 8655 standard and supplied with a calibration certificate.

➤ All wetted parts are PTFE, FEP and borosilicate glass ensuring highest degree of chemical resistance.

➤ Springless PTFE valve manifold ensures excellent chemical compatibility and leak-proof functioning. PTFE piston and viton "O" ring guarantees fatigue-free, smooth, effortless piston movement and high accuracy.

➤ This also ensures wiper like movement of the piston making it suitable for crystalline liquids.

➤ Dosing cylinder is protected against breakage by a polypropylene sleeve preventing glass spillage in case of any accidental breakage.

➤ Large volume scale guarantees fast, easy and precise volume settings.

➤ Specially designed calibration tool is provided with each dispenser for convenient and fast user re-calibration.

catalogue number	volume	increment	accuracy ±% ±ml	pack quantity
008.07.005	0.5 - 5 ml	0.10 ml	0.5 0.025	1 piece
008.07.010	1.0 - 10 ml	0.20 ml	0.5 0.050	1 piece
008.07.030	2.5 - 30 ml	0.50 ml	0.5 0.150	1 piece
008.07.060	5.0 - 60 ml	1.00 ml	0.5 0.300	1 piece
008.07.100	10.0 - 100 ml	2.00 ml	0.5 0.500	1 piece



Reagent loss during purging is avoided with the built-in recirculation valve.



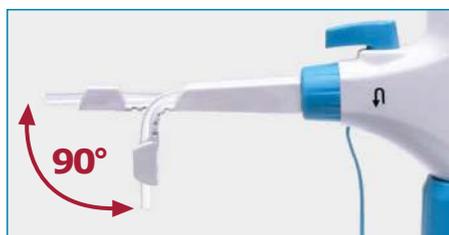
Adapter rotates freely 360° on the bottle neck and redirects the discharge to the desired position.



Fast, easy and reliable volume setting with 180° rotating volume adjustment knob.



Discharge tube cap reduces contact with the air and prevents drying. Also prevents accidental dropping.



Flexible discharge tube provides easy adjustment with any desired angle.



Supplied with 5 adaptors (28/30/32/36 and 40&45 mm diameter) to fit almost all available reservoir bottle necks.

DISPENSERS - "with re-circulation" & re-filling functions"

Offers alternative 4 modes of operation

**STANDARD DISPENSING**

Valve 1: open / Valve 2: closed

In this mode dispenser transfers the liquid from the reservoir bottle into receiver flask.

**PURGING**

Valve 1: closed / Valve 2: closed

In this mode the liquid is re-circulated into the same reservoir bottle for removal of air bubbles from the liquid without any waste.

**DILUTION & RINSING & 2nd LIQUID DISPENSING**

Valve 1: open / Valve 2: open

In this mode the liquid from a second source can be dispensed into the receiver flask. The user can rinse the dispenser without dismantling from the reservoir bottle. This mode also allows dilution of the reagent in the receiver flask.

**BOTTLE REFILLING**

Valve 1: closed / Valve 2: open

In this mode the liquid from a second source can be used to re-fill the reservoir bottle without dismantling the dispenser.

**BOTTLES - "reservoir" "with side arm" - "glass"**

- Manufactured from thick walled glass with side arm and easy to fill large neck.
- Ideal reservoir bottles to be used with dispensers and digital burettes.
- Side arm allows the filling without disassembling of the already assembled dispenser or digital burette.

clear bottles	amber bottles	volume	pack quantity
007.02.001	007.02.002	1000 ml	1 piece
007.02.003	007.02.004	2000 ml	1 piece

**BOTTLES - "reservoir" "with side arm" - "polyethylene"**

- Manufactured from thick walled polyethylene with side arm and easy to fill large neck.
- Ideal reservoir bottles to be used with dispensers and digital burettes.
- Side arm allows the filling without disassembling of the already assembled dispenser or digital burette.

clear bottles	amber bottles	volume	pack quantity
007.02.005	007.02.006	1500 ml	1 piece



volumetric measurement & liquid handling



MICROPIPETTES - "adjustable volume" - "non-autoclavable"

- 9 models cover volume range from 0,25 µl to 10 ml and combines all the requirements of a modern pipette.
- Each pipette is individually calibrated according to ISO 8655 and certified.
- Serial number is printed on each pipette.
- Ultralight and with balanced body offers greatest comfort for extended pipetting periods.
- Contoured and ergonomic body shape that fits perfectly to all hand sizes.
- Featured with a universal cone for standard pipette tips.
- Guarantees fast and easy volume setting with single hand. Volume display is always fully visible.
- Thumb friendly soft spring pipetting system reduce plunger pressure and guarantees the whole procedure more comfortable and less energetic.
- Ergonomic finger hook offers comfortable handling and to take the weight for a more relaxed grip.
- Tip ejector with large pad reduces thumb pressure workload and guarantees easy tip ejection.
- Supplied with an individual calibration certificate and a calibration tool for convenient and fast user re-calibration.



Guarantees fast and easy volume setting with single hand. Volume display is always fully visible.

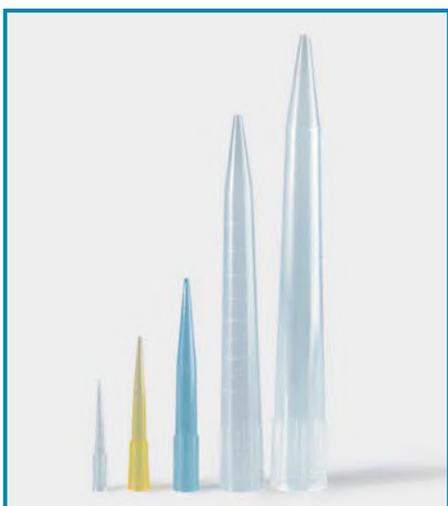


Ergonomic finger hook offers comfortable handling and to take the weight for a more relaxed grip.



Tip ejector with large pad reduces thumb pressure workload and guarantees easy tip ejection.

non-autoclavable pipettes	volume range	test volume	max. % inaccuracy	pack quantity
011.06.002	0.1 - 2.5 µl	2.5 µl	2.50 %	1 piece
011.06.010	0.5 - 10 µl	10 µl	1.00 %	1 piece
011.06.020	2 - 20 µl	20 µl	0.90 %	1 piece
011.06.050	5 - 50 µl	50 µl	0.60 %	1 piece
011.06.100	10 - 100 µl	100 µl	0.80 %	1 piece
011.06.200	20 - 200 µl	200 µl	0.60 %	1 piece
011.06.901	100 - 1000 µl	1000 µl	0.60 %	1 piece
011.06.905	1000 - 5000 µl	5000 µl	0.50 %	1 piece
011.06.910	2000 - 10000 µl	10 ml	0.70 %	1 piece



Various supplementary products such as pipette tips can be selected from catalogue page no 38.



MICROPIPETTES - "single channel" - "adjustable volume" - "autoclavable"



- 9 models cover volume range from 0,25 µl to 10 ml and combines all the requirements of a modern pipette.
- Each pipette is individually calibrated according to ISO 8655 and certified.
- Serial number is printed on each pipette.
- Fully autoclavable ultralight and with balanced body offers greatest comfort for extended pipetting periods.
- Contoured and ergonomic body shape that fits perfectly to all hand sizes.
- Featured with a universal cone for standard pipette tips.
- Guarantees fast and easy volume setting with single hand. Volume display is always fully visible.
- Thumb friendly soft spring pipetting system reduce plunger pressure and guarantees the whole procedure more comfortable and less energetic.
- Ergonomic finger hook offers comfortable handling and to take the weight for a more relaxed grip.
- Tip ejector with large pad reduces thumb pressure workload and guarantees easy tip ejection.
- Supplied with an individual calibration certificate and a calibration tool for convenient and fast user re-calibration.



Guarantees fast and easy volume setting with single hand. Volume display is always fully visible.



Ergonomic finger hook offers comfortable handling and to take the weight for a more relaxed grip.



Tip ejector with large pad reduces thumb pressure workload and guarantees easy tip ejection.

autoclavable pipettes	volume range	test volume	max. % inaccuracy	pack quantity
011.05.002	0.1 - 2.5 µl	2.5 µl	2.50 %	1 piece
011.05.010	0.5 - 10 µl	10 µl	1.00 %	1 piece
011.05.020	2 - 20 µl	20 µl	0.90 %	1 piece
011.05.050	5 - 50 µl	50 µl	0.60 %	1 piece
011.05.100	10 - 100 µl	100 µl	0.80 %	1 piece
011.05.200	20 - 200 µl	200 µl	0.60 %	1 piece
011.05.901	100 - 1000 µl	1000 µl	0.60 %	1 piece
011.05.905	1000 - 5000 µl	5000 µl	0.50 %	1 piece
011.05.910	2000 - 10000 µl	10 ml	0.70 %	1 piece



Various supplementary products such as pipette stands, dispenser boxes, pipetting reservoirs can be selected from catalogue pages no 40 - 42.

volumetric measurement & liquid handling

MICROPIPETTES - "single channel" - "fully autoclavable" - "for research"



- One pipette with exchangeable fix-volume controllers solves all your problems.
- 8 models cover volume range from 0,2 µl to 5 ml and fulfill all the requirements of a modern pipette.
- Significantly lighter weight than many other pipettes.
- Fully autoclavable, ultralight and with balanced body offers greatest comfort for extended pipetting periods.
- Contoured and ergonomic body shape that fits perfectly to all hand sizes.
- PP/PVDF/ anodised aluminum and stainless steel body construction guarantees the highest level of accuracy and precision.
- Dual "O" ring technology guarantees best tip fit. Outer "O" rings makes tip loading easy.
- Fast and easy volume setting with single hand. Volume setting requires 50% fewer turns compared to some brands.
- Volume lock prevents accidental volume changes during operation. Volume display is always fully visible.
- Thumb friendly soft spring pipetting system reduce plunger pressure by up to 50% and guarantees the whole procedure more comfortable.
- Ergonomic finger hook offers comfortable handling and to take the weight for a more relaxed grip.
- Color-coded tip ejector reduces thumb workload by 70 % compared with other brands.
- Large pad of tip ejector guarantees easy tip ejection.
- Each pipette is individually calibrated and certified. Serial number is printed on each pipette.

catalogue number	volume range	inaccuracy	imprecision %	color code	pack quantity
011.20.002	0.2 - 2.0 µl	12.00 / 2.00	6.00 / 1.00		1 piece
011.20.010	0.5 - 10 µl	2.50 / 1.00	1.80 / 0.50		1 piece
011.20.020	2 - 20 µl	5.00 / 1.00	1.50 / 0.30		1 piece
011.20.050	5 - 50 µl	2.00 / 1.00	1.20 / 0.30		1 piece
011.20.100	10 - 100 µl	2.50 / 0.70	1.00 / 0.20		1 piece
011.20.200	20 - 200 µl	2.50 / 0.60	0.70 / 0.20		1 piece
011.20.901	100 - 1000 µl	2.00 / 0.80	0.60 / 0.20		1 piece
011.20.905	1 - 5 ml	1.20 / 0.60	0.30 / 0.15		1 piece

dual "O" ring



Dual "O" ring technology: guarantees best tip fit.

- Outer "O" rings make tip loading easier. The first "O" ring creates a smooth seal while the second "O" ring creates a positive stop to ensure that the tips are airtight, sealed, and can be ejected with the smallest amount of force.

High precision pipettes which combine all the requirements of a modern pipette with highest level of accuracy and precision.



volume lock feature



Select the desired volume and lock the indicator.

- Volume lock feature allows selecting the desired volume and locking the indicator to achieve a more reliable pipetting experience.
- Locking feature prevents accidental volume changes during pipetting procedures.
- Simply slide the button to the upper position to lock or lower to release.

Exchangeable volume control knobs



Change your variable volume pipette to a fix-volume pipette in seconds.

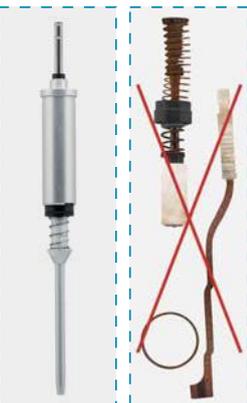
- Use one variable-volume pipette with many pre-calibrated fix-volume knobs and substantially reduce costs.
- Take off the variable volume control knob and insert any desired fix-volume knob in seconds.
- Save time by no longer turning micrometer dials.
- Eliminate setting errors by using pre-calibrated knobs. Fix-volume knobs are calibrated for consistent pipetting the same amount.



ordering info for volume knobs

catalogue number	technical specification of volume knobs	pack quantity
011.23.001	1 µl fixed volume controller knob for 0.2 - 2 µl pipette	1 piece
011.23.002	2 µl fixed volume controller knob for 0.2 - 2 µl pipette	1 piece
011.24.005	5 µl fixed volume controller knob for 0.5 - 10 µl pipette	1 piece
011.24.010	10 µl fixed volume controller knob for 0.5 - 10 µl pipette	1 piece
011.25.010	10 µl fixed volume controller knob for 2 - 20 µl pipette	1 piece
011.25.020	20 µl fixed volume controller knob for 2 - 20 µl pipette	1 piece
011.26.020	20 µl fixed volume controller knob for 5 - 50 µl pipette	1 piece
011.26.025	25 µl fixed volume controller knob for 5 - 50 µl pipette	1 piece
011.26.050	50 µl fixed volume controller knob for 5 - 50 µl pipette	1 piece
011.27.030	30 µl fixed volume controller knob for 10 - 100 µl pipette	1 piece
011.27.050	50 µl fixed volume controller knob for 10 - 100 µl pipette	1 piece
011.27.100	100 µl fixed volume controller knob for 10 - 100 µl pipette	1 piece
011.28.100	100 µl fixed volume controller knob for 20 - 200 µl pipette	1 piece
011.28.200	200 µl fixed volume controller knob for 20 - 200 µl pipette	1 piece
011.29.300	300 µl fixed volume controller knob for 30 - 300 µl pipette	1 piece
011.30.500	500 µl fixed volume controller knob for 100 - 1000 µl pipette	1 piece
011.30.901	1000 µl fixed volume controller knob for 100 - 1000 µl pipette	1 piece
011.31.925	2,5 ml fixed volume controller knob for 1 - 5 ml pipette	1 piece

ultimate interior design



Ultimate interior design allows almost no maintenance.

- Steel alloy plunger does not bend or brake. Thick polymer seals do not split or leak.
- Robust steel alloy body protects internal components and impact damage if dropped. Large ejection spring provides low ejection forces.
- Aluminum alloy shaft does not wear down from loading friction.

Traditional pipettes needs continuous maintenance.

- Small plastic seals and "O" rings wear-out often and needs frequent replacement.
- Plastic shaft wear down from the friction involved with tip loading and needs frequent replacement.
- Plastic body provides a single seal and might not protect fragile internal components against impact.

fully autoclavable

Guaranteed autoclave sterilisation without the risk of volume re-calibration.



Unlike to other autoclavable pipettes, our pipettes require no volume calibration after sterilization process.

- Durable PP/PVDF/anodised aluminium and stainless steel body construction and stainless steel spring enable easy and safe sterilisation by autoclave.
- First take off the volume knob. Then put the main body into the autoclave.
- The pipette body can be fully autoclavable at 121°C and 0,1 MPa conditions for 20 minutes.

MICROPIPETTES - "8 channel" - "fully autoclavable" - "for research"



- 8 channel pipettes share same features of single channel pipettes.
- 4 models cover volume range from 0,5 µl to 300 µl and fulfill all the requirements of a modern pipette.
- Significantly lighter weight than many other pipettes.
- Fully autoclavable, ultralight and with balanced body offers greatest comfort for extended pipetting periods.
- Contoured and ergonomic body shape that fits perfectly to all hand sizes.
- PP/PVDF/ anodised aluminium and stainless steel body construction guarantees the highest level of accuracy and precision.
- Dual "O" ring technology guarantees best tip fit. Outer "O" rings makes tip loading easy.
- Fast and easy volume setting with single hand. Volume setting requires 50% fewer turns compared to some brands.
- Volume lock prevents accidental volume changes during operation. Volume display is always fully visible.
- Large pad of tip ejector guarantees easy tip ejection.
- Thumb friendly soft spring pipetting system reduce plunger pressure by up to 50%.
- Ergonomic Finger hook offers comfortable handling and to take the weight for a more relaxed grip.
- Color-coded tip ejector reduces thumb workload by 70 %.
- Each pipette is individually calibrated and certified. Serial number is printed on each pipette.

catalogue number	channel number	volume range	inaccuracy %	imprecision %	color code	pack quantity
011.21.010	8	0.5 - 10 µl	5.00 / 2.00	3.60 / 1.00		1 piece
011.21.050	8	5 - 50 µl	3.20 / 1.40	1.60 / 0.60		1 piece
011.21.200	8	20 - 200 µl	1.80 / 1.20	0.80 / 0.40		1 piece
011.21.300	8	30 - 300 µl	1.66 / 1.40	0.60 / 0.30		1 piece

curved ejector bar

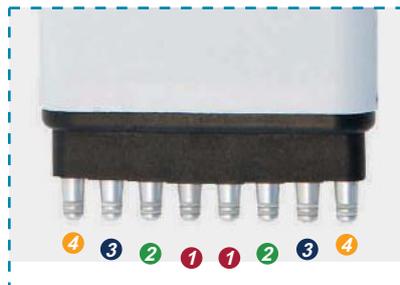
Curved ejector bar reduces the force required for ejection.



Ejection is simply done applying light pressure to the levered ejector arm.

curved ejector bar

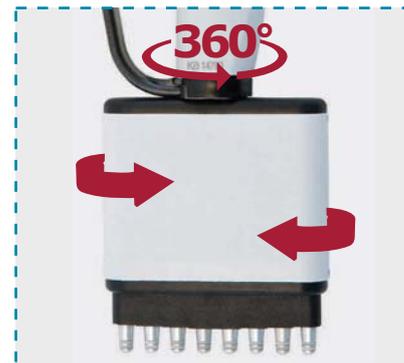
Curved ejector bar push the pipette tips in steps.



Pipette tips are ejected one after each other. First two tips at positions 1 fall then two tips at positions 2 fall. Then tips at positions 3 and 4 follow.

rotating manifold

Rotating manifold enables pipetting in any direction.



Manifold rotates 360° in any direction and with any angle.

MICROPIPETTES - "12 channel" - "fully autoclavable" - "for research"



- 12 channel pipettes share same features of single channel pipettes.
- 4 models cover volume range from 0,5 µl to 300 µl and fulfill all the requirements of a modern pipette.
- Significantly lighter weight than many other pipettes.
- Fully autoclavable, ultralight and with balanced body offers greatest comfort for extended pipetting periods.
- Contoured and ergonomic body shape that fits perfectly to all hand sizes.
- PP/PVDF/ anodised aluminium and stainless steel body construction guarantees the highest level of accuracy and precision.
- Dual "O" ring technology guarantees best tip fit. Outer "O" rings makes tip loading easy.
- Fast and easy volume setting with single hand. Volume setting requires 50% fewer turns compared to some brands.
- Volume lock prevents accidental volume changes during operation. Volume display is always fully visible.
- Large pad of tip ejector guarantees easy tip ejection.
- Thumb friendly soft spring pipetting system reduce plunger pressure by up to 50%.
- Ergonomic Finger hook offers comfortable handling and to take the weight for a more relaxed grip.
- Color-coded tip ejector reduces thumb workload by 70 %.
- Each pipette is individually calibrated and certified. Serial number is printed on each pipette.

catalogue number	channel number	volume range	inaccuracy %	imprecision %	color code	pack quantity
011.22.010	12	0.5 - 10 µl	5.00 / 2.00	3.60 / 1.00		1 piece
011.22.050	12	5 - 50 µl	3.20 / 1.40	1.60 / 0.60		1 piece
011.22.200	12	20 - 200 µl	1.80 / 1.20	0.80 / 0.40		1 piece
011.22.300	12	30 - 300 µl	1.66 / 1.40	0.60 / 0.30		1 piece

curved ejector bar

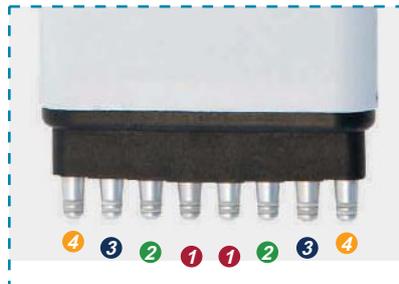
Curved ejector bar reduces the force required for ejection.



Ejection is simply done applying light pressure to the levered ejector arm.

curved ejector bar

Curved ejector bar push the pipette tips in steps.



Pipette tips are ejected one after each other. First two tips at positions 1 fall then two tips at positions 2 fall. Then tips at positions 3 and 4 follow.

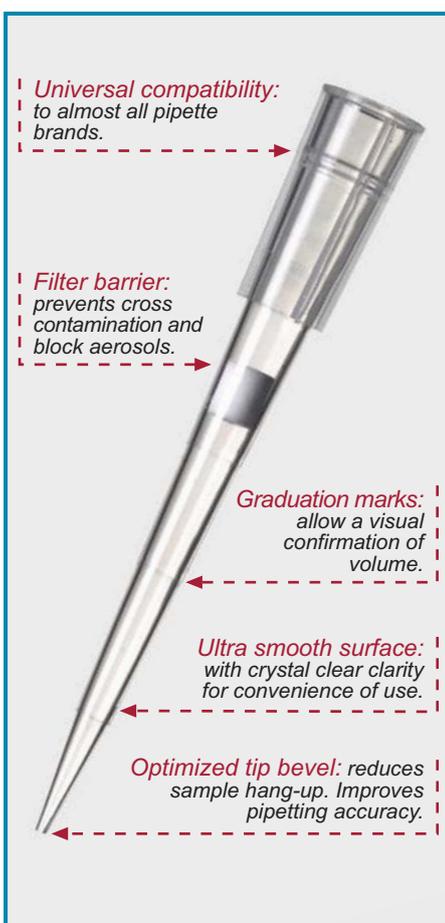
rotating manifold

Rotating manifold enables pipetting in any direction.



Manifold rotates 360° in any direction and with any angle.

PIPETTE TIPS - "precision" - "for research"



- Manufactured from FDA approved polypropylene with consistent quality.
- Exclusive molding technology reduces the sample loss, saves costly reagents and maximises accuracy and precision.
- Manufactured in fully automatic, human touch-free, clean room facilities as DNase, RNase, Pyrogen free. Certified on lot basis.
- Filtered tips prevents cross contamination from sample to sample by creating a physical barrier in the tip to inhibit and block aerosols.
- Low retention is achieved by a special resin which offers minimum retention and maximum accuracy allowing complete retrieval of precious samples.
- Optimised shape fits to all common pipettes to give perfect seal between the pipette tip and the pipette shaft.
- Maximum sample recovery eliminates sample hold-up, providing the most accurate sample delivery.
- Different lengths within the same volume range for different applications.



Alternative packing options:

Puncture resistant bags:

- Base with a wide gusset enables self-standing and allows single-handed access.
- Heat sealed above the zip-lock closure, product integrity and cleanliness is assured right down to the last tip.

Durable boxes:

- Easy to open-close hinged lid boxes with internal rib structure provide an extremely strong platform.
- Features recessed wells to ensure perfect tip allignment.



catalogue number	product descriptions	packing specifications
T-B-010	pipette tip - ISOLAB - clear - 10 µl - bag	1000 pieces / bag
T-R-010	pipette tip - ISOLAB - clear - 10 µl - box	96 pieces / box
T-R-S-010	pipette tip - ISOLAB - clear - 10 µl - box - sterile	96 pieces / box
TF-010	pipette tip - filter - ISOLAB - clear - low retention - 10 µl - bag	1000 pieces / bag
TF-R-S-010	pipette tip - filter - ISOLAB - clear - low retention - 10 µl - box - sterile	96 pieces / box
T-B-011	pipette tip - ISOLAB - clear - long - 10 µl - bag	1000 pieces / bag
T-R-011	pipette tip - ISOLAB - clear - long - 10 µl - box	96 pieces / box
T-R-S-011	pipette tip - ISOLAB - clear - long - 10 µl - box - sterile	96 pieces / box
TF-011	pipette tip - filter - ISOLAB - clear - low retention - long - 10 µl - bag	1000 pieces / bag
TF-R-S-011	pipette tip - filter - ISOLAB - clear - low retention - long - 10 µl - box - sterile	96 pieces / box
T-B-020	pipette tip - ISOLAB - clear - 20 µl - bag	1000 pieces / bag
T-R-020	pipette tip - ISOLAB - clear - 20 µl - box	96 pieces / box
T-R-S-020	pipette tip - ISOLAB - clear - 20 µl - box - sterile	96 pieces / box
TF-020	pipette tip - filter - ISOLAB - clear - low retention - 20 µl - bag	1000 pieces / bag
TF-R-S-020	pipette tip - filter - ISOLAB - clear - low retention - 20 µl - box - sterile	96 pieces / box
TF-100	pipette tip - filter - ISOLAB - clear - low retention - 100 µl - bag	1000 pieces / bag
TF-R-S-100	pipette tip - filter - ISOLAB - clear - low retention - 100 µl - box - sterile	96 pieces / box
T-B-200	pipette tip - ISOLAB - clear - 200 µl - bag	1000 pieces / bag
T-R-200	pipette tip - ISOLAB - clear - 200 µl - box	96 pieces / box
T-R-S-200	pipette tip - ISOLAB - clear - 200 µl - box - sterile	96 pieces / box
TF-200	pipette tip - filter - ISOLAB - clear - low retention - 200 µl - bag	1000 pieces / bag
TF-R-S-200	pipette tip - filter - ISOLAB - clear - low retention - 200 µl - box - sterile	96 pieces / box
T-B-1000	pipette tip - ISOLAB - clear - 1000 µl - bag	1000 pieces / bag
T-R-1000	pipette tip - ISOLAB - clear - 1000 µl - box	96 pieces / box
T-R-S-1000	pipette tip - ISOLAB - clear - 1000 µl - box - sterile	96 pieces / box
TF-1000	pipette tip - filter - ISOLAB - clear - low retention - 1000 µl - bag	1000 pieces / bag
TF-R-S-1000	pipette tip - filter - ISOLAB - clear - low retention - 1000 µl - box - sterile	96 pieces / box
T-B-1250	pipette tip - ISOLAB - clear - 1250 µl - bag	1000 pieces / bag
T-R-1250	pipette tip - ISOLAB - clear - 1250 µl - box	96 pieces / box
T-R-S-1250	pipette tip - ISOLAB - clear - 1250 µl - box - sterile	96 pieces / box
TF-1250	pipette tip - filter - ISOLAB - clear - low retention - 1250 µl - bag	1000 pieces / bag
TF-R-S-1250	pipette tip - filter - ISOLAB - clear - low retention - 1250 µl - box - sterile	96 pieces / box
T-B-5000	pipette tip - ISOLAB - clear - 5000 µl	250 pieces / bag
T-R-S-5000	pipette tip - ISOLAB - clear - 5000 µl - box - sterile	50 pieces / box

maximum sample recovery

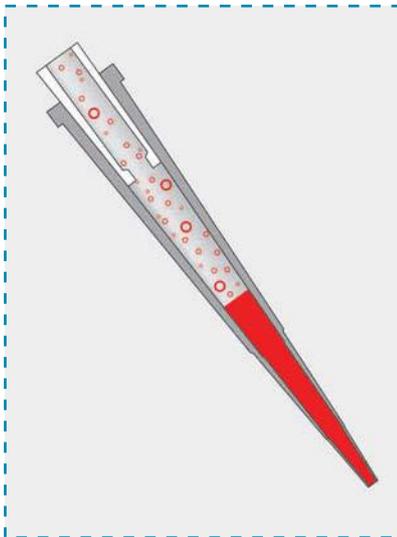


ISOLAB tips are made from low liquid retention resins that provides superior sample recovery while increasing accuracy and reproducibility.

- Allows for complete retrieval of precious samples.
- Saves costly reagents by reducing sample loss.
- Optimizes accuracy of the pipettor and also transfer of blood plasma.
- Avoids denaturation of nucleic acids and protein samples.

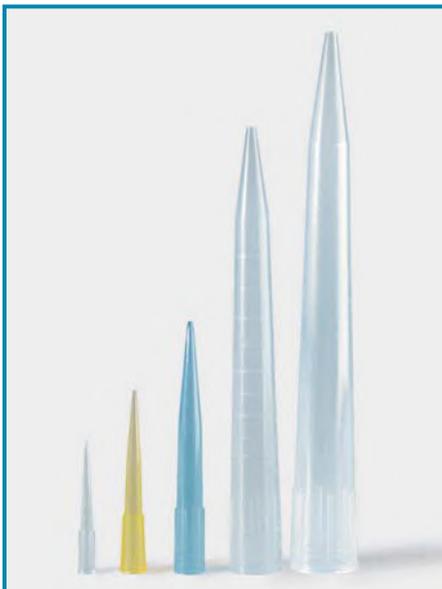
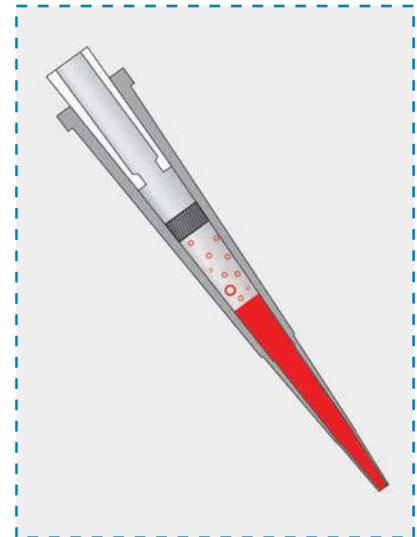


filter tips



ISOLAB filter tips offer the ultimate in protection against contamination.

- Filter barriers block aerosols by coalescing radioactive, chemical or biological contaminants before they can come in contact of pipettor shaft.
- Their usage is mostly essential in critical applications such as PCR, DNA sequencing and other techniques that involve the use of vaporous, biohazardous or corrosive material.
- Tip filters also act as a safety barrier against accidental over-pipetting of liquids without risk of sample lock-up.



PIPETTE TIPS - "economical"

- Manufactured from high quality pure polypropylene which is highly resistant to chemicals and thermal effects.
- Produced to match wide variety of pipettors for secure sealing and easy tip ejecting.
- Uniformity in size and shape allows perfect fitting with almost all micropipettes.
- Flashfree and uniform delivery orifice for consistent accuracy and reproducible sample delivery.
- Thin wall and small surface area at the tip minimize the possible tip retaining samples droplets.

catalogue number	capacity	color	pack quantity
005.01.001	10 µl	clear	1000 pcs
005.01.002	200 µl	yellow	1000 pcs
005.01.003	1000 µl	blue	500 pcs
005.01.004	5 ml	clear	250 pcs
005.01.005	10 ml	clear	100 pcs



STAND - "micropipette" "carrousel"

- Manufactured from polypropylene for use with most common micropipette brands.
- This space saving, robust stand can hold up to 6 pipettes comfortably.
- The round carrousel stand can rotate 360° around the axis enabling easy reach of any pipette.

catalogue number	base diameter	total height	pack quantity
006.11.005	159 mm	330 mm	1 piece



STAND - "micropipette" "linear"

- Manufactured from polypropylene for use with most common micropipette brands.
- Offers practical and easy direct access to micropipettes.
- This space saving, robust stand can hold up to 6 pipettes comfortably.



Linear micropipette stand can also hold multi channel pipettes.

catalogue number	dimensions	pack quantity
006.11.006	143 x 290 x 290 mm	1 piece



STAND - "micropipette" "adjustable"

- Manufactured from acrylic with ergonomic angled body form with adjustable pipette holding option.
- Can be used with most pipette brands.
- Depending on the stand size enables easy holding and handling of 4 or 6 single channel pipettes.



The unique adjustable pipette holding design guarantees the use with different height pipettes.

catalogue number	dimensions	pack quantity
006.12.004	130 x 260 x 220 mm	1 piece
006.12.006	150 x 380 x 220 mm	1 piece



STAND - "micropipette" - "with bin"

- Manufactured from acrylic with a bin. The top support can hold 4 single channel pipettes.
- Generous opening of the bin provides easy and safe access to pipette tips.
- Cover is featured with easy opening sliding lid. Once opened, the lid stays open and enables easy filling and dispensing.
- Bin guarantees safe and clean storage of box pipette tips without been effected from dust, moisture and other environmental effects.
- Featured with non-skid silicone feet for safe and stable stand on the laboratory desks.

catalogue number	dimensions	pack quantity
006.05.001	200 x 178 x 173 mm	1 piece



Bin guarantees safe and clean storage of pipette tips without been effected from dust, moisture and other environmental effects.

Cover is featured with easy opening sliding lid. Once opened, the lid stays open and enables easy filling and dispensing.



STAND - "micropipette" - "curved"

- Manufactured from ABS and perfectly fits to research pipettes.
- Also fits a large variety of other pipette brands including multi-channel pipettes.
- Modern and ergonomic design that enables extremely easy storing and handling of both single and multi-channel pipettes.
- Due to the unique construction can be linked to each other to form a longer stand form.

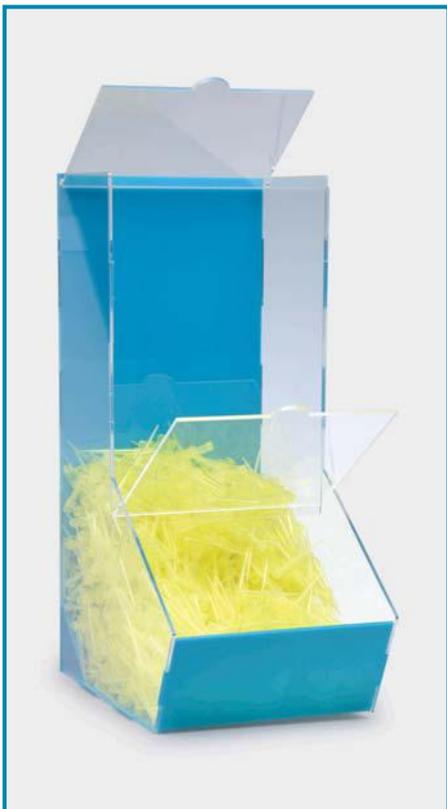
catalogue number	dimensions	pack quantity
006.01.001	100 x 60 x 230 mm	1 piece



Due to the unique construction can be linked to each other to form a longer stand form.



Curved pipette stand designed for a safe and practical hold of multi channel pipettes.



DISPENSER BOXES "for pipette tips"

- Manufactured from crystal clear acrylic with excellent field of vision.
- Ideal supportive assistants for storing and dispensing pipette tips.
- Generous openings provide easy and safe access to partiations.
- Covers are featured with easy opening hinged lids. Once opened, the lid stands open and enables easy filling and dispensing.
- Boxes with their flip-top covers guarantee safe and clean storage of box contents without been effected from dust, moisture and other environmental effects.
- Featured with non-skid silicone feet for safe and stable stand on the laboratory desks.

Other technical specifications can be seen at catalogue page no 68.



PIPETTING RESERVOIRS - "non-sterile & sterile" - "disposable"



- Manufactured from polystyrene featured with thick walls and crush-resistant corners as single, disposable use.
- Offers a clean, practical and economical alternative to all other re-usable pipetting reservoirs.
- Featured with a visible volume marking on the side wall.
- Large pour-back spouts at the corners guarantee pouring back the remaining liquid in to the original container without spillage.
- Easily stackable due to the tapered body form for reducing storage space.
- Liquid reservoirs do not stick to each other even stacked.
- Bottoms with a sloping "V" form and tapered in a narrow through guarantee maximum liquid recovery without any risks of loss.
- Alternative 2 products: ➤ non-sterile reservoirs
➤ sterile reservoirs

catalogue number	volume	product specifications	pack quantity
006.03.030	30 ml	non-sterile	100 pieces
006.13.030	30 ml	sterile	10 pieces
006.03.055	55 ml	non-sterile	100 pieces
006.13.055	55 ml	sterile	10 pieces
006.03.110	110 ml	non-sterile	100 pieces
006.13.110	110 ml	sterile	10 pieces



Pour-back spouts at the corners guarantee pouring back the remaining liquid in to the original container without spillage.



Easily stackable due to the tapered body form for reducing storage space. Liquid reservoirs do not stick to each other even stacked.



Bottoms with a sloping "V" form and tapered in a narrow through guarantee maximum liquid recovery without any risks of loss.



Embossed volume graduations on wall side offers better liquid level viewing and reproducible filling of the reservoir.



PIPETTING RESERVOIR - "3 in 1"

- Manufactured from polypropylene with 2 side options and 3 different compartment layout option.
- Ideal for use when the filling multi tube blocks, microwell plates etc since this two side reservoir is actually three reservoirs in one body.
- One side has a single compartment of 50 ml with 10, 25 and 40 ml visible volume markings at side wall.
- The reverse side has two individual compartments with 8 and 12 channels. Each individual channel has 5 ml volume capacity.

catalogue number	pack quantity
006.08.001	1 piece





*lab consumables
& labware*





BEAKERS - "glass" "low form"

- Manufactured from borosilicate glass 3.3 according to ISO 3819 and DIN 12331 standards.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Volume graduations and inscriptions are printed with white enamel.

catalogue number	volume	pack quantity
025.01.005	5 ml	10 pieces
025.01.010	10 ml	10 pieces
025.01.025	25 ml	10 pieces
025.01.050	50 ml	10 pieces
025.01.100	100 ml	10 pieces
025.01.150	150 ml	10 pieces
025.01.250	250 ml	10 pieces
025.01.400	400 ml	10 pieces
025.01.600	600 ml	10 pieces
025.01.800	800 ml	10 pieces
025.01.901	1000 ml	10 pieces
025.01.902	2000 ml	6 pieces
025.01.905	5000 ml	1 piece
025.01.910	10000 ml	1 piece



Various beaker tongs can be selected from catalogue page no 79.



BEAKERS - "P.P." "low form" - "embossed scale"

- Manufactured from ultra clear polypropylene according to ISO 7056 standard with thick walls preventing breakage.
- Functional large spout minimize possible spills during liquid transfer.
- Volume graduations and inscriptions are made embossed scale form.

embossed scale	volume	pack quantity
026.01.025	25 ml	1 piece
026.01.050	50 ml	1 piece
026.01.100	100 ml	1 piece
026.01.250	250 ml	1 piece
026.01.500	500 ml	1 piece
026.01.901	1000 ml	1 piece
026.01.902	2000 ml	1 piece



BEAKERS - "PTFE"

- Manufactured from chemically inert PTFE with excellent chemical resistance, high mechanical strength and high temperature resistance between -200°C to +260°C.
- Flat base enables a flat contact with the surface for effective heat transfer.

catalogue number	volume	pack quantity
025.03.050	50 ml	1 piece
025.03.100	100 ml	1 piece
025.03.250	250 ml	1 piece
025.03.500	500 ml	1 piece
025.03.901	1000 ml	1 piece



BEAKERS - "P.P." "low form" - "blue printed scale"

- Manufactured from ultra clear polypropylene according to ISO 7056 standard with thick walls preventing breakage.
- Functional large spout minimize possible spills during liquid transfer.
- Volume graduations and inscriptions are printed with blue enamel.



BEAKERS - "stainless steel"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Robust seamless construction guarantees a long life cycle.
- Highly polished smooth interior enables much easier cleaning.

catalogue number	volume	pack quantity
025.04.100	100 ml	1 piece
025.04.250	250 ml	1 piece
025.04.500	500 ml	1 piece
025.04.901	1000 ml	1 piece



Various beaker tongs can be selected from catalogue page no 79.



BEAKERS WITH HANDLE "P.P" - "embossed scale"

- Manufactured from ultra clear polypropylene according to ISO 7056 standard with thick walls preventing breakage.
- Functional large spout minimize possible spills during liquid transfer.
- Volume graduations and inscriptions are made embossed scale form.
- Easily stackable due to the tapered body form for reducing storage space.

catalogue number	volume	pack quantity
026.02.250	250 ml	1 piece
026.02.500	500 ml	1 piece
026.02.901	1000 ml	1 piece
026.02.902	2000 ml	1 piece
026.02.903	3000 ml	1 piece



BEAKERS WITH HANDLE "P.P" - "blue printed scale"

- Manufactured from ultra clear polypropylene according to ISO 7056 standard with thick walls preventing breakage.
- Functional large spout minimize possible spills during liquid transfer.
- Volume graduations and inscriptions are printed with blue enamel.
- Easily stackable due to the tapered body form for reducing storage space.

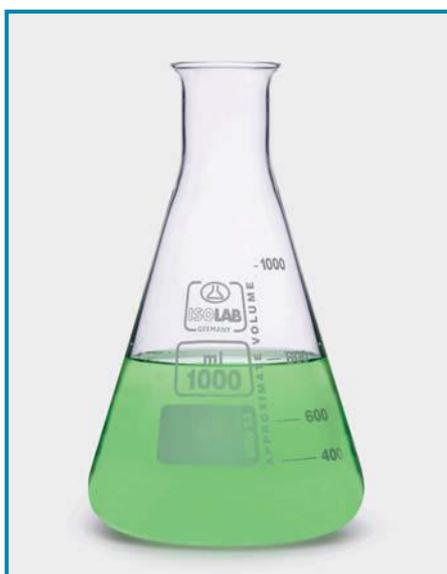
catalogue number	volume	pack quantity
026.04.250	250 ml	1 piece
026.04.500	500 ml	1 piece
026.04.901	1000 ml	1 piece
026.04.902	2000 ml	1 piece
026.04.903	3000 ml	1 piece



BEAKERS WITH HANDLE "stainless steel"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Robust seamless construction guarantees a long life cycle.
- Highly polished smooth interior enables much easier cleaning.
- Moulded graduations on the side wall offer easy volume identification.
- Functional large spout minimize possible spills during liquid transfer.

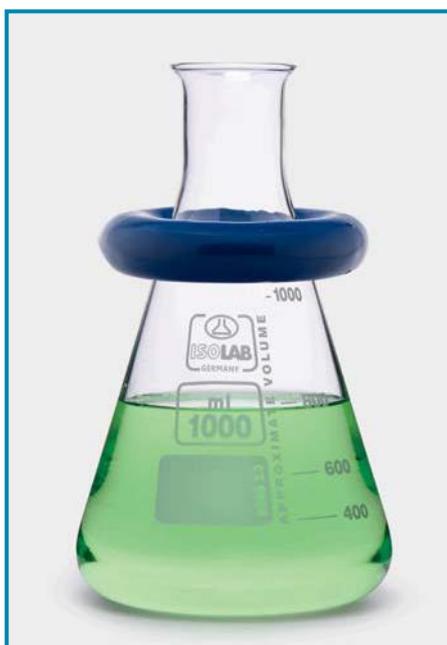
catalogue number	volume	pack quantity
025.05.500	500 ml	1 piece
025.05.901	1000 ml	1 piece
025.05.902	2000 ml	1 piece



ERLENMEYERS - "clear" "glass" - "narrow neck"

- Manufactured from borosilicate glass 3.3 according to ISO 1773 standard.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Volume graduations and inscriptions are printed with white enamel.

catalogue number	volume	pack quantity
027.01.025	25 ml	10 pieces
027.01.050	50 ml	10 pieces
027.01.100	100 ml	10 pieces
027.01.250	250 ml	10 pieces
027.01.300	300 ml	10 pieces
027.01.500	500 ml	10 pieces
027.01.901	1000 ml	10 pieces
027.01.902	2000 ml	6 pieces
027.01.903	3000 ml	1 piece
027.01.905	5000 ml	1 piece



ERLENMEYERS - "clear" "glass" - "screw cap"

- Manufactured from borosilicate glass 3.3 with a leak-proof screw cap.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Supplied polypropylene screw cap with large ridges for increased grip.
- Unique internal flanged design of the caps guarantees leak-proof closure.
- Volume graduations and inscriptions are printed with white enamel.

catalogue number	neck size	volume	pack quantity
027.03.100	GL 32	100 ml	1 piece
027.03.250	GL 32	250 ml	1 piece
027.03.500	GL 32	500 ml	1 piece
027.03.901	GL 32	1000 ml	1 piece



ERLENMEYERS - "clear" "polypropylene" - "screw cap"

- Manufactured from clear polypropylene with a leak-proof screw cap.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Cap with large ridges for increased grip.
- Unique internal flanged design of the caps guarantees leak-proof closure.
- Volume graduations and inscriptions are printed with blue enamel.

catalogue number	neck size	volume	pack quantity
028.03.050	GL 40	50 ml	1 piece
028.03.100	GL 40	100 ml	1 piece
028.03.250	GL 52	250 ml	1 piece
028.03.500	GL 52	500 ml	1 piece
028.03.901	GL 52	1000 ml	1 piece

STABILISING RINGS - "for erlenmeyers"

- Manufactured from heavy alloy with different internal diameters for perfect fit to the necks of various volume erlenmeyers and flasks.
- Can fit neatly around the neck of erlenmeyers and other flasks preventing falling over or floating risks in water baths.
- Soft vinyl coated ring surface prevents scratching the glass surface during use.



catalogue number	internal diameter	external diameter	recommended for	pack quantity
027.11.048	48 mm	85 mm	100 ml - 500 ml	1 piece
027.11.056	56 mm	100 mm	250 ml - 1000 ml	1 piece
027.11.061	61 mm	115 mm	500 ml - 2000 ml	1 piece
027.11.074	74 mm	129 mm	1000 ml - 4000 ml	1 piece



FLASKS - "clear" "glass" - "round bottom"

- Manufactured from borosilicate glass 3.3 according to ISO 1773 standard.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Inscriptions are printed with white enamel.

catalogue number	volume	pack quantity
029.02.050	50 ml	10 pieces
029.02.100	100 ml	10 pieces
029.02.250	250 ml	10 pieces
029.02.500	500 ml	10 pieces
029.02.901	1000 ml	10 pieces
029.02.902	2000 ml	6 pieces
029.02.904	4000 ml	1 piece
029.02.906	6000 ml	1 piece
029.02.910	10000 ml	1 piece



FLASKS - "clear" "glass" - "flat bottom"

- Manufactured from borosilicate glass 3.3 according to ISO 1773 standard.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Inscriptions are printed with white enamel.

catalogue number	volume	pack quantity
029.01.050	50 ml	10 pieces
029.01.100	100 ml	10 pieces
029.01.250	250 ml	10 pieces
029.01.500	500 ml	10 pieces
029.01.901	1000 ml	10 pieces
029.01.902	2000 ml	6 pieces
029.01.904	4000 ml	1 piece
029.01.906	6000 ml	1 piece
029.01.910	10000 ml	1 piece



FLASKS STAND "polypropylene"

- Manufactured from best quality heat resistant polypropylene for holding round bottom flasks.
- Unique wall design offers an excellent support at every point of contact.
- Easily stackable due to the tapered body form for reducing storage space.

catalogue number	for flasks volume	pack quantity
029.14.902	100 - 2000 ml	1 piece



Circular aluminium covers for closing the necks can be selected from catalogue page no 109.



FLASK STAND - "cork"

- Manufactured from best quality heat resistant, non-porous, natural cork for holding round bottom flasks.
- Unique wall design offers an excellent support at every point of contact.

catalogue number	recommended flask volume	pack quantity
029.04.001	50 - 100 ml	1 piece
029.04.002	250 - 500 ml	1 piece
029.04.003	1000 - 2000 ml	1 piece
029.04.004	3000 ml	1 piece
029.04.005	4000 ml	1 piece





BOTTLES - "ISO" - "glass" - "clear"

- Manufactured from borosilicate glass 3.3 with thick walls and crush-resistant corners.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- These impact resistant, excellently thermal stable bottles are autoclavable at 121°C. Caps should not be closed during autoclaving.
- Angled neck form allows unrestricted liquid flow-out without leaving any residue at the bottle neck.
- A large GL 45 bottle neck provides easy filling and pouring. Unique design pouring ring prevents drops and spillage.
- Caps are made from polypropylene with large ridges with increased grip. Cap inner design ensures hermetical and leak-proof closure.
- Volume graduations on wall side offer better liquid level viewing and reproducible filling of the bottle without the need of a measuring cylinder. Volume graduations and inscriptions are printed with white enamel.

catalogue number	volume	pack quantity
061.01.100	100 ml	10 pieces
061.01.250	250 ml	10 pieces
061.01.500	500 ml	10 pieces
061.01.901	1000 ml	10 pieces
061.01.902	2000 ml	4 pieces
061.01.903	3000 ml	1 piece
061.01.905	5000 ml	1 piece
061.01.910	10000 ml	1 piece
061.01.920	20000 ml	1 piece



BOTTLES - "ISO" - "glass" - "amber"

- Manufactured from borosilicate glass 3.3 with thick walls and crush-resistant corners. Amber bottles prevent UV lights to penetrate into the bottle.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- These impact resistant, excellently thermal stable bottles are autoclavable at 121°C. Caps should not be closed during autoclaving.
- Angled neck form allows unrestricted liquid flow-out without leaving any residue at the bottle neck.
- A large GL 45 bottle neck provides easy filling and pouring. Unique design pouring ring prevents drops and spillage.
- Caps are made from polypropylene with large ridges with increased grip. Cap inner design ensures hermetical and leak-proof closure.
- Volume graduations on wall side offer better liquid level viewing and reproducible filling of the bottle without the need of a measuring cylinder. Volume graduations and inscriptions are printed with white enamel.

catalogue number	volume	pack quantity
061.02.100	100 ml	1 piece
061.02.250	250 ml	1 piece
061.02.500	500 ml	1 piece
061.02.901	1000 ml	1 piece
061.02.902	2000 ml	1 piece
061.02.903	3000 ml	1 piece
061.02.905	5000 ml	1 piece
061.02.910	10000 ml	1 piece
061.02.920	20000 ml	1 piece





BOTTLES - "ISO" - "glass" - "clear"

- Manufactured from neutral glass with thick walls and crush-resistant corners.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Angled neck form allows unrestricted liquid flow-out without leaving any residue at the bottle neck.
- A large GL 45 bottle neck provides easy filling and pouring. Unique design pouring ring prevents drops and spillage.
- Caps are made from polypropylene with large ridges with increased grip. Cap inner design ensures hermetical and leak-proof closure.
- Volume graduations on wall side offer better liquid level viewing and reproducible filling of the bottle without the need of a measuring cylinder.
- Volume graduations and inscriptions are printed with white enamel.

catalogue number	volume	pack quantity
061.31.100	100 ml	10 pieces
061.31.250	250 ml	10 pieces
061.31.500	500 ml	10 pieces
061.31.901	1000 ml	10 pieces



BOTTLES - "glass" - "clear"

- Manufactured from neutral glass according to DIN 168 with thick walls and crush-resistant corners.
- Ideal for safe storage and transportation of liquids and powders.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Caps are made from polypropylene with large ridges with increased grip.
- Cap inner design ensures hermetical and leak-proof closure.

catalogue number	volume	pack quantity
061.10.050	50 ml	10 pieces
061.10.100	100 ml	10 pieces
061.10.250	250 ml	10 pieces
061.10.500	500 ml	10 pieces
061.10.901	1000 ml	10 pieces



Supplied with a leak-proof polypropylene cap with an insert.



BOTTLES - "glass" - "amber"

- Manufactured from neutral glass with thick walls and crush-resistant corners. Amber bottles prevent UV lights to penetrate into the bottle.
- Ideal for safe storage and transportation of liquids and powders.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Caps are made from polypropylene with large ridges with increased grip. Cap inner design ensures hermetical and leak-proof closure.

catalogue number	volume	pack quantity
061.11.050	50 ml	10 pieces
061.11.100	100 ml	10 pieces
061.11.250	250 ml	10 pieces
061.11.500	500 ml	10 pieces
061.11.901	1000 ml	10 pieces



Supplied with a leak-proof polypropylene cap with an insert.

BOTTLES - "aluminium"



➤ These odour-natural, impervious to light and rust proof bottles are manufactured from aluminium for storing, transporting and delivery of samples and products which have to be stored totally unaltered.

➤ Supplied with an insert plug and a cap with a locking ring ensuring safe sealing of the bottle content.

➤ Round neck form allows unrestricted liquid flow-out without leaving any residue at the bottle neck.

catalogue number	volume	pack quantity
061.14.025	25 ml	10 pieces
061.14.060	60 ml	10 pieces
061.14.120	120 ml	10 pieces
061.14.300	300 ml	10 pieces
061.14.600	600 ml	10 pieces
061.14.901	1200 ml	10 pieces

Caps of aluminium bottles have a lock ring ensuring safe sealing of content.



Aluminium bottles are supplied with insert plug and cap with lock.



JARS - "glass"

➤ Manufactured from neutral glass with thick walls and crush-resistant corners.

➤ Ideal for safe storage and transportation of liquids and powders.

➤ Caps are made from enameled steel with large ridges with increased grip. Cap inner design ensures hermetical and leak-proof closure.

catalogue number	volume	jar height	pack quantity
061.29.040	40 ml	50 mm	10 pieces
061.29.105	105 ml	84 mm	10 pieces
061.29.370	370 ml	121 mm	10 pieces
061.29.720	720 ml	141 mm	10 pieces
061.29.901	1000 ml	180 mm	10 pieces



JARS - "polypropylene"

➤ Manufactured from polypropylene with thick walls and crush-resistant corners.

➤ Ideal for safe storage and transportation of liquids and powders.

➤ Caps are made from polypropylene with large ridges with increased grip. Cap inner design ensures hermetical and leak-proof closure.

catalogue number	volume	dimensions Ø x height	pack quantity
061.13.001	250 ml	90 x 62 mm	1 piece
061.13.002	410 ml	90 x 102 mm	1 piece
061.13.004	1270 ml	140 x 110 mm	1 piece
061.13.006	1420 ml	140 x 135 mm	1 piece
061.13.008	1800 ml	140 x 160 mm	1 piece



BOTTLES - "narrow neck" - "PP"

➤ Manufactured from polypropylene with thick walls and crush-resistant corners.

➤ Ideal for safe storage and transportation of liquids and powders.

➤ Caps are made from polypropylene with large ridges with increased grip. Cap inner design ensures hermetical and leak-proof closure.

catalogue number	volume	dimensions Ø x height	pack quantity
061.55.100	100 ml	42 x 124 mm	1 piece
061.55.250	250 ml	60 x 156 mm	1 piece
061.55.500	500 ml	74 x 190 mm	1 piece
061.55.901	1000 ml	95 x 225 mm	1 piece

BOTTLES - "square" - "wide neck" - "polyethylene"

- Manufactured from transparent polyethylene with thick walls and crush-resistant corners.
- A large bottle neck provides easy filling and pouring.
- Cap offers increased grip. Featured with an insert plug for hermetical and leak-proof closure.
- Bottle neck and the cap carry holes for enabling the insertion of the security seal wire.
- The space between the cap and the insert plug can be used for securing confidential notes.
- Embossed volume graduations on wall side offer better liquid level viewing and reproducible filling of the bottle without the need of a measuring cylinder.

catalogue number	bottle volume	dimensions	pack quantity
061.07.050	50 ml	37 x 39 x 73 mm	50 pieces
061.07.100	100 ml	50 x 45 x 90 mm	50 pieces
061.07.250	250 ml	64 x 57 x 112 mm	50 pieces
061.07.500	500 ml	85 x 72 x 140 mm	50 pieces
061.07.901	1000 ml	104 x 82 x 173 mm	50 pieces
061.07.902	2000 ml	134 x 100 x 210 mm	50 pieces

**SECURITY SEALS**

- Security seal is used ensure the safety locking and durability of the product inside the bottles.
- 4 different colors are used to identify among the seals with identification numbers printed on the seal plate.



061.09.0B1 061.09.0R1 061.09.0Y1 061.09.0G1

catalogue number	color	pack quantity
061.09.0B1	blue	10 pieces
061.09.0R1	red	10 pieces
061.09.0Y1	yellow	10 pieces
061.09.0G1	green	10 pieces



The space between cap and insert plug can be used for private and confidential notes.



Insert the seal wire through the holes of both the cap and bottle itself. Then insert the wire into the hole of the seal as shown.



Last step is to wind the seal key clockwise until the seal wire gets tight enough to provide optimum security lock.

SECURITY SEAL CUTTER

- Security seal cutter is a perfect tool to cut security seal wires easily.

catalogue number	pack quantity
061.20.001	1 piece





BOTTLES - "ISO" - "P.P" - "clear"

- Manufactured from glass-like transparent special formulated polypropylene with thick walls and crush-resistant corners.
- These impact resistant, excellently thermal stable bottles are autoclavable at 121°C.
- Angled neck form allows unrestricted liquid flow-out without leaving any residue at the bottle neck.
- A large GL 45 bottle neck provides easy filling and pouring. Unique design of the neck with moulded pouring ring prevents drops and spillage.
- Cap with large ridges with increased grip featured with self lock and internal security ring. Cap inner design ensures hermetical and leak-proof closure.
- Embossed volume graduations on wall side offer better liquid level viewing and reproducible filling of the bottle without the need of a measuring cylinder.
- Alternative 2 products:
 - Non-sterile bottles
 - Sterile bottles
- Sterile bottles are manufactured at aseptically sterile production halls and then sent to gamma sterilisation.
- Such informations as Lot number, production and expiry dates etc are indicated on the packing.

clear bottles non-sterile	clear bottles sterile	volume	pack quantity
061.15.100	061.16.100	100 ml	100 pieces
061.15.250	061.16.250	250 ml	100 pieces
061.15.500	061.16.500	500 ml	100 pieces
061.15.901	061.16.901	1000 ml	50 pieces
061.15.902	061.16.902	2000 ml	50 pieces



Caps are made from robust and thick polypropylene with large ridges for increased grip.



Unique neck design with moulded pouring ring prevents drops and liquid splash.



Unique design of the cap with intended top plate guarantees tight and leakproof closure.



Integral security ring of the cap ensures safe and untouched protection of the bottle content.



Sterile bottles are manufactured at aseptically sterile production halls and then sent to gamma sterilisation.

Such informations as Lot number, production and expiry dates etc. are indicated on the packing.

BOTTLES - "ISO" - "P.P" - "amber"

- Manufactured from amber colored special formulated polypropylene with thick walls and crush-resistant corners. Specially recommended for storing UV sensitive products.
- These impact resistant, excellently thermal stable bottles are autoclavable at 121°C.
- Angled neck form allows unrestricted liquid flow-out without leaving any residue at the bottle neck.
- A large GL 45 bottle neck provides easy filling and pouring. Unique design of the neck with moulded pouring ring prevents drops and spillage.
- Cap with large ridges with increased grip featured with self lock and internal security ring. Cap inner design ensures hermetical and leak-proof closure.
- Embossed volume graduations on wall side offer better liquid level viewing and reproducible filling of the bottle without the need of a measuring cylinder.
- Alternative 2 products:
 - Non-sterile bottles
 - Sterile bottles
- Sterile bottles are manufactured at aseptically sterile production halls and then sent to gamma sterilisation.
- Such informations as Lot number, production and expiry dates etc are indicated on the packing.

amber bottles non-sterile	amber bottles sterile	volume	pack quantity
061.17.100	061.18.100	100 ml	100 pieces
061.17.250	061.18.250	250 ml	100 pieces
061.17.500	061.18.500	500 ml	100 pieces
061.17.901	061.18.901	1000 ml	50 pieces
061.17.902	061.18.902	2000 ml	50 pieces



Caps are made from robust and thick polypropylene with large ridges for increased grip.



Unique neck design with moulded pouring ring prevents drops and liquid splash.



Unique design of the cap with intended top plate guarantees tight and leakproof closure.



Integral security ring of the cap ensures safe and untouched protection of the bottle content.



Sterile bottles are manufactured at aseptically sterile production halls and then sent to gamma sterilisation.

Such informations as Lot number, production and expiry dates etc are indicated on the packing.

BOTTLES - "for water sampling" - "polypropylene" - "without sodium thiosulfate"



➤ Manufactured from polypropylene for taking, transporting and storing of water samples for microbiological analysis. They can be used for all analysis where a sterile sample is required.

➤ These bottles are manufactured at aseptically sterile production halls and then sent to gamma sterilisation. Such informations as Lot number, production and expiry dates etc are indicated on the packing.

➤ Alternative 2 products: ➤ **Clear bottles**
➤ **Amber bottles**

➤ Amber bottles preferably used with UV light sensitive samples.

➤ Square bottle form offers easy handling and optimum space saving solutions.

➤ GL 50 wide bottle neck provides easy filling and pouring

➤ Polyethylene cap with large ridges with increased grip featured with self lock and internal security ring. Cap inner design ensures hermetical and leak-proof closure.

➤ Embossed volume graduations on wall side offer better liquid level viewing.

➤ **"Bulk packed"**; where bottles are packed as a group in a box.

➤ Alternative 2 packing:

➤ **"Single packed"**; where bottles are first individually packed in P.E bags and then repacked in a box.



Self sealing lock caps with integral security ring. Cap inner design ensures hermetical closure and guarantees an excellent leak proof closure.



Each bottle is labelled specifying sample and source descriptions, code and lot numbers, expiry date and other informations.



Cap with large ridges with increased grip featured with self lock and internal security ring. Cap inner design ensures hermetical and leak-proof closure.



"Single packed"; where bottles are first individually packed in P.E bags and then repacked in a box.

"clear bottles without sodium thiosulfate"

bulk packed bottles	catalogue number	bottle volume	dimensions	packing specifications
	061.21.250	250 ml	60x 60 x 115	108 pcs in box
	061.21.500	500 ml	70 x 70 x 145	84 pcs in box
	061.21.901	1000 ml	90 x 90 x 175	30 pcs in box

single packed bottles	catalogue number	bottle volume	dimensions	packing specifications
	061.25.250	250 ml	60x 60 x 115	72 pcs in box
	061.25.500	500 ml	70 x 70 x 145	42 pcs in box
	061.25.901	1000 ml	90 x 90 x 175	22 pcs in box

"amber bottles without sodium thiosulfate"

bulk packed bottles	catalogue number	bottle volume	dimensions	packing specifications
	061.22.250	250 ml	60x 60 x 115	108 pcs in box
	061.22.500	500 ml	70 x 70 x 145	84 pcs in box
	061.22.901	1000 ml	90 x 90 x 175	30 pcs in box

single packed bottles	catalogue number	bottle volume	dimensions	packing specifications
	061.26.250	250 ml	60x 60 x 115	72 pcs in box
	061.26.500	500 ml	70 x 70 x 145	42 pcs in box
	061.26.901	1000 ml	90 x 90 x 175	22 pcs in box

BOTTLES - "for water sampling" - "polypropylene" - "with sodium thiosulfate"

- Manufactured from polypropylene for taking, transporting and storing of water samples for microbiological analysis. They can be used for all analysis where a sterile sample is required.
- Bottles with sodium thiosulfate (20 mg/lit – according to ISO/FIS 19458/2006 standard) are ideal for water analysis where chlorine may modify the composition of the sample.
- These bottles are manufactured at aseptically sterile production halls and then sent to gamma sterilisation. Lot number, production and expiry dates etc are indicated on the packing.
- Alternative 2 products:
 - Clear bottles
 - Amber bottles
- Amber bottles preferably used with UV light sensitive samples.
- Square bottle form offers easy handling and optimum space saving solutions. GL 50 wide bottle neck provides easy filling and pouring
- Polyethylene cap with large ridges with increased grip featured with self lock and internal security ring. Cap inner design ensures hermetical and leak-proof closure.
- Embossed volume graduations on wall side offer better liquid level viewing.
- Alternative 2 packing:
 - "Bulk packed"; where bottles are packed as a group in a box.
 - "Single packed"; where bottles are first individually packed in P.E bags and then repacked in a box.



"Single packed"; where bottles are first individually packed in P.E bags and then repacked in a box.



Self sealing lock caps with integral security ring. Cap inner design ensures hermetical closure and guarantees an excellent leak proof closure.



Each bottle is labelled specifying sample and source descriptions, code and lot numbers, expiry date and other informations.



Cap with large ridges with increased grip featured with self lock and internal security ring. Cap inner design ensures hermetical and leak-proof closure.

"clear bottles with sodium thiosulfate"

bulk packed bottles	catalogue number	bottle volume	dimensions	packing specifications
	061.23.250	250 ml	60x 60 x 115	108 pcs in box
	061.23.500	500 ml	70 x 70 x 145	84 pcs in box
	061.23.901	1000 ml	90 x 90 x 175	30 pcs in box

single packed bottles	catalogue number	bottle volume	dimensions	packing specifications
	061.27.250	250 ml	60x 60 x 115	72 pcs in box
	061.27.500	500 ml	70 x 70 x 145	42 pcs in box
	061.27.901	1000 ml	90 x 90 x 175	22 pcs in box

"amber bottles with sodium thiosulfate"

bulk packed bottles	catalogue number	bottle volume	dimensions	packing specifications
	061.24.250	250 ml	60x 60 x 115	108 pcs in box
	061.24.500	500 ml	70 x 70 x 145	84 pcs in box
	061.24.901	1000 ml	90 x 90 x 175	30 pcs in box

single packed bottles	catalogue number	bottle volume	dimensions	packing specifications
	061.28.250	250 ml	60x 60 x 115	72 pcs in box
	061.28.500	500 ml	70 x 70 x 145	42 pcs in box
	061.28.901	1000 ml	90 x 90 x 175	22 pcs in box



BOTTLES - "reservoir" "clear & amber" - "glass"

- Manufactured from thick glass to be used with automatic burettes.
- Grinded neck with NS 29/32 socket size perfectly fits to automatic burette's cone.

Other technical specifications can be seen at catalogue page no 16.



BOTTLES - "reservoir" "with side arm" - "glass"

- Manufactured from thick walled glass with side arm and easy to fill large neck.
- Ideal reservoir bottles to be used with dispensers and digital burettes.
- Side arm allows the filling without disassembling of the already assembled dispenser or digital burette.

Other technical specifications can be seen at catalogue page no 31.



BOTTLES - "reservoir" "with side arm" - "polyethylene"

- Manufactured from thick walled polyethylene with side arm and easy to fill large neck.
- Ideal reservoir bottles to be used with dispensers and digital burettes.
- Side arm allows the filling without disassembling of the already assembled dispenser or digital burette.

Other technical specifications can be seen at catalogue page no 31.



CONTAINER CUP - "screw cap"



- Manufactured from clear polypropylene with 100 ml effective volume.
- The screw caps are with large ridges for increased grip ensures hermetical and leak-proof closure.
- Moulded graduations on the side wall offer easy volume identification.
- Frosted marking area on side wall enables easy marking and labelling.

- Alternative 2 products:
- non-sterile cups (supplied with unasssembled caps - bulk packed)
 - sterile cups (supplied with assembled caps - single packed)

catalogue number	product description	pack quantity
087.01.001	non-sterile cups	500 pieces
087.01.002	sterile cups	250 pieces

CONTAINER CUP - "screw cap"



- Manufactured from clear polystyrene with 20 ml effective volume.
- Ideal for safe storage and transportation of solids, liquids and powders.
- The screw caps are with large ridges for increased grip ensures hermetical and leak-proof closure.
- Sticker marking area on side wall enables easy marking and labelling.

- Alternative 2 products:
- non-sterile cups (supplied with unasssembled caps - bulk packed)
 - sterile cups (supplied with assembled caps - single packed)

catalogue number	product description	pack quantity
087.03.001	non-sterile cups	400 pieces
087.03.002	sterile cups	400 pieces

CONTAINER CUP "press-on cap"



- Manufactured from clear polypropylene with 30 ml effective volume.
- The press-on cap ensures hermetical and leak-proof closure.
- Moulded graduations on the side wall offer easy volume identification.
- Cups are supplied without caps. Caps should be ordered separately.

catalogue number	product description	pack quantity
087.05.001	container cup	5000 pieces
087.05.002	lid for container cup	1000 pieces

CONTAINER CUP "press-on cap"



- Manufactured from clear polypropylene with 40 ml effective volume.
- The press-on cap ensures hermetical and leak-proof closure. Scale on side wall for easy volume identification.
- Frosted marking area on side wall enables easy marking and labelling.

catalogue number	product description	pack quantity
087.02.001	non-sterile cups	1000 pieces
087.02.002	sterile cups	500 pieces

STORAGE VIALS - "clear & amber"



- Manufactured from glass for safe storage and transportation of solids, liquids and powders.
- The screw caps with silicone septas ensure hermetical and leak-proof closure.
- Caps supplied not assembled to vials.

All other technical specifications can be seen at catalogue page no 268.



JERRYCANS - "polyethylene"

- Manufactured from UV stabilised, thick polyethylene with sturdy carrying handles.
- Ideal for safe storage, transportation and dispensing of liquids.
- Featured with a wide neck for easy filling and draining.
- Caps are made from polypropylene with large ridges with increased grip.
- Cap featured with self-locking internal security ring ensures hermetical and leak-proof closure.



Caps are made from polypropylene with large ridges with increased grip.

catalogue number	volume	pack quantity
062.21.902	2 L	1 piece
062.21.903	3 L	1 piece
062.21.905	5 L	1 piece
062.21.910	10 L	1 piece



JERRYCANS - "aluminium"

- These odour-natural, impervious to light and rust proof bottles are manufactured from aluminium.
- Ideal for storing, transporting and delivery of samples and products which have to be stored totally unaltered.
- Featured with a sturdy carrying handle and an insert plug and a cap with a locking ring ensuring safe sealing of the bottle content.
- Round neck form allows unrestricted liquid flow-out without leaving any residue at the bottle neck.



Featured with a sturdy carrying handle.



Featured an insert plug and a cap with a locking ring ensuring safe sealing of the bottle content.

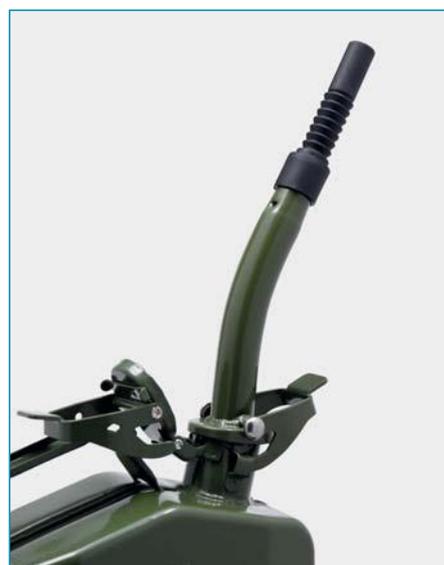
catalogue number	volume	pack quantity
061.14.906	6 L	1 piece
061.14.912	12 L	1 piece
061.14.931	31 L	1 piece



JERRYCANS - "steel"

- These explosion proof jerrycans are manufactured from thick steel.
- Ideal for safe storage, transportation and dispensing of explosive and flammable liquids.
- Featured with a wide neck for easy filling and draining.
- Self-locking screw caps ensure hermetical and leak-proof closure.
- Supplied with delivery tube for safe transfer of liquids.

catalogue number	volume	pack quantity
062.22.905	5 L	1 piece
062.22.910	10 L	1 piece
062.22.920	20 L	1 piece





BOTTLES - "aspirator" - "with stopcock" - "glass"

- Manufactured from borosilicate 3.3 glass with thick wall, heavy base and reinforced rim.
- Ideal for safe storage, transportation and dispensing of liquids.
- Featured with a wide neck for easy filling and draining.
- Caps are made from polypropylene with large ridges with increased grip.
- Cap inner design ensures hermetical and leak-proof closure.
- Featured with a leak-proof stopcock which prevents vacuum formation during draining.



Caps are made from polypropylene with large ridges with increased grip.



Featured with a leak-proof stopcock which prevents vacuum formation during draining.

catalogue number	volume	pack quantity
062.27.905	5 L	1 piece
062.27.910	10 L	1 piece
062.27.920	20 L	1 piece



BOTTLES - "aspirator" - "with stopcock" - "polyethylene"

- Manufactured from UV stabilised, thick polyethylene with sturdy carrying handles.
- Ideal for safe storage, transportation and dispensing of liquids.
- Featured with a wide neck for easy filling and draining.
- Caps are made from polypropylene with large ridges with increased grip.
- Cap inner design ensures hermetical and leak-proof closure.
- Featured with a leak-proof stopcock which prevents vacuum formation during draining.



Caps are made from polypropylene with large ridges with increased grip.



Featured with a leak-proof stopcock which prevents vacuum formation during draining.

catalogue number	volume	pack quantity
062.28.905	5 L	1 piece
062.28.910	10 L	1 piece
062.28.920	20 L	1 piece



JERRYCANS - "with stopcock" - "polyethylene"

- Manufactured from UV stabilised, thick polyethylene with sturdy carrying handles.
- Ideal for safe storage, transportation and dispensing of liquids.
- Featured with a wide neck for easy filling and draining.
- Caps are made from polypropylene with large ridges with increased grip.
- Cap featured with self-locking internal security ring ensures hermetical and leak-proof closure.
- Featured with a leak-proof stopcock which prevents vacuum formation during draining.



Cap featured with self-locking internal security ring ensures hermetical and leak-proof closure.



Featured with a leak-proof stopcock which prevents vacuum formation during draining.

catalogue number	volume	pack quantity
062.21.920	20 L	1 piece
062.21.930	30 L	1 piece
062.21.960	60 L	1 piece



BOTTLES - "wash" - "narrow neck" - "clear"

- Manufactured from highly translucent and semi-rigid polyethylene with walls and crush-resistant corners.
- Round neck form allows un-restricted liquid flow-out without leaving any residue at the bottle neck.
- Flexible delivery tube guarantees a fine and straight flow with an application of a slight pressure on the body.
- "Goose neck" design of the delivery tube guarantees easy and precise reaching to the flask corners.
- The tip of the delivery tube can be cut to increase the flow rate.



catalogue number	volume	pack quantity
062.05.100	100 ml	1 piece
062.05.250	250 ml	1 piece
062.05.500	500 ml	1 piece
062.05.901	1000 ml	1 piece



BOTTLES - "wash" - "narrow neck" - "multi-color bottle & cap"

- Manufactured from highly translucent and semi-rigid polyethylene with walls and crush-resistant corners.
- Colored body and caps enables fast, easy and practical identification of bottle content.
- Round neck form allows un-restricted liquid flow-out without leaving any residue at the bottle neck.
- Flexible delivery tube guarantees a fine and straight flow with an application of a slight pressure on the body.
- "Goose neck" design of the delivery tube guarantees easy and precise reaching to the flask corners.
- The tip of the delivery tube can be cut to increase the flow rate.



catalogue number	volume	bottle color	pack quantity
062.05.05R	500 ml	red	1 piece
062.05.05Y	500 ml	yellow	1 piece
062.05.05G	500 ml	green	1 piece
062.05.05B	500 ml	blue	1 piece



BOTTLES - "wash" - "wide neck" - "multi-color cap"

- Manufactured from highly translucent and semi-rigid polyethylene with walls and crush-resistant corners.
- Round neck form allows un-restricted liquid flow-out without leaving any residue at the bottle neck.
- Angled delivery tube guarantees a fine and straight flow with an application of a slight pressure on the body.
- Dispensing tube design offers optimum backflow and turbulence free liquid transfer.
- Caps acupled with delivery tube are made from polyethylene with large ridges with increased grip. Cap inner design ensures hermetical and leak-proof closure.



catalogue number	volume	cap color	pack quantity
062.09.05R	500 ml	red	1 piece
062.09.05Y	500 ml	yellow	1 piece
062.09.05G	500 ml	green	1 piece
062.09.05B	500 ml	blue	1 piece

BOTTLES - "wash" - "polyethylene" - "wide neck" - bilingual



➤ Manufactured from highly translucent and semi-rigid polyethylene with walls and crush-resistant corners according to European safety regulations (EC)1272/2008(GHS).

➤ Round neck form allows un-restricted liquid flow-out without leaving any residue at the bottle neck.

➤ Angled delivery tube guarantees a fine and straight flow with an application of a slight pressure on the body.

➤ Dispensing tube design offers optimum backflow and turbulence free liquid transfer.

➤ Caps acupled with delivery tube are made from polyethylene with large ridges with increased grip. Cap inner design ensures hermetical and leak-proof closure.

➤ Chemical names, formulas, CAS numbers and other key safety informations are printed on the body surface in 4 (English / French / German and Spanish) languages.

➤ Warning words such as "flammable" or "danger" etc. to identify the severity of the hazardous liquids and globally harmonised system with new designed pictograms reflecting the latest changes in legislations are also printed on the body.



Chemical names, formulas, CAS numbers and pictograms showing the latest changes in legislations are printed on the body surface.



Warning words as "flammable", to identify the the hazardous liquids, "how-to-use" instructions in four languages are printed on the body.



Color coded cap and bottle offers easy recognition of the wash bottle content.

catalogue number	wash bottle label name	bottle material	bottle volume	cap color	pack quantity
062.50.500	acetone	P.P	500 ml	red	1 piece
062.51.500	water	P.E	500 ml	blue	1 piece
062.51.501	distilled water	P.E	500 ml	blue	1 piece
062.51.502	deionised water	P.E	500 ml	blue	1 piece
062.52.500	ethanol	P.E	500 ml	green	1 piece
062.53.500	ethyl acetate	P.E	500 ml	white	1 piece
062.54.500	iso-propanol	P.E	500 ml	yellow	1 piece
062.55.500	methanol	P.E	500 ml	orange	1 piece
062.56.500	methylethylketone	P.P	500 ml	brown	1 piece
062.57.500	tetrahydrofuran	P.P	500 ml	black	1 piece
062.58.500	toluene	P.E	500 ml	torquise	1 piece



WASH BOTTLES - "integral"

- Manufactured from a mixture of high and low density polyethylene.
- Semi rigid, translucent and with high clarity with ergonomic shape for easy grip and handling.
- Single piece cap and delivery tube assembly eliminate air or liquid absorption through the cap and ensures a leaktight seal.
- Dispensing tip provides extra fine stream. The tip of the delivery tube can be cut in order to increase the liquid flow rate.
- Close the tip by means of the cap attached to the delivery tube.



Dispensing tip provides extra fine stream. The tip of the delivery tube can be cut in order to increase the liquid flow rate.

catalogue number	volume	pack quantity
062.08.250	250 ml	1 piece
062.08.500	500 ml	1 piece



BOTTLES - "dropping"

- Manufactured from transparent polyethylene with a dropping tip.
- Dispensing tip provides similar size drops at all times.
- The dispensing tip can be cut to increase the drop volume.
- Supplied with a push-open seal cap for safety reasons.
- Cap can be easily dismantled for cleaning.



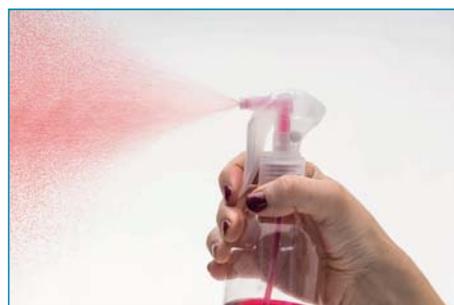
Dispensing tip provides always similar size drops at all times.

catalogue number	volume	pack quantity
062.10.010	10 ml	10 pieces
062.10.015	15 ml	10 pieces
062.10.020	20 ml	10 pieces
062.10.030	30 ml	10 pieces



BOTTLES - "spray"

- Manufactured from transparent PET with a spray head.
- All media contacting parts perfectly resists to most solvents and chemicals.
- Liquids can be finely vaporised with the pull of the hand pump trigger.
- Safety lock at the trigger prevents accidental use.



Extremely homogenous vaporisation is guaranteed with the pull of the trigger.

catalogue number	volume	pack quantity
062.11.250	250 ml	1 piece
062.11.500	500 ml	1 piece



BOTTLES - "dropping"

- Manufactured from borosilicate glass 3.3 with a glass dropping lid.
- Dispensing tip provides similar size drops at all times.
- Lid can be easily dismantled for cleaning.

➤ Alternative 2 products:

- Clear bottles
- Amber bottles

- Amber bottles prevent UV lights to penetrate into the bottle.



Dispensing tip provides always similar size drops at all times.

clear bottles	amber bottles	volume	pack quantity
062.02.100	062.03.100	100 ml	1 piece



BOTTLES - "dropping"

- Manufactured from borosilicate glass 3.3 with a rubber dropping cap.
- Dispensing tip provides similar size drops at all times.
- Lid can be easily dismantled for cleaning.

➤ Alternative 2 products:

- Clear bottles
- Amber bottles

- Amber bottles prevent UV lights to penetrate into the bottle.



Dispensing tip provides always similar size drops at all times.

clear bottles	amber bottles	volume	pack quantity
062.12.050	062.13.050	50 ml	1 piece
062.12.100	062.13.100	100 ml	1 piece



BOTTLES - "dropping"

- Manufactured from transparent polyethylene with a dropping cap.
- Dispensing tip provides similar size drops at all times.

- The dispensing tip can be cut to increase the drop volume

- The tip can also provide an extra fine stream allowing the bottle to be used as a wash bottle.

- Cap can be easily dismantled for cleaning.

➤ Alternative 2 products:

- Clear bottles
- Amber bottles

- Amber bottles prevent UV lights to penetrate into the bottle.



Dispensing tip provides always similar size drops at all times.

clear bottles	amber bottles	volume	pack quantity
062.04.100	062.04.101	100 ml	1 piece



BASKET - "for wash bottle"

- Manufactured from ABS for safe and convenient transportation up to 6 wash bottles.
- Although highly recommended for 500 ml bottles can also carry 250 ml bottles.
- Strong, light weight body construction and ergonomic handle offers both comfort and control.
- Easily stackable due to the tapered body form for reducing storage space.

catalogue number	pack quantity
062.66.001	1 piece



BASKET - "general purpose"

- Manufactured from polypropylene for holding and carrying various flasks and bottles and many others.
- Featured with double compartment for flexible usage.
- Easily stackable due to the tapered body form for reducing storage space.

catalogue number	pack quantity
062.66.002	1 piece



TRANSPORT BOX - "general purpose"

- Manufactured from polypropylene for storing and transporting small size products.
- Clasp lid ensures safe closure and guarantees the interior being not effected by dust, humidity and other enviromental conditions.
- The clarity of the box enables the user to visibly check the sample integrity and use the box safely.
- Carry handle folds neatly allowing the boxes can be stacked on each other.
- The lid can open fully 180° offering easy access to the contents and easy cleaning of interior.
- Detachable tray with divisions enables easier organising of box contents.

catalogue number	pack quantity
062.66.004	1 piece



Detachable tray with divisions enables easier organising of box contents.



TRAYS - "polypropylene"

- Manufactured from polypropylene for multipurpose use.
- Injection moulded as one piece, durable and featured with a strong rim around the body.
- Usable with food-stuff, hygienic and easy to clean.
- Easily stackable for reducing storage space.

catalogue number	base dimensions	height	pack quantity
062.40.901	183 x 127 mm	50 mm	1 piece
062.40.902	255 x 180 mm	60 mm	1 piece
062.40.905	355 x 245 mm	70 mm	1 piece



TRAYS - "stainless steel"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel for multipurpose use.
- Robust and seamless construction guarantees long life cycle.
- Smooth polished surfaces provides fast and easy cleaning.

catalogue number	base dimensions	height	pack quantity
062.42.910	400 x 500 mm	50 mm	1 piece
062.42.915	450 x 600 mm	50 mm	1 piece
062.42.920	500 x 700 mm	50 mm	1 piece



BUCKET - "with lid"

- Manufactured from HD-PE with a uniform wall thickness.
- Reinforced body prevents distortion when carried and ensures best possible impact strength.

catalogue number	volume	top dia. x height	pack quantity
062.60.901	1 L	120 x 122 mm	10 pieces
062.60.902	2 L	165 x 138 mm	10 pieces
062.60.903	3 L	190 x 132 mm	10 pieces
062.60.905	5 L	210 x 171 mm	10 pieces
062.60.909	9 L	260 x 225 mm	10 pieces
062.60.918	18 L	310 x 275 mm	10 pieces



BUCKET - "with spoud"

- Manufactured from polypropylene which stays hard and solid with the use of boiling water.
- Supplied with a carry handle and embossed volume scale inside the bucket.

catalogue number	volume	top dia. x height	pack quantity
062.61.909	9 L	237 x 252 mm	1 piece
062.61.914	14 L	290 x 298 mm	1 piece



BUCKET - "stainless steel"

- Manufactured from AISI 304 stainless steel with a fine and brilliant finish.
- Perfect choice for applications where durability and long-lasting service are mandatory.
- Provides high tensile strength, as well as easy cleaning, sanitizing and sterilization.

catalogue number	volume	pack quantity
062.62.910	10 L	1 piece
062.62.915	15 L	1 piece



BOXES - "click lock"

- Manufactured from polypropylene for easy and safe storage of most products.
- "Click-lock" system enables safe closure and easy opening of the box lid.
- The clarity of the box enables the user to visibly check the sample integrity and use the box safely.
- Easily stackable due to the tapered body form for reducing storage space.

catalogue number	box width	box length	box height	box volume	pack quantity
062.36.910	385 mm	260 mm	155 mm	10 L	1 piece
062.36.920	460 mm	320 mm	180 mm	20 L	1 piece
062.36.930	510 mm	355 mm	230 mm	30 L	1 piece



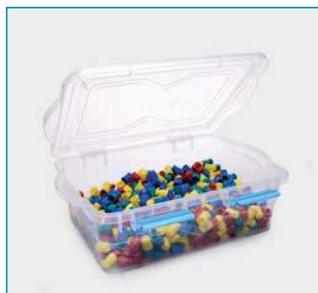
Easily stackable due to the tapered body form for reducing storage space.



BOXES - "double opening"

- Manufactured from polypropylene for storing and transporting all products including food stuff.
- Clasp lid ensures safe closure and guarantees the interior being not effected by dust, humidity and other enviromental conditions.
- The clarity of the box enables the user to visibly check the sample integrity and use the box safely.
- Easily stackable due to the tapered body form for reducing storage space.
- The lid can open fully 180° with two steps offering easy access to the contents and easy cleaning of interior.

catalogue number	box width	box length	box height	box volume	pack quantity
062.39.900	95 mm	150 mm	75 mm	0,75 ml	1 piece
062.39.901	125 mm	185 mm	65 mm	1,00 ml	1 piece
062.39.902	125 mm	185 mm	90 mm	1,50 ml	1 piece
062.39.903	155 mm	230 mm	110 mm	3,00 ml	1 piece
062.39.905	200 mm	280 mm	125 mm	5,00 ml	1 piece
062.39.907	255 mm	355 mm	122 mm	7,50 ml	1 piece
062.39.910	250 mm	345 mm	150 mm	10,00 ml	1 piece
062.39.913	255 mm	355 mm	200 mm	13,00 ml	1 piece



The lid can open fully 180° with two steps offering easy access to the contents and easy cleaning of interior.

BOXES - "foldable"

- Manufactured from polypropylene for easy and safe storage of most products.
- External reinforced body design allows rough handling under most inconvenient conditions.
- Unique design offers easy folding and reducing the volume of the box for reducing storage space.
- The folded box only covers 1/6 space of the unfolded, open box.

catalogue number	box width	box length	box height	box volume	pack quantity
062.38.904	171 mm	266 mm	105 mm	4 L	1 piece
062.38.915	300 mm	400 mm	145 mm	15 L	1 piece
062.38.945	400 mm	600 mm	220 mm	45 L	1 piece

**BOX - "with compartments"**

- Manufactured from polystyrene featured with different size compartments.
- Offers practical positioning and easy reach of different size small objects such as magnetic stirrers.
- Featured with a lid protecting the box interior from environmental conditions and also reduce the risk of lost.

catalogue number	box width	box length	box height	compartment quantity	pack quantity
057.02.100	175 mm	85 mm	30 mm	10	1 piece

**BOX - "with compartments"**

- Manufactured from acrylic featured with different size compartments.
- Offers practical positioning and easy reach of different size small objects such as magnetic stirrers.
- The long compartment is ideal to store longer objects including magnetic bar retrievers.
- Featured with a lid protecting the box interior from environmental conditions and also reduce the risk of lost.

catalogue number	box width	box length	box height	compartment quantity	pack quantity
057.02.101	330 mm	110 mm	35 mm	12	1 piece



DISPENSER BOX "1 compartment"

- Manufactured from crystal clear acrylic with excellent field of vision with one compartment.
- Ideal supportive assistants for storing and dispensing small sized products such as pipette tips, tubes, vials and many others.
- Generous openings provides easy and safe access to partiations.
- Covers are featured with easy opening hinged lids. Once opened, the lid stands open and enables easy filling and dispensing.
- Their flip-top covers guarantees safe and clean storage without been effected from dust, moisture and other enviromental effects.
- Featured with non-skid silicone feet for safe and stable stand on the desks.

catalogue number	external dimensions	pack quantity
006.15.001	175 x 250 x 330 mm	1 piece



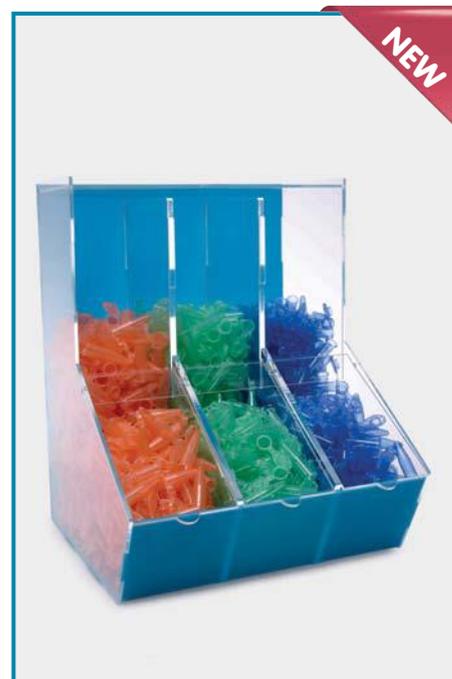
DISPENSER BOX "2 compartments"

- Manufactured from crystal clear acrylic with excellent field of vision with two equal compartment.
- Ideal supportive assistants for storing and dispensing small sized products such as pipette tips, tubes, vials and many others.
- Generous openings provides easy and safe access to partiations.
- Covers are featured with easy opening hinged lids. Once opened, the lid stands open and enables easy filling and dispensing.
- Their flip-top covers guarantees safe and clean storage without been effected from dust, moisture and other enviromental effects.
- Featured with non-skid silicone feet for safe and stable stand on the desks.

catalogue number	external dimensions	pack quantity
006.15.002	175 x 250 x 330 mm	1 piece

Generous filling openings provides easy and safe access to partiations.

Covers are featured with easy opening hinged lids. Once opened, the lid stands open and enables easy filling and dispensing.



DISPENSER BOX "3 compartments"

- Manufactured from crystal clear acrylic with excellent field of vision with three equal compartment.
- Ideal supportive assistants for storing and dispensing small sized products such as pipette tips, tubes, vials and many others.
- Generous openings provides easy and safe access to partiations.
- Covers are featured with easy opening hinged lids. Once opened, the lid stands open and enables easy filling and dispensing.
- Their flip-top covers guarantees safe and clean storage without been effected from dust, moisture and other enviromental effects.
- Featured with non-skid silicone feet for safe and stable stand on the desks.

catalogue number	external dimensions	pack quantity
006.15.003	265 x 250 x 330 mm	1 piece



DISPENSER BOX - "large"

- Manufactured from crystal clear acrylic with excellent field of vision.
- Ideal for storing and dispensing relatively large scale products such as pasteur pipettes.
- Featured with an easy opening hinged lid. Once opened, the lid stands open for easy dispensing.
- Box offers safe and clean storage of pipettes without been effected from dust, moisture and other enviromental effects.
- Featured with non-skid silicone feet for stable stand.



catalogue number	external dimensions	pack quantity
084.05.001	175 x 250 x 600 mm	1 piece



Featured with an easy opening hinged lid. Once opened, the lid stands open for easy dispensing.



Featured with an easy opening hinged lid. Once opened, the lid stands open for easy dispensing.

CABINET

- Manufactured from crystal clear acrylic with excellent field of vision for storing various products, specially spectacles.
- Guarantees dust free storage of products and enables easy access to them.
- 4 wide shelves provides easy and safe access to partiations. Small objects can be placed to the upper row.
- Cover is featured with easy opening hinged lids. Once opened, the lid stands open and enables easy filling and dispensing.
- Magnetic fixators at side guarantees safe and tight closure of the lid.
- Delivered with necessary attachment screws to be mount to the wall.

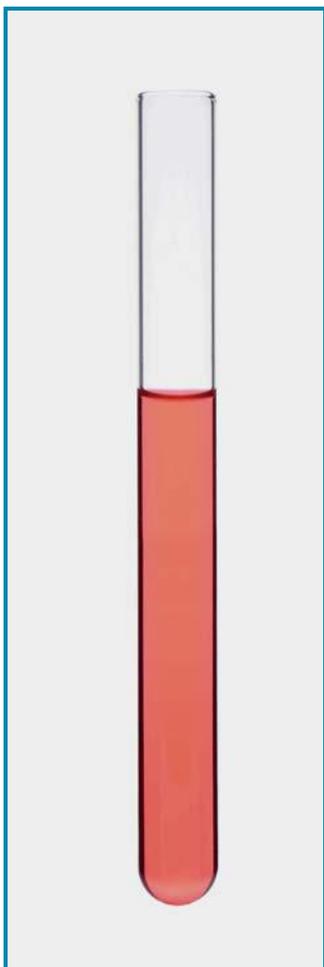


Provides wall mounting option with holes on the frame.



Magnetic clasp on the lid guarantees safe closure.

catalogue number	shelf quantity	external dimensions	shelf dimensions	pack quantity
080.40.101	5	110x260x400 mm	80x80x200 mm	1 piece

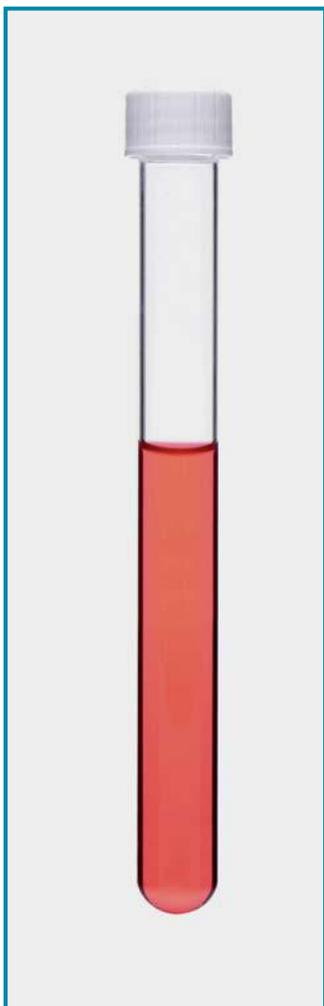
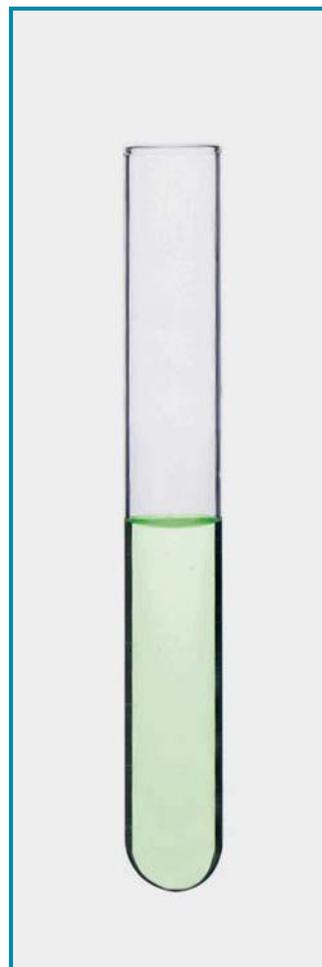


TEST TUBES - "glass"

- Manufactured by automated machines with consistent length and thickness.
- Alternative 2 products:
 - made from neutral glass
 - made from borosilicate glass
- Due to the properties of borosilicate glass highly recommended for over heated applications.

neutral glass test tubes	tube dimensions	wall thickness	pack quantity
077.01.000	6 x 40 mm	0,8/0,9 mm	100 pieces
077.01.001	10x75 mm	0,8/0,9 mm	100 pieces
077.01.021	12x75 mm	0,8/0,9 mm	100 pieces
077.01.002	12x100 mm	0,8/0,9 mm	100 pieces
077.01.003	13x100 mm	0,8/0,9 mm	100 pieces
077.01.031	13x130 mm	0,8/0,9 mm	100 pieces
077.01.004	16x100 mm	0,9/1,0 mm	100 pieces
077.01.005	16x160 mm	0,9/1,0 mm	100 pieces
077.01.006	18x180 mm	0,9/1,0 mm	100 pieces
077.01.007	20x200 mm	0,9/1,0 mm	100 pieces
077.01.008	20x220 mm	0,9/1,0 mm	100 pieces

borosilicate glass test tubes	tube dimensions	wall thickness	pack quantity
077.02.001	10x75 mm	0,9/1,0 mm	100 pieces
077.02.002	12x100 mm	0,9/1,0 mm	100 pieces
077.02.003	13x100 mm	0,9/1,0 mm	100 pieces
077.02.004	16x100 mm	1,0/1,1 mm	100 pieces
077.02.005	16x160 mm	1,0/1,1 mm	100 pieces
077.02.006	18x180 mm	1,0/1,1 mm	100 pieces



TEST TUBES - "glass" - "with screw cap"

- Manufactured from neutral glass featured with a polypropylene screw cap.
- Hermetic caps guarantees absolute leak-proof closure.
- Specially recommended for tissue culture or other similar applications.
- Tubes and caps are delivered in separate packings.

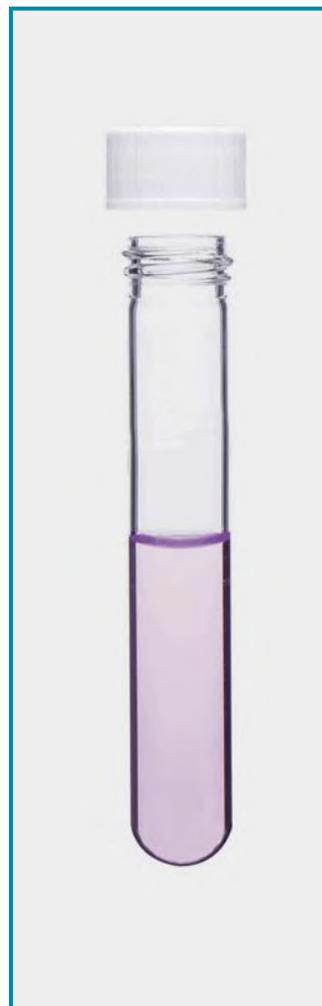
catalogue number	tube dimensions	wall thickness	pack quantity
077.03.001	16x100 mm	1,0 / 1,1 mm	100 pieces
077.03.002	16x160 mm	1,0 / 1,1 mm	100 pieces

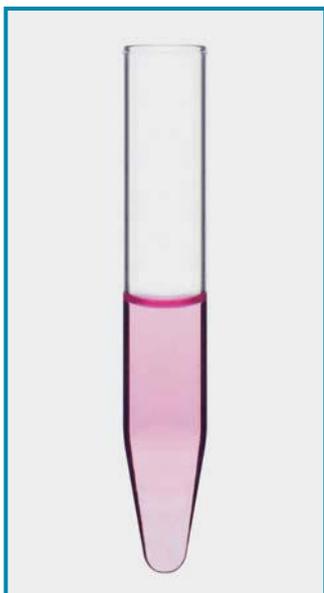


STOPPERS - "polyethylene" - "flange"

- Manufactured from polyethylene for perfect tight sealing of specially test tubes. Grooved, conical body shape guarantees perfect closure.

Other technical specifications can be seen at catalogue page no 107.

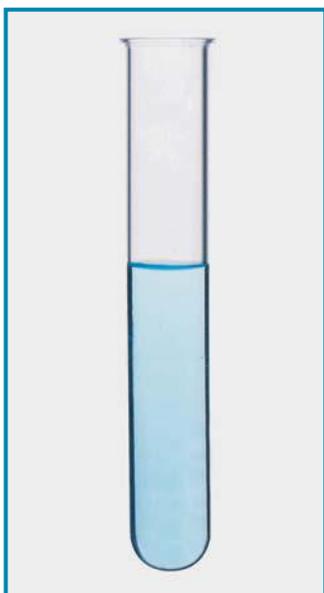
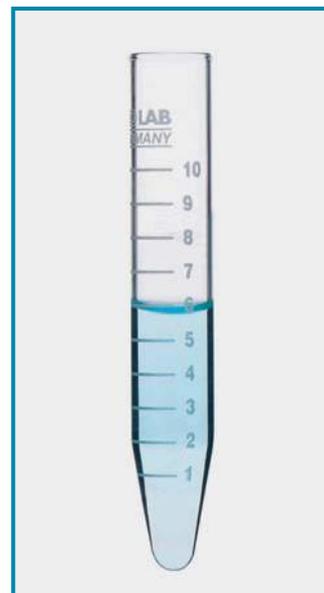




CENTRIFUGE TUBES - "glass"

- Manufactured from neutral glass with wall thickness 1,0 - 1,1 mm.
- Nominal capacity is approximately 15 ml. They stand up to 3.500 RCF and guarantee problem free centrifugation.
- Alternative 2 products:
 - Tubes without graduation
 - Tubes with graduation

tube centrifuge	tube dimensions	wall thickness	product specifications	pack quantity
078.01.001	16x100 mm	1,0 / 1,1 mm	non-graduated	100 pieces
078.01.002	16x100 mm	1,0 / 1,1 mm	graduated	10 pieces

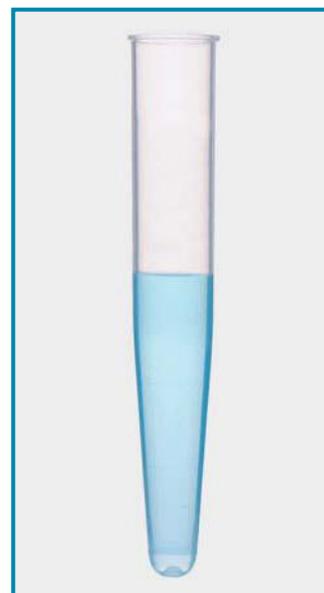


TEST TUBES - "P.P or P.S" - "disposable"

- Manufactured from clear polypropylene or from polystyrene for disposable use.
- Alternative 2 products:
 - Tubes with round bottom
 - Tubes with conical bottom

polystyrene tubes	tube dimensions	bottom form	pack quantity
077.04.001	12x75 mm	round	1000 pieces
077.04.003	16x100 mm	round	500 pieces
077.04.005	16x100 mm	conical	500 pieces

polypropylene tubes	tube dimensions	bottom form	pack quantity
077.04.002	12x75 mm	round	1000 pieces
077.04.004	16x100 mm	round	500 pieces
077.04.006	16x100 mm	conical	500 pieces



TONG - "for tubes" - "wood"

- Manufactured from hardened wood for holding tubes in the most secure way.
- Featured with a steel spring for tight and firm holding of the tubes.
- Long handling arm avoids close contact of the fingers to the flame.

catalogue number	total length	pack quantity
080.04.001	180 mm	1 piece



TONG - "for tubes" - "steel"

- Manufactured from chromated steel for holding tubes in the most secure way.
- Featured with a steel spring and a finger for tight and firm holding of the tubes.
- Long handling arm avoids close contact of the fingers to the flame.

catalogue number	total length	pack quantity
080.04.002	150 mm	1 piece



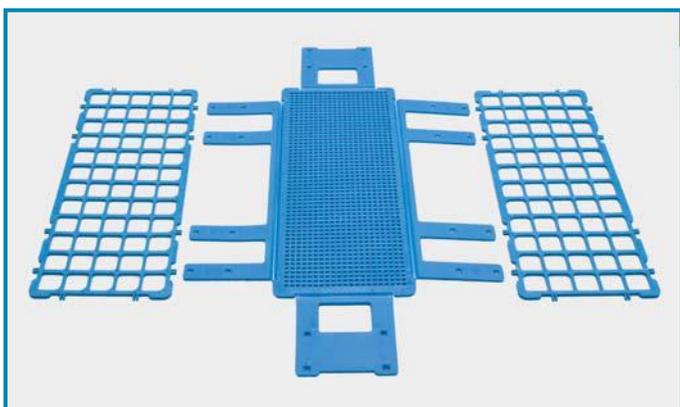
TEST TUBE RACKS - "dismantled"

- Manufactured from modified polypropylene which enables the racks to be used in water baths without floating.
- The alpha numeric grid reference on the top tier of the rack ensures an easy tube location and sample positioning.
- Racks are supplied dismantled for reducing storage area.
- Racks can be easily assembled less than half a minute with the help of supplied instruction manual.

catalogue number	tube diameter	tube quantity	tube array	pack quantity
079.01.001	13 mm	90 pcs	6 x 15	1 piece
079.01.002	16 mm	60 pcs	5 x 12	1 piece
079.01.003	20 mm	40 pcs	4 x 10	1 piece
079.01.004	25 mm	24 pcs	3 x 8	1 piece
079.01.005	30 mm	21 pcs	3 x 7	1 piece



The alpha numeric grid reference ensures an easy tube location and sample positioning.



Racks are supplied dismantled for reducing storage area. Racks can be easily assembled within few seconds with the help of supplied instruction manual.



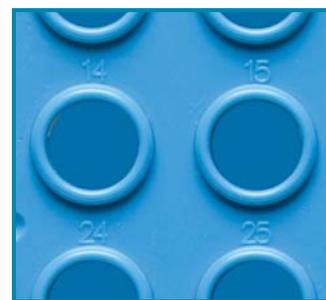
TEST TUBE RACKS - "monoblock"

- Manufactured from modified polypropylene which enables the racks to be used in water baths without floating.
- Offers a very long life cycle due to the very robust construction.
- Raised tube sockets guarantees firm hold of the tubes at their exact positions.
- The alpha numeric grid reference on the top tier of the rack ensures an easy tube location and sample positioning.
- Racks are supplied already assembled. Can be easily dismantled in few seconds for reducing storage area.

catalogue number	tube diameter	tube quantity	tube array	pack quantity
079.03.001	12-13 mm	50 pieces	5 x 10	1 piece
079.03.002	15-16 mm	50 pieces	5 x 10	1 piece
079.03.003	17-18 mm	50 pieces	5 x 10	1 piece
079.03.004	18-20 mm	45 pieces	5 x 9	1 piece
079.03.005	28-30 mm	26 pieces	4 x 6/7	1 piece



Raised tube sockets guarantees firm hold of the tubes at their exact positions.



The alpha numeric grid reference ensures an easy tube location and sample positioning.



These racks can also be dismantled for reducing storage area.

RACKS - "for test tubes" - "stainless steel"

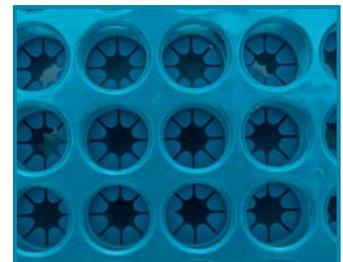
- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Robust and seamless construction guarantees long life cycle.
- Smooth polished surfaces provides fast and easy cleaning.
- Offers a very long life cycle due to the very robust construction.

catalogue number	tube diameter	tube quantity	tube array	pack quantity
079.02.001	13 mm	50	5x10	1 piece
079.02.002	16 mm	50	5x10	1 piece
079.02.003	18 mm	40	4x10	1 piece

**RACKS - "for test tubes" - "with silicone grips"**

- Manufactured from modified ABS which enables the racks to be used in water baths without floating.
- Offers a very long life cycle due to the very robust construction.
- Bottom of each tube compartment is featured with a silicone grip that firmly holds the tubes in position without wobble.
- Tubes can be inserted and extracted with a gentle push or pull.
- Racks are supplied already assembled and cannot be disassembled.

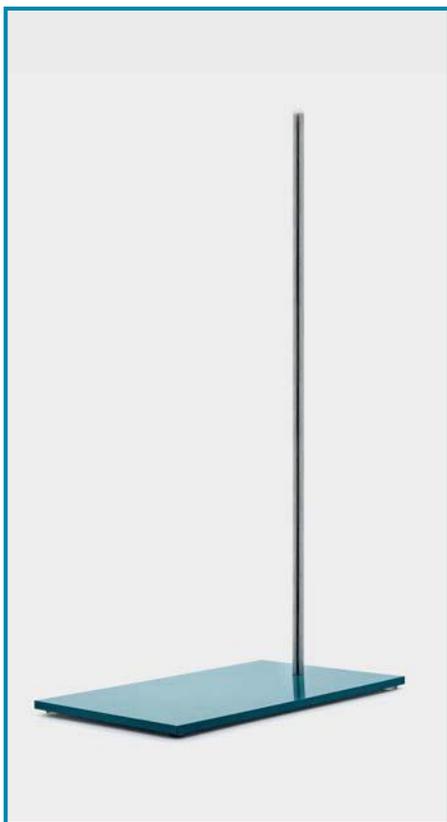
catalogue number	tube diameter	tube quantity	tube array	pack quantity
079.11.016	15 - 16 mm	50	5 x 10	1 piece



Bottom of each tube compartment is featured with a silicone grip that firmly holds the tubes in position without wobble.

PUSH & EJECT

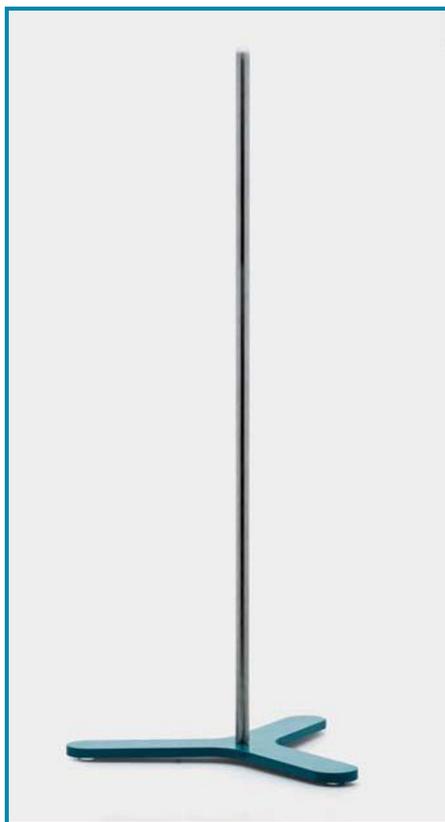
Just simply press upwards the bottom layer of the tube rack by two hands. The eject mechanism automatically releases the tubes from their positions simultaneously and immediately.



STANDS - "rectangular"

- Highly stable rectangular base is manufactured from enamel coated sheet steel.
- Silicone feet placed under the base prevents the stand from sliding.
- Supplied without rods. Kindly select the suitable rod from below table.

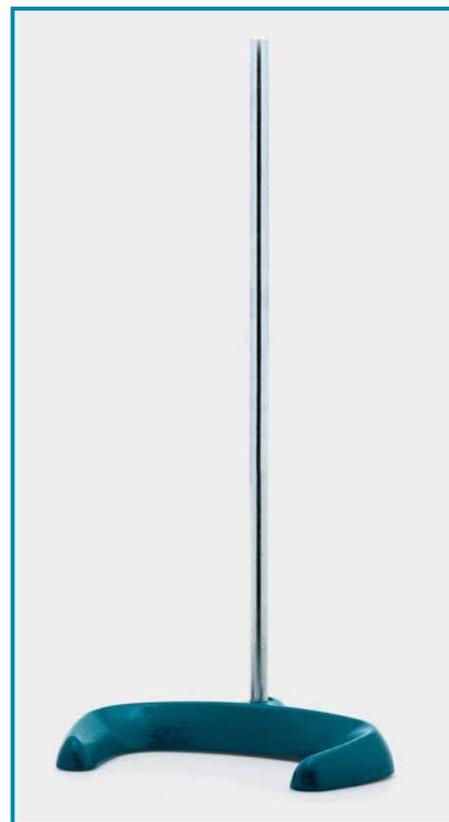
catalogue number	dimensions	pack quantity
049.01.130	130 x 210 mm	1 piece
049.01.150	150 x 300 mm	1 piece
049.01.200	200 x 315 mm	1 piece



STANDS - "triangle"

- Highly stable triangle base is manufactured from enamel coated sheet steel.
- Silicone feet placed under the base prevents the stand from sliding.
- Supplied without rods. Kindly select the suitable rod from below table.

catalogue number	foot length	base thickness	pack quantity
049.03.115	115 mm	8 mm	1 piece
049.03.150	150 mm	8 mm	1 piece



STANDS - "horse shoe"

- The most sturdy stand type.
- Extremely stable horse shoe base is manufactured from enamel coated cast steel.
- Highly recommended for various applications such as titration, assembly of stirrers etc. Supplied with rods.

catalogue number	size	rod dia.	rod height	pack quantity
049.09.180	small	12 mm	60 mm	1 piece
049.09.250	medium	14 mm	70 mm	1 piece
049.09.320	large	16 mm	80 mm	1 piece

SUPPORT RODS

- Manufactured either from galvanised steel or stainless steel with a M10 thread.

galvanised steel	rod length	rod diameter	pack quantity
049.06.004	600 mm	12 mm	1 piece
049.06.005	750 mm	12 mm	1 piece
049.06.006	1000 mm	12 mm	1 piece

stainless steel	rod length	rod diameter	pack quantity
049.07.004	600 mm	12 mm	1 piece
049.07.005	750 mm	12 mm	1 piece
049.07.006	1000 mm	12 mm	1 piece



WIRE GAUZES

- Manufactured from galvanised steel with a ceramic circular plate at the center.

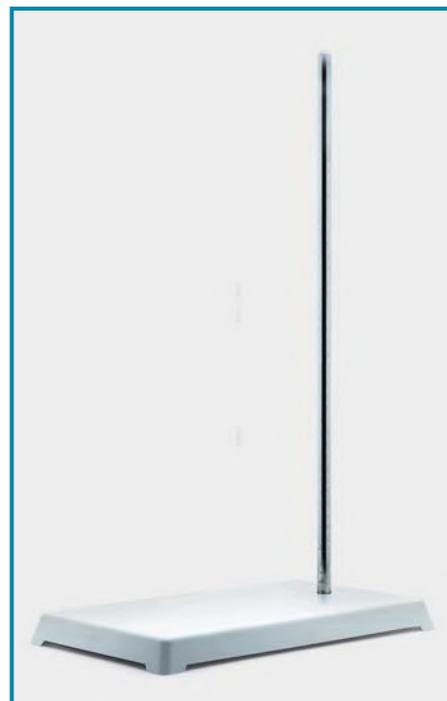
catalogue number	wire gauze dimensions	pack quantity
050.06.001	150x150 mm	1 piece



STANDS - "ABS"

- Highly stable rectangular base is manufactured from ABS.
- Base with dimensions 175x300 mm has two rod holding holes.
- Same rod can be placed either at the center or at the rear of the base offering multi advantages.
- White base color guarantees perfect visual observation of color changes during titration applications.
- Delivered complete with a screw-in support rod of 600 mm height.

catalogue number	base width	base length	pack quantity
049.04.175	175 mm	300 mm	1 piece



LABORATORY JACKS

- Table and base plate are manufactured from anodized aluminium. Scissors are made from stainless steel.
- Large control knob enables smooth and continuous control of table height.

catalogue number	plate width	plate length	pack quantity
050.05.150	150 mm	150 mm	1 piece
050.05.200	200 mm	200 mm	1 piece



TRIPOD - "fix height"

- Manufactured from chrome plated steel.
- Holding ring with 125 mm diameter offers practical use with all sizes of ceramic triangles and wire gauzes.

catalogue number	fix height	pack quantity
050.04.001	200 mm	1 piece

CERAMIC TRIANGLES

- Consists of ceramic pipes around galvanized steel wire.

catalogue number	ceramic cylinder dimension	pack quantity
050.07.050	50 mm	1 piece
050.07.060	60 mm	1 piece



TRIPOD - "adjustable height"

- Manufactured from chrome plated steel. Height can be adjustable from 200 mm to 300 mm.

- Holding ring with 150 mm diameter can be reduced to 125 mm with the supplied reduction attachment.

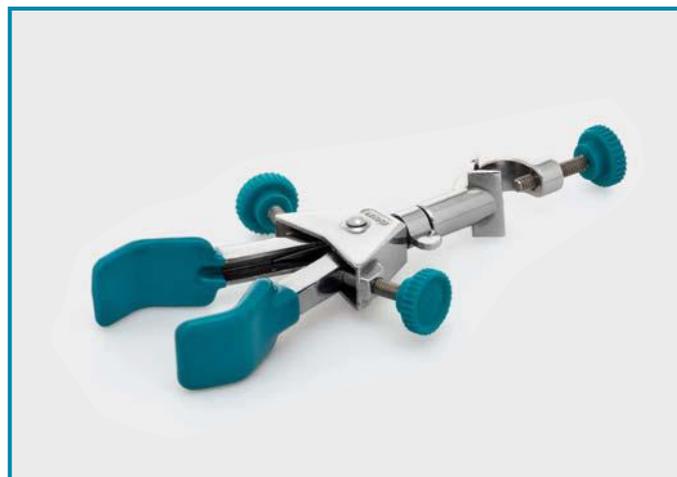
catalogue number	pack quantity
050.04.002	1 piece



CLAMP - "2 jaws" - "without boss head"

- Manufactured from high quality, corrosion resistant chromated steel holding for various objects in the most secure way.
- PVC coated insulated jaws guarantees perfect heat insulation. Soft and elastic coating holds the glassware gently and prevent possible breakage.
- Individually adjustable clamps guarantess perfect and precise control of holding pressure and holding position.
- Clamps can be opened and closed smoothly with a 50 mm grip diameter.

catalogue number	pack quantity
045.01.001	1 piece



CLAMP - "2 jaws" - "with boss head"

- Manufactured from high quality, corrosion resistant chromated steel holding for various objects in the most secure way.
- Featured with a swivel bosshead which provides 360° swivel of the clamped object around their axis. Bosshead locking feature guarantees perfect position hold of the clamped objects. Adjustable clamps guarantees perfect pressure control.
- PVC coated insulated jaws guarantees perfect heat insulation. Soft coating holds the glassware gently and prevent breakage.
- Clamps can be opened and closed smoothly with a 50 mm grip diameter.

catalogue number	pack quantity
045.04.001	1 piece



CLAMP - "3 jaws" - "without boss head"

- Manufactured from high quality, corrosion resistant chromated steel holding for various objects in the most secure way.
- PVC coated insulated jaws guarantees perfect heat insulation. Soft and elastic coating holds the glassware gently and prevent possible breakage.
- Individually adjustable clamps guarantess perfect and precise control of holding pressure and holding position.
- Clamps can be opened and closed smoothly with a 70 mm grip diameter.

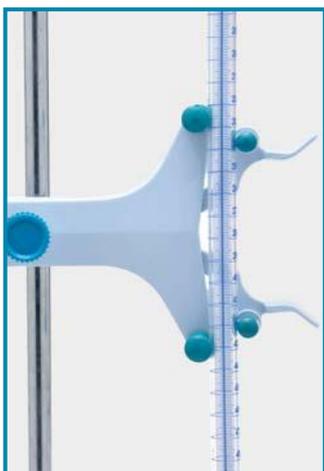
catalogue number	pack quantity
045.03.001	1 piece



CLAMP - "3 jaws" - "with boss head"

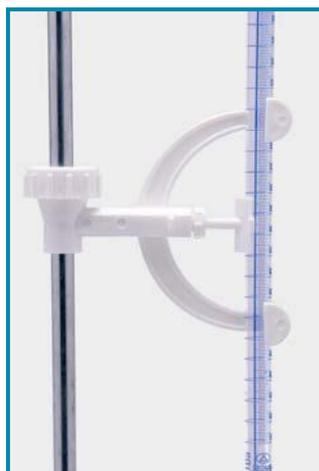
- Manufactured from high quality, corrosion resistant chromated steel holding for various objects in the most secure way.
- Featured with a swivel bosshead which provides 360° swivel of the clamped object around their axis. Bosshead locking feature guarantees perfect position hold of the clamped objects. Adjustable clamps guarantees perfect pressure control.
- PVC coated insulated jaws guarantees perfect heat insulation. Soft coating holds the glassware gently and prevent breakage.
- Clamps can be opened and closed smoothly with a 70 mm grip diameter.

catalogue number	pack quantity
045.06.001	1 piece

CLAMP - "for 1 burette" - "steel"

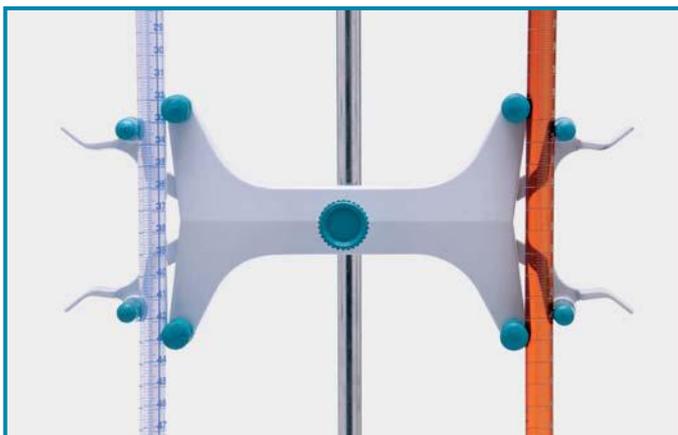
- Manufactured from steel to hold one straight burette at a time.
- Unique design guarantees firm hold of the burettes and offers an un-interrupted easy observation of volume graduations and meniscus level through all angles.
- Clamps can be used on support rods of diameter 10 mm to 12 mm.
- Fixing head featured with flexible springs offers easy insertion and extraction of the burettes.

catalogue number	pack quantity
018.05.001	1 piece

CLAMP - "for 1 burette" - "polypropylene"

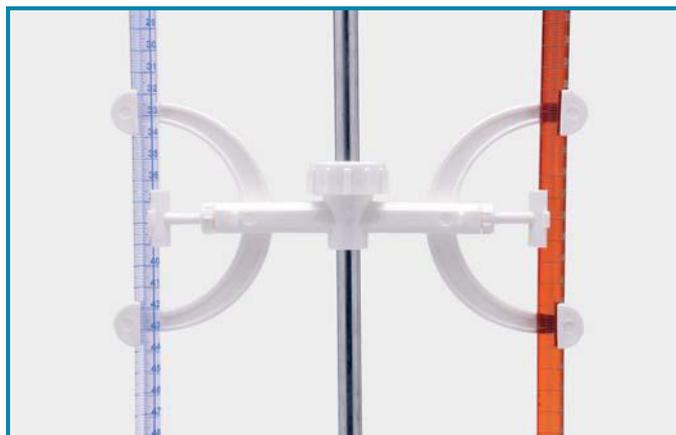
- Manufactured from polypropylene to hold one straight burette at a time.
- Unique design guarantees firm hold of the burettes and offers an un-interrupted easy observation of volume graduations and meniscus level through all angles.
- Clamps can be used on support rods of diameter 10 mm to 12 mm.
- Fixing head featured with flexible springs offers easy insertion and extraction of the burettes.

catalogue number	pack quantity
018.06.001	1 piece

CLAMP - "for 2 burettes" - "steel"

- Manufactured from steel to hold two straight burettes at a time.
- Unique design guarantees firm hold of the burettes and offers an un-interrupted easy observation of volume graduations and meniscus level through all angles.
- Fixing head featured with flexible springs offers easy insertion and extraction of the burettes.
- Clamps can be used on support rods of diameter 10 mm to 12 mm.

catalogue number	pack quantity
018.05.002	1 piece

CLAMP - "for 2 burettes" - "polypropylene"

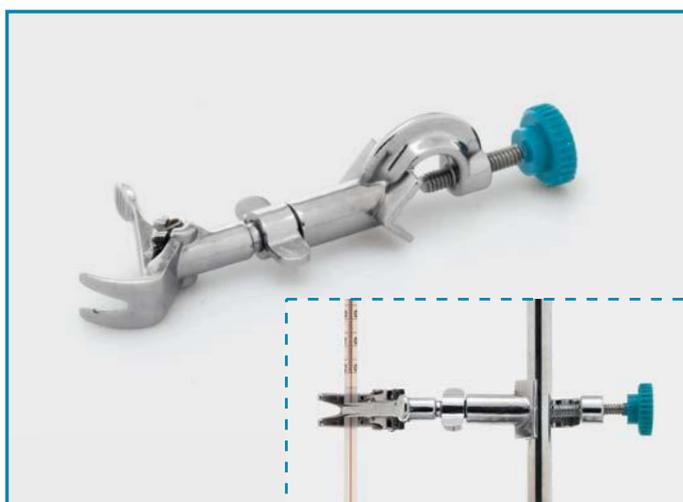
- Manufactured from polypropylene to hold two straight burette at a time.
- Unique design guarantees firm hold of the burettes and offers an un-interrupted easy observation of volume graduations and meniscus level through all angles.
- Fixing head featured with flexible springs offers easy insertion and extraction of the burettes.
- Clamps can be used on support rods of diameter 10 mm to 12 mm.

catalogue number	pack quantity
018.06.002	1 piece

**CLAMP - "for frame work"**

- Manufactured from high quality, corrosion resistant chromated steel.
- Clamps can be opened and closed smoothly by a screw thread with a 12 mm grip diameter.
- Ideal for frame works and fixing perpendiculars.

catalogue number	pack quantity
046.07.001	1 piece



CLAMP - "for thermometers"

- Manufactured from high quality, corrosion resistant chromated steel for holding thermometers in the most secure way.
- Featured with a swivel bosshead which provides 360° swivel of the clamped object around their axis.
- Bosshead locking feature guarantees perfect position hold of the clamped objects.
- Fixing head featured with flexible springs offers easy insertion and extraction of the thermometers.
- Clamps can be opened and closed smoothly with a 30 mm grip diameter.

Other specifications can be seen at catalogue page no 206.



BOSSEHEAD - "standard" - "fix position"

- Manufactured from high quality, corrosion resistant chromated steel for holding rods in the most secure way.
- Holds the objects on a fixed position.
- Clamps can be opened and closed smoothly with a 20 mm grip diameter.

catalogue number	pack quantity
046.01.001	1 piece



BOSSEHEAD - "heavy duty" - "fix position"

- Manufactured from high quality, corrosion resistant chromated steel for holding rods in the most secure way.
- Holds the objects on a fixed position.
- Clamps can be opened and closed smoothly with a 15 mm grip diameter.

catalogue number	pack quantity
046.05.001	1 piece



BOSSEHEAD - "heavy duty" - "fix position"

- Manufactured from high quality, corrosion resistant powder coated steel for holding rods in the most secure way.
- Holds the objects on a fixed position.
- Sturdy construction guarantees the use with heavy objects.
- Clamps can be opened and closed smoothly with a 30 mm grip diameter.

catalogue number	pack quantity
046.05.002	1 piece



BOSSEHEAD - "standard" - "swivel head"

- Manufactured from high quality, corrosion resistant chromated steel for holding rods in the most secure way.
- Featured with a swivel bosshead which provides 360° swivel of the clamped object around their axis.
- Bosshead locking feature guarantees perfect position hold of the clamped objects.
- Clamps can be opened and closed smoothly with a 20 mm grip diameter.

catalogue number	pack quantity
046.01.002	1 piece



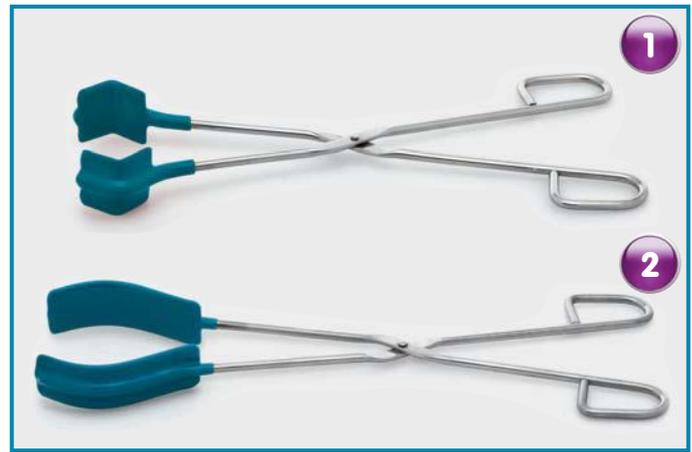
TONGS - "rod jaws"

➤ Manufactured from high quality, corrosion resistant chromated steel for holding erlenmeyers and flasks in the most secure way.

➤ PVC coated insulated jaws guarantees perfect heat insulation.

➤ Soft and elastic coating holds the glassware gently and prevent possible breakage.

catalogue number	pos. no	pack quantity
029.03.001	1	1 piece
026.03.001	2	1 piece



TONGS - "flat jaws"

➤ Manufactured from high quality, corrosion resistant chromated steel for holding erlenmeyers and flasks in the most secure way.

➤ PVC coated insulated jaws guarantees perfect heat insulation.

➤ Soft and elastic coating holds the glassware gently and prevent possible breakage.

catalogue number	pos. no	pack quantity
029.03.002	1	1 piece
026.03.002	2	1 piece



TONG - "for evaporating dishes"

➤ Manufactured from high quality, corrosion resistant chromated steel for holding dishes in the most secure way.

➤ Unique design with grabbing jaws enables easy and safe holding of dishes preventing possible breakage.

Other technical specifications can be seen at catalogue page no 94.



TONGS - "for crucibles"

➤ Manufactured from high quality, corrosion resistant chromated steel for holding crucibles in the most secure way.

➤ Unique design with grabbing jaws enables easy and safe holding of crucibles preventing possible breakage.

Other technical specifications can be seen at catalogue page no 96.



TONG - "for tubes" - "wood"

➤ Manufactured from hardened wood for holding tubes in the most secure way.

➤ Featured with a steel spring for tight and firm holding of the tubes.

➤ Long handling arm avoids close contact of the fingers to the flame.

All other technical specifications can be seen at catalogue page 71.



TONG - "for tubes" - "steel"

➤ Manufactured from chromated steel for holding tubes in the most secure way.

➤ Featured with a steel spring and a finger for tight and firm holding of the tubes.

➤ Long handling arm avoids close contact of the fingers to the flame.

All other technical specifications can be seen at catalogue page 71.

lab consumables & labware



SPATULAS - "st. steel" - "macro spoon"

➤ Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.

➤ Most commonly used spatula. Featured with a macro spoon for medium and large size particles at one end and a straight/flat spatula at the other end.

➤ Robust and seamless construction guarantees long life cycle.

➤ Smooth polished surfaces provides fast and easy cleaning.

catalogue number	total length	pack quantity
047.01.120	120 mm	1 piece
047.01.150	150 mm	1 piece
047.01.180	180 mm	1 piece
047.01.210	210 mm	1 piece
047.01.250	250 mm	1 piece
047.01.300	300 mm	1 piece



SPATULAS - "st. steel" - "double end"

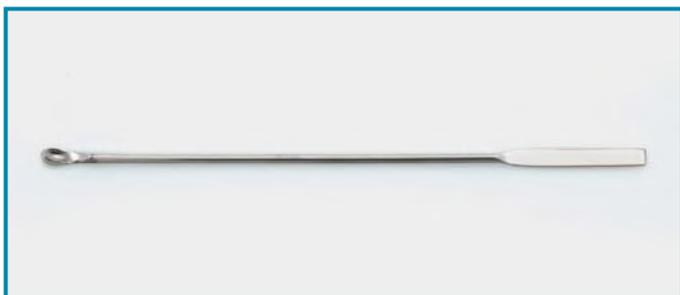
➤ Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.

➤ Suitable for transferring products from flat or sticky surfaces. Featured with a round/flat spatula at one end and a straight/flat spatula at the other end.

➤ Robust and seamless construction guarantees long life cycle.

➤ Smooth polished surfaces provides fast and easy cleaning.

catalogue number	total length	pack quantity
047.07.130	130 mm	1 piece
047.07.150	155 mm	1 piece
047.07.185	180 mm	1 piece
047.07.210	210 mm	1 piece
047.07.250	255 mm	1 piece
047.07.300	300 mm	1 piece



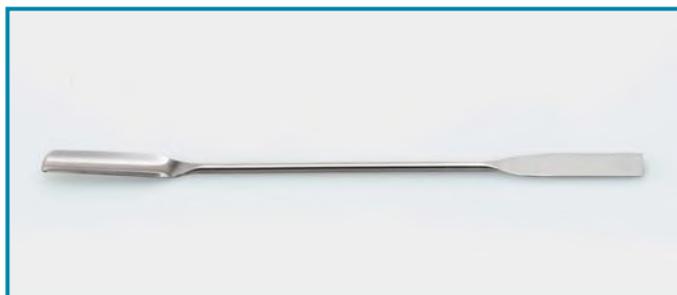
SPATULAS - "st. steel" - "micro spoon"

➤ Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.

➤ Suitable for small size objects. Featured with a micro spoon for small size particles at one end and a straight/flat spatula at the other end.

➤ Robust and seamless construction guarantees long life cycle. Smooth polished surfaces provides fast and easy cleaning.

catalogue number	total length	pack quantity
047.06.150	150 mm	1 piece
047.06.180	180 mm	1 piece
047.06.210	210 mm	1 piece



SPATULAS - "st. steel" - "round grooved"

➤ Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.

➤ Suitable for transferring tiny particles without spillage. Featured with a grooved spoon at one end and a straight/flat spatula at the other end.

➤ Robust and seamless construction guarantees long life cycle. Smooth polished surfaces provides fast and easy cleaning.

catalogue number	total length	pack quantity
047.02.150	150 mm	1 piece
047.02.180	185 mm	1 piece
047.02.210	210 mm	1 piece



SPATULAS - "P.P" - "macro spoon"

➤ Manufactured from high quality flexible polypropylene.

➤ Most commonly used spatula. Featured with a macro spoon for medium and large size particles at one end and a straight/flat spatula at the other end.

➤ Robust and seamless construction guarantees long life cycle. Smooth polished surfaces provides fast and easy cleaning.

catalogue number	total length	pack quantity
047.30.150	150 mm	1 piece
047.30.180	180 mm	1 piece
047.30.210	210 mm	1 piece



SPATULAS - "st. steel" - "curved end"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Suitable for transferring products from flat or sticky surfaces. Featured with a curved/flat spatula at one end and a curved/flat spatula at the other end.
- Robust and seamless construction guarantees long life cycle. Smooth polished surfaces provides fast and easy cleaning.

catalogue number	total length	pack quantity
047.03.150	150 mm	1 piece
047.03.180	180 mm	1 piece
047.03.210	210 mm	1 piece



SPATULAS - "st. steel" - "poly"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Suitable for transferring products from edges and corners of flasks and bottles. Featured with a ellipsoidal/curved spoon at one end and a straight/flat triangular spatula at the other end.
- Robust and seamless construction guarantees long life cycle. Smooth polished surfaces provides fast and easy cleaning.

catalogue number	total length	pack quantity
047.08.150	150 mm	1 piece
047.08.180	180 mm	1 piece
047.08.210	210 mm	1 piece



SPATULAS - "st. steel" - "chattaway"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Suitable for transferring products from flat or sticky surfaces. Featured with a curved/flat spatula at one end and a straight/flat spatula at the other end.
- Robust and seamless construction guarantees long life cycle.
- Smooth polished surfaces provides fast and easy cleaning.

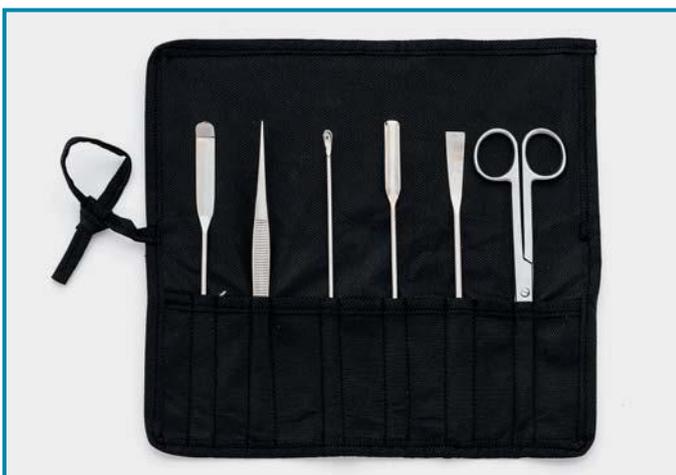
catalogue number	total length	pack quantity
047.09.100	100 mm	1 piece
047.09.130	130 mm	1 piece
047.09.150	150 mm	1 piece
047.09.180	180 mm	1 piece
047.09.210	210 mm	1 piece



SPATULAS - "st. steel" - "flat knife"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel with a wooden handle.
- Suitable for large size transferring products. Featured with a flat knife formed spatula at one end and a wooden handle at the other end.
- Robust and seamless construction guarantees long life cycle.
- Smooth polished surfaces provides fast and easy cleaning.

catalogue number	knife length	pack quantity
047.10.075	75 mm	1 piece
047.10.100	100 mm	1 piece
047.10.150	150 mm	1 piece
047.10.200	200 mm	1 piece
047.10.300	300 mm	1 piece



SPATULA SET - "in a wallet"

- A practical set of 6 most common and frequently used spatulas all manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel .
- Set consists of one of each micro spoon / curved and ground/ chattaway spatula with all 180 mm length and dissecting forcep / blunt - sharp scissors with 160 mm length.
- All spatulas are placed into suitable holding pockets of the wallet that keeps the spatulas away from disorder and exterior effects.

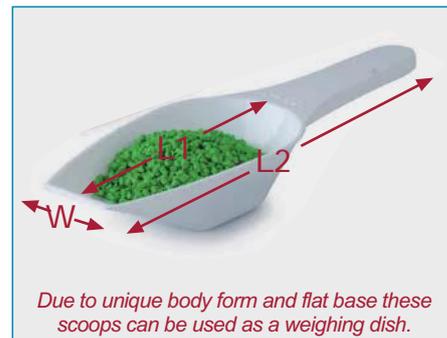
spatula set	pack quantity
047.05.001	1 piece

empty wallet	pack quantity
047.05.002	1 piece



SCOOPS - "polypropylene"

- Manufactured from high quality polypropylene with round corners.
- 9 different volume sizes from 2 ml to 1000 ml guarantees an extra wide scooping option from smallest to largest size.
- Featured with a flat bottom enabling stable and horizontal stand.
- With unique flat base design these scoops can be used as a weighing dish.



The indicated volumes are estimated volumes.

catalogue number	volume	L1	L2	W	pack quantity
037.30.002	2 ml	31 mm	62 mm	10 mm	1 piece
037.30.005	5 ml	42 mm	82 mm	13 mm	1 piece
037.30.010	10 ml	56 mm	96 mm	16 mm	1 piece
037.30.025	25 ml	74 mm	128 mm	21 mm	1 piece
037.30.050	50 ml	92 mm	164 mm	27 mm	1 piece
037.30.100	100 ml	118 mm	203 mm	34 mm	1 piece
037.30.250	250 ml	153 mm	263 mm	44 mm	1 piece
037.30.500	500 ml	195 mm	317 mm	57 mm	1 piece
037.30.901	1000 ml	250 mm	390 mm	72 mm	1 piece



SCOOPS - "polyethylene"

- Manufactured from high quality polyethylene with round corners.
- 3 different volume sizes from 500 ml to 2000 ml offers a large size scooping option.
- Featured with a sturdy handle with gripping rims for easier handling.

catalogue number	size	scoop volume	pack quantity
037.27.001	small	500 ml	1 piece
037.27.002	medium	1000 ml	1 piece
037.27.003	large	2000 ml	1 piece

The indicated volumes are estimated volumes.



SCOOPS - "polystyrene"

- Manufactured from high quality polystyrene with round corners.
- 3 different volume sizes from 50 ml to 250 ml offers a medium size scooping option.
- Featured with a flat bottom enabling stable and horizontal stance.

catalogue number	pack quantity
037.26.001	1 set

The indicated volumes are estimated volumes.



SCOOPS - "st. steel"

- Manufactured from high quality, corrosion resistant AISI 304 stainless steel.
- Suitable for spooning medium and large size products. Featured with a round formed spoon at one end and a steel handle at the other end.
- Robust and seamless construction guarantees long life cycle. Smooth polished surfaces provides easy cleaning.

catalogue number	scoop diameter	pack quantity
037.08.050	50 mm	1 piece
037.08.075	75 mm	1 piece
037.08.100	100 mm	1 piece
037.08.120	120 mm	1 piece

The indicated volumes are estimated volumes.



SCOOP - "stainless steel"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Suitable for spooning small to medium size products. Featured with a round formed spoon at one end and a handle at the other end.
- Robust and seamless construction guarantees long life cycle.
- Smooth polished surfaces provides fast and easy cleaning.

catalogue number	total length	pack quantity
047.18.002	200 mm	1 piece



SPOON - "stainless steel"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Suitable for spooning small to medium size products. Featured with a round formed spoon at one end and a handle at the other end.
- Robust and seamless construction guarantees long life cycle.
- Smooth polished surfaces provides fast and easy cleaning.

catalogue number	total length	pack quantity
047.18.001	200 mm	1 piece



SPOON - "polypropylene" - "sterile"

- Manufactured under germ-free aseptically sterile conditions with extreme sterility control from virgin polypropylene.
- Certified as "DNase, RNase and pyrogen-free since sterilised by gamma irradiation after production step.
- Individually single packed with lot number, production date and expiry date printed on the package.

catalogue number	total length	pack quantity
037.28.001	115 mm	1 piece



SPOON - "polystyrene" - "sterile"

- Manufactured under germ-free aseptically sterile conditions with extreme sterility control from virgin polystyrene.
- Certified as "DNase, RNase and pyrogen-free since sterilised by gamma irradiation after production step.
- Individually single packed with lot number, production date and expiry date printed on the package.

catalogue number	total length	pack quantity
037.29.001	150 mm	1 piece



FORCEPS - "general use"

➤ Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.

➤ Most commonly used forceps. Featured with a blunt point tip without jaw.

➤ Robust and seamless construction guarantees long life cycle.

➤ Grid lines on the middle part of the body enables safe and easy handling.

catalogue number	total length	pack quantity
048.01.105	105 mm	1 piece
048.01.115	115 mm	1 piece
048.01.130	130 mm	1 piece
048.01.145	145 mm	1 piece
048.01.160	160 mm	1 piece
048.01.200	200 mm	1 piece
048.01.250	250 mm	1 piece
048.01.300	300 mm	1 piece



FORCEPS - "general use" - "with tooth"

➤ Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.

➤ Most commonly used forceps. Featured with a blunt point tip with a 1:2 array jaws for much effective and forced grasping.

➤ Robust and seamless construction guarantees long life cycle.

➤ Grid lines on the middle part of the body enables safe and easy handling.

catalogue number	total length	pack quantity
048.02.115	115 mm	1 piece
048.02.130	130 mm	1 piece
048.02.145	145 mm	1 piece
048.02.160	160 mm	1 piece



FORCEPS - "dissecting use" - "straight tip"

➤ Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.

➤ Most commonly used forceps for dissecting. Featured with a straight fine sharp point tip without jaw.

➤ Robust and seamless construction guarantees long life cycle.

➤ Grid lines on the middle part of the body enables safe and easy handling.

catalogue number	total length	pack quantity
048.07.105	105 mm	1 piece
048.07.115	115 mm	1 piece
048.07.130	130 mm	1 piece
048.07.150	150 mm	1 piece
048.07.160	160 mm	1 piece
048.07.200	200 mm	1 piece



FORCEPS - "dissecting use" - "inclined tip"

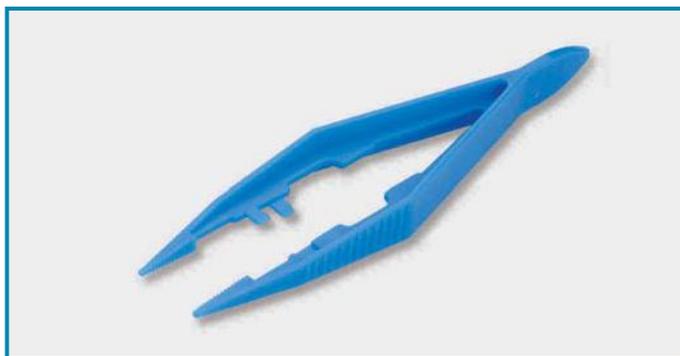
➤ Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.

➤ Most commonly used forceps for dissecting. Featured with an inclined fine sharp point tip without jaw.

➤ Robust and seamless construction guarantees long life cycle.

➤ Grid lines on the middle part of the body enables safe and easy handling.

catalogue number	total length	pack quantity
048.08.105	105 mm	1 piece
048.08.115	115 mm	1 piece
048.08.130	130 mm	1 piece



FORCEPS - "general use" - "non-sterile"

➤ Manufactured from high quality, chemical and corrosion resistant ABS as single use.

➤ Fine sharp tips and straight body form offers multiple advantages.

catalogue number	total length	pack quantity
048.10.110	110 mm	10 pieces



FORCEPS - "general use" - "sterile"

➤ Manufactured under germ-free aseptically sterile conditions with extreme sterility control from ABS.

➤ Certified as "DNase, RNase and pyrogen-free since sterilised by gamma irradiation after production step.

➤ Individually single packed with lot number, production date and expiry date printed on the package.

➤ Fine sharp tips and straight body form offers multiple advantages.

catalogue number	total length	pack quantity
048.11.110	110 mm	1 piece



FORCEPS - "for cover glasses" - "inclined"

➤ Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.

➤ Most commonly used forceps for handling cover glasses. Featured with a flat and inclined tip.

➤ Robust and seamless construction guarantees long life cycle.

➤ Grid lines on the middle part of the body enables safe and easy handling.

Other specifications can be seen at catalogue page no 307.



FORCEPS - "for cover glasses" - "straight"

➤ Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.

➤ Most commonly used forceps for handling cover glasses. Featured with a flat and straight tip.

➤ Robust and seamless construction guarantees long life cycle.

➤ Grid lines on the middle part of the body enables safe and easy handling.

Other specifications can be seen at catalogue page no 307.



FORCEPS - "for filter papers"

➤ Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.

➤ Most commonly used forceps for handling filter papers. Flattened jaws grabs paper gently reducing the risk of laceration.

➤ Robust and seamless construction guarantees long life cycle. Grid lines on the middle part of the body enables safe and easy handling.

Other specifications can be seen at catalogue page no 147.



SCISSORS - "general use" - "sharp tip"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel with straight form.
- Most commonly used scissors. Featured with a sharp/sharp tip and close shank.
- Robust and seamless construction guarantees long life cycle.

catalogue number	total length	pack quantity
048.22.130	130 mm	1 piece
048.22.160	155 mm	1 piece



SCISSORS - "general use" - "blunt tip"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel with straight form.
- Most commonly used scissors. Featured with a blunt/blunt tip and close shank.
- Robust and seamless construction guarantees long life cycle.

catalogue number	total length	pack quantity
048.23.130	130 mm	1 piece
048.23.160	160 mm	1 piece



SCISSORS - "general use" - "blunt/sharp tip"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel with straight form.
- Most commonly used scissors. Featured with a blunt/sharp tip and close shank.
- Robust and seamless construction guarantees long life cycle.

catalogue number	total length	pack quantity
048.24.130	130 mm	1 piece
048.24.160	160 mm	1 piece



SCISSORS - "general use"

- Scissor part manufactured from high quality, chemical and corrosion resistant steel.
- Commonly used scissors for general applications.
- Featured with a straight and fine sharp point tips.

catalogue number	total length	pack quantity
048.30.130	130 mm	1 piece
048.30.160	160 mm	1 piece
048.30.200	200 mm	1 piece



SCISSORS - "dissecting use" - "straight"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Most commonly used scissors for dissecting. Featured with a straight and fine sharp point tip.
- Robust and seamless construction guarantees long life cycle.

catalogue number	total length	pack quantity
048.25.130	130 mm	1 piece



SCISSORS - "dissecting use" - "curved"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Most commonly used scissors for dissecting. Featured with a curved and fine sharp point tip.
- Robust and seamless construction guarantees long life cycle.

catalogue number	total length	pack quantity
048.26.130	130 mm	1 piece



SCISSORS - "heavy duty"

- Scissor part manufactured from high quality, chemical and corrosion resistant steel.
- Most commonly used scissor for cutting all materials even thin layer of metal sheets.
- Spring supported ergonomic plastic handle with safety lock offers easy, fast and safe use.

catalogue number	total length	pack quantity
048.31.001	185 mm	1 piece



SCISSORS - "for hose cutting"

- Offers a clean and sharp cut of all kinds of hoses with external diameter range 6 mm to 25 mm.
- The cutter blade is manufactured from stainless steel with two ends.
- If one cutting end gets blunt, the other side can be used.

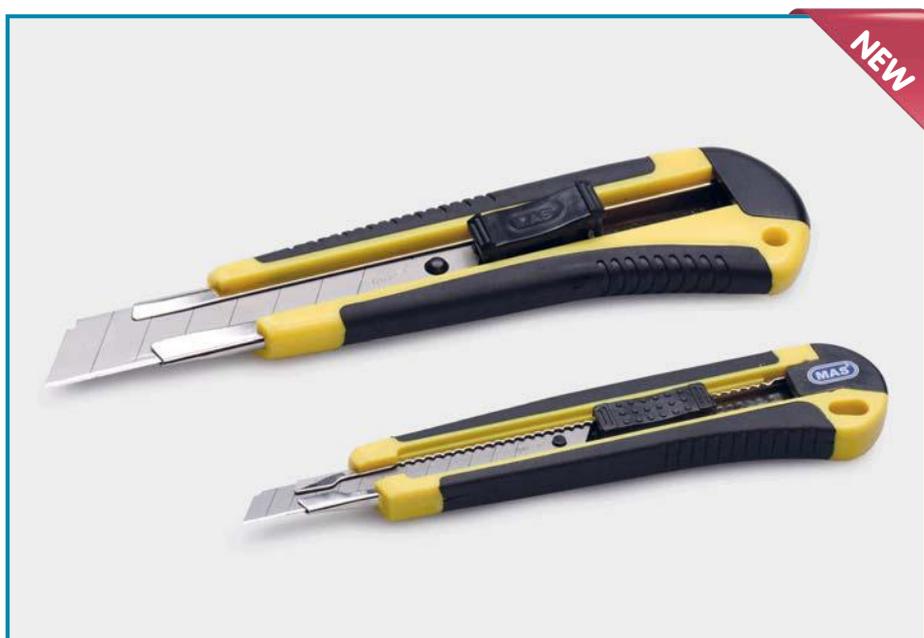
Other specifications can be seen at catalogue page no 101.



KNIVES

- Featured with very sharp stainless steel blade covered with ceramic layer.
- Ceramic layer guarantees corrosion and rust - free long life cycle.
- These knives are unbreakable and do not require re-sharpening.
- Light weight and ergonomic handle offers excellent grip option.

catalogue number	total length	blade length	pack quantity
048.40.001	220 mm	120 mm	1 piece
048.40.002	230 mm	130 mm	1 piece



CUTTERS

- Can be used as a cutter, as a safety knife suitable for detailed precise cutting.
- Blade is manufactured from stainless steel. Automatic blade retractor offers blade length adjustment by one hand. Blade can be stowed without any danger.
- Both models are featured with both a break-off device. Large cutter is also featured with a auto-lock knob as additional safety.
- Light weight and ergonomic handle offers excellent grip option.

catalogue number	blade length	blade width	pack quantity
048.06.001	80 mm	9 mm	1 piece
048.06.002	100 mm	18 mm	1 piece



DISSECTING NEEDLES

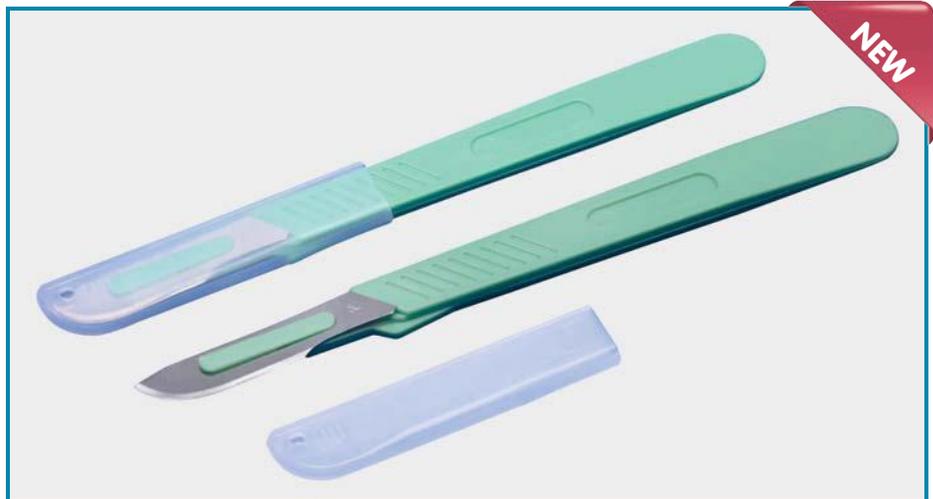
- Needle parts are manufactured from stainless steel with sharp ends.
- Supplied as a set consisting of 3 needle:
 - dissecting needle, **straight**
 - dissecting needle, **bent**
 - dissecting needle, **lanceolated**

catalogue number	pack quantity
052.30.001	1 set

SCALPEL “with safety cover”

- Single packed sterile scalpel featured with highest grade stainless steel cutting blade.
- Handle is manufactured from polypropylene with a soft grip option.
- The safety cover close the blade part securely and prevents the unexpected cut risks.

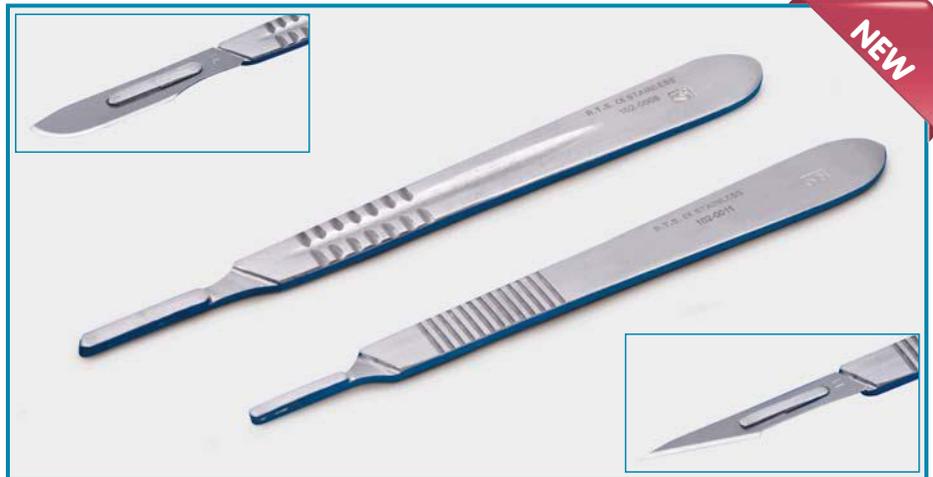
catalogue number	total length	blade length	pack quantity
048.50.003	140 mm	40 mm	1 piece



SCALPEL HANDLES

- Manufactured from stainless steel with approximate length of 130 mm.
- Handle no: 1 carries blades size from 10 to 18. Handle no: 2 carries blade size from 18 to 24.
- Grids at the front part guarantees perfect control during usage.

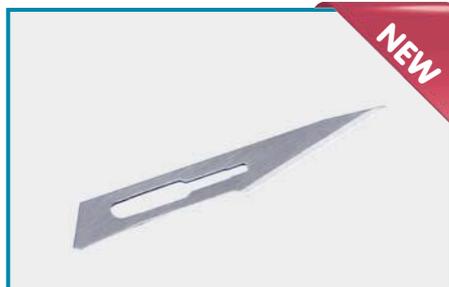
catalogue number	handle no	total length	pack quantity
048.50.001	1	130 mm	1 piece
048.50.002	2	130 mm	1 piece



SCALPEL BLADE - “no:10”

- Manufactured from stainless steel and sterilised with gamma radiation.
- Suitable to be used with scalpel handle no: 1.

catalogue number	for handle	blade length	pack quantity
048.51.010	no:1	25 mm	100 pieces



SCALPEL BLADE - “no:11”

- Manufactured from stainless steel and sterilised with gamma radiation.
- Suitable to be used with scalpel handle no: 1.

catalogue number	for handle	blade length	pack quantity
048.51.011	no:1	20 mm	100 pieces



SCALPEL BLADE - “no:21”

- Manufactured from stainless steel and sterilised with gamma radiation.
- Suitable to be used with scalpel handle no: 2.

catalogue number	for handle	blade length	pack quantity
048.51.021	no:2	35 mm	100 pieces



DESICCATORS "glass" - "non-vacuum"

- Manufactured thick, robust and heat resistant borosilicate 3.3 glass without vacuum stopcock.
- Excellent smooth grinded body and lid flanges guarantees airtight closure.
- Supplied with a porcelain perforated desiccator plate.



Excellent smooth grinded body and lid flanges guarantees airtight closure.

catalogue number	desiccator diameter	pack quantity
039.01.200	200 mm	1 piece
039.01.250	250 mm	1 piece
039.01.300	300 mm	1 piece



DESICCATORS "glass" - "vacuum"

- Manufactured thick, robust and heat resistant borosilicate 3.3 glass with a vacuum stopcock.
- Featured with a 2-way high vacuum stopcock enabling consistent and uniform vacuum draw and release.
- Vacuum stopcock can hold maximum vacuum of 1 Torr more than 24 hours.
- Excellent smooth grinded body and lid flanges guarantees airtight closure.
- Supplied with a porcelain perforated desiccator plate.



DESICCATORS "P.P & P.C" - "vacuum"

- Manufactured robust polypropylene base with transparent polycarbonate cover with a vacuum stopcock.
- Featured with a 3-way high vacuum stopcock enabling consistent and uniform vacuum draw and release.
- Vacuum stopcock can hold maximum vacuum of 1 Torr more than 24 hours.
- Silicone gasket between body and the lid ensures grease free, airtight closure.
- Supplied with a polypropylene perforated desiccator plate.

catalogue number	desiccator diameter	pack quantity
039.12.200	200 mm	1 piece
039.12.250	250 mm	1 piece
039.12.300	300 mm	1 piece



Various vacuum pumps can be selected from catalogue pages 141 & 146.



DESICCATOR LIDS "glass" - "non-vacuum"

- Manufactured thick, robust and heat resistant borosilicate 3.3 glass without vacuum stopcock.
- Excellent smooth grinded body and lid flanges guarantees airtight closure.

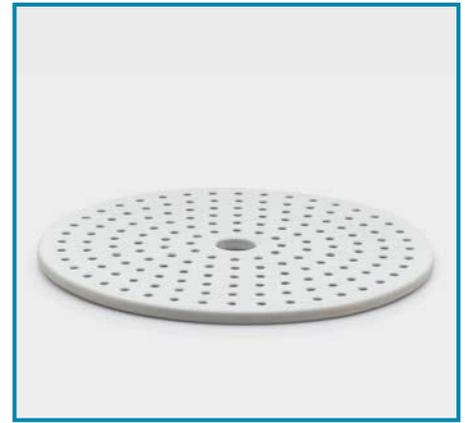
catalogue number	lid diameter	pack quantity
039.06.200	200 mm	1 piece
039.06.250	250 mm	1 piece
039.06.300	300 mm	1 piece



DESICCATOR LIDS "glass" - "vacuum"

- Manufactured thick, robust and heat resistant borosilicate 3.3 glass with a vacuum stopcock.
- Featured with a 2-way high vacuum stopcock enabling consistent and uniform vacuum draw and release.

catalogue number	lid diameter	pack quantity
039.07.200	200 mm	1 piece
039.07.250	250 mm	1 piece
039.07.300	300 mm	1 piece



DESICCATOR PLATES "porcelain"

- Manufactured from best quality glazed porcelain. They perfectly fit the base of desiccator bodies.
- Featured with perforated holes for perfect heat transfer.

catalogue number	plate diameter	pack quantity
039.05.200	190 mm	1 piece
039.05.250	230 mm	1 piece
039.05.300	285 mm	1 piece

SILICA - GEL DESICCANT BEADS

- Silica-Gel beads are moisture absorbing self - indicating drying agents.
- Perfect substitute of classical desiccator moisture absorbents
- Beads has a grain size variable from 1 to 3 mm. They are free from any heavy and environmentally compatible.
- Original orange color gradually turns to white as the gel adsorbs moisture.
- Color change offers monitoring of the saturation level.
- Silica-Gel beads can be re-generated when heated at a temperature of maximum 120°C.
- The color turns back to original orange color.
- Packed as 1 kg in a sealed P.P bottle in order to prevent pre-absorption of moisture.

catalogue number	packing specification
039.16.001	1 kg in P.P bottle



Before moisture absorption

After moisture absorption

After regeneration



MORTARS - "agate" - "standard form"

- Manufactured from high quality, natural agate stone with standard depth.
- Hardness degree of 7-8 MOHS guarantees very good crushing resistance.
- Recommended for use contamination free crushing.
- Supplied with a pestle with relevant size to agate mortar.

catalogue number	volume	external diameter	internal diameter	height	pack quantity
038.07.050	9 ml	50 ± 3 mm	40 ± 3 mm	30 ± 3 mm	1 piece
038.07.075	22 ml	75 ± 3 mm	65 ± 3 mm	35 ± 3 mm	1 piece
038.07.100	50 ml	100 ± 3 mm	90 ± 3 mm	40 ± 3 mm	1 piece
038.07.125	120 ml	125 ± 3 mm	115 ± 3 mm	45 ± 3 mm	1 piece
038.07.150	270 ml	150 ± 3 mm	140 ± 3 mm	55 ± 3 mm	1 piece



MORTARS - "agate" - "deep form"

- Manufactured from high quality, natural agate stone with extra depth comparison to standard depth mortars.
- Hardness degree of 7-8 MOHS guarantees very good crushing resistance.
- Recommended for use contamination free crushing.
- Supplied with a pestle with relevant size to agate mortar.

catalogue number	volume	external diameter	internal diameter	height	pack quantity
038.09.060	25 ml	60 ± 3 mm	50 ± 3 mm	35 ± 3 mm	1 piece
038.09.070	35 ml	70 ± 3 mm	55 ± 3 mm	40 ± 3 mm	1 piece
038.09.080	60 ml	80 ± 3 mm	65 ± 3 mm	45 ± 3 mm	1 piece
038.09.100	100 ml	100 ± 3 mm	80 ± 3 mm	55 ± 3 mm	1 piece
038.09.120	165 ml	120 ± 3 mm	100 ± 3 mm	60 ± 3 mm	1 piece



MORTARS - "agate" - "standard form" - "black"

- Manufactured from high quality, natural black agate stone with standard depth.
- Hardness degree of 6-7 MOHS guarantees very good crushing resistance.
- Recommended for use contamination free crushing.
- Supplied with a pestle with relevant size to agate mortar.

catalogue number	volume	external diameter	internal diameter	height	pack quantity
038.18.065	25 ml	65 ± 3 mm	55 ± 3 mm	30 ± 3 mm	1 piece
038.18.085	70 ml	85 ± 3 mm	80 ± 3 mm	35 ± 3 mm	1 piece
038.18.110	140 ml	110 ± 3 mm	100 ± 3 mm	45 ± 3 mm	1 piece
038.18.125	210 ml	125 ± 3 mm	115 ± 3 mm	50 ± 3 mm	1 piece
038.18.150	350 ml	150 ± 3 mm	140 ± 3 mm	55 ± 3 mm	1 piece



MORTARS - "alsint" - "standard form"

- Manufactured from extremely chemical resistant pure 99,7 % aluminum oxide (alsint).
- Hardness degree of 9+ MOHS guarantees excellent crushing resistance.
- Recommended for use absolute contamination free crushing.
- Supplied with a pestle with relevant size to alsint mortar.

catalogue number	volume	external diameter	internal diameter	height	pack quantity
038.08.050	7 ml	50 mm	37 mm	26 mm	1 piece
038.08.075	30 ml	75 mm	60 mm	37 mm	1 piece
038.08.100	80 ml	100 mm	85 mm	47 mm	1 piece
038.08.125	120 ml	125 mm	110 mm	65 mm	1 piece
038.08.150	150 ml	150 mm	130 mm	75 mm	1 piece



MORTARS - "porcelain" - "standard form"

- Manufactured from high quality, glazed porcelain according to DIN 12906 standard.
- Hardness degree of 5+ MOHS guarantees fairly good crushing resistance.
- Grinding chamber made from un-glazed porcelain provides perfect hold of the samples during crushing without splattering.
- Supplied without pestle. Please select the appropriate pestle.

catalogue number	volume	external diameter	internal diameter	height	pack quantity
038.02.065	70 ml	80 mm	65 mm	40 mm	1 piece
038.02.090	170 ml	105 mm	90 mm	55 mm	1 piece
038.02.130	400 ml	148 mm	130 mm	65 mm	1 piece
038.02.150	700 ml	175 mm	150 mm	70 mm	1 piece
038.02.180	1000 ml	207 mm	180 mm	80 mm	1 piece



PESTLES - "porcelain" - "standard form"

- Manufactured from high quality, glazed porcelain according to DIN 12906 standard. Hardness degree of 5 MOHS guarantees fairly good crushing resistance.
- Grinding head made from un-glazed porcelain for crushing without splattering.

catalogue number	head diameter	total length	pack quantity
038.03.115	24 mm	115 mm	1 piece
038.03.135	30 mm	135 mm	1 piece
038.03.150	36 mm	150 mm	1 piece
038.03.175	42 mm	175 mm	1 piece
038.03.210	55 mm	210 mm	1 piece



PESTLES - "agat" - "standard form" - "black"

- Manufactured from high quality, natural black agat stone.
- Hardness degree of 6-7 MOHS guarantees very good crushing resistance.

catalogue number	total length	pack quantity
038.04.065	65 ± 3 mm	1 piece
038.04.075	75 ± 3 mm	1 piece
038.04.085	85 ± 3 mm	1 piece
038.04.110	110 ± 3 mm	1 piece
038.04.125	125 ± 3 mm	1 piece
038.04.150	150 ± 3 mm	1 piece



EVAPORATING DISHES "porcelain" - "flat base"

- Manufactured from high quality, glazed porcelain according to DIN 12903 standard.
- In order to prevent breakage controlled cooling and preventing use with direct flame is recommended.

catalogue number	volume	external diameter	height	pack quantity
038.11.060	20 ml	63 mm	13 mm	6 pieces
038.11.080	40 ml	80 mm	20 mm	6 pieces
038.11.100	80 ml	100 mm	22 mm	6 pieces
038.11.125	270 ml	125 mm	27 mm	6 pieces
038.11.160	450 ml	160 mm	35 mm	6 pieces



EVAPORATING DISHES "porcelain" - "round base"

- Manufactured from high quality, glazed porcelain according to DIN 12903 standard.
- In order to prevent breakage controlled cooling and preventing use with direct flame is recommended.

catalogue number	volume	internal diameter	height	pack quantity
038.12.060	40 ml	63 mm	25 mm	6 pieces
038.12.080	75 ml	80 mm	34 mm	6 pieces
038.12.100	180 ml	100 mm	40 mm	6 pieces
038.12.125	310 ml	115 mm	47 mm	6 pieces
038.12.160	640 ml	160 mm	64 mm	6 pieces

EVAPORATING DISHES "stainless steel" - "round base"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Robust and seamless construction guarantees long life cycle.
- Smooth polished surfaces provides easy cleaning.

catalogue number	volume	internal diameter	height	pack quantity
038.14.060	50 ml	60 mm	30 mm	1 piece
038.14.080	125 ml	80 mm	40 mm	1 piece
038.14.100	250 ml	100 mm	50 mm	1 piece

TONG - "for evaporating dishes"

- Manufactured from high quality, corrosion resistant chromated steel for holding dishes in the most secure way.
- Unique design with grabbing jaws enable easy and safe holding of dishes preventing possible breakage.

catalogue number	total length	pack quantity
038.05.001	275 mm	1 piece





EVAPORATING DISHES "quartz" - "round base"

- Manufactured quartz glass resistant to high temperature 1050°C.
- Since the production is done manually at 1700°C, some irregularities at the physical outlook might occur.

catalogue number	volume	external diameter	height	pack quantity
038.16.060	30 ml	60 mm	34 mm	1 piece
038.16.080	150 ml	80 mm	45 mm	1 piece
038.16.100	200 ml	100 mm	55 mm	1 piece



CRYSTALLIZATION DISHES "st. steel" - "flat base"

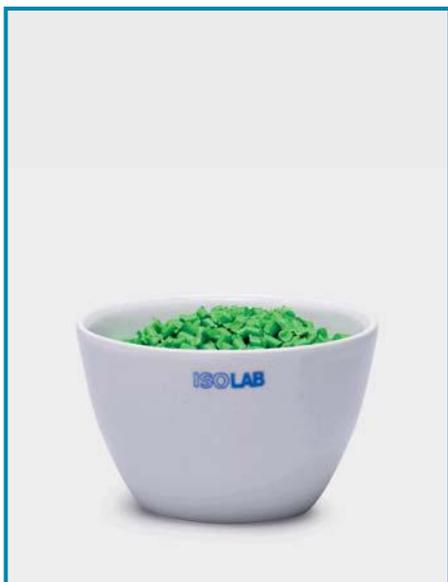
- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Robust and seamless construction guarantees long life cycle. Smooth polished surfaces provides easy cleaning.

catalogue number	volume	external diameter	height	pack quantity
049.08.070	100 ml	70 mm	35 mm	1 piece
049.08.085	150 ml	85 mm	45 mm	1 piece
049.08.110	400 ml	110 mm	55 mm	1 piece

CRYSTALLIZATION DISHES "glass" - "flat base"

- Manufactured from borosilicate 3.3 glass according to DIN 12338 standard.
- In order to prevent breakage controlled cooling and preventing use with direct flame is recommended.

catalogue number	volume	external diameter	height	pack quantity
049.05.060	85 ml	60 mm	35 mm	1 piece
049.05.100	110 ml	70 mm	40 mm	1 piece
049.05.150	160 ml	80 mm	45 mm	1 piece
049.05.300	280 ml	95 mm	55 mm	1 piece
049.05.900	860 ml	140 mm	75 mm	1 piece



CRUCIBLES "porcelain" - "low form"

➤ Manufactured from high quality, glazed porcelain according to DIN 12904 standard.

➤ **In order to prevent breakage controlled cooling and preventing use with direct flame is recommended.**

➤ Supplied without lid. Please select the appropriate size from lid options.

catalogue number	external diameter	height	pack quantity
038.14.L30	30 mm	20 mm	6 pieces
038.14.L35	35 mm	23 mm	6 pieces
038.14.L40	40 mm	26 mm	6 pieces
038.14.L45	45 mm	29 mm	6 pieces
038.14.L50	50 mm	32 mm	6 pieces
038.14.L60	60 mm	38 mm	6 pieces
038.14.L70	70 mm	47 mm	6 pieces



CRUCIBLES "porcelain" - "medium form"

➤ Manufactured from high quality, glazed porcelain according to DIN 12904 standard.

➤ **In order to prevent breakage controlled cooling and preventing use with direct flame is recommended.**

➤ Supplied without lid. Please select the appropriate size from lid options.

catalogue number	external diameter	height	pack quantity
038.14.M35	35 mm	28 mm	6 pieces
038.14.M40	40 mm	32 mm	6 pieces
038.14.M45	45 mm	36 mm	6 pieces
038.14.M50	50 mm	40 mm	6 pieces
038.14.M60	60 mm	50 mm	6 pieces
038.14.M70	70 mm	60 mm	6 pieces
038.14.M82	82 mm	65 mm	6 pieces



CRUCIBLES "porcelain" - "high form"

➤ Manufactured from high quality, glazed porcelain according to DIN 12904 standard.

➤ **In order to prevent breakage controlled cooling and preventing use with direct flame is recommended.**

➤ Supplied without lid. Please select the appropriate size from lid options.

catalogue number	external diameter	height	pack quantity
038.14.H30	30 mm	38 mm	6 pieces
038.14.H35	35 mm	44 mm	6 pieces
038.14.H40	40 mm	51 mm	6 pieces
038.14.H46	46 mm	58 mm	6 pieces
038.14.H51	51 mm	65 mm	6 pieces
038.14.H60	60 mm	79 mm	6 pieces



CRUCIBLE LIDS - "porcelain"

➤ Manufactured from high quality, glazed porcelain according to DIN 12904 standard.

➤ **In order to prevent breakage not recommended to be used under direct flame.**

catalogue number	external diameter	pack quantity
038.19.035	35 mm	6 pieces
038.19.043	43 mm	6 pieces
038.19.046	46 mm	6 pieces
038.19.052	52 mm	6 pieces
038.19.060	60 mm	6 pieces
038.19.068	68 mm	6 pieces



TONGS - "for crucibles"

➤ Manufactured from high quality, corrosion resistant chromated steel for holding crucibles in the most secure way.

➤ Unique design with grabbing jaws enables easy and safe holding of crucibles preventing possible breakage.

catalogue number	total length	pack quantity
038.06.250	250 mm	1 piece
038.06.300	300 mm	1 piece
038.06.400	400 mm	1 piece



CRUCIBLES "quartz" - "medium form"

- Manufactured quartz glass resistant to high temperature 1050°C.
- Since the production is done manually at 1700°C, some irregularities at the physical outlook might occur.

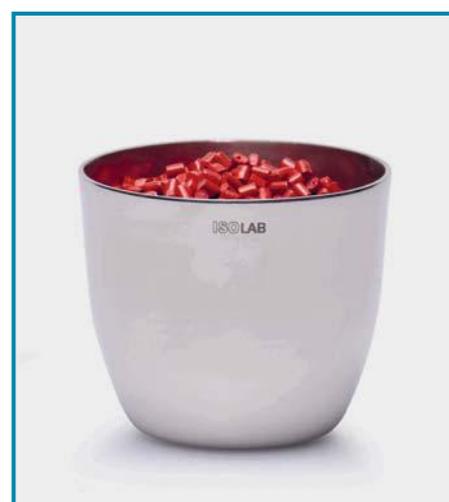
catalogue number	external diameter	height	pack quantity
038.13.Q15	40 mm	32 mm	1 piece
038.13.Q24	50 mm	40 mm	1 piece
038.13.Q40	60 mm	48 mm	1 piece



CRUCIBLES "alsint" - "wide & tall form"

- Manufactured from extremely chemical resistant pure 99,7 % aluminum oxide (alsint) resistant to 1700°C.
- In order to prevent breakage controlled cooling and preventing use with direct flame is recommended.

catalogue number	external diameter	height	pack quantity
038.13.A30	30 mm	24 mm	1 piece
038.13.A41	41 mm	37 mm	1 piece
038.13.A48	48 mm	41 mm	1 piece
038.13.A54	54 mm	50 mm	1 piece
038.13.A60	60 mm	50 mm	1 piece
038.13.A66	66 mm	56 mm	1 piece



CRUCIBLES "st. steel" - "medium form"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Robust and seamless construction guarantees long life cycle. Smooth polished surfaces provides fast and easy cleaning.

catalogue number	external diameter	height	pack quantity
038.13.S35	44 mm	35 mm	1 piece
038.13.S45	53 mm	43 mm	1 piece
038.13.S50	62 mm	48 mm	1 piece



COMBUSTION BOATS "porcelain"

- Manufactured from high quality, glazed porcelain.
- In order to prevent breakage controlled cooling and preventing use with direct flame is recommended.

catalogue number	dimensions	height	pack quantity
038.17.001	85 x 13 mm	8 mm	10 pieces



INCINERATING DISHES "porcelain" - "cylindrical"

- Manufactured from high quality, glazed porcelain.
- In order to prevent breakage controlled cooling and preventing use with direct flame is recommended.

catalogue number	internal diameter	height	pack quantity
038.21.040	40 mm	21 mm	1 piece
038.21.050	50 mm	25 mm	1 piece
038.21.060	60 mm	31 mm	1 piece



INCINERATING DISHES "porcelain" - "rectangular"

- Manufactured from high quality, glazed porcelain.
- In order to prevent breakage controlled cooling and preventing use with direct flame is recommended.

catalogue number	dimensions	height	pack quantity
038.20.025	48 x 26 mm	10 mm	1 piece
038.20.046	70 x 46 mm	13 mm	1 piece
038.20.055	96 x 55 mm	16 mm	1 piece



BUNSEN BURNER "standard type"

- Manufactured from steel and chromated brass. Most common used economical bunsen burner with flame adjustment option.
- Due to the compact design can be used under standard height tripods.
- **Can be used with all gases such as neutral gas, butane gas and coal gas.**
- Offers practical control of flame from very slow heating to rapid boiling with an adjustable air and gas regulation ring.
- Precise flame adjustment is guaranteed by a screw driven gas control knob.

catalogue
number

pack
quantity

050.01.001

1 piece



BUNSEN BURNER "advanced type"

- Manufactured from steel and chromated brass. Preferably used if higher heating capacity is required.
- Due to the compact design can be used under standard height tripods.
- **Can be used with all gases such as neutral gas, butane gas and coal gas.**
- Offers practical control of flame from very slow heating to rapid boiling with an adjustable air and gas regulation ring.
- Easy and precise flame adjustment is guaranteed by a screw driven gas control knob.

catalogue
number

pack
quantity

050.01.002

1 piece



BUNSEN BURNER "meker type"

- Manufactured from steel and chromated brass. Most Suitable for very high heating capacity up to 1700°C is required.
- Perforated plate vent with 30 mm diameter guarantees high, evenly distributed and stable flame.
- **Can be used with all gases such as neutral gas, butane gas and coal gas.**
- Offers practical control of flame from very slow heating to rapid boiling with an adjustable air and gas regulation ring.
- Precise flame adjustment is guaranteed by a screw driven gas control knob.

catalogue
number

pack
quantity

050.01.003

1 piece



BUNSEN BURNER STABILIZER

- Due to the torsion and twisting effect of the bunsen burner hoses there is always a tilt over risk for bunsen burners.
- Bunsen burner stabilizer provides a very stable and robust additional base and holds the attached bunsen burner firmly avoiding above mentioned risk.
- Manufactured from spray coated heavy cast iron. The nest perfectly fits to the bases of bunsen burners with **catalogue no: 050.01.002 and 050.01.003.**
- First insert the bunsen burner into the stabilizer nest. Then stabilize the bunsen burner by fixing the provided screw tightly.



First insert the bunsen burner into the stabilizer nest.



Then stabilize the bunsen burner by tightly fixing the provided screw.

catalogue
number

pack
quantity

050.09.001

1 piece



BUNSEN BURNER "with gas cartridge"

- High performance, multi purpose and portable bunsen burner offers practical and convenient solutions where connection to a gas pipe line is not existing.
- Offers precise and practical control of flame from very slow heating to rapid boiling.
- Precise flame adjustment is guaranteed by a screw driven gas control knob.
- Perforated design of the gas vent acts as a stabilizer allowing the gas to emerge at low velocity acting as a pilot for the regular flame.
- Supplied without gas cartridge. Kindly order gas cartridge separately.

catalogue number	pack quantity
050.01.004	1 piece



BLOW LAMP - "with gas cartridge"

- High performance, multi purpose and portable blow lamp offers practical and convenient solutions where connection to a gas pipe line is not existing.
- Offers precise and practical control of flame from very slow heating to rapid boiling.
- Precise flame adjustment is guaranteed by a screw driven gas control knob.
- Supplied without gas cartridge. Kindly order gas cartridge separately.

catalogue number	pack quantity
050.02.001	1 piece



GAS CARTRIDGE

- Gas cartridge perfectly fits to the bunsen burner and also blow lamp.

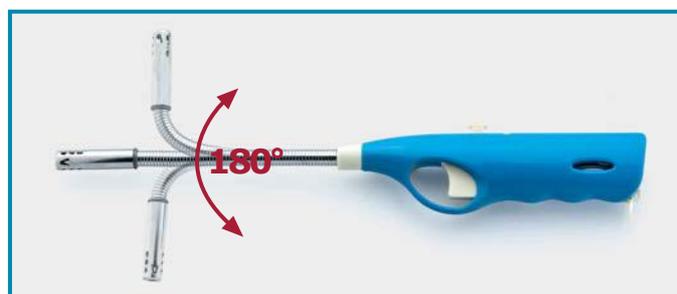
catalogue number	pack quantity
050.03.001	1 piece



HOSES - "for bunsen burners"

- Manufactured from extra thick walled rubber. Specially designed to be used with bunsen burners.
- Reinforced ends fits perfect to the bunsen burner at one side and the gas tap at the other side assuring gas leakage free connection.

catalogue number	hose length	pack quantity
050.08.075	75 cm	1 piece
050.08.100	100 cm	1 piece



LIGHTER - "refillable"

- Perfect and practical tool to ignite the bunsen burners and flame lamp. Long and flexible gas tube can be bend 180° or more enabling ignition from any desired position but always from a safe distance from the flame.
- Refillable from the bottom part. Featured with a safety button.

catalogue number	gas tube length	pack quantity
050.10.001	150 mm	1 piece



TUBINGS - "rubber" - "standard type"

- Manufactured from natural rubber with standard thickness of durometer 45 A.
- Guarantees excellent chemical and temperature resistance between -25°C to +70°C.

catalogue number	internal diameter	external diameter	wall thickness	pack quantity
052.10.001	5,0 mm	8,0 mm	1,5 mm	1 meter
052.10.002	5,0 mm	9,0 mm	2,0 mm	1 meter
052.10.003	6,0 mm	9,0 mm	1,5 mm	1 meter
052.10.004	6,0 mm	10,0 mm	2,0 mm	1 meter
052.10.005	7,0 mm	11,0 mm	2,0 mm	1 meter
052.10.006	8,0 mm	12,0 mm	2,0 mm	1 meter
052.10.007	10,0 mm	14,0 mm	2,0 mm	1 meter
052.10.008	12,0 mm	16,0 mm	2,0 mm	1 meter



TUBINGS - "rubber" - "vacuum type"

- Manufactured from natural rubber with thickness required by vacuum applications with durometer 45 A.
- Guarantees excellent chemical and temperature resistance between -25°C to +70°C.

catalogue number	internal diameter	external diameter	wall thickness	pack quantity
052.11.001	6,0 mm	16,0 mm	5,0 mm	1 meter
052.11.002	7,0 mm	17,0 mm	5,0 mm	1 meter
052.11.003	8,0 mm	18,0 mm	5,0 mm	1 meter
052.11.004	10,0 mm	20,0 mm	5,0 mm	1 meter



TUBINGS - "silicone"

- Manufactured from natural silicone with standard thickness of durometer 45 A.
- Guarantees excellent chemical and temperature resistance between -60°C to +170°C.

catalogue number	internal diameter	external diameter	wall thickness	pack quantity
052.12.001	3,0 mm	6,0 mm	1,5 mm	1 meter
052.12.002	4,0 mm	7,0 mm	1,5 mm	1 meter
052.12.003	5,0 mm	8,0 mm	1,5 mm	1 meter
052.12.004	6,0 mm	10,0 mm	2,0 mm	1 meter
052.12.005	7,0 mm	11,0 mm	2,0 mm	1 meter
052.12.006	8,0 mm	12,0 mm	2,0 mm	1 meter
052.12.007	9,0 mm	13,0 mm	2,0 mm	1 meter
052.12.008	10,0 mm	14,0 mm	2,0 mm	1 meter

TUBINGS - "PTFE" - standard type"

➤ Manufactured from chemically inert PTFE with excellent mechanical strength.

➤ Guarantees excellent chemical and temperature resistance between -200°C to +280°C.

catalogue number	internal diameter	external diameter	wall thickness	pack quantity
052.13.001	0,5 mm	1,0 mm	0,25 mm	1 meter
052.13.002	1,0 mm	1,5 mm	0,25 mm	1 meter
052.13.003	1,0 mm	2,0 mm	0,50 mm	1 meter
052.13.004	1,5 mm	3,5 mm	1,00 mm	1 meter
052.13.005	2,0 mm	4,0 mm	1,00 mm	1 meter
052.13.006	3,0 mm	5,0 mm	1,00 mm	1 meter
052.13.007	4,0 mm	6,0 mm	1,00 mm	1 meter
052.13.008	6,0 mm	8,0 mm	1,00 mm	1 meter
052.13.009	8,0 mm	10,0 mm	1,00 mm	1 meter

**TUBINGS - "PVC" - "reinforced type"**

➤ Manufactured with durometer 77 A from terylene mesh reinforced PVC providing extra strenght.

➤ Guarantees excellent chemical and temperature resistance between -20°C to +80°C.

catalogue number	internal diameter	external diameter	wall thickness	pack quantity
052.14.001	6,0 mm	12,0 mm	3,0 mm	1 meter
052.14.002	8,0 mm	14,0 mm	3,0 mm	1 meter
052.14.003	10,0 mm	16,0 mm	3,0 mm	1 meter

**SCISSOR - "for hose cutting"**

➤ Offers a clean and sharp cut of all kinds of hoses with external diameter range 6 mm to 25 mm.

➤ The cutter blade is manufactured from stainless steel with two ends.

➤ If one cutting end gets blunt the other side can be used.

catalogue number	pack quantity
052.08.002	1 piece



Offers a clean and sharp cut of all kinds of hoses with external diameter range 6 mm to 25 mm.





TUBING CLAMPS - "with easy click closure"

- Manufactured with a stainless steel clamp and HIPS pressure plate for reliable and precise flow control of liquids and gases.
- The micro screw system enables a fine and stepless adjusted flow control.
- The clamp can be opened and closed at any position without tiresome screwing.
- The unique construction enables easy mount of the clamp even when the tubing is already connected to a system.
- Adjustable pressure plate compress the tubing over a wide area against the stainless hook in order to prevent damages.



catalogue number	max. hose diameter	pack quantity
052.15.010	up to 10 mm	1 piece
052.15.015	up to 15 mm	1 piece
052.15.020	up to 20 mm	1 piece



TUBING CLAMPS - "worm drive screw"

- Ideal clamps for safe fastening and securing tubings on pipe systems or to stopcocks.
- Manufactured from chrome steel according to DIN 3017 standard.

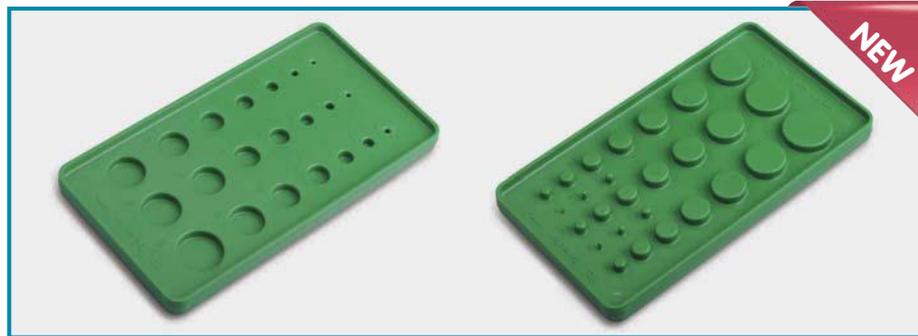
catalogue number	for hose diameter	pack quantity
052.16.012	8 - 12 mm	1 piece
052.16.016	10 - 16 mm	1 piece
052.16.020	12 - 20 mm	1 piece
052.16.025	16 - 25 mm	1 piece



FLOW INDICATOR

- Manufactured from PMP for precise optical indication of the flow. Can resist max 2 bar pressure.
- Can be used with tubings of 6 to 11 mm internal diameter.
- Functions in both directions and can be mounted with any angle.
- For best performance the minimum flow rate of 50 ml / minute (vertically) and 140 ml / minute (horizontally) is required.

catalogue number	pack quantity
052.18.001	1 piece



TUBING SELECTOR

- Manufactured from ABS for quick selection of the required tubing.
- One side of the tube selector enables selection of inner diameters of tubings starting from 1 mm to 25 mm.
- The other side is for selection of outer diameters of tubings starting from 1,5 mm to 21 mm.

catalogue number	pack quantity
052.08.001	1 piece

- Includes following inside diameter gauges:

1.0 mm - 2.0 mm - 2.5 mm - 3.0 mm - 4.0 mm - 4,5 mm - 5.0 mm - 6.0 mm - 7.0 mm - 8.0 mm - 9.0 mm - 9.5 mm - 10.0 mm - 11.0 mm - 12.0 mm - 13.0 mm - 14.0 mm - 15.0 mm - 16.0 mm - 17.0 mm - 18.0 mm - 19.0 mm - 20.0 mm - 21.0 mm - 22.0 mm - 25.0 mm.

- Includes following outside diameter gauges:

1,5 mm - 2.0 mm - 2.5 mm - 3.0 mm - 4.0 mm - 5.0 mm - 5,5 mm - 6.0 mm - 7.0 mm - 8.0 mm - 9.0 mm - 10.0 mm - 11.0 mm - 12.0 mm - 13.0 mm - 14.0 mm - 15.0 mm - 16.0 mm - 17.0 mm - 18.0 mm - 21.0 mm.



TUBING CONNECTOR - "twin end"

- Manufactured from clear polypropylene for safe connection of tubings.
- Ideal to connect the tubings with either same or close inner diameters.

catalogue number	for tubing inside dia.	length	pack quantity
052.20.003	3 - 5 mm	47 mm	1 piece
052.20.006	7 - 10 mm	54 mm	1 piece
052.20.009	9 - 13 mm	56 mm	1 piece



TUBING CONNECTOR - "different end"

- Manufactured from transparent polypropylene.
- Straight form, ideal to connect tubings with different inside diameter.

catalogue number	for tubing inside dia.	length	pack quantity
052.21.003	3 - 5 mm / 6 - 10 mm	55 mm	1 piece
052.21.006	4 - 10 mm / 9 - 13 mm	55 mm	1 piece
052.21.009	7 - 10 mm / 9 - 13 mm	60 mm	1 piece

TUBE CONNECTORS - "L" - "Y" - "T" - "X"

- Manufactured from clear polypropylene for safe connection of tubings with exactly same inner diameter.
- 4 available models provide excellent, leak-proof and multi-functional connection.

ID hose diameters	"L" model catalogue no	"Y" model catalogue no	pack quantity
6 mm	052.22.006	052.23.006	1 piece
8 mm	052.22.008	052.23.008	1 piece
10 mm	052.22.010	052.23.010	1 piece

ID hose diameters	"T" model catalogue no	"X" model catalogue no	pack quantity
6 mm	052.24.006	052.25.006	1 piece
8 mm	052.24.008	052.25.008	1 piece
10 mm	052.24.010	052.25.010	1 piece



STOPCOCKS - "P.P" "multi way"

- Manufactured from polypropylene for safe connection of tubings.
- 2 way stopcock is ideal for flow control by releasing or blocking the flow.
- 3 way stopcock in addition to above features also diverts the direction of the flow.

catalogue number	model	pack quantity
055.32.001	2 way	1 piece
055.32.002	3 way	1 piece





STOPPERS "rubber"

- Manufactured from additive free, best quality natural rubber according to DIN 12871 standard with durometer 40 A.
- Guarantees excellent chemical and temperature resistance between -25°C to +70°C.

catalogue number	bottom Ø mm	top Ø mm	height mm	pack quantity
051.20.001	3,5	6,5	15,0	10 pcs.
051.20.002	5,0	9,0	20,0	10 pcs.
051.20.003	8,0	12,0	20,0	10 pcs.
051.20.004	10,5	14,5	20,0	10 pcs.
051.20.005	12,5	16,5	20,0	10 pcs.
051.20.006	14,0	18,0	20,0	10 pcs.
051.20.007	17,0	22,0	25,0	10 pcs.
051.20.008	18,0	24,0	30,0	10 pcs.
051.20.009	21,0	27,0	30,0	10 pcs.
051.20.010	23,0	29,0	30,0	10 pcs.
051.20.011	26,0	32,0	30,0	10 pcs.
051.20.012	29,0	35,0	30,0	10 pcs.
051.20.013	31,0	38,0	35,0	10 pcs.
051.20.014	36,0	44,0	40,0	10 pcs.
051.20.015	41,0	49,0	40,0	6 pcs.
051.20.016	47,0	55,0	40,0	6 pcs.
051.20.017	50,5	59,5	45,0	6 pcs.
051.20.018	56,0	65,0	45,0	6 pcs.
051.20.019	60,0	70,0	50,0	6 pcs.
051.20.020	64,5	75,5	55,0	3 pcs.
051.20.021	71,0	83,0	60,0	3 pcs.
051.20.022	79,0	92,0	65,0	3 pcs.



STOPPERS "silicone"

- Manufactured from chemically inert, autoclavable, best quality natural silicone according to DIN 12871 standard with durometer 50 A.
- Guarantees excellent chemical and temperature resistance between -60°C to +170°C.

catalogue number	bottom Ø mm	top Ø mm	height mm	pack quantity
051.22.001	3,5	6,5	15,0	10 pcs.
051.22.002	5,0	9,0	20,0	10 pcs.
051.22.003	8,0	12,0	20,0	10 pcs.
051.22.004	10,5	14,5	20,0	10 pcs.
051.22.005	12,5	16,5	20,0	10 pcs.
051.22.006	14,0	18,0	20,0	10 pcs.
051.22.007	17,0	22,0	25,0	10 pcs.
051.22.008	18,0	24,0	30,0	10 pcs.
051.22.009	21,0	27,0	30,0	10 pcs.
051.22.010	23,0	29,0	30,0	10 pcs.
051.22.011	26,0	32,0	30,0	10 pcs.
051.22.012	29,0	35,0	30,0	10 pcs.
051.22.013	31,0	38,0	35,0	10 pcs.
051.22.014	36,0	44,0	40,0	10 pcs.
051.22.015	41,0	49,0	40,0	6 pcs.
051.22.016	47,0	55,0	40,0	6 pcs.
051.22.017	50,5	59,5	45,0	6 pcs.
051.22.018	56,0	65,0	45,0	6 pcs.
051.22.019	60,0	70,0	50,0	6 pcs.
051.22.020	64,5	75,5	55,0	3 pcs.
051.22.021	71,0	83,0	60,0	3 pcs.
051.22.022	79,0	92,0	65,0	3 pcs.



STOPPERS "cork"

- Manufactured from non-porous, additive free, best quality natural cork according to DIN 12871 standard dimensions.
- Offers multi advantages with their light weight yet robust construction. Can be easily drilled.

catalogue number	bottom Ø mm	top Ø mm	height mm	pack quantity
051.23.001	3,5	6,5	15,0	10 pcs.
051.23.002	5,0	9,0	20,0	10 pcs.
051.23.003	8,0	12,0	20,0	10 pcs.
051.23.004	10,5	14,5	20,0	10 pcs.
051.23.005	12,5	16,5	20,0	10 pcs.
051.23.006	14,0	18,0	20,0	10 pcs.
051.23.007	17,0	22,0	25,0	10 pcs.
051.23.008	18,0	24,0	30,0	10 pcs.
051.23.009	21,0	27,0	30,0	10 pcs.
051.23.010	23,0	29,0	30,0	10 pcs.
051.23.011	26,0	32,0	30,0	10 pcs.
051.23.012	29,0	35,0	30,0	10 pcs.
051.23.013	31,0	38,0	35,0	10 pcs.
051.23.014	36,0	44,0	40,0	10 pcs.
051.23.015	41,0	49,0	40,0	10 pcs.
051.23.016	47,0	55,0	40,0	10 pcs.
051.23.017	50,5	59,5	45,0	10 pcs.
051.23.018	56,0	65,0	45,0	10 pcs.
051.23.019	60,0	70,0	50,0	10 pcs.
051.23.020	64,5	75,5	55,0	10 pcs.
051.23.021	71,0	83,0	60,0	10 pcs.
051.23.022	79,0	92,0	65,0	10 pcs.



STOPPERS "rubber" - "drilled"

- Manufactured from additive free, best quality natural rubber according to DIN 12871 standard with durometer 40 A.
- Guarantees excellent chemical and temperature resistance between -25°C to +70°C.
- The drilled hole offers labour and time saving applications.

catalogue number	bottom Ø mm	top Ø mm	hole Ø mm	pack quantity
051.21.001	10,5	14,5	3,0	1 piece
051.21.002	12,5	16,5	3,0	1 piece
051.21.003	14,0	18,0	3,0	1 piece
051.21.004	17,0	22,0	4,0	1 piece
051.21.005	18,0	24,0	4,0	1 piece
051.21.006	21,0	27,0	5,0	1 piece
051.21.007	23,0	29,0	5,0	1 piece
051.21.008	26,0	32,0	6,0	1 piece
051.21.009	29,0	35,0	6,0	1 piece
051.21.010	31,0	38,0	7,0	1 piece



STOPPERS "cellulose"

- Manufactured from additive free autoclavable. Air permeable, actively breathing best quality cellulose.
- Provide excellent sealing for microbiological samples in tissue culture tubes, flasks etc.
- Also offers multi advantages such as economical price, labour and time saving applications and perfectly tight fitting.

catalogue number	bottom Ø mm	top Ø mm	height mm	pack quantity
051.24.001	7,5	12,5	30,0	10 pcs.
051.24.002	9,0	12,5	30,0	10 pcs.
051.24.003	11,0	15,5	32,0	10 pcs.
051.24.004	11,5	16,5	40,0	10 pcs.
051.24.005	12,5	17,0	40,0	10 pcs.
051.24.006	15,5	20,0	40,0	10 pcs.
051.24.007	15,5	25,0	45,0	10 pcs.
051.24.008	20,0	26,5	50,0	10 pcs.
051.24.009	24,0	35,0	55,0	10 pcs.



STOPPERS - "silicone" "turn - over flange"

- Manufactured from chemically inert, autoclavable, best quality natural silicone.
- Offers high chemical and temperature resistance between -60°C to +170°C.
- They provide perfect tight sealing even with poorly finished rims.
- The upper septum can be easily punctured by needles.



catalogue number	effective diameter	pack quantity
051.26.001	7,1 mm	10 pieces
051.26.002	10,2 mm	10 pieces
051.26.003	12,7 mm	10 pieces
051.26.004	14,9 mm	10 pieces
051.26.005	15,9 mm	10 pieces
051.26.006	19,4 mm	10 pieces
051.26.007	23,7 mm	10 pieces
051.26.008	30,7 mm	10 pieces

how to select proper size stopper?

NS size	total height	diameter narrow end	diameter wide end
10/19	19,00 mm	8,02 mm	10,00 mm
12/21	21,00 mm	10,50 mm	12,50 mm
14/23	23,00 mm	12,17 mm	14,50 mm
19/26	26,00 mm	16,01 mm	18,80 mm
24/29	29,00 mm	20,95 mm	24,00 mm
29/32	32,00 mm	26,12 mm	29,20 mm
34/35	35,00 mm	30,77 mm	34,50 mm

Attached table indicates technical dimensions of NS joints. Please examine the related NS size and select the right stopper from the catalogue list.

Please pay attention to select a larger stopper for perfect closure of the joint.



STOPPERS - "hallow glass" - "hexagonal" - "clear"

- Manufactured from borosilicate 3.3 glass according to DIN 12252 standard.
- Hexagonal flat head prevents the stopper from rolling on the bench and avoids the breakage risk.
- A pointed, round formed "drip-tip" stopper lower end guarantees return of the adhered liquid back to the flasks.



A pointed, round formed "drip-tip" stopper lower end guarantees return of the adhered liquid back to the flasks.

catalogue number	NS size	pack quantity
051.03.001	NS 10/19	10 pieces
051.03.002	NS 12/21	10 pieces
051.03.003	NS 14/23	10 pieces
051.03.004	NS 19/26	10 pieces
051.03.005	NS 24/29	10 pieces
051.03.006	NS 29/32	10 pieces
051.03.007	NS 34/35	10 pieces



STOPPERS - "hallow glass" - "hexagonal" - "amber"

- Manufactured from borosilicate 3.3 glass according to DIN 12252 standard.
- Hexagonal flat head prevents the stopper from rolling on the bench and avoids the breakage risk.
- A pointed, round formed "drip-tip" stopper lower end guarantees return of the adhered liquid back to the flasks.



Hexagonal flat head prevents the stopper from rolling on the bench and avoids the breakage risk.

catalogue number	NS size	pack quantity
051.04.001	NS 10/19	1 piece
051.04.002	NS 12/21	1 piece
051.04.003	NS 14/23	1 piece
051.04.004	NS 19/26	1 piece
051.04.005	NS 24/29	1 piece
051.04.006	NS 29/32	1 piece
051.04.007	NS 34/35	1 piece



STOPPERS - "polypropylene"

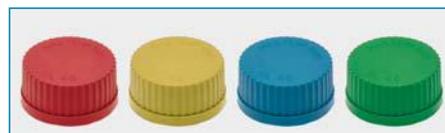
- Manufactured from polypropylene for perfect tight sealing for all NS joints.
- Hexagonal flat head prevents the stopper from rolling on the bench and avoids the breakage risk.
- The hallow form of the stopper head collects the adhered liquid and prevents the possible damage risk of the laboratory benches.

catalogue number	NS size	pack quantity
051.08.010	NS 10/19	10 pieces
051.08.012	NS 12/21	10 pieces
051.08.014	NS 14/23	10 pieces
051.08.019	NS 19/26	10 pieces
051.08.024	NS 24/29	10 pieces
051.08.029	NS 29/32	10 pieces



CAPS - "polypropylene"

- Manufactured from polypropylene for perfect and tight closure of GL 45 screw necked laboratory bottles.
- Large ridges on the cap outer surface guarantees for increased grip and fast closure.
- Color coded caps enable fast, easy and practical identification of bottle content.



catalogue number	color	pack quantity
051.09.45R	red	10 pieces
051.09.45Y	yellow	10 pieces
051.09.45B	blue	10 pieces
051.09.45G	green	10 pieces



STOPPERS - "flange" - "polyethylene"

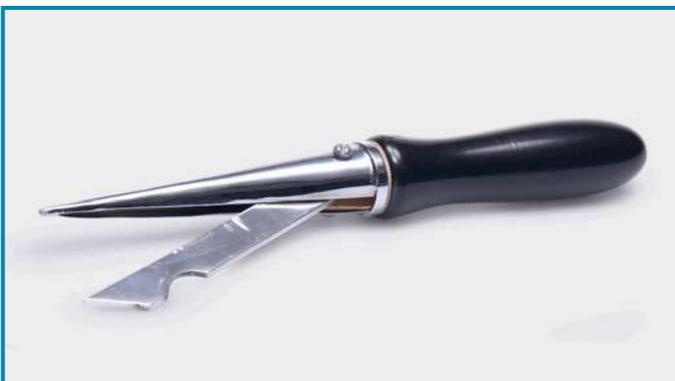
- Manufactured from polyethylene for perfect tight sealing of specially test tubes.
- Large size flanges on the stopper perfectly touches to the walls of the tubes and offers the best leak-proof sealing.
- Grooved, conical body shape guarantees perfect closure.
- Color coded stoppers enables fast, easy and practical identification of bottle content.

Large size flanges on the stopper perfectly touches to the walls of the tubes and offers the leak-proof sealing.



catalogue number 13 mm	catalogue number 16 mm	color	pack quantity
051.10.001	051.11.001	clear	100 pieces
051.10.002	051.11.002	blue	100 pieces
051.10.003	051.11.003	yellow	100 pieces
051.10.004	051.11.004	red	100 pieces
051.10.005	051.11.005	green	100 pieces

BORER SHARPENER



- Manufactured from chromated steel for sharpening the worn, blinded borer pipes.
- The sharpening knife is manufactured from hardened steel.

- Consist of plated metal cone with hinged cutter blade set in slot and a handle.

catalogue number	pack quantity
051.13.001	1 piece



STOPPERS - "for NMR tubes"

- Manufactured from polyethylene for perfect tight sealing of 5 mm test tubes.
- Large size flanges on the stopper perfectly touches to the walls of the tubes and offers the best leak-proof sealing.
- Grooved, conical body shape for perfect closure.
- Color coded stoppers enables fast, and practical identification of bottle content.

All other technical specifications can be seen on catalogue page no 252.

Large size flanges on the stopper perfectly touches to the walls of the tubes and offers the leak-proof sealing.



BORER SET - "for stoppers"

- Manufactured from chromated, nickel plated brass with sharpened cutting end.
- Specially recommended to drill different size bores to cork, rubber or silicone stoppers.
- Large handles offers a good grip for faster drilling speed.
- Set consists of 6 different pipes with diameters starting from 4 mm to 18 mm.
- Supplied cleaning rod guarantees fast and effective cleaning of the residues remaining in the cutting pipes.

catalogue number	pack quantity
051.12.001	1 piece





SEALING FILM - "parafilm"

- Most common sealing film used in laboratories.
- Also prevents breakage risk of flask neck and spillage of flask contents in case of a tilt over.
- Manufactured from polyolefin and paraffin mixture.
- Guarantees excellent chemical to salt, inorganic and alkaline solutions up to 48 hours and offers temperature resistance between -45°C to +500°C.
- Stretches and widens-up 200 % of original length.
- Clings around flask necks circumference and seals irregular perimeters of flasks, erlenmeyers, bottles, beakers etc. with leak-proof tightness.



Clings around flask necks circumference and seals irregular perimeters of flasks, erlenmeyers, bottles, beakers etc. with leak-proof tightness.

catalogue number	W x L mm x mt.	pack quantity	box quantity
058.01.001	50 x 75	1 piece	24 pieces
058.01.002	100 x 38	1 piece	12 pieces



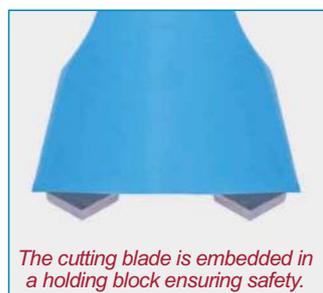
PARAFILM DISPENSER

- Perfect tool for safe and easy cutting of 100 mm and 50 mm width parafilms.
- Keeps the remaining part unaffected from environmental conditions.
- Can cut one roll of 100 mm or simultaneously 2 rolls of 50 mm width parafilm.
- Manufactured from ABS and featured with a double action cutting blade that slides and cuts.
- The clear hinged lid enables visual control of the remaining parafilm roll.
- The cutting blade can easily slide in both directions providing a clean and un-interrupted cut.
- The cutting blade is embedded in a holding block ensuring finger safety.
- Unique design of the blade holder guarantees easy handling.

dispenser cat. number	dimensions	spare blade cat. number	pack quantity
058.02.001	120 x 140 x 140 mm	058.02.101	1 piece



Can cut simultaneously 2 rolls of 50 mm width parafilm.



The cutting blade is embedded in a holding block ensuring safety.



Unique design of the blade holder guarantees easy handling.



The clear hinged lid enables visual control of the parafilm roll.



Push the cutting mechanism of the dispenser backwards.



Place the parafilm and move the mechanism back to original position.



Pull out the necessary length from dispenser for cutting.



Parafilm is cut with one movement of the blade from side to side.

CLING FILM

- Manufactured from PVC based resin with extremely good stretching, and adhesion characteristics. Perfect tool for sealing and wrapping of various labware.
- Offers an easy use and easy for unravel application.
- Stretches and widens-up 50 % of original length. Clings around the labware and seals labware with leak-proof tightness.
- Waterproof. Chemically inert and resistant to most organic solvents and caustic agents.
- Remains flexible in moderate freezing temperatures. Can resist up to 75°C.

catalogue number	roll width	roll length	foil thickness	pack quantity
058.03.001	300 mm	90 m	0,011 mm	1 piece



FOIL ROLL - "aluminium"

- Manufactured from polished, pure aluminium sheet for wrapping and sealing of various labware.
- Due to the characteristics also convenient to form temporary containers.
- Offers ideal use during autoclaving, heating, freezing applications.

catalogue number	roll width	roll length	foil thickness	pack quantity
058.04.001	300 mm	45 m	0,018 mm	1 piece



FOIL DISPENSER

- Perfect dispenser to be used for aluminium folios and cling films.
- Easy and safe to use; Place the roll inside the box, press the lid, pull the necessary length out and start cutting.
- An easy and clean cut without waste is guaranteed with sharp cutting teeth.
- Light weight ensures easy handling with one hand.
- Compact design requires limited working space area.

catalogue number	max. roll width	pack quantity
058.02.002	300 mm	1 piece



ALUMINIUM DISCS

- Manufactured from polished, pure aluminium sheet in circular form for sealing of beakers, erlenmeyers, flasks and other various labware necks.
- Guarantees perfect, dust-free seal and offers ideal use during autoclaving, heating, freezing applications.
- Discs do not stick to each other since they are interleaved with protective tissue papers.

catalogue number	diameter	foil thickness	pack quantity
058.05.080	80 mm	0,03 mm	1000 pieces / pack
058.05.100	100 mm	0,03 mm	1000 pieces / pack
058.05.125	125 mm	0,03 mm	1000 pieces / pack
058.05.150	150 mm	0,03 mm	1000 pieces / pack





PEN - "engraving"

- Offers unlimited application for writing, marking and engraving on almost all surfaces without applying pressure.
- Easy to operate; hold the pen tightly on the surface, press the power button, let the tip rotate with high speed and provide a permanent inscription on the surface.
- The inscriptions and markings will not be effected by chemicals or sunshine and stays forever.
- Cordless battery power enables both indoor and outdoor applications. Operates with 2x"AA" battery which is not supplied with the pen.



Easy to operate; hold the pen tightly on the surface, press the power button, let the tip rotate with high speed and provide a permanent inscription on the surface.

catalogue
number

099.01.001

pack
quantity

1 piece



PENS - "permanent-ink"- "double tip"

- All purpose pens with round fiber tip for labelling, writing, painting on virtually all materials including glass, metal and plastic surfaces.
- Consists of 2 tips at each end. The "fine" tip at one end has 0,6 mm stroke. The "medium" tip at the other hand has 1,5 mm stroke.
- The pen ink is odorless, smudge-proof, and quick drying. Tips do not dry even if left uncapped for prolonged hours.



Supplied as a pack of 3 pens with red, blue and black colors.

catalogue
number

099.01.002

pack
quantity

set of 3 pens



PENS - "marker"- "double tip"

- All purpose pens with flat fiber tip for marking texts on paper.
- Consists of 2 tips at each end. The "fine" tip at one end has 0,9 mm stroke. The "medium" tip at the other hand has 2,7 mm stroke.
- Airtight pen cap prevents air flow and for extended life cycle.
- Supplied as a pack of 5 pens with purple, blue, green, pink and yellow colors.



Supplied as a pack of 5 pens with purple, blue, green, pink and yellow colors.

catalogue
number

099.01.006

pack
quantity

set of 5 pens



Supplied as a pack of 3 pens with blue, red and black colors.

PENS - "permanent-ink"- "single tip"

- All purpose pens with round fiber tip for labelling, writing, painting on virtually all materials including glass, metal and plastic surfaces.
- Consists of a single tip at one end with 3 mm stroke.
- The pen ink is odorless, smudge-proof, and quick drying. Tip do not dry even if left uncapped for prolonged hours.

catalogue
number

099.01.003

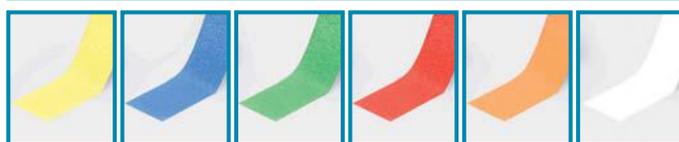
pack
quantity

set of 3 pens

TAPES - "for labelling" - "roll"

- Manufactured from colored paper with special resin adhesive that resists to moisture and most solvents.
- Can be used between -80°C to + 140°C temperature range. Also withstands steam autoclaving cycle and gamma irradiation.
- Adheres to any clean surface including PTFE coated surfaces and peels off without leaving any sticky residue.
- Accepts writing from almost all pen types such as pencil, ball point pen, solvent ink marker etc.
- Markings remain absolutely legible under the most demanding laboratory conditions.
- Supplied as white color or as "rainbow pack" pack of 6 different colors matching the universal hazard color codes. (yellow for chemical reactivity / blue for health hazards / green for safety / red for flammability / orange tape for biohazard and white for general use)

catalogue number	tape width	tape length	tape color	pack quantity
099.02.001	19 mm	30 meter	rainbow colors	set of 6 rolls
099.02.011	19 mm	30 meter	white	1 roll



TAPE DISPENSER

- Suitable for holding and releasing the tape to be cut to users desire.
- The core perfectly fits to the inner diameter of the tape and keeps the tape rigidly.
- Platform includes a writing surface. Finger holes on the platform enables quick release of the tape and accelerates the cutting step.
- Featured with a cut-off edge for efficient cutting of the tape.
- A weighted base with non-skid pads prevent sliding or lifting.
- Over all dimensions: 155 x 250x100 mm. Cutting platform dimensions: 155x110 mm.

catalogue number	pack quantity
099.02.002	1 piece



LABELS - "rectangular form"

- Manufactured from polypropylene flexible paper with acrylic resin adhesive back.
- This unique combination expands and retracts together with temperature fluctuations and guarantees always a strong adhesive bond.
- Chemically inert, resists to water, moisture and most organic solvents and caustic agents. Can be used between -96°C to + 121°C temperature range. Also withstands steam autoclaving cycle and gamma irradiation
- Adheres to any clean surface including PTFE coated surfaces without cracking, peeling and degrading. Peels off without leaving any sticky residue.

catalogue number	label length	label width	label color	roll quantity	pack quantity
099.03.050	30 mm	50 mm	white	1000 labels	1 roll
099.03.072	72 mm	40 mm	white	1000 labels	1 roll
099.03.090	90 mm	50 mm	white	1000 labels	1 roll





LABEL - "circular form"

- Manufactured from polyfiber grade flexible paper with acrylic resin adhesive back.
- This unique combination expands and retracts together with temperature fluctuations and guarantees always a strong adhesive bond.
- Chemically inert, resists to water, moisture and most organic solvents and caustic agents. Can be used between -196°C to $+80^{\circ}\text{C}$ temperature range.
- Adheres to any clean surface including PTFE coated surfaces without cracking, peeling and degrading. Peels off without leaving any sticky residue.
- Recommended to be used on tube caps with different diameters.
- Supplied as white color or as "rainbow pack" pack of 6 different colors matching the universal hazard color codes. (yellow for chemical reactivity / blue for health hazards / green for safety / red for flammability / orange tape for biohazard and white for general use)



catalogue number	label diameter	recommended for	label color	roll quantity	pack quantity
099.05.009	9,5 mm	0,5 ml tubes	white	1000 labels	1 roll
099.05.109	9,5 mm	0,5 ml tubes	rainbow pack	1000 labels	6 rolls
099.05.013	13 mm	1,5 & 2,0 ml tubes	white	1000 labels	1 roll
099.05.113	13 mm	1,5 & 2,0 ml tubes	rainbow pack	1000 labels	6 rolls
099.05.019	19 mm	15 ml tubes	white	500 labels	1 roll
099.05.025	25 mm	50 ml tubes	white	500 labels	1 roll



LABEL DISPENSER

- Perfect organizer for fast and efficient use of labels. Manufactured from clear acrylic and holds 6 label box.
- Drop the label box in the label dispenser and feed the paper through the slot.
- The writing surface enables easy and clean writing on the label. The sharp cutting edge helps to tear off the labels.
- Featured with a special pen for marking on the labels.
- A weighted base with non-skid pads prevent sliding or lifting.

catalogue number	pack quantity
099.50.001	1 piece



LABEL REMOVAL

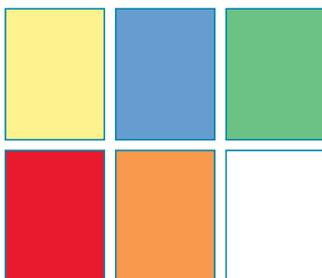
- A perfect tool for effortless removal self adhesive labels.
- It works on the adhesive and quickly and gently dissolves adhesive of the label without leaving the sticky residue of the adhesive on the surface.
- Can be used on glass, porcelain, metal, wood, cardboard and some plastic surfaces.
- Not recommended to be used with polystyrene.

catalogue number	pack quantity
099.60.001	1 piece



LABELS - "rectangular form"

- Manufactured from polyfiber grade flexible paper with acrylic resin adhesive back.
- This unique combination expands and retracts together with temperature fluctuations and guarantees always a strong adhesive bond.
- Chemically inert, resists to water, moisture and most organic solvents and caustic agents.
- Can be used between -40°C to $+121^{\circ}\text{C}$ temperature range.
- Also withstands steam autoclaving cycle and gamma irradiation.
- Adheres to any clean surface including PTFE coated surfaces without cracking, peeling and degrading. Peels off without leaving any sticky residue.
- Recommended to be used on flat or round surfaces with different diameters.
- Supplied as 1000 label rolls packed in a dispenser box for practice use.



"rainbow pack offers 6 colors"

Supplied as white color or as "rainbow pack" pack of 6 different colors matching the universal hazard color codes. (yellow for chemical reactivity / blue for health hazards / green for safety / red for flammability / orange tape for biohazard and white for general use).

catalogue number	label dimensions	recommended tube volume	label color	pack quantity
099.06.024	24x13 mm	0,5 ml	white	1 roll
099.06.124	24x13 mm	0,5 ml	rainbow pack	6 rolls
099.06.033	33x13 mm	1,5 & 2,0 ml	white	1 roll
099.06.133	33x13 mm	1,5 & 2,0 ml	rainbow pack	6 rolls
099.06.038	38x19 mm	general purpose	white	1 roll



LABELS - "rectangular form"

- Manufactured from polyfiber grade flexible paper with acrylic resin adhesive back.
- This unique combination expands and retracts together with temperature fluctuations and guarantees always a strong adhesive bond.
- Chemically inert, resists to water, moisture and most organic solvents and caustic agents.
- Can be used between -196°C to $+80^{\circ}\text{C}$ temperature range.
- Also with stands gamma irradiation.
- Adheres to any clean surface including PTFE coated surfaces without cracking, peeling and degrading. Peels off without leaving any sticky residue.
- Recommended specially to be used with cryo vials or on any flat or round surface.
- Supplied as 1000 label rolls packed in a dispenser box for practice use.

catalogue number	label dimensions	recommended tube volume	label color	pack quantity
099.07.033	33x13 mm	1,5 & 2,0 ml	white	1 roll
099.07.038	38x19 mm	general purpose	white	1 roll

GHS pictograms can be selected from catalogue page no 183.





BAGS - "autoclavable" - "plain"

- Manufactured from a special grade of polypropylene with high tear and puncture resistance.
- Commonly used for safe disposal of contaminated laboratory waste such as used petri dishes, test tubes, sample vials, cultureware and other biohazardous products.
- Also offers an alternative for storing and transportation of various products.
- Can resist pressure differences during autoclaving.
- Bags should be left open during autoclaving.
- Strong side seams stands safe under pressure or weight and guarantees safe holding of bag content.

catalogue number	bag type	width x height	pack quantity
039.30.001	plain	200 x 300 mm	100 pieces / pack
039.30.002	plain	300 x 600 mm	100 pieces / pack
039.30.003	plain	400 x 700 mm	100 pieces / pack
039.30.004	plain	590 x 890 mm	100 pieces / pack
039.30.005	plain	690 x 1100 mm	100 pieces / pack



BAGS - "autoclavable" - "imprinted"

- Manufactured from a special grade of polypropylene with high tear and puncture resistance.
- Commonly used for safe disposal of contaminated laboratory waste such as used petri dishes, test tubes, sample vials, cultureware, and other biohazardous products.
- Also offers an alternative for storing and transportation of various products.
- Can resist pressure differences during autoclaving.
- Bags should be left open during autoclaving.
- Strong side seams stands safe under pressure or weight and guarantees safe holding of bag content
- On the bag surface a large writing area and necessary warnings are imprinted.

catalogue number	bag type	width x length	pack quantity
039.20.001	imprinted	320 x 640 mm	50 pieces / pack
039.20.002	imprinted	420 x 600 mm	50 pieces / pack
039.20.003	imprinted	555 x 745 mm	50 pieces / pack



BAGS - "with document wallet"

- Manufactured from a special grade of polyethylene with high tear and puncture resistance.
- Commonly used for safe transportation of samples together with related documents.
- On the bag surface a large writing area and biohazard warnings are imprinted.
- Press-seal closure system guarantees leak-proof closure.
- Consists of two compartments firmly separated from each other.
- First compartment is used for sample storing. Documents are placed in the second compartment.
- Once the bag is closed sample and document never touches to each other even if the sample leaks.

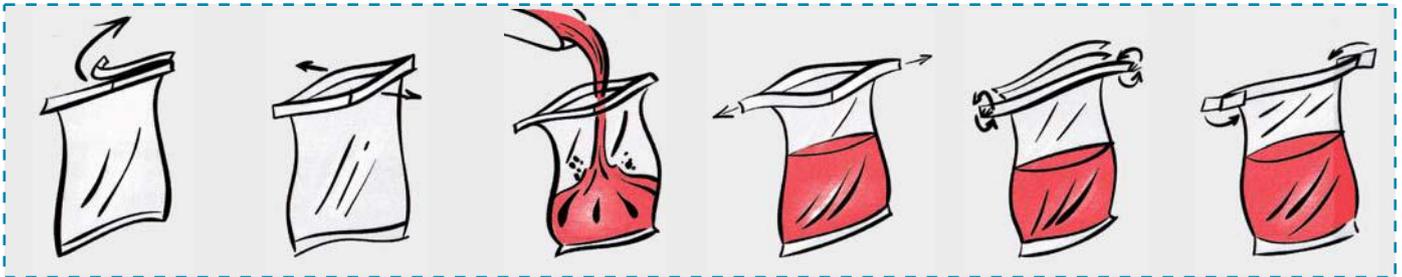
catalogue number	width x height	pack quantity
039.31.001	145 x 220 mm	100 pcs / pack
039.31.002	145 x 230 mm	100 pcs / pack



BAGS - "with wire closure" - "sterile"

- Manufactured from clear and thick polyethylene to be used with chemical, medical, food, biological samples of liquid, powder, solid and paste form.
- With their exceptionally transparent, odortight, tear-proof and leakproof properties they offer alternative solutions to laboratory bottles and other flasks.
- Sterilized with gamma irradiation, **free of RNase, DNase, and pyrogene**. Can be frozen to -80°C .
- Unique metal closure system guarantees leak-proof closure preventing odors and any leakage to exterior environment.
- Write-on white patch offers a practical area for writing specific marks and notes.

◀ How to use sample bags with wire closure ▶



Tear the upper film strip carefully along the perforation.

Open the bag by pulling the two strips at the middle of closure system.

Fill the samples carefully to the half level of the bag.

Close the bag by pulling the outer loops apart strongly.

Swirl the closing mechanism at least 4 times for safe closure.

Bend wire closures the bag is closed air-tight and liquid-tight.

catalogue number	volume	width x height	wall thickness	wire thickness	packing specifications
039.21.001	60 ml	76 x 127 mm	70 microns	0,5 mm	500 pcs / pack - 1000 pcs / case
039.21.002	120 ml	76 x 178 mm	70 microns	0,5 mm	500 pcs / pack - 1000 pcs / case
039.21.003	540 ml	114 x 229 mm	70 microns	0,5 mm	500 pcs / pack - 1000 pcs / case
039.21.004	720 ml	140 x 229 mm	90 microns	0,5 mm	500 pcs / pack - 1000 pcs / case
039.21.005	1650 ml	180 x 300 mm	100 microns	0,5 mm	250 pcs / pack - 1000 pcs / case



BAGS - "with zip-lock" - "with write - on patch"

- Manufactured from clear and robust polyethylene to be used with chemical, medical, food, biological samples of liquid, powder, solid and paste form.
- Non-sterile, ideal for dust-free storing, collecting, protecting and shipping of specimens and samples.
- Write - on white patch offers a practical area for writing specific marks and notes.
- Rim channel seal can be opened and closed repeatedly with the guarantee of leak-proof closure.

catalogue number	w x L (mm)	pack quantity
039.08.100	70x100	100 pieces
039.08.150	100x150	100 pieces
039.08.220	150x220	100 pieces
039.08.300	200x300	100 pieces



BAG SEALERS

- Can easily seal both polypropylene and polyethylene bags and sheets and foils.
- Depending on the thickness of the bag material, welding can be done maximum in few seconds.
- Featured with a sliding blade which cuts excess material 19 mm from the seal.
- Heat control knob ensures safe and guaranteed sealing.
- Featured with a handle for better control of applied pressure.
- Guarantees extra safety since the heating element hot only during sealing.

Other specifications can be seen catalogue page no 175.



Offers very tight sealing of the bags. Cannot be opened again once closed.



Unique design enables allows multiple use of the same bag lock.

BAG TIES

- Manufactured from a special grade of polyamide with raster strips for single use.
- Offers very tight sealing of the bags. Ties cannot be opened again once closed.
- Guarantees high tensile strength, high chemical resistance also thermic resilient.

Other technical specifications can be seen catalogue page no 175.

BAG LOCKS

- Manufactured from a special grade of polypropylene for quick closing of the bags.
- Unique design enables allows multiple use of the same bag lock.

Other technical specifications can be seen catalogue page no 175.



BAG LATCHES

- Manufactured from a special grade of polypropylene for quick closing of the bags
- Practical closing system guarantees perfect and tight closure of the bags.
- Color coded in 4 different colors for fast and easy identification.

Other technical specifications can be seen catalogue page no 175.



ISOLAB
Laborgeräte GmbH



*distillation & filtration
separation
sample preparation*



distillation & filtration & separation & sample preparation

GROUND JOINTS - "socket"



➤ Manufactured from borosilicate 3.3 glass according to DIN 12249 standard with 120 mm length.

➤ Excellent grinding quality prevents airleaks and liquid leakage.

catalogue number	joint NS size	pack quantity
063.01.010	10/19	1 piece
063.01.012	12/21	1 piece
063.01.014	14/23	1 piece
063.01.019	19/26	1 piece
063.01.024	24/29	1 piece
063.01.029	29/32	1 piece
063.01.034	34/35	1 piece
063.01.045	45/40	1 piece

GROUND JOINTS - "cone"



➤ Manufactured from borosilicate 3.3 glass according to DIN 12249 standard with 120 mm length.

➤ Excellent grinding quality prevents airleaks and liquid leakage.

catalogue number	joint NS size	pack quantity
063.02.010	10/19	1 piece
063.02.012	12/21	1 piece
063.02.014	14/23	1 piece
063.02.019	19/26	1 piece
063.02.024	24/29	1 piece
063.02.029	29/32	1 piece
063.02.034	34/35	1 piece
063.02.045	45/40	1 piece

ADAPTERS - "expansion"



➤ Manufactured from borosilicate 3.3 glass according to DIN 12257 standard with socket size larger than cone size.

catalogue number	cone NS	socket NS	pack qty
064.11.001	12/21	14/23	1 pc.
064.11.002	14/23	19/26	1 pc.
064.11.003	14/23	24/29	1 pc.
064.11.004	14/23	29/32	1 pc.
064.11.005	19/26	24/29	1 pc.
064.11.006	19/26	29/32	1 pc.
064.11.007	19/26	34/35	1 pc.
064.11.008	24/29	29/32	1 pc.
064.11.009	24/29	34/35	1 pc.
064.11.010	24/29	45/40	1 pc.
064.11.011	29/32	34/35	1 pc.
064.11.012	29/32	45/40	1 pc.

ADAPTERS - "reduction"



➤ Manufactured from borosilicate 3.3 glass according to DIN 12257 standard with socket size smaller than cone size.

catalogue number	cone NS	socket NS	pack qty
064.12.001	14/23	12/21	1 pc.
064.12.002	19/26	14/23	1 pc.
064.12.003	24/29	14/23	1 pc.
064.12.004	24/29	19/26	1 pc.
064.12.005	29/32	14/23	1 pc.
064.12.006	29/32	19/26	1 pc.
064.12.007	29/32	24/29	1 pc.
064.12.008	34/35	19/26	1 pc.
064.12.009	34/35	24/29	1 pc.
064.12.010	34/35	29/32	1 pc.
064.12.011	45/40	24/29	1 pc.
064.12.012	45/40	29/32	1 pc.

ADAPTERS - "with screw thread"



➤ Manufactured from borosilicate 3.3 glass according to DIN 12257 standard.

➤ Excellent grinding quality prevents airleaks and liquid leakage.

➤ Different thread sizes offers multiple tubing connection options.

catalogue number	joint NS size	neck thread	pack qty
065.19.141	14/23	GL 14	1 pc.
065.19.142	14/23	GL 18	1 pc.
065.19.291	29/32	GL 14	1 pc.
065.19.292	29/32	GL 18	1 pc.
065.19.293	29/32	GL 25	1 pc.

ADAPTERS - "with screw thread & cap"



➤ Manufactured from borosilicate 3.3 glass according to DIN 12257 standard.

➤ Excellent grinding quality prevents airleaks and liquid leakage.

➤ Supplied with a screw cap with hole featured with silicone sealing.

➤ Provides easy adjustment of thermometer height position.

catalogue number	joint NS size	neck thread	pack qty
065.21.014	14/23	GL 14	1 pc.
065.21.029	29/32	GL 14	1 pc.

distillation & filtration & separation & sample preparation

ADAPTERS - "straight"



- Manufactured from borosilicate 3.3 glass featured with a straight tubing adapter.
- Excellently grinded joint prevents airleaks and leakage.
- Tubing adapter fits tubings with 6-10 mm diameter.

catalogue number	joint NS size	pack quantity
065.26.014	14/23	1 piece
065.26.029	29/32	1 piece

ADAPTERS - "straight" - "with stopcock"



- Manufactured from borosilicate 3.3 with a straight adapter and a PTFE stopcock.
- Excellently grinded joint prevents airleaks and leakage.
- Tubing adapter fits tubings with 6-10 mm diameter.

catalogue number	joint NS size	pack quantity
065.28.014	14/23	1 piece
065.28.029	29/32	1 piece

ADAPTERS - "bend"



- Manufactured from borosilicate 3.3 glass featured with a 90° angle bend tubing adapter.
- Excellently grinded joint prevents airleaks and leakage.
- Tubing adapter fits tubings with 6-10 mm diameter.

catalogue number	joint NS size	pack quantity
065.27.014	14/23	1 piece
065.27.029	29/32	1 piece

ADAPTERS - "bend" - "with stopcock"



- Manufactured from borosilicate 3.3 glass with a 90° bend tubing adapter and a PTFE stopcock.
- Excellently grinded joint prevents airleaks and leakage.
- Tubing adapter fits tubings with 6-10 mm diameter.

catalogue number	joint NS size	pack quantity
065.29.014	14/23	1 piece
065.29.029	29/32	1 piece

ADAPTERS - "straight"



- Manufactured from borosilicate 3.3 glass featured with a straight tubing adapter.
- Excellently grinded joint prevents airleaks and leakage.
- Tubing adapter fits tubings with 6-10 mm diameter.

catalogue number	joint NS size	pack quantity
065.22.014	14/23	1 piece
065.22.029	29/32	1 piece

ADAPTERS - "straight" - "with stopcock"



- Manufactured from borosilicate 3.3 glass featured with a straight tubing adapter and a PTFE stopcock.
- Excellently grinded joint prevents airleaks and leakage.
- Tubing adapter fits tubings with 6-10 mm diameter.

catalogue number	joint NS size	pack quantity
065.24.014	14/23	1 piece
065.24.029	29/32	1 piece

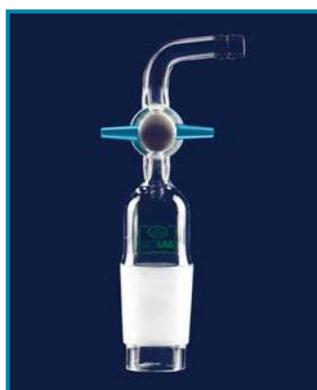
ADAPTERS - "bend"



- Manufactured from borosilicate 3.3 glass featured with a 90° angle bend tubing adapter.
- Excellently grinded joint prevents airleaks and leakage.
- Tubing adapter fits tubings with 6-10 mm diameter.

catalogue number	joint NS size	pack quantity
065.23.014	14/23	1 piece
065.23.029	29/32	1 piece

ADAPTERS - "bend" - "with stopcock"



- Manufactured from borosilicate 3.3 glass with a 90° angle bend tubing adapter and a PTFE stopcock.
- Excellently grinded joint prevents airleaks and leakage.
- Tubing adapter fits tubings with 6-10 mm diameter.

catalogue number	joint NS size	pack quantity
065.25.014	14/23	1 piece
065.25.029	29/32	1 piece

distillation & filtration & separation & sample preparation

ADAPTERS - "bend" - "75° angle"



➤ Manufactured from borosilicate 3.3 glass 75° angle bend and featured with two cones on both ends.

➤ Excellently grinded cones prevents airleaks and liquid leakage.

catalogue number	joint NS size	pack quantity
065.37.014	14/23	1 piece
065.37.029	29/32	1 piece

ADAPTERS - "bend" - "90° angle"



➤ Manufactured from borosilicate 3.3 glass 90° angle bend and featured with two cones on both ends.

➤ Excellently grinded cones prevents airleaks and liquid leakage.

catalogue number	joint NS size	pack quantity
065.38.014	14/23	1 piece
065.38.029	29/32	1 piece

ADAPTERS - "2 neck" - "45° upwards angled"



➤ Manufactured from borosilicate 3.3 glass featured with a 45° upwards angled socket.

➤ Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	socket NS size	cone NS size	angled socket NS size	pack quantity
065.42.001	NS 14/23	NS 14/23	NS 14/23	1 piece
065.42.002	NS 19/26	NS 19/26	NS 19/26	1 piece
065.42.003	NS 29/32	NS 29/32	NS 14/23	1 piece
065.42.004	NS 29/32	NS 29/32	NS 29/32	1 piece

ADAPTERS - "2 neck" - "75° downwards angled"



➤ Manufactured from borosilicate 3.3 glass featured with a 75° downwards angled cone.

➤ Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	socket NS size	cone NS size	angled cone NS size	pack quantity
065.18.001	NS 14/23	NS 14/23	NS 14/23	1 piece
065.18.002	NS 19/26	NS 19/26	NS 19/26	1 piece
065.18.003	NS 29/32	NS 29/32	NS 14/23	1 piece
065.18.004	NS 29/32	NS 29/32	NS 29/32	1 piece

ADAPTERS - "2 neck" - "parallel"



➤ Manufactured from borosilicate 3.3 glass featured with a parallel socket.

➤ Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	socket NS size	cone NS size	parallel socket NS size	pack quantity
065.43.001	NS 14/23	NS 14/23	NS 14/23	1 piece
065.43.002	NS 19/26	NS 19/26	NS 19/26	1 piece
065.43.003	NS 24/29	NS 19/26	NS 19/26	1 piece
065.43.004	NS 24/29	NS 24/29	NS 24/29	1 piece
065.43.005	NS 29/32	NS 14/23	NS 14/23	1 piece
065.43.006	NS 29/32	NS 29/32	NS 29/32	1 piece

ADAPTERS - "3 neck" - "angled & parallel"



➤ Manufactured from borosilicate 3.3 glass featured with one parallel and one angled socket.

➤ Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	socket NS size	cone NS size	parallel socket NS size	pack quantity
065.44.001	NS 14/23	NS 14/23	NS 14/23	1 piece
065.44.002	NS 19/26	NS 19/26	NS 19/26	1 piece
065.44.003	NS 24/29	NS 19/26	NS 19/26	1 piece
065.44.004	NS 24/29	NS 24/29	NS 24/29	1 piece
065.44.005	NS 29/32	NS 14/23	NS 14/23	1 piece
065.44.006	NS 29/32	NS 29/32	NS 29/32	1 piece

distillation & filtration & separation & sample preparation

DISTILLING HEADS



- Manufactured from borosilicate 3.3 glass according to DIN 12594 standard featured with a 75° downwards angled cone.
- NS 14/23 socket is designed to be used with distillation thermometers.
- Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	socket NS size	cone NS size	angled cone NS size	pack quantity
065.45.001	NS 14/23	NS 14/23	NS 14/23	1 piece
065.45.002	NS 14/23	NS 19/26	NS 19/26	1 piece
065.45.005	NS 14/23	NS 29/32	NS 29/32	1 piece

DISTILLING HEADS - "Claisen"



- Manufactured from borosilicate 3.3 glass according to DIN 12594 standard featured with a 75° downwards angled cone.
- Two parallel NS 14/23 sockets are designed to be used with distillation thermometers.
- Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	socket NS size	cone NS size	angled cone NS size	pack quantity
065.46.001	NS 14/23	NS 14/23	NS 14/23	1 piece
065.46.002	NS 14/23	NS 19/26	NS 19/26	1 piece
065.46.005	NS 14/23	NS 29/32	NS 14/23	1 piece
065.46.006	NS 14/23	NS 29/32	NS 29/32	1 piece

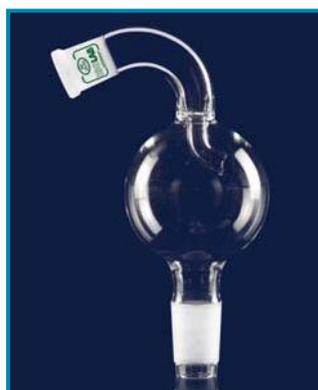
SPLASH HEADS - "straight"



- Manufactured from borosilicate 3.3 glass for separation of drops. Advised to be placed directly on top of the distillation flasks.
- Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	cone NS	socket NS	pack qty
065.47.001	14/23	14/23	1 pc.
065.47.003	29/32	29/32	1 pc.

SPLASH HEADS - "bend"



- Manufactured from borosilicate 3.3 glass 75° angled bend for separation of drops. Advised to be placed directly on top of the distillation flasks.
- Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	cone NS	socket NS	pack qty
065.48.001	14/23	14/23	1 pc.
065.48.005	29/32	29/32	1 pc.

ADAPTERS - "delivery" - "straight"



- Made from borosilicate glass 3.3.
- Suitable for distillation assemblies with vacuum connections.

catalogue number	cone NS	socket NS	pack qty
065.34.014	14/23	14/23	1 pc.
065.34.029	29/32	29/32	1 pc.

ADAPTERS - "with stopcock"



- Made from borosilicate glass 3.3. Supplied with PTFE stopcock.

catalogue number	cone NS	socket NS	pack qty
065.41.014	14/23	14/23	1 pc.
065.41.019	19/26	19/26	1 pc.
065.41.024	24/29	24/29	1 pc.
065.41.029	29/32	29/32	1 pc.

distillation & filtration & separation & sample preparation



DISTILLING LINKS

- Manufactured from borosilicate 3.3 glass without condenser with two parallel cones.
- Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	cone NS size	cone NS size	pack quantity
065.52.014	NS 14/23	NS 14/23	1 piece
065.52.029	NS 29/32	NS 29/32	1 piece



DISTILLING LINKS - "with splash head"

- Manufactured from borosilicate 3.3 glass with a splash head and with two parallel cones.
- Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	cone NS size	cone NS size	pack quantity
065.54.014	NS 14/23	NS 14/23	1 piece
065.54.029	NS 29/32	NS 29/32	1 piece



DISTILLING LINKS - "with socket"

- Manufactured from borosilicate 3.3 glass without condenser with two parallel cones. NS 14/23 socket is designed to be used with distillation thermometers.
- Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	cone NS size	cone NS size	socket NS size	pack quantity
065.53.014	NS 14/23	NS 14/23	NS 14/23	1 piece
065.53.029	NS 29/32	NS 29/32	NS 14/23	1 piece



DISTILLING LINKS - "with condenser"

- Manufactured from borosilicate 3.3 glass with a liebig condenser with a NS 14/23 socket is designed to be used with distillation thermometers.
- Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	cone NS size	socket NS size	condenser length	pack quantity
065.55.001	NS 14/23	NS 14/23	160 mm	1 piece
065.55.002	NS 14/23	NS 14/23	250 mm	1 piece
065.55.003	NS 29/32	NS 14/23	250 mm	1 piece
065.55.004	NS 29/32	NS 14/23	400 mm	1 piece



DISTILLING LINKS - "condenser & adapter"

- Manufactured from borosilicate 3.3 glass with a liebig condenser with a NS 14/23 socket is designed to be used with distillation thermometers. Featured with a vacuum connecting adapter.
- Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	cone NS size	socket NS size	condenser length	pack quantity
065.56.001	NS 14/23	NS 14/23	160 mm	1 piece
065.56.002	NS 14/23	NS 14/23	250 mm	1 piece
065.56.003	NS 29/32	NS 14/23	250 mm	1 piece
065.56.004	NS 29/32	NS 14/23	400 mm	1 piece

distillation & filtration & separation & sample preparation

DISTILLING LINKS - "with condenser" - "Claisen head"



➤ Manufactured from borosilicate 3.3 glass with a liebig condenser with two NS 14/23 socket is designed to be used with distillation thermometers.

➤ Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	cone NS size	socket NS size	condenser length	pack quantity
065.57.001	NS 14/23	NS 14/23	160 mm	1 piece
065.57.002	NS 14/23	NS 14/23	250 mm	1 piece
065.57.003	NS 29/32	NS 14/23	250 mm	1 piece
065.57.004	NS 29/32	NS 14/23	400 mm	1 piece

DISTILLING LINKS - "with condenser & vacuum adapter" - "Claisen head"



➤ Manufactured from borosilicate 3.3 glass with a liebig condenser with two NS 14/23 socket is designed to be used with distillation thermometers. Featured with a vacuum connecting adapter.

➤ Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	cone NS size	socket NS size	condenser length	pack quantity
065.58.001	NS 14/23	NS 14/23	160 mm	1 piece
065.58.002	NS 14/23	NS 14/23	250 mm	1 piece
065.58.003	NS 29/32	NS 14/23	250 mm	1 piece
065.58.004	NS 29/32	NS 14/23	400 mm	1 piece

CONNECTORS - "PTFE" - "flexible"

➤ Manufactured from chemically inert PTFE with excellent chemical resistance, high mechanical strength and high temperature resistance between -200°C to +260°C.

➤ Unique flexible body form guarantees 90° angular connections of NS joints and provides corrections of mis-alignment in glassware assemblies.

➤ Extra smooth interior finish guarantees high vacuum sealing performance without a need of any lubricant.

catalogue number	socket NS size	cone NS size	pack quantity
065.36.014	NS 14/23	NS 14/23	1 piece
065.36.019	NS 19/26	NS 19/26	1 piece
065.36.024	NS 24/29	NS 24/29	1 piece
065.36.029	NS 29/32	NS 29/32	1 piece

GLASS BEADS

➤ Manufactured from borosilicate glass with different diameters.

catalogue number	diameter	pack quantity
030.60.003	3,0 - 3,5	1 kg
030.60.004	3,5 - 4,0	1 kg
030.60.005	4,0 - 5,0	1 kg
030.60.006	5,0 - 6,0	1 kg



distillation & filtration & separation & sample preparation

ADAPTERS - "delivery" - "bend" - "short"



- Manufactured from borosilicate 3.3 glass with 65 mm length.
- Featured with a 105° angled bend socket.
- Excellently grinded joint prevents airleaks and liquid leakage.

catalogue number	cone NS size	pack quantity
065.30.014	14/23	1 piece
065.30.029	29/32	1 piece

ADAPTERS - "delivery" - "bend" - "long"



- Manufactured from borosilicate glass 3.3 with 200 mm length.
- Featured with a 105° angled bend socket.
- Excellently grinded joint prevents airleaks and liquid leakage.

catalogue number	cone NS size	pack quantity
065.31.014	14/23	1 piece
065.31.029	29/32	1 piece

ADAPTERS - "delivery" - "bend"



- Manufactured from borosilicate 3.3 glass featured with a cone and a socket with drain tip.
- Featured with a 105° angled bend socket.
- Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	cone NS	socket NS	pack qty
065.32.014	14/23	14/23	1 pc.
065.32.029	29/32	29/32	1 pc.

ADAPTERS - "delivery" - "bend" - "with ventilation"



- Manufactured from borosilicate 3.3 glass featured with a cone and a socket with drain tip.
- Featured with a 105° angled bend socket and with ventilation arm useful to be used with highly boiling liquids.
- Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	cone NS	socket NS	pack qty
065.33.014	14/23	14/23	1 pc.
065.33.029	29/32	29/32	1 pc.

ADAPTERS - "receiving" - "straight"



- Manufactured from borosilicate 3.3 glass according to DIN 12594 standard with a cone with drain tip.
- Featured with a straight socket and a vacuum connecting adapter.
- Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	cone NS	socket NS	pack qty
065.39.014	14/23	14/23	1 pc.
065.39.029	29/32	29/32	1 pc.

ADAPTERS - "receiving" - "bend"



- Manufactured from borosilicate 3.3 glass according to DIN 12594 standard with a cone with drain tip.
- Featured with a straight socket and a vacuum connecting adapter.
- Excellently grinded joints prevents airleaks and liquid leakage.

catalogue number	cone NS	socket NS	pack qty
065.40.014	14/23	14/23	1 pc.
065.40.029	29/32	29/32	1 pc.

distillation & filtration & separation & sample preparation

DRYING TUBES - "bend"



- Manufactured from borosilicate 3.3 glass according to DIN 12610 standard with a ball and connection tube.

catalogue number	pack quantity
065.60.100	1 piece
065.60.150	1 piece

DRYING TUBES - "U form"



- Manufactured from borosilicate 3.3 glass with a U form.

catalogue number	pack quantity
065.62.100	1 piece
065.62.130	1 piece
065.62.180	1 piece

DRYING TUBES - "U form" - "with stopcock"



- Manufactured from borosilicate 3.3 glass according to DIN 12610 standard with a U form and featured with a stopcock.

catalogue number	pack quantity
065.63.100	1 piece
065.63.130	1 piece
065.63.180	1 piece

BOTTLES - "gas washing"



- Manufactured from borosilicate 3.3 with thick walls with NS 29/32 neck size.

- Supplied without the bottle heads.

catalogue number	bottle volume	pack quantity
065.66.125	125 ml	1 piece
065.66.250	250 ml	1 piece
065.66.500	500 ml	1 piece
065.66.901	1000 ml	1 piece

BOTTLE HEAD - "glass side arm" - "without disc"



- Manufactured from borosilicate 3.3 without sintered glass support.

- Featured with a glass side arm.

catalogue number	pack quantity
065.67.001	1 piece

BOTTLE HEAD - "glass side arm" - "with disc"



- Manufactured from borosilicate 3.3 with sintered glass support. Featured with a glass side arm.

- Sintered glass disc with porosity "1" enables efficient gas dispensing.

catalogue number	pack quantity
065.67.011	1 piece

BOTTLE HEAD - "P.P side arm" - "without disc"



- Manufactured from borosilicate 3.3 without sintered glass support.

- Featured with with GL 14 screw thread polypropylene side arm which can easily connected or disconnected preventing accidental breakage.

catalogue number	pack quantity
065.67.002	1 piece

BOTTLE HEAD - "P.P side arm" - "with disc"



- Manufactured from borosilicate 3.3 without sintered glass support.

- Sintered glass disc with porosity "1" enables efficient gas dispensing.

- Featured with with GL 14 screw thread polypropylene side arm.

catalogue number	pack quantity
065.67.022	1 piece

distillation & filtration & separation & sample preparation

CHEMISTRY SET

- Set consists of 16 pieces various small size glassware with NS 14/23 joints.
- Allows multi micro experiments under vacuum or atmospheric pressure.
- Supplied in a sturdy plastic case featured with foam inserts. Foam inserts prevents breakage and allows organised storing of the contents.
- Product descriptions of the chemistry set is shown at below list.

catalogue number	pack quantity
067.30.001	1 piece



item photo code	product descriptions	pack quantity
1	filter funnel	1 piece
2	receiver adapter - short stem	1 piece
3	stillhead with screwcap adapter	1 piece
4	receiver adapter - with vent	1 piece
5	pear shape flask with three necks - 25 ml	1 piece
6	erlenmeyer flask - 25 ml	1 piece
7	seperating funnel - with PTFE key - 30 ml	1 piece
8	vigreux fractionating column	1 piece

item photo code	product descriptions	pack quantity
9	measuring cylinder - 10 ml	1 piece
10	beaker - low form - 25 ml	1 piece
11	liebig condenser	1 piece
12	flat bottom flask - 10 ml	1 piece
13	keck clip	1 piece
14	pressure equalising funnel - 10 ml	1 piece
15	hexagonal stoppers	2 pieces
16	microscale chemistry case	1 piece

WATER ESTIMATOR



- Manufactured from borosilicate 3.3 for determination of water with xylol method.
- System consists of a 500 ml flask with NS 29/32 joint, a liebig condenser of 400 length and a measuring tube with PTFE stopcock.

catalogue number	pack quantity
065.70.001	1 piece

ARSENIC ESTIMATOR



- Manufactured from borosilicate 3.3 for determination of arsenic and antimony content.
- System consists of a 100 ml erlenmeyer with NS 29/32 joint and an absorption tube attached to erlenmeyer.

catalogue number	pack quantity
065.71.001	1 piece

distillation & filtration & separation & sample preparation



CLIPS - "for NS joints"

- Manufactured from POM with excellent chemical resistance and high mechanical strength.
- With their flexible jaws they guarantee absolute leak-proof, tight connection of two NS joints.

catalogue number	color	NS size	pack quantity
063.04.010	black	NS 10/19	1 piece
063.04.012	purple	NS 12/21	1 piece
063.04.014	yellow	NS 14/23	1 piece
063.04.019	blue	NS 19/26	1 piece
063.04.024	green	NS 24/29	1 piece
063.04.029	red	NS 29/32	1 piece
063.04.034	orange	NS 34/35	1 piece
063.04.045	brown	NS 45/40	1 piece



JOINT GREASE "standard vacuum"

- Ideal for lubricating and leak-proof sealing of all types of joints, metal and plastic connectors and stopcocks.
- Recommended to be used under standard vacuum conditions.
- Guarantees excellent chemical and temperature resistance between -40°C to $+300^{\circ}\text{C}$.
- Non- solidifying during use. Easily washable due to water soluble characteristic.
- Best results can be achieved by application of a thin layer.
- Supplied in a tube of 60 gram lubricant weight.

catalogue number	grease color	pack quantity
063.16.001	clear	1 piece



JOINT GREASE "high vacuum"

- Ideal for lubricating and leak-proof sealing of all types of joints, metal and plastic connectors and stopcocks.
- Recommended to be used under high vacuum conditions.
- Guarantees excellent chemical and temperature resistance between -40°C to $+320^{\circ}\text{C}$.
- Non- solidifying during use. Easily washable due to water soluble characteristic.
- Best results can be achieved by application of a thin layer.
- Supplied in a tube of 60 gram lubricant weight.

catalogue number	grease color	pack quantity
063.16.002	brown	1 piece

JOINT SLEEVES - "PTFE"



- Manufactured from chemically inert PTFE with excellent chemical resistance, high mechanical strength and high temperature resistance between -200°C to $+260^{\circ}\text{C}$.
- Unique flexible body form guarantees leak-proof connections of NS joints with high vacuum performance.
- Extra smooth interior finish guarantees high vacuum sealing performance without a need of any lubricant.



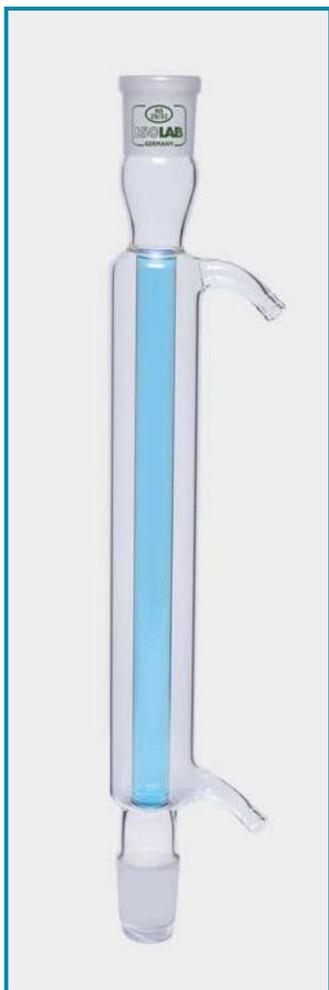
catalogue number	NS size	pack quantity
063.14.014	NS 14/23	1 piece
063.14.019	NS 19/26	1 piece
063.14.024	NS 24/29	1 piece
063.14.029	NS 29/32	1 piece
063.14.034	NS 34/35	1 piece
063.14.045	NS 45/40	1 piece



SEALING TAPE - "PTFE"

- Manufactured from chemically inert PTFE with excellent chemical resistance, high mechanical strength and high temperature resistance between -200°C to $+260^{\circ}\text{C}$.
- Stretches, conform and perfectly seals all joints, connectors, stopcocks with leak- proof tightness.

catalogue number	tape width	tape length	pack quantity
058.06.001	12 mm	10 mt	1 piece



CONDENSERS - "liebigh" - "glass side arm"

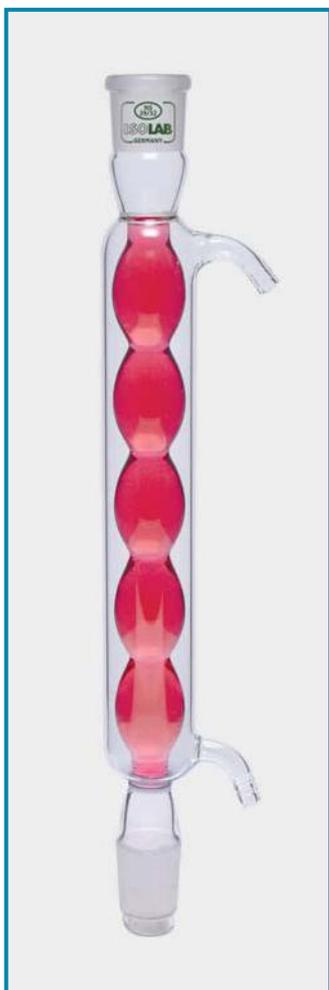
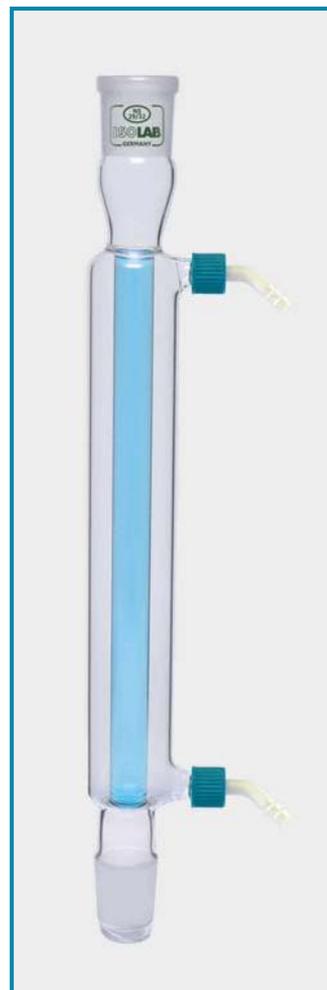
► Manufactured from borosilicate glass 3.3 according to DIN 12576 standard. Featured with glass side arms fitting 8-9 mm bore size tubings. Thick wall, and reinforced rim prevent breakage during washing and transportation.

catalogue number	effective length	joint NS size	pack quantity
033.11.160	160 mm	NS 14/23	1 piece
033.11.250	250 mm	NS 14/23	1 piece
033.11.252	250 mm	NS 24/29	1 piece
033.11.253	250 mm	NS 29/32	1 piece
033.11.400	400 mm	NS 14/23	1 piece
033.11.402	400 mm	NS 24/29	1 piece
033.11.403	400 mm	NS 29/32	1 piece

CONDENSERS - "liebigh" - "P.P side arm"

► Manufactured from borosilicate glass 3.3 according to DIN 12576 standard. Featured with GL 14 screw thread polypropylene side arms fitting 8-9 mm bore size tubings. Side arms can be easily connected or disconnected to the main body preventing accidental breakage.

catalogue number	effective length	joint NS size	pack quantity
033.12.160	160 mm	NS 14/23	1 piece
033.12.250	250 mm	NS 14/23	1 piece
033.12.252	250 mm	NS 24/29	1 piece
033.12.253	250 mm	NS 29/32	1 piece
033.12.400	400 mm	NS 14/23	1 piece
033.12.402	400 mm	NS 24/29	1 piece
033.12.403	400 mm	NS 29/32	1 piece



CONDENSERS - "allihn" - "glass side arm"

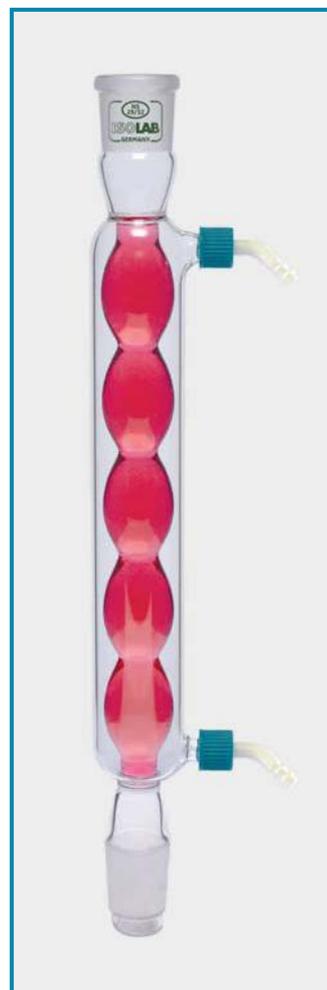
► Manufactured from borosilicate glass 3.3 according to DIN 12581 standard. Featured with glass side arms fitting 8-9 mm bore size tubings. Thick wall, and reinforced rim prevent breakage during washing and transportation.

catalogue number	effective length	joint NS size	pack quantity
033.13.160	160 mm	NS 14/23	1 piece
033.13.250	250 mm	NS 14/23	1 piece
033.13.252	250 mm	NS 24/29	1 piece
033.13.253	250 mm	NS 29/32	1 piece
033.13.400	400 mm	NS 14/23	1 piece
033.13.402	400 mm	NS 24/29	1 piece
033.13.403	400 mm	NS 29/32	1 piece

CONDENSERS - "allihn" - "P.P side arm"

► Manufactured from borosilicate glass 3.3 according to DIN 12581 standard. Featured with GL 14 screw thread polypropylene side arms fitting 8-9 mm bore size tubings. Side arms can be easily connected or disconnected to the main body preventing accidental breakage.

catalogue number	effective length	joint NS size	pack quantity
033.14.160	160 mm	NS 14/23	1 piece
033.14.250	250 mm	NS 14/23	1 piece
033.14.252	250 mm	NS 24/29	1 piece
033.14.253	250 mm	NS 29/32	1 piece
033.14.400	400 mm	NS 14/23	1 piece
033.14.402	400 mm	NS 24/29	1 piece
033.14.403	400 mm	NS 29/32	1 piece



distillation & filtration & separation & sample preparation

CONDENSERS - "spiral" - "glass side arm"

➤ Manufactured from borosilicate glass 3.3 according to DIN 12592 standard.

➤ Featured with glass side arms fitting 8-9 mm bore size tubings. Thick wall, and reinforced rim prevent breakage during washing and transportation.

catalogue number	effective length	joint NS size	pack quantity
033.15.160	160 mm	NS 14/23	1 piece
033.15.253	250 mm	NS 29/32	1 piece
033.15.403	400 mm	NS 29/32	1 piece

CONDENSERS - "spiral" - "P.P side arm"

➤ Manufactured from borosilicate glass 3.3 according to DIN 12592 standard.

➤ Featured with GL 14 screw thread polypropylene side arms fitting 8-9 mm bore size tubings. Side arms can be easily connected or disconnected preventing breakage.

➤ Thick wall, and reinforced rim prevent breakage during washing and transportation.

catalogue number	effective length	joint NS size	pack quantity
033.16.160	160 mm	NS 14/23	1 piece
033.16.253	250 mm	NS 29/32	1 piece
033.16.403	400 mm	NS 29/32	1 piece

CONDENSERS - "dimroth" - "glass side arm"

➤ Manufactured from borosilicate glass 3.3 according to DIN 12591 standard. Featured with glass side arms fitting 8-9 mm bore size tubings. Thick wall, and reinforced rim prevent breakage.

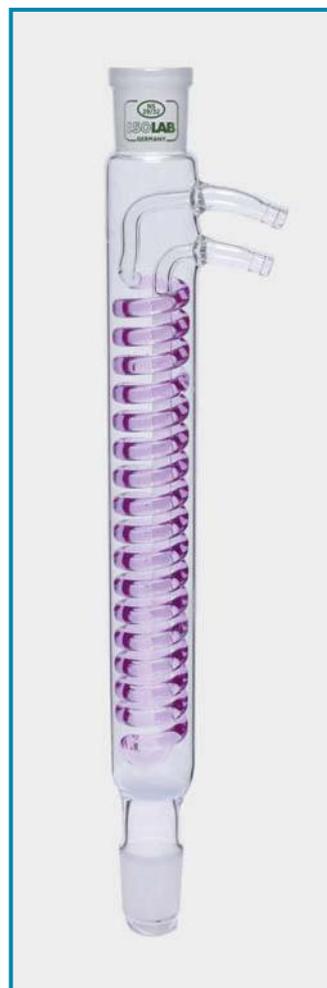
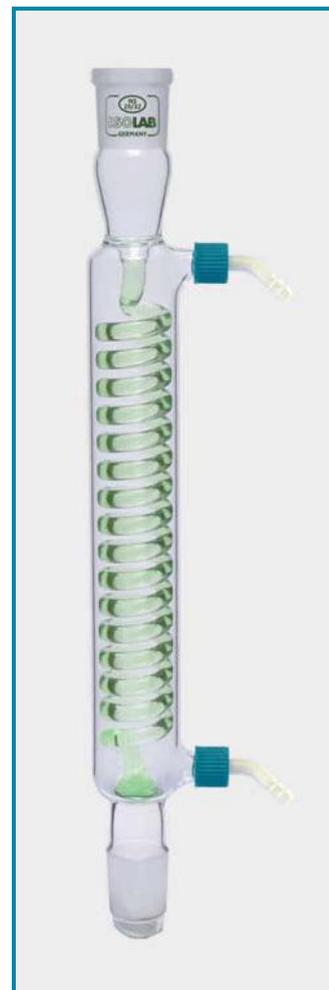
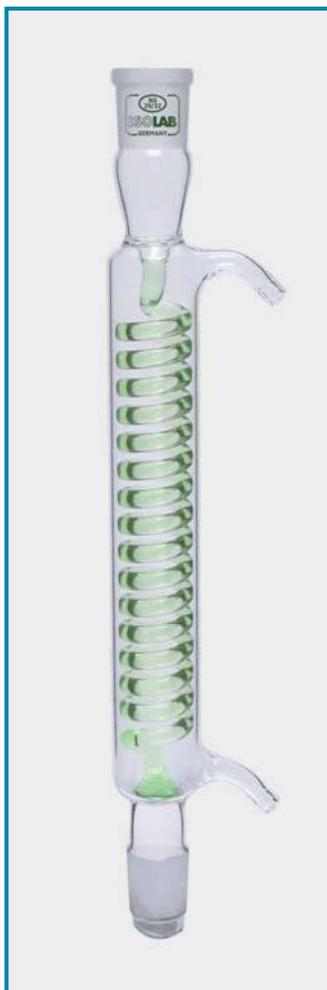
catalogue number	effective length	joint NS size	pack quantity
033.17.160	160 mm	NS 14/23	1 piece
033.17.163	160 mm	NS 29/32	1 piece
033.17.250	250 mm	NS 14/23	1 piece
033.17.253	250 mm	NS 29/32	1 piece
033.17.400	400 mm	NS 14/23	1 piece
033.17.403	400 mm	NS 29/32	1 piece

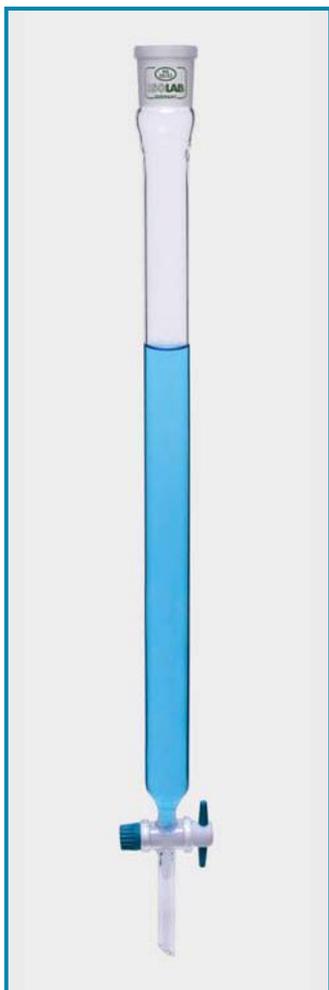
CONDENSERS - "dimroth" - "P.P side arm"

➤ Manufactured from borosilicate glass 3.3 according to DIN 12591 standard.

➤ Featured with GL 14 screw thread polypropylene side arms fitting 8-9 mm bore size tubings. Side arms can be easily connected or disconnected preventing breakage.

catalogue number	effective length	joint NS size	pack quantity
033.18.160	160 mm	NS 14/23	1 piece
033.18.163	160 mm	NS 29/32	1 piece
033.18.250	250 mm	NS 14/23	1 piece
033.18.253	250 mm	NS 29/32	1 piece
033.18.400	400 mm	NS 14/23	1 piece
033.18.403	400 mm	NS 29/32	1 piece





COLUMNS - "chromotography" - "w/o filter"

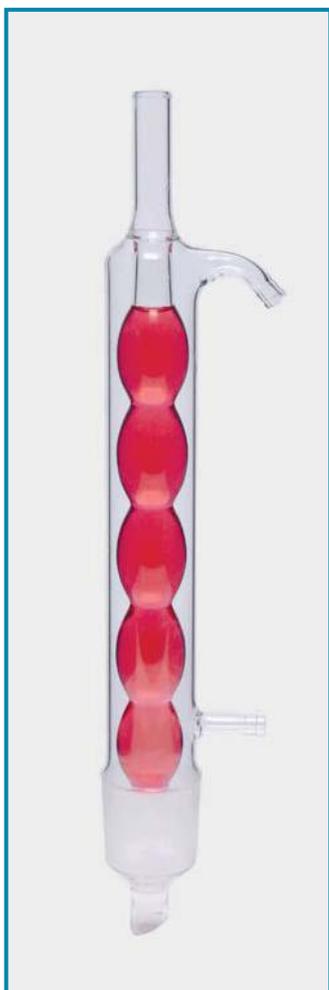
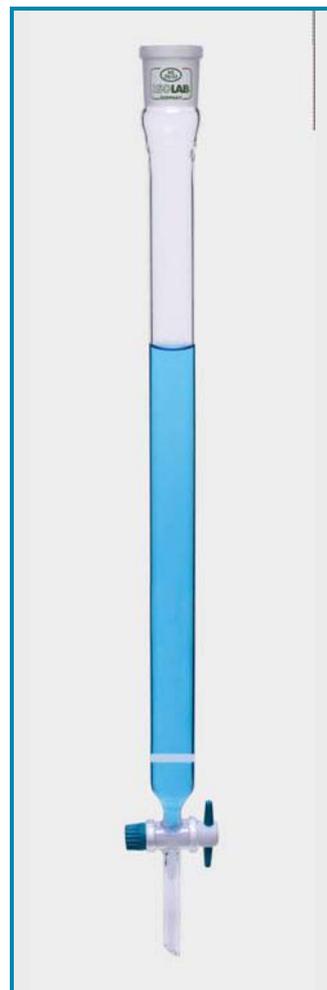
- Manufactured from borosilicate glass without filter.
- Thick wall, and reinforced rim prevent breakage during washing and transportation.
- NS joints are manufactured according to DIN 12242 standard. Supplied with an interchangeable PTFE stopcock which does not require greasing at all.

catalogue number	effective length	internal diameter	socket NS size	pack quantity
066.10.001	200 mm	10 mm	NS 14/23	1 piece
066.10.003	400 mm	20 mm	NS 29/32	1 piece
066.10.004	600 mm	30 mm	NS 29/32	1 piece

COLUMNS - "chromotography" - "with filter"

- Manufactured from borosilicate glass with "pore 1" size sintered glass filter. Reinforced rim prevent breakage.
- Perfectly grinded NS necks with smooth interior are manufactured according to DIN 12242 standard. Supplied with an interchangeable PTFE stopcock which does not require greasing at all.

catalogue number	effective length	internal diameter	socket NS size	pack quantity
066.11.001	200 mm	10 mm	NS 14/23	1 piece
066.11.003	200 mm	15 mm	NS 14/23	1 piece
066.11.002	300 mm	10 mm	NS 14/23	1 piece
066.11.004	400 mm	20 mm	NS 29/32	1 piece
066.11.005	600 mm	30 mm	NS 29/32	1 piece



CONDENSERS - "soxhlet"- "allihn" - "glass arm"

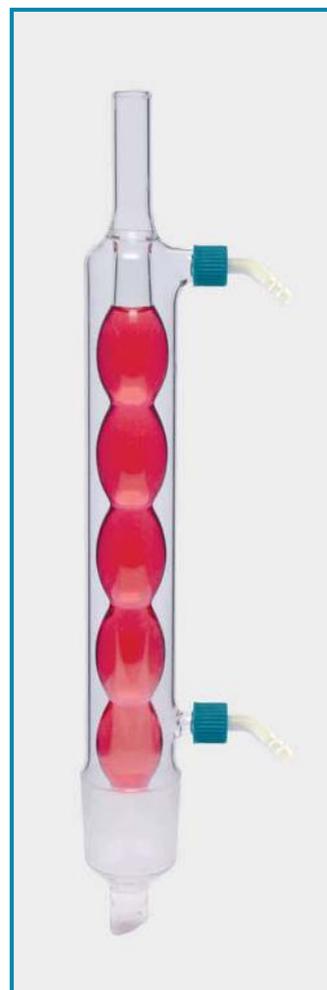
- Manufactured from borosilicate glass 3.3 according to DIN 12581 standard.
- Featured with glass side arms fitting 8-9 mm bore size tubings. Thick wall, and reinforced rim prevent breakage during washing and transportation.

catalogue number	for extractor volume	cone NS size	pack quantity
035.11.030	30 ml	NS 29/32	1 piece
035.11.070	70 ml	NS 34/35	1 piece
035.11.250	100 / 250 ml	NS 45/40	1 piece
035.11.500	500 ml	NS 45/40	1 piece

CONDENSERS - "soxhlet"- "allihn" - "P.P arm"

- Manufactured from borosilicate glass 3.3 according to DIN 12581 standard. Thick wall, and reinforced rim prevent breakage during washing and transportation.
- Featured with GL 14 screw thread polypropylene side arms fitting 8-9 mm bore size tubings. Side arms can be easily connected or disconnected to the main body preventing accidental breakage.

catalogue number	for extractor volume	cone NS size	pack quantity
035.12.030	30 ml	NS 29/32	1 piece
035.12.070	70 ml	NS 34/35	1 piece
035.12.250	100 / 250 ml	NS 45/40	1 piece
035.12.500	500 ml	NS 45/40	1 piece



distillation & filtration & separation & sample preparation

CONDENSERS - "soxhlet"- "dimroth"- "glass arm"

➤ Manufactured from borosilicate glass 3.3 according to DIN 12591 standard.

➤ Featured with glass side arms fitting 8-9 mm bore size tubings. Thick wall, and reinforced rim prevent breakage during washing and transportation.

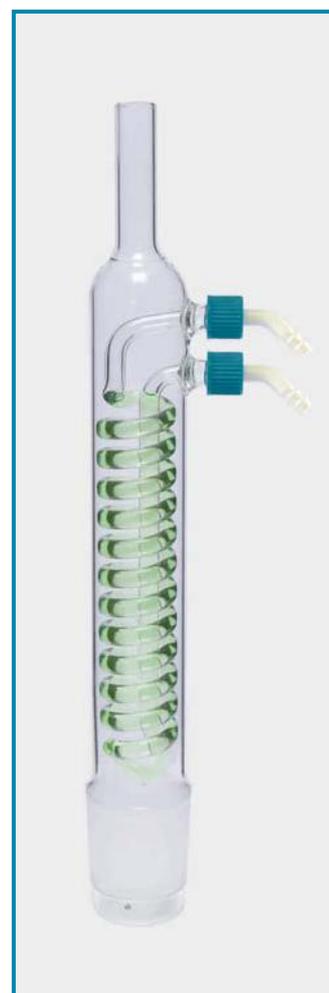
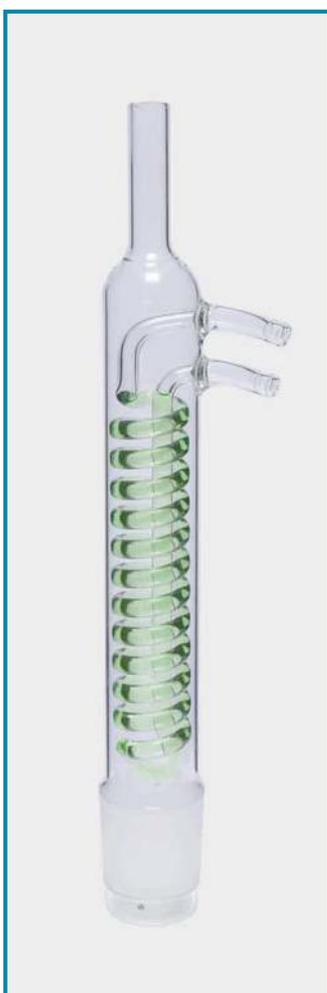
catalogue number	for extractor volume	cone NS size	pack quantity
035.13.030	30 ml	NS 29/32	1 piece
035.13.070	70 ml	NS 34/35	1 piece
035.13.250	100 / 250 ml	NS 45/40	1 piece
035.13.500	500 ml	NS 45/40	1 piece

CONDENSERS - "soxhlet"- "dimroth"- "P.P arm"

➤ Manufactured from borosilicate glass 3.3 according to DIN 12591 standard. Thick wall, and reinforced rim prevent breakage during washing and transportation.

➤ Featured with GL 14 screw thread polypropylene side arms fitting 8-9 mm bore size tubings. Side arms can be easily connected or disconnected to the main body preventing accidental breakage.

catalogue number	for extractor volume	cone NS size	pack quantity
035.14.030	30 ml	NS 29/32	1 piece
035.14.070	70 ml	NS 34/35	1 piece
035.14.250	100 / 250 ml	NS 45/40	1 piece
035.14.500	500 ml	NS 45/40	1 piece



EXTRACTORS "soxhlet"

➤ Manufactured from borosilicate glass 3.3 without stopcock according to DIN 12602 standard.

➤ Thick wall, and reinforced rim prevent breakage during washing and transportation.

➤ Perfectly grinded NS joint with smooth interior guarantees perfect leakproof sealing.

catalogue number	volume	pack quantity
036.01.030	30 ml	1 piece
036.01.070	70 ml	1 piece
036.01.100	100 ml	1 piece
036.01.150	150 ml	1 piece
036.01.250	250 ml	1 piece
036.01.500	500 ml	1 piece

catalogue number	socket NS size
036.01.030	NS 29/32
036.01.070	NS 34/35
036.01.100	NS 45/40
036.01.150	NS 45/40
036.01.250	NS 45/40
036.01.500	NS 45/40



EXTRACTOR THIMBLES - "cellulose"

➤ Manufactured from thick and 100 % pure cotton fibres for reproducible results without any harm to the samples.

➤ Offers high temperature resistance up to 550°C, high mechanical strength and excellent retention capacity.

➤ Controlled dimensional accuracy guarantees excellent fitting to the extractors body.

➤ Also suitable for extracting solid or liquid samples from the gases.



catalogue number	diameter	height	pack quantity
102.28.080	28 mm	80 mm	25 pieces
102.30.080	30 mm	80 mm	25 pieces
102.33.080	33 mm	80 mm	25 pieces
102.33.094	33 mm	94 mm	25 pieces
102.34.120	34 mm	120 mm	25 pieces

distillation & filtration & separation & sample preparation



ERLENMEYERS - "clear" - "glass" - "ground neck"

➤ Manufactured from borosilicate glass 3.3 according to DIN 4797 standard.

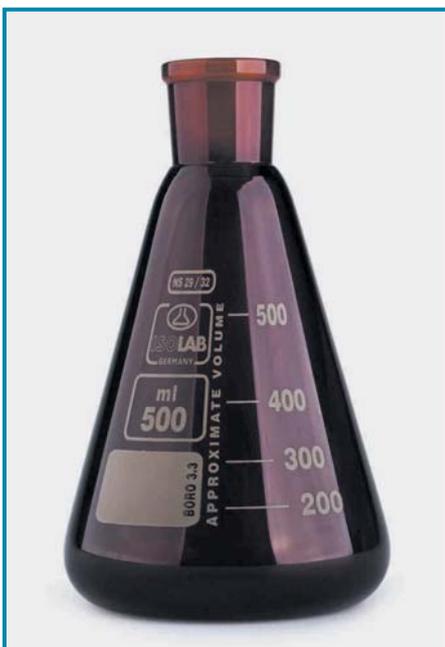
➤ Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.

➤ Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.

➤ Volume graduations and inscriptions are printed with white enamel.

Various stoppers for closing the erlenmeyer necks can be selected from catalogue page no 104.

catalogue number	volume	neck NS size	pack quantity
028.01.050	50 ml	NS 14/23	1 piece
028.01.051	50 ml	NS 19/26	1 piece
028.01.052	50 ml	NS 24/29	1 piece
028.01.053	50 ml	NS 29/32	1 piece
028.01.100	100 ml	NS 14/23	1 piece
028.01.101	100 ml	NS 19/26	1 piece
028.01.102	100 ml	NS 24/29	1 piece
028.01.103	100 ml	NS 29/32	1 piece
028.01.250	250 ml	NS 19/26	1 piece
028.01.251	250 ml	NS 24/29	1 piece
028.01.252	250 ml	NS 29/32	1 piece
028.01.300	300 ml	NS 29/32	1 piece
028.01.500	500 ml	NS 19/26	1 piece
028.01.501	500 ml	NS 24/29	1 piece
028.01.502	500 ml	NS 29/32	1 piece
028.01.901	1000 ml	NS 29/32	1 piece
028.01.902	2000 ml	NS 29/32	1 piece



ERLENMEYERS - "amber" - "glass" - "ground neck"

➤ Manufactured from borosilicate glass 3.3 according to DIN 4797 standard.

➤ Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.

➤ Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.

➤ Volume graduations and inscriptions are printed with white enamel.

Various stoppers for closing the erlenmeyer necks can be selected from catalogue page no 104.

catalogue number	volume	neck NS size	pack quantity
028.11.053	50 ml	NS 29/32	1 piece
028.11.103	100 ml	NS 29/32	1 piece
028.11.252	250 ml	NS 29/32	1 piece
028.11.502	500 ml	NS 29/32	1 piece
028.11.901	1000 ml	NS 29/32	1 piece
028.11.902	2000 ml	NS 29/32	1 piece



Various stoppers for erlenmeyer necks can be selected from catalogue page no 104.



distillation & filtration & separation & sample preparation



FLASKS - "clear" - "glass" - "ground neck" - "flat bottom"

- Manufactured from borosilicate glass 3.3 according to DIN 4797 standard.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.
- Volume graduations and inscriptions are printed with white enamel.

catalogue number	volume	neck NS size	pack quantity
030.01.050	50 ml	NS 14/23	1 piece
030.01.051	50 ml	NS 19/26	1 piece
030.01.052	50 ml	NS 24/29	1 piece
030.01.053	50 ml	NS 29/32	1 piece
030.01.100	100 ml	NS 14/23	1 piece
030.01.101	100 ml	NS 19/26	1 piece
030.01.102	100 ml	NS 24/29	1 piece
030.01.103	100 ml	NS 29/32	1 piece
030.01.250	250 ml	NS 19/26	1 piece
030.01.251	250 ml	NS 24/29	1 piece
030.01.252	250 ml	NS 29/32	1 piece
030.01.500	500 ml	NS 24/29	1 piece
030.01.501	500 ml	NS 29/32	1 piece
030.01.900	1000 ml	NS 24/29	1 piece
030.01.901	1000 ml	NS 29/32	1 piece
030.01.902	2000 ml	NS 29/32	1 piece
030.01.904	4000 ml	NS 29/32	1 piece



FLASKS - "clear" - "glass" - "ground neck" - "round bottom"

- Manufactured from borosilicate glass 3.3 according to DIN 4797 standard.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.
- Volume graduations and inscriptions are printed with white enamel.

catalogue number	volume	neck NS size	pack quantity
030.02.050	50 ml	NS 14/23	1 piece
030.02.051	50 ml	NS 19/26	1 piece
030.02.052	50 ml	NS 24/29	1 piece
030.02.053	50 ml	NS 29/32	1 piece
030.02.100	100 ml	NS 14/23	1 piece
030.02.101	100 ml	NS 19/26	1 piece
030.02.102	100 ml	NS 24/29	1 piece
030.02.103	100 ml	NS 29/32	1 piece
030.02.250	250 ml	NS 19/26	1 piece
030.02.251	250 ml	NS 24/29	1 piece
030.02.252	250 ml	NS 29/32	1 piece
030.02.500	500 ml	NS 24/29	1 piece
030.02.501	500 ml	NS 29/32	1 piece
030.02.900	1000 ml	NS 24/29	1 piece
030.02.901	1000 ml	NS 29/32	1 piece
030.02.902	2000 ml	NS 29/32	1 piece
030.02.904	4000 ml	NS 29/32	1 piece



FLASKS - "amber" - "glass" - "ground neck" - "round bottom"

- Manufactured from borosilicate glass 3.3 according to DIN 4797 standard.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.
- Volume graduations and inscriptions are printed with white enamel.

catalogue number	volume	neck NS size	pack quantity
030.12.053	50 ml	NS 29/32	1 piece
030.12.103	100 ml	NS 29/32	1 piece
030.12.252	250 ml	NS 29/32	1 piece
030.12.501	500 ml	NS 29/32	1 piece
030.12.901	1000 ml	NS 29/32	1 piece

distillation & filtration & separation & sample preparation



**FLASKS - "2 ground neck"
"20° angled side neck"**

- Manufactured from borosilicate glass 3.3 according to DIN 12394 standard.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.
- Inscriptions are printed with white enamel.



**FLASKS - "2 ground neck"
"parallel side neck"**

- Manufactured from borosilicate glass 3.3 according to DIN 12394 standard.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.
- Inscriptions are printed with white enamel.



**FLASKS - "3 ground neck"
"20° angled side neck"**

- Manufactured from borosilicate glass 3.3 according to DIN 12394 standard.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.
- Inscriptions are printed with white enamel.

catalogue number	volume	center NS size	side NS size
030.24.050	50 ml	14/23	14/23
030.24.100	100 ml	14/23	14/23
030.24.250	250 ml	14/23	14/23
030.25.100	100 ml	24/29	14/23
030.25.250	250 ml	24/29	14/23
030.25.500	500 ml	24/29	14/23
030.25.901	1000 ml	24/29	14/23
030.26.100	100 ml	24/29	19/26
030.26.250	250 ml	24/29	19/26
030.26.500	500 ml	24/29	19/26
030.26.901	1000 ml	24/29	19/26
030.27.100	100 ml	29/32	14/23
030.27.250	250 ml	29/32	14/23
030.27.500	500 ml	29/32	14/23
030.27.901	1000 ml	29/32	14/23
030.27.902	2000 ml	29/32	14/23
030.28.100	100 ml	29/32	19/26
030.28.250	250 ml	29/32	19/26
030.28.500	500 ml	29/32	19/26
030.28.901	1000 ml	29/32	19/26
030.28.902	2000 ml	29/32	19/26
030.29.100	100 ml	29/32	29/32
030.29.250	250 ml	29/32	29/32
030.29.500	500 ml	29/32	29/32
030.29.901	1000 ml	29/32	29/32
030.29.902	2000 ml	29/32	29/32

catalogue number	volume	center NS size	side NS size
030.30.050	50 ml	14/23	14/23
030.30.100	100 ml	14/23	14/23
030.30.250	250 ml	14/23	14/23
030.31.100	100 ml	24/29	14/23
030.31.250	250 ml	24/29	14/23
030.31.500	500 ml	24/29	14/23
030.31.901	1000 ml	24/29	14/23
030.32.100	100 ml	24/29	19/26
030.32.250	250 ml	24/29	19/26
030.32.500	500 ml	24/29	19/26
030.32.901	1000 ml	24/29	19/26
030.33.100	100 ml	29/32	14/23
030.33.250	250 ml	29/32	14/23
030.33.500	500 ml	29/32	14/23
030.33.901	1000 ml	29/32	14/23
030.33.902	2000 ml	29/32	14/23
030.34.100	100 ml	29/32	19/26
030.34.250	250 ml	29/32	19/26
030.34.500	500 ml	29/32	19/26
030.34.901	1000 ml	29/32	19/26
030.34.902	2000 ml	29/32	19/26
030.35.100	100 ml	29/32	29/32
030.35.250	250 ml	29/32	29/32
030.35.500	500 ml	29/32	29/32
030.35.901	1000 ml	29/32	29/32
030.35.902	2000 ml	29/32	29/32

catalogue number	volume	center NS size	side NS size
030.36.250	250 ml	14/23	14/23
030.37.250	250 ml	24/29	14/23
030.37.500	500 ml	24/29	14/23
030.37.901	1000 ml	24/29	14/23
030.38.250	250 ml	24/29	19/26
030.38.500	500 ml	24/29	19/26
030.38.901	1000 ml	24/29	19/26
030.38.902	2000 ml	24/29	19/26
030.39.250	250 ml	29/32	14/23
030.39.500	500 ml	29/32	14/23
030.39.901	1000 ml	29/32	14/23
030.40.250	250 ml	29/32	19/26
030.40.500	500 ml	29/32	19/26
030.40.901	1000 ml	29/32	19/26
030.41.250	250 ml	29/32	29/32
030.41.500	500 ml	29/32	29/32
030.41.901	1000 ml	29/32	29/32
030.41.902	2000 ml	29/32	29/32

distillation & filtration & separation & sample preparation



FLASKS - "3 ground neck" "parallel side neck"

- Manufactured from borosilicate glass 3.3 according to DIN 12394 standard.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.
- Inscriptions are printed with white enamel.

catalogue number	volume	center NS size	side NS size
030.42.250	250 ml	14/23	14/23
030.43.250	250 ml	24/29	14/23
030.43.500	500 ml	24/29	14/23
030.43.901	1000 ml	24/29	14/23
030.44.250	250 ml	24/29	19/26
030.44.500	500 ml	24/29	19/26
030.44.901	1000 ml	24/29	19/26
030.44.902	2000 ml	24/29	19/26
030.45.250	250 ml	29/32	14/23
030.45.500	500 ml	29/32	14/23
030.45.901	1000 ml	29/32	14/23
030.46.250	250 ml	29/32	19/26
030.46.500	500 ml	29/32	19/26
030.46.901	1000 ml	29/32	19/26
030.47.250	250 ml	29/32	29/32
030.47.500	500 ml	29/32	29/32
030.47.901	1000 ml	29/32	29/32
030.47.902	2000 ml	29/32	29/32



FLASKS - "clear" - "glass" "pear shape"

- Manufactured from borosilicate glass 3.3 according to DIN 12383 standard.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.
- Inscriptions are printed with white enamel.

catalogue number	volume	center NS size	pack quantity
030.49.010	10 ml	NS 14/23	1 piece
030.49.025	25 ml	NS 14/23	1 piece
030.49.050	50 ml	NS 14/23	1 piece
030.49.100	100 ml	NS 14/23	1 piece
030.49.250	250 ml	NS 14/23	1 piece

catalogue number	volume	center NS size	pack quantity
030.52.050	50 ml	NS 29/32	1 piece
030.52.100	100 ml	NS 29/32	1 piece
030.52.250	250 ml	NS 29/32	1 piece



FLASKS - "pear shape" "25° angled side neck"

- Manufactured from borosilicate glass 3.3 according to DIN 12383 standard.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.
- Inscriptions are printed with white enamel.

catalogue number	volume	center NS size	side NS size	pack quantity
030.53.025	25 ml	14/23	14/23	1 piece
030.53.050	50 ml	14/23	14/23	1 piece
030.53.100	100 ml	14/23	14/23	1 piece
030.54.025	25 ml	19/26	14/23	1 piece
030.54.050	50 ml	19/26	14/23	1 piece
030.54.100	100 ml	19/26	14/23	1 piece



Various flask tongs can be selected from catalogue page no 79.

distillation & filtration & separation & sample preparation

FLASKS - "clear" - "glass" - "kjeldahl"



- Manufactured from borosilicate glass 3.3 according to DIN 12360 standard.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.
- Volume graduations and inscriptions are printed with white enamel.

catalogue number	neck NS size	volume	pack quantity
030.57.100	NS 19/26	100 ml	1 piece
030.57.250	NS 29/32	250 ml	1 piece
030.57.500	NS 29/32	500 ml	1 piece
030.57.750	NS 29/32	750 ml	1 piece
030.57.901	NS 29/32	1000 ml	1 piece



FLASK STANDS - "cork"

- Manufactured from best quality heat resistant, non-porous, natural cork for holding round bottom flasks.
- Unique wall design offers an excellent support at every point of contact.

catalogue number	recommended flask volume	pack quantity
029.04.001	50 - 100 ml	1 piece
029.04.002	250 - 500 ml	1 piece
029.04.003	1000 - 2000 ml	1 piece
029.04.004	3000 ml	1 piece
029.04.005	4000 ml	1 piece

FLASKS - "clear" - "glass" - "nitrogen"



- Manufactured from borosilicate glass 3.3 according to DIN and ISO standards. Featured with an 25° angle PTFE stopcock.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.
- Volume graduations and inscriptions are printed with white enamel.

catalogue number	volume	neck NS size	pack quantity
030.58.025	25 ml	NS 14/23	1 piece
030.58.050	50 ml	NS 14/23	1 piece
030.58.100	100 ml	NS 14/23	1 piece
030.58.250	250 ml	NS 14/23	1 piece
030.59.050	50 ml	NS 29/32	1 piece
030.59.100	100 ml	NS 29/32	1 piece
030.59.250	250 ml	NS 29/32	1 piece
030.59.500	500 ml	NS 29/32	1 piece
030.59.901	1000 ml	NS 29/32	1 piece



FLASK STANDS - "P.P"

- Manufactured from best quality heat resistant, polypropylene for holding round bottom flasks.
- Unique wall design offers an excellent support at every point of contact.
- Easily stackable due to the tapered body form for reducing storage space.

catalogue number	for flasks volume	pack quantity
029.14.902	100 - 2000 ml	1 piece

distillation & filtration & separation & sample preparation

FLASKS - "evaporating"



- Manufactured from borosilicate glass 3.3.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.
- Volume graduations and inscriptions are printed with white enamel.

catalogue number	volume	evaporating NS size	pack quantity
030.55.100	100 ml	NS 29/32	1 piece
030.55.250	250 ml	NS 29/32	1 piece
030.55.500	500 ml	NS 29/32	1 piece
030.55.901	1000 ml	NS 29/32	1 piece

FLASKS - "receiving"



- Manufactured from borosilicate glass 3.3.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior guarantees excellent leak-proof closure.
- Volume graduations and inscriptions are printed with white enamel.

catalogue number	volume	receiving NS size	pack quantity
030.56.100	100 ml	KS 35	1 piece
030.56.250	250 ml	KS 35	1 piece
030.56.500	500 ml	KS 35	1 piece
030.56.901	1000 ml	KS 35	1 piece

CLIPS - "for evaporating flasks"



- Manufactured from POM with excellent chemical resistance and high mechanical strength.
- With their flexible jaws they guarantee absolute leak-proof, tight connection of two NS joints.

catalogue number	pack quantity
063.04.029	1 piece

CLIPS - "for receiving flasks"



- Manufactured from stainless steel with excellent chemical resistance and superior mechanical strength.
- Perfect tools to keep two KS joints fastened firmly to each other.

catalogue number	pack quantity
063.05.001	1 piece



WATER STILLS - "basic"

- Offers space saving, and practical design with economical energy and water consumption.
- Supplies laboratory grade, high purity water free off pyrogen.
- Double walled interior chamber is manufactured from cavitation-proof, seamless, corrosion resistant stainless steel.
- Interior chamber should always be kept clean for consistent supply of pure water.
- Easily removable condenser unit enables fast and efficient cleaning of the chamber.
- Integrated low water protection system turns off heating in case lack of water.
- Integrated over temperature protection system turns off heating in case of a sudden increase of heat.
- Automatic circuit breakers ensure user safety in case of over temperature and over current problems.



Stainless steel double walled chamber. Easily removable condenser unit for fast and efficient cleaning of the chamber.

catalogue no	623.01.004	623.01.008
dimensions (mm)	380 x 290 x 580	380 x 365 x 640
voltage (V)	220	220
frequency (Hz)	50	50
heating power (W)	3000	6000
output capacity (L/hr)	3,5	7,5
cooling water usage (L/hr)	30 - 50	60 - 80
controler	hydraulic thermostat	
safety devices	over temperature breaker water level switch	



WATER STILLS - "automatic"

- Offers many advantages with fully automatic operation, with space saving unique design with economical energy and water consumption.
- Supplies laboratory grade, high purity water free off pyrogen.
- Double walled interior chamber is manufactured from cavitation-proof, corrosion resistant stainless steel.
- Interior chamber should always be kept clean for consistent output.
- Easily removable condenser unit enables fast and efficient cleaning of the chamber.
- Pre-filter system prevents undesired impurities and built-in large storage tank stores the produced water.
- Low water protection system turns off heating in case of low water inlet or lack of water supplied.
- Integrated over temperature protection system turns off heating in case of a sudden increase of heat.



fully automatic operation system

- Sensing water level in boiling chamber to prevent from over heating.
- Sensing water supply to control distillation process.
- Sensing water level in reservoir to start and stop distillation.

PRE - FILTER

- Pre-filter system prevents undesired impurities and built-in large storage tank stores the produced water.
- Filter part in the pre-filter system should be controlled often and should be immediately replaced in case of dirt.

catalogue number	pack quantity
623.11.110	1 piece

catalogue no	623.02.004	623.02.008
<i>dimensions (mm)</i>	680 x 340 x 530	760 x 340 x 610
<i>voltage (V)</i>	220	220
<i>frequency (Hz)</i>	50	50
<i>heating power (W)</i>	3000	6000
<i>output capacity (L/hr)</i>	4	8
<i>storage capacity (L)</i>	8	14
<i>cooling water usage (L/hr)</i>	30 - 50	60 - 80
<i>controler</i>	hydraulic thermostat	
<i>safety devices</i>	over temperature breaker, water level switch water float level sensor	

ROTARY EVAPORATOR - "vertical"



- Featured with motorised quick-action lift that automatically raises the evaporation flask from the bath in case of any power failure.
- Chemical-resistant double PTFE system and patented pressure spring guarantees an excellent sealing during operation.
- Easy to read large digital LCD screen displays heating temperature, rotation speed, time and other parameters.
- Patented condenser design with 1.500 cm² effective cooling capacity guarantees excellent cooling effect.
- Unique motor action enabling selective rotation of the evaporation flask as clockwise or anti-clockwise movement guarantees effective results.
- Featured with an adjustable final position recognition system for protection of the glass parts from breakage.
- Timer function with time setting range 1 - 999 minute enables precise control of the operation.
- Featured with an operation control panel that allows remote control of the system and also transfer of all parameters via USB.
- Supplied with a large, stainless steel 5 L water-oil bath with precise temperature control from ambient to 180°C.
- An automatic over-heat protection system automatically stops heating if the bath temperature exceeds 220°C.



Integrated operating panel for convenient control of the main unit and heating bath.

Unique design of the detachable operating panel enables remote control option and easy use of the panel outside the fume hood.



Supplied with a large, stainless steel 5 L water-oil bath with precise temperature control from ambient to 180°C.

An automatic over-heat protection system automatically stops heating if the bath temperature exceeds 220°C.

catalogue no	605.01.001
dimensions / weight (mm / kg)	465 x 457 x 563 / 15,0
power (W)	1400
voltage (V)	220
frequency (Hz)	50
heating range (°C)	ambient +5 to 180
heating accuracy (°C)	± 1,0
speed range (rpm)	20 - 280
speed & temp. & time display	LCD
time setting range (min)	1 - 999
rotation direction	reversible
protection class	IP 20
USB interface	yes



Unique push-off device to release the flask and protect it from breaking.

Optimal interval operation offers dual action in clockwise and counter clockwise for the drying process.

PUMPS - "vacuum & pressure"



- Ideal pumps for all kinds of filtration applications and also for air sampling, suspended solid tests, vacuum distillation, gel drying, chromatography applications.
- Can be used simultaneously both as a vacuum pump and as a pressure pump for pressure supply.
- Piston driven, belt free motor does not need any oil or lubricant and offers continuous oil free pumping.
- Unique design of the pump guarantees maintenance free and long life cycle with minimum noise level less than 50dB.
- Filter barrier in the air exchange compartment of the pump enables clean air cycling at all times.
- Vacuum and pressure indicator at model 622.12.001 shows operational vacuum and pressure values at all times.
- Thermal protection system for overheating guarantees automatic stop in case of over heat during process.



Vacuum and pressure indicator at model 622.12.001 shows operational vacuum and pressure values.



Siliconized rubber feet strongly hold the bench surface avoiding shaking and "walking" during operation.

catalogue number	maximum flow rate	maximum vacuum	maximum pressure	tube thread	motor power	total weight	vacuum& pressure indicator	dimensions
622.11.001	15 L / min.	250 mbar	30 Psi	6 mm	75 watt	4 kg	non	195x100x156
622.12.001	30 L / min.	200 mbar	30 Psi	6 mm	160 watt	8 kg	yes	210x170x250



FUNNELS "glass" - "plain"

- Manufactured from borosilicate glass 3.3 with short stem according to ISO 4798 standard.
- 60° cone filtering angle guarantees excellent adaptation of the filter papers.
- Thick wall, and reinforced rim prevent breakage during washing and transportation.

catalogue number	funnel diameter	pack quantity
041.01.040	40 mm	10 pieces
041.01.060	60 mm	10 pieces
041.01.080	80 mm	10 pieces
041.01.100	100 mm	10 pieces
041.01.120	120 mm	6 pieces
041.01.150	150 mm	6 pieces



FUNNELS "polypropylene" - "plain"

- Manufactured from translucent polypropylene with short stem according to ISO 4798 standard.
- 60° cone filtering angle guarantees excellent adaptation of the filter papers.
- Thick wall, and reinforced rim prevent breakage during washing and transportation.

catalogue number	funnel diameter	pack quantity
041.02.040	40 mm	1 piece
041.02.060	60 mm	1 piece
041.02.080	80 mm	1 piece
041.02.100	100 mm	1 piece
041.02.120	120 mm	1 piece
041.02.150	150 mm	1 piece



FUNNELS "polypropylene" - "ribbed"

- Manufactured from translucent polypropylene with short stem according to ISO 4798 standard.
- Internal helicoid ribs increases the filtering speed also prevents back pressure and airlocks.
- 60° cone filtering angle guarantees excellent adaptation of the filter papers.

catalogue number	funnel diameter	pack quantity
041.05.040	40 mm	1 piece
041.05.060	60 mm	1 piece
041.05.080	80 mm	1 piece
041.05.100	100 mm	1 piece
041.05.120	120 mm	1 piece
041.05.150	150 mm	1 piece



ANALYTICAL FUNNELS

- Manufactured from borosilicate glass 3.3 or polypropylene with rims and long stem.
- Internal helicoid ribs increases the filtering speed also prevents back pressure and airlocks.
- 60° cone filtering angle guarantees excellent adaptation of the filter papers.
- Thick wall, and reinforced rim prevent breakage during washing and transportation.

glass funnel	P.P funnel	funnel diameter	pack quantity
041.03.080	041.04.080	80 mm	1 piece





FUNNELS "polypropylene" - "for powder"

- Manufactured from polypropylene for transfer of powder. Can be used also for liquids.
- Stem guarantees perfect fit to the flask and large bore diameter guarantees fast delivery of the material.
- NS neck guarantees perfect fit to the flask and thick wall, and reinforced rim prevent breakage during washing and transportation.



Stem guarantees perfect fit to the flask and large bore diameter guarantees fast delivery of the material.

catalogue number	funnel diameter	pack quantity
041.07.065	65 mm	1 piece
041.07.080	80 mm	1 piece
041.07.100	100 mm	1 piece
041.07.120	120 mm	1 piece
041.07.150	150 mm	1 piece



FUNNELS "glass" - "for powder"

- Manufactured from borosilicate glass 3.3 for transfer of powder. Can be used also for liquids.
- NS joint guarantees perfect fit to the flask and large bore diameter guarantees fast delivery of the material.
- NS neck guarantees perfect fit to the flask and Thick wall, and reinforced rim prevent breakage during washing and transportation.



NS joint guarantees perfect fit to the flask and large bore diameter guarantees fast delivery of the material.

catalogue number	funnel diameter	cone NS size	pack quantity
041.08.060	60mm	14/23	1 piece
041.08.080	80mm	19/26	1 piece
041.08.100	100mm	24/29	1 piece
041.08.120	120mm	29/32	1 piece



FUNNELS "stainless steel"

- Manufactured from high quality, corrosion resistant stainless steel with short stem.
- Robust seamless construction guarantees a long life cycle.
- Highly polished smooth interior enables much easier cleaning.
- 60° cone filtering angle guarantees excellent adaptation of the filter papers.



Robust seamless construction guarantees a long life cycle.

catalogue number	funnel diameter	pack quantity
041.06.080	80 mm	1 piece
041.06.100	100 mm	1 piece
041.06.120	120 mm	1 piece
041.06.150	150 mm	1 piece



FUNNELS "polyethylene" - "industrial"

- Manufactured from high density polyethylene with short stem.
- Specially recommended to fill carboys, large vessels and drums.
- Thick wall, and reinforced rim prevent breakage during washing and transportation.

catalogue number	funnel diameter	pack quantity
041.02.200	200 mm	1 piece
041.02.250	250 mm	1 piece
041.02.300	300 mm	1 piece

distillation & filtration & separation & sample preparation



FUNNELS HOLDERS "stainless steel" - "without bosshead"

➤ Manufactured from high quality, corrosion resistant chromated steel for holding all kinds of funnels up to 150 mm diameter in the most secure way.

➤ Unique ring shape with a slit offers practical use also with separating funnels.

catalogue number	holder diameter	pack quantity
042.03.040	40 mm	1 piece
042.03.060	60 mm	1 piece
042.03.080	80 mm	1 piece
042.03.100	100 mm	1 piece



FUNNELS HOLDERS "stainless steel" - "with bosshead"

➤ Manufactured from high quality, corrosion resistant chromated steel for holding all kinds of funnels up to 150 mm diameter in the most secure way.

➤ Ring with slit offers use also with separating funnels.

➤ The boss head mounted to the stem enables fast and easy attachment of the funnel holder to the stand rods.

catalogue number	holder diameter	pack quantity
042.04.040	40 mm	1 piece
042.04.060	60 mm	1 piece
042.04.080	80 mm	1 piece
042.04.100	100 mm	1 piece



FUNNELS HOLDER "polypropylene" - "without slit"

➤ Manufactured from polypropylene for holding all kinds of funnels from 60 mm up to 150 mm diameter in the most secure way.

➤ Two tapered wedges in the locking system are used to ensure firm grip on rods of diameter range 10 mm to 13 mm.



Funnel holder without slit consists two pieces.

catalogue number	pack quantity
042.05.001	1 piece



FUNNELS HOLDER "polypropylene" - "with slit"

➤ Manufactured from polypropylene for holding all kinds of funnels from 60 mm up to 150 mm diameter in the most secure way.

➤ Specially recommended to be used with separating funnels.

➤ Two tapered wedges in the locking system are used to ensure firm grip on rods of diameter range 10 mm to 13 mm.



Funnel holder with slit consists single piece.

catalogue number	pack quantity
042.06.001	1 piece



FUNNELS HOLDERS "steel" - "adjustable height"

➤ Manufactured from high quality, corrosion resistant chromated steel for holding all kinds of funnels up to 150 mm diameter in the most secure way.

➤ The extendable funnel ring guarantees practical use with different funnel heights.

catalogue number	pack quantity
042.06.010	1 piece

distillation & filtration & separation & sample preparation



FLASKS - "filter" - "glass" "glass side arm"

- Manufactured from borosilicate glass 3.3 according to ISO 6556 and DIN 12475 standards.
- Featured with glass side arms fitting 6-10 mm bore size tubings.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.
- Volume graduations and inscriptions are printed with white enamel.

catalogue number	volume	pack quantity
040.01.100	100 ml	1 piece
040.01.250	250 ml	1 piece
040.01.500	500 ml	1 piece
040.01.901	1000 ml	1 piece
040.01.902	2000 ml	1 piece



FLASKS - "filter" - "glass" "polypropylene side arm"

- Manufactured from borosilicate glass 3.3 according to ISO 6556 and DIN 12475 standards.
- Featured with GL 14 screw thread polypropylene side arms fitting 6-10 mm bore size tubings. Side arms can be easily connected or disconnected to the main body preventing accidental breakage.
- Other technical specifications are same as glass side arm filter flasks.

catalogue number	volume	pack quantity
040.02.100	100 ml	1 piece
040.02.250	250 ml	1 piece
040.02.500	500 ml	1 piece
040.02.901	1000 ml	1 piece
040.02.902	2000 ml	1 piece



PROTECTIVE COLLARS "natural rubber"

- Manufactured from natural rubber with a special design that keeps the funnel and filtering flask always in center.
- These adapters also provide all-round protection reducing impact damages.
- Also clean seal is created between the flask rim and the funnel neck.



catalogue number	recommended for flask volume	pack quantity
040.05.001	100 ml	1 piece
040.05.002	250 - 500 ml	1 piece
040.05.003	1000 ml	1 piece
040.05.004	2000 ml	1 piece



GASKETS - "natural rubber"

- Manufactured from natural rubber with conical body form enabling flexible fit to the filter flask neck.
- Conical body form guarantees perfect fitting of funnels, filter funnels and crucibles to the filter flask neck.
- Supplied as a set of 7 different size adapters which guarantees perfect fit to all filter funnel necks.

catalogue number	pack quantity
040.06.001	1 set





NON-RETURN VALVE "polypropylene"

- Manufactured from polypropylene for usage with tubing connections and vacuum systems.
- Prevents water back flow when the pressure declines. Suitable to work between 0,07 Bar and 2 Bar at ambient temperature.

non return valve	nominal tube diameter	pack quantity
040.10.005	8- 11 mm	1 piece



WATER JET PUMP "polypropylene"

- Manufactured from polypropylene for continuous filtering applications. Suitable to operate under 10 kg/cm² water pressure.
- Featured with a non-return valve that eliminates water back flow. Easily dismantled for effective cleaning.
- Can be used also as a simple vacuum pump for sucking waste solutions and other liquids.

catalogue number	pack quantity
040.10.001	1 piece



FUNNELS "büchner" - "porcelain"

- Manufactured from thick and robust glazed porcelain according to DIN 12905 to be used with filter funnels.
- Support plate with holes holds the filter paper allows maximum filtering speed.

catalogue number	internal diameter	pack quantity
042.01.070	70 mm	1 piece
042.01.090	90 mm	1 piece
042.01.110	110 mm	1 piece



FUNNELS "büchner" - "polypropylene"

- Manufactured from polypropylene with a perforated filter plate. The upper part can be stacked with the lower part to form a vacuum seal.
- Upper and lower parts can be separated for efficient cleaning.

catalogue number	internal diameter	pack quantity
042.02.070	70 mm	1 piece
042.02.090	90 mm	1 piece
042.02.110	110 mm	1 piece

PUMP - "handy" "vacuum" - "polystyrene"

- Light, portable yet effective vacuum pump manufactured from polystyrene. Vacuum level can be followed-up by the mounted vacuum gauge.
- Capable of 625 mm Hg (25°C) vacuum. Effective pumping rate is 15 ml / stroke. Featured with a default vacuum release valve.
- Can be used as a pressure pump by placing release valve cap to vacuum port. Pump nozzle can fit to 6 mm inside diameter tubes.

catalogue number	pack quantity
040.10.015	1 piece



Vacuum level can be controlled and followed-up by the mounted vacuum gauge.

distillation & filtration & separation & sample preparation



FILTER PAPERS - "quantitative"

- Perfect for quantitative routine analysis which requires high purity.
- They are acid-washed and have an extremely low ash content which is round <0,01%.
- The total percentage of alpha-cellulose is about 95%.

M. Nagel cat. no	ISOLAB cat. no	color code	filtration speed	diameter	pack quantity
105.01.110	105.11.110	blue	slow	110 mm	100 pieces
105.02.110	105.12.110	white	medium	110 mm	100 pieces
105.03.110	105.13.110	black	fast	110 mm	100 pieces
105.01.125	105.11.125	blue	slow	125 mm	100 pieces
105.02.125	105.12.125	white	medium	125 mm	100 pieces
105.03.125	105.13.125	black	fast	125 mm	100 pieces



FILTER PAPERS - "general purpose"

- Manufactured from high quality 100 % cellulose with a good humidity resistance and relatively high absorption capacity.
- Suitable for general laboratory filtrations. Alternatively, can also be used as a bench protector or pharmaceutical product preparation.

catalogue number	paper dimensions	paper specifications	pack quantity
107.40.040	40 x 40 cm	80 gr / m ²	200 pieces
107.40.140	40 x 40 cm	60 gr / m ²	250 pieces
107.58.058	58 x 58 cm	80 gr / m ²	200 pieces
107.58.158	58 x 58 cm	60 gr / m ²	250 pieces



FILTER PAPERS - "qualitative"

- Perfect for qualitative routine analysis and for analytical gravimetric applications.
- Wet strengthened, particularly suited for applications where the residue is removed from the filter e.g. with a spatula.

M. Nagel cat. no	ISOLAB cat. no	filtration grade	filtration speed	diameter	pack quantity
106.01.110	106.11.110	No:2	slow	110 mm	100 pieces
106.02.110	106.12.110	No:1	medium	110 mm	100 pieces
106.03.110	106.13.110	No:4	fast	110 mm	100 pieces
106.01.125	106.11.125	No:2	slow	125 mm	100 pieces
106.02.125	106.12.125	No:1	medium	125 mm	100 pieces
106.03.125	106.13.125	No:4	fast	125 mm	100 pieces



FORCEPS - "for filter papers"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Most commonly used forceps for placing and picking filter papers during filtering process.
- Robust and seamless construction guarantees long life cycle. Grid lines on the middle part of the body enables safe and easy handling.
- Flattened jaws grabs even wet paper discs gently reducing the risk of laceration.

catalogue number	pack quantity
048.04.001	1 piece



FILTER FLASK "for vacuum system"

- Manufactured from borosilicate glass 3.3 according to ISO 6556 and DIN 12475 standards with a volume capacity of 2000 ml.
- Featured with GL 14 screw thread polypropylene side arms fitting 6-10 mm bore size tubings.
- Side arms can be easily connected or disconnected to the main body preventing accidental breakage.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.

catalogue number	volume	pack quantity
043.06.001	2000 ml	1 piece



FILTER BOTTLE "for vacuum system"

- Manufactured from borosilicate glass 3.3 according to ISO 6556 and DIN 12475 standards with a volume capacity of 5000 ml.
- Featured with GL 14 screw thread polypropylene side arms fitting 6-10 mm bore size tubings.
- Side arms can be easily connected or disconnected to the main body preventing accidental breakage.
- Thick wall, heavy base and reinforced rim prevent breakage during washing and transportation.

catalogue number	volume	pack quantity
043.06.011	5000 ml	1 piece



VACUUM FILTER SET

- Manufactured from borosilicate glass particularly suitable for analysis of microscopic residues, particle controls and multipurpose filtration application.
- Thick wall heavy base and reinforced rim prevent breakage during washing and transportation.
- Suitable to be used with 47/50 mm diameter membrane filters.
- Supplied complete with filter funnel of 300 ml volume capacity, support base with sintered disc, vacuum connection side arm, connecting clamp and vacuum flask of 1000 ml volume capacity.

filtration unit	vacuum flask	support material	pack quantity
043.03.001	1000 ml	sintered	1 piece



MEMBRANE FILTERS

- Membrane filtration offer a very convenient, fast and economical separation method.

They offer below mentioned advantages;

- ✓ Excellent level of particle retention
- ✓ Large load carry capacity
- ✓ High permeability to air
- ✓ Non-hygroscopic and biologically inert
- ✓ Chemical resistance to most solvents and reagents.
- ✓ Very high temperature resistance
- Available 2 products:
 - filters with 0,45 µm pore size
 - filters with 0,20 µm pore size

Other technical specifications can be selected from catalogue page no 253.

distillation & filtration & separation & sample preparation

SPARE PARTS - "for vacuum filter set"



VACUUM FLASKS

➤ Manufactured from borosilicate glass with thick walls resistant to vacuum applications.

➤ Featured with 1000 ml capacity and NS 29/32 reverse joint. **Cat. No: 043.03.005**



CLAMP

➤ Manufactured from aluminium for tight closure of the support base with sinter plate to the filter funnel.

➤ Offers easy and practical opening and closing during clamping. **Cat. No: 043.03.002**



FILTER FUNNEL

➤ Manufactured from borosilicate glass with perfect design for excellent fit to the top of the support part.

➤ Featured with 300 ml capacity and volume graduations at wall side. **Cat. No: 043.03.003**



SUPPORT BASE

➤ Manufactured from borosilicate glass with perfect design for excellent fit to the bottom of the filter funnel.

➤ Featured with a sintered glass filter disc plate for excellent performance. **Cat. No: 043.03.004**

VACUUM MANIFOLDS

➤ Manufactures from AISI 304 quality stainless steel.

➤ Robust seamless construction guarantees long life cycle and smooth finishes offers easy cleaning.

➤ Suitable to be used with 47/50 mm diameter membrane filters.

➤ Can operate with a single vacuum pump and depending the chosen model they offer a filtration capacity up to 6 samples at the same time.

➤ Supplied complete with filter funnels, stoppers and clamps.

catalogue number	manifold model	pack quantity
043.05.001	with 1 funnel	1 piece
043.05.003	with 3 funnel	1 piece
043.05.006	with 6 funnel	1 piece



SPARE PARTS "for vacuum manifolds"



CLAMP

➤ Manufactured from aluminium for closure of funnel.

catalogue number	pack quantity
043.06.004	1 piece

FILTER FUNNEL

➤ Manufactured from stainless steel.

catalogue number	pack quantity
043.06.002	1 piece



distillation & filtration & separation & sample preparation

FUNNELS - "gooch" - "glass" "with sintered glass disc"



➤ Manufactured from borosilicate 3.3 glass with an acid resistant sintered glass disc for filtration.

➤ Guarantees an easy and fast filtering without the need of any kind of filter paper.

➤ Heavy and thick body construction and reinforced rim prevent breakage during washing and transportation.

funnel sintered glass	nominal volume	porosity grade	type	disc diameter	pack quantity
043.01.051	50 ml	1	3 D	35 mm	1 piece
043.01.052	50 ml	2	3 D	35 mm	1 piece
043.01.053	50 ml	3	3 D	35 mm	1 piece
043.01.054	50 ml	4	3 D	35 mm	1 piece
043.01.071	75 ml	1	11 D	45 mm	1 piece
043.01.072	75 ml	2	11 D	45 mm	1 piece
043.01.073	75 ml	3	11 D	45 mm	1 piece
043.01.074	75 ml	4	11 D	45 mm	1 piece
043.01.121	125 ml	1	17 D	60 mm	1 piece
043.01.122	125 ml	2	17 D	60 mm	1 piece
043.01.123	125 ml	3	17 D	60 mm	1 piece
043.01.124	125 ml	4	17 D	60 mm	1 piece
043.01.501	500 ml	1	25 D	95 mm	1 piece
043.01.502	500 ml	2	25 D	95 mm	1 piece
043.01.503	500 ml	3	25 D	95 mm	1 piece
043.01.504	500 ml	4	25 D	95 mm	1 piece

CRUCIBLES - "gooch" - "glass" "with sintered glass disc"



➤ Manufactured from borosilicate 3.3 glass with an acid resistant sintered glass disc for filtration.

➤ Guarantees an easy and fast filtering without the need of any kind of filter paper.

➤ Heavy and thick body construction and reinforced rim prevent breakage during washing and transportation.

crucibles sint. glass	porosity grade	type	nominal volume	diameter	pack quantity
043.02.031	1	1 D	30 ml	30 mm	1 piece
043.02.032	2	1 D	30 ml	30 mm	1 piece
043.02.033	3	1 D	30 ml	30 mm	1 piece
043.02.034	4	1 D	30 ml	30 mm	1 piece
043.02.051	1	2 D	50 ml	40 mm	1 piece
043.02.052	2	2 D	50 ml	40 mm	1 piece
043.02.053	3	2 D	50 ml	40 mm	1 piece
043.02.054	4	2 D	50 ml	40 mm	1 piece



CRUCIBLES - "gooch" - "porcelain" "with perforated base"

➤ Manufactured from glazed porcelain with perforated bottom layer.

➤ The crucible body form guarantees perfect fit to "GUKO" adapters.

crucibles sint. glass	nominal volume	diameter	height	pack quantity
043.08.015	15 ml	29 mm	33 mm	6 pieces
043.08.030	25 ml	36 mm	45 mm	6 pieces
043.08.050	40 ml	40 mm	50 mm	6 pieces

distillation & filtration & separation & sample preparation

SYRINGE FILTERS - "non-sterile"

- Specially designed for HPLC sample preparations with the best quality tear proven membranes. Fully autoclavable.
- Since the housing is ultrasonically sealed they offer excellent pressure stability.
- Sample distribution rings of the body directs samples for uniform filtration with a guarantee of high flow rate and filtration speed on both directions restricting the liquid overload.
- Unique female luer-lock secures connections with syringes. Body design enables to be used with all robotic machines.
- Membrane type and porosity printed on each filter. Different colour coded sealing rings enables easy differentiation of the membrane type.
- Available 2 products:
 - Syringe filters with 0,45 μm pore size
 - Syringe filters with 0,22 μm pore size



SYRINGE FILTERS - "sterile"

- Specially designed for HPLC sample preparations with the best quality tear proven membranes. Fully autoclavable.
- Since the housing is ultrasonically sealed they offer excellent pressure stability.
- Sample distribution rings of the body directs samples for uniform filtration with a guarantee of high flow rate and filtration speed on both directions restricting the liquid overload.
- Unique female luer-lock secures connections with syringes. Body design enables to be used with all robotic machines.
- Membrane type and porosity printed on each filter. Different colour coded sealing rings enables easy differentiation of the membrane type.
- Available 2 products:
 - Syringe filters with 0,45 μm pore size
 - Syringe filters with 0,22 μm pore size



Other technical specifications can be seen at catalogue page no 250 and 251.

MV = cellulose mixed esters, **CA** = cellulose acetate, **RC** = regenerated cellulose, **PA** = polyamide, **PTFE** = polytetrafluoroethylene, **PVDF** = polyvinylidene difluoride, **PES** = polyethersulfone, **PET** = polyester

PVDF: Hydrophilic membrane
For polar solutions, water-soluble oligomers and polymers like proteins, binding capacity for proteins 20 μg per 25 mm filter.

PES: Hydrophilic membrane
For aqueous and slightly organic liquids with higher flow rates, very low adsorption for pharmaceuticals and proteins, good stability against acids and bases.

PA: Rather hydrophilic membrane
For aqueous and organic / aqueous medium polar liquids.

PTFE: hydrophobic membrane
For nonpolar liquids and gases which are resistant to all kinds of solvents flushing with alcohol, followed by water, makes the membrane more hydrophilic.

CA: Hydrophilic membrane
For filtration of water-soluble oligomers and polymers, especially suited for biological macromolecules, extremely low binding capacity for proteins 21 μg per 25 mm filter.

MV: Hydrophilic membrane with very low adsorption
For aqueous or polar solutions

RC: Hydrophilic membrane with very low adsorption
For aqueous and organic / aqueous liquids i.e. polar and medium polar sample solutions
Binding capacity for proteins 84 μg per 25 mm filter.

PET: Hydrophilic multipurpose membrane
For polar as well as nonpolar solvents, not cytotoxic, does not block the growth of microorganisms and higher cells.



FUNNELS - "separating" "squib" - "graduated"

- Manufactured from borosilicate glass 3.3 with graduation marks printed on the body according to ISO 4800.
- Thick wall, and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior are manufactured according to DIN 12242 standard.
- Volume graduations and inscriptions are printed with white enamel.
- Supplied with P.P stopper and an interchangeable PTFE stopcock which does not require greasing.

catalogue number	volume	neck NS size	pack quantity
031.02.050	50 ml	NS 19/26	1 piece
031.02.100	100 ml	NS 19/26	1 piece
031.02.250	250 ml	NS 29/32	1 piece
031.02.500	500 ml	NS 29/32	1 piece
031.02.901	1000 ml	NS 29/32	1 piece
031.02.902	2000 ml	NS 29/32	1 piece



FUNNELS - "separating" "conical" - "graduated"

- Manufactured from borosilicate glass 3.3 with graduation marks printed on the body according to ISO 4800.
- Thick wall, and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior are manufactured according to DIN 12242 standard.
- Volume graduations and inscriptions are printed with white enamel.
- Supplied with P.P stopper and an interchangeable PTFE stopcock which does not require greasing.

catalogue number	volume	neck NS size	pack quantity
031.04.050	50 ml	NS 19/26	1 piece
031.04.100	100 ml	NS 19/26	1 piece
031.04.250	250 ml	NS 29/32	1 piece
031.04.500	500 ml	NS 29/32	1 piece
031.04.901	1000 ml	NS 29/32	1 piece
031.04.902	2000 ml	NS 29/32	1 piece



FUNNELS - "separating" "cylindrical" - "graduated"

- Manufactured from borosilicate glass 3.3 with graduation marks printed on the body according to ISO 4800.
- Thick wall, and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior are manufactured according to DIN 12242 standard.
- Volume graduations and inscriptions are printed with white enamel.
- Supplied with P.P stopper and an interchangeable PTFE stopcock which does not require greasing.

catalogue number	volume	neck NS size	pack quantity
031.06.050	50 ml	NS 19/26	1 piece
031.06.100	100 ml	NS 19/26	1 piece
031.06.250	250 ml	NS 29/32	1 piece
031.06.500	500 ml	NS 29/32	1 piece
031.06.901	1000 ml	NS 29/32	1 piece



FUNNELS - "dropping"
"conical" - "graduated"

- Manufactured from borosilicate glass 3.3 with graduation marks printed on the body according to ISO 4800.
- Thick wall, and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior are manufactured according to DIN 12242 standard.
- Volume graduations and inscriptions are printed with white enamel.
- Supplied with P.P stopper and an interchangeable PTFE stopcock which does not require greasing.

conical graduated	volume	neck NS	cone NS	pack quantity
032.01.050	50 ml	19/26	29/32	1 piece
032.01.100	100 ml	19/26	29/32	1 piece
032.01.250	250 ml	29/32	29/32	1 piece
032.01.500	500 ml	29/32	29/32	1 piece
032.01.901	1000 ml	29/32	29/32	1 piece



FUNNELS - "dropping"
"cylindrical" - "graduated"

- Manufactured from borosilicate glass 3.3 with graduation marks printed on the body according to ISO 4800.
- Thick wall, and reinforced rim prevent breakage during washing and transportation.
- Perfectly grinded NS necks with smooth interior are manufactured according to DIN 12242 standard.
- Volume graduations and inscriptions are printed with white enamel.
- Supplied with P.P stopper and an interchangeable PTFE stopcock which does not require greasing.

conical graduated	volume	neck NS	cone NS	pack quantity
032.02.050	50 ml	19/26	29/32	1 piece
032.02.100	100 ml	19/26	29/32	1 piece
032.02.250	250 ml	29/32	29/32	1 piece
032.02.500	500 ml	29/32	29/32	1 piece
032.02.901	1000 ml	29/32	29/32	1 piece



FUNNELS - "dropping"
"cylindrical" - "graduated"
"with relief tube"

- Manufactured from borosilicate glass 3.3 with graduation marks printed on the body according to ISO 4800.
- Thick wall, and reinforced rim prevent breakage.
- Perfectly grinded NS necks with smooth interior are manufactured according to DIN 12242 standard.
- Volume graduations and inscriptions are printed with white enamel.
- Supplied with P.P stopper and an interchangeable PTFE stopcock which does not require greasing.

conical graduated	volume	neck NS	cone NS	pack quantity
032.03.050	50 ml	19/26	29/32	1 piece
032.03.100	100 ml	19/26	29/32	1 piece
032.03.250	250 ml	29/32	29/32	1 piece
032.03.500	500 ml	29/32	29/32	1 piece
032.03.901	1000 ml	29/32	29/32	1 piece



CENTRIFUGE - "mini"

- Compact and easy to use personal centrifuge for quick spin downs, micro-filter cell separations, and HPLC samples.
- Durable transparent and UV resistant polycarbonate lid and ABS resin body.
- DC motor accelerates the rotor to the set speed with low vibration and also with a quiet operation less than 50 dB noise level.
- Starts and reaches a maximum speed of 7.000 rpm in seconds.
- Multi voltage design guarantees stable running and high accuracy of speed.
- Featured with a door interlock system for extra safety.
- For user safety electronic brake immediately stops when lid opens.
- Rotor is seated on a tapered shaft which enables tool-free, fast and easy exchange.
- Supplied with two rotors and adapters to accommodate 0,5 ml and 1,5 ml and 2 ml tubes and also PCR tubes.



8 cavity rotor designed for 1,5 & 2,0 ml tubes directly.



16 cavity rotor designed for 0,2 ml PCR tubes which can also hold 2 x 8 PCR strips.



tube adapters of 0,2 ml & 0,5 ml tubes to be used with 8 cavity rotor.



Easy to start: Close the lid, the rotor starts and instantly reaches 7.000 rpm.



Easy to stop: Open the lid, the electrical brake immediately stops the rotor.

catalogue no	603.01.001
dimensions / weight (mm / kg)	180 x 140 x 117 / 0,5
voltage (V)	100 - 240
frequency (Hz)	50 / 60
maximum speed (rpm)	7000
maximum RCF (xg)	2680
noise level (dB)	< 50
run time	continuous operation
rotor capacity	0,2 / 0,5 / 1,5 / 2,0 ml x 8 0,2 ml x 16 PCR strips 0,2 ml x 2 PCR 8 strips
standard accessories	16 cavity & 8 cavity rotors & adapters

CENTRIFUGE - "mini" - "high speed"

- Ideal centrifuge for fast spins for higher RCF requirement, for PCR protocols, for microfilter cell separations, clinical applications and HPLC protocols.
- Offers memory function up to 10 different programs.
- Featured with an explosion proof and fully enclosed strong inner structure for full safety.
- Brushless DC motor accelerates the rotor to the set speed with low vibration and also with a quiet operation less than 56 dB noise level.
- Air evacuation system ensures free air flow during high speed to prevent samples being over heated.
- User friendly large LCD display enables easy setting and reading of the functional parameters.
- Both RPM and RCF can be set and displayed. The parameters can be modified after the set speed is reached.
- Starts and reaches the maximum speed of 15.000 rpm with max 15.100 RCF in seconds. Speed can be set with an accuracy of +/- 20 rpm.
- Metal casing with low gravity, provides stable and reliable running at maximum speed.
- Timer can be set from 30 seconds to 99 minutes or continuous running. Timer starts once the target speed is reached for more accurate operation time.
- Offers quick spins by pressing and holding the "pulse" key.
- Multi voltage design guarantees stable running and high accuracy of speed.
- Featured with a dual door interlock system for twice safety. Electronic brake immediately stops when lid opens for user safety. Lid is released automatically when the rotor stops.
- Rotor is sealed on a tapered shaft which enables tool-free, fast and easy exchange.
- Supplied with a 12 cavity rotor designed for 1,5&2.0 ml tubes directly and 12 pieces tube adapters of 0,5 ml tube volume.



User friendly large LCD display enables easy setting and reading of the functional parameters. Both RPM and RCF can be set and displayed.



High strength plastic rotor with excellent balance offers a stable operation. 12 cavity rotor designed for 0,5 & 1,5 & 2.0 ml tubes directly.

catalogue no	603.02.001
<i>dimensions / weight (mm / kg)</i>	256 x 225 x 155 / 6,0
<i>voltage (V)</i>	100 - 240
<i>frequency (Hz)</i>	50 / 60
<i>maximum speed (rpm)</i>	15000
<i>maximum RCF (xg)</i>	15100
<i>speed accuracy (rpm)</i>	± 20
<i>noise level (dB)</i>	< 56
<i>run time</i>	timer & continuous operation
<i>rotor capacity</i>	0,5 / 1,5 / 2,0 ml x 12
<i>standard accessories</i>	12 cavity rotors
<i>safety devices</i>	door interlock over speed detection over temperature detection automatic internal diagnosis

CENTRIFUGE - "micro" - "high speed" - "with & without refrigeration"



➤ Ideal centrifuge for fast spins for higher RCF requirement, for PCR protocols, for microfilter cell separations, clinical applications and HPLC protocols.

➤ Brushless DC motor accelerates the rotor to the set speed with low vibration and also with a quiet operation less than 58 dB noise level.

➤ User friendly large LCD display enables easy setting and reading of the functional parameters.

➤ Both RPM and RCF can be set and displayed. The parameters can be modified after the set speed is reached.

➤ Starts and reaches a maximum speed of 15.000 rpm with max 21.380 x g RCF in seconds. Speed can be set with an accuracy of +/- 20 rpm.

➤ Metal casing with low gravity, provides stable running at maximum speed. A powerful and efficient cooling system based on multi-flow air cooling principle minimizes rotor heating with a ratio of 10°C per one hour working period.

➤ Timer can be set from 30 seconds to 99 minutes or continuous running. Timer starts once the target speed is reached for more accurate operation time.

➤ Short spin function is used for quick spins by pressing and holding the "pulse" key.

➤ Featured with a dual door interlock system for twice safety. Electronic brake immediately stops when lid opens for user safety. Lid is released automatically when the rotor stops (excluding refrigerated model).

➤ The unique design guarantees stable running and high accuracy of speed.

**Centrifuges are supplied without rotors.
Rotors should be ordered separately.**

Rotors are manufactured from military grade aluminum alloy with high mechanical strength for precise running and highest level of safety.

Rotors can be fully autoclaved with unlimited service time

Unique biosafe rotor/anti-sample overflow system stops sample leakage during centrifugation and prevents microbial contamination.

Rubber seals fitted to the rotor guarantees bio-seal condition. The rotor is bio-safe once the tubes are inserted and the lid is closed.



24 cavity rotor for 1,5 / 2,0 ml
for 0,2 ml for 0,5 ml
catalogue no: 603.03.101



4 cavity rotor for 0,2 ml / PCR 8
catalogue no: 603.03.102

CENTRIFUGE - "micro" - "high speed" - "with & without refrigeration"



Dual door interlock system for twice safety. Electronic brake for immediate stops when lid opens for user safety.

The lid remains closed after run time in order to keep the chamber temperature stable (refrigerated model).

Automatic release of the lid when the rotor stops to save processing time.

Unique pre-cooling system provides cool-down prior to operation and keeps the chamber at the pre-set temperature.

Just after 7 minutes the powerfull cooling system quickly cools down chamber to 2°C and keeps the samples temperature under 2°C even at maximum speed. Sound alert adds additional safety factor to the precise temperature stability in the chamber.

User friendly large LCD display shows all informations including accumulated running time and last running parameters. Offers full-digit display and easy identification of parameters.

Unique temperature display protects sensitive samples. RPM or G-force can be set and displayed. Parameters can be modified after the set speed is achieved.

catalogue no	603.04.001 (with refrigeration)	603.03.001 (W/O refrigeration)
dimensions / weight (mm / kg)	338x580x324 / 30	280x364x266 / 12
voltage (V)	220	220
frequency (Hz)	50	50
maximum speed (rpm)	15000	15000
maximum RCF (xg)	21380	21380
speed accuracy (rpm)	± 20	± 20
noise level (dB)	< 56	< 58
run time	30 sec. - 99 min. or continuous	30 sec. - 99 min. or continuous
acceleration / braking time (sec)	25 s ↑ 25 s ↓	25 s ↑ 25 s ↓
temperature range	(-20°C) to (+40°C)	N / A
safety devices	dual door interlock over - speed detection over temperature detection automatic internal diagnostic	dual door interlock over - speed detection over temperature detection automatic internal diagnostic
additional features	speed / RCF switch short time run function sound alert function	speed / RCF switch short time run function sound alert function

CENTRIFUGE - "clinical"



► Ideal centrifuge for fast separation of serum, plasma, urea, blood samples and other routine applications in medical, research and chemical laboratories.

► Explosion proof and marked as CE, cTUVus, and FCC. MCA test according to IEC/EN61010-2-20.

► Brushless DC motor accelerates the rotor to the set speed with low vibration and also with a quiet operation less than 56 dB noise level.

► User friendly large LCD display enables easy setting and reading of the functional parameters.

► Both RPM and RCF can be set and displayed. The parameters can be modified after the set speed is reached.

► Starts and reaches a maximum speed of 4.500 rpm with max 2.490 x g RCF in seconds. Speed can be set with an accuracy of +/- 20 rpm.

► Metal casing with low gravity, provides stable and reliable running at maximum speed.

► Timer can be set from 30 seconds to 99 minutes or continuous running. Timer starts once the target speed is reached for more accurate operation time.

► Short spin function is used for quick spins by pressing and holding the "pulse" key.

► Featured with a door interlock system for safety. Electronic brake immediately stops when lid opens for user safety. Lid is released automatically when the rotor stops.

► The unique design guarantees stable running and high accuracy of speed. High strength plastic rotor and excellent balance technology to guarantee a quiet and stable operation.

► Delivered complete with a 12 cavity angled rotor and suitable adaptors to be used with 15 ml conical tubes and all kinds of blood collection tubes.

catalogue no	603.05.001
dimensions / weight (mm / kg)	255 x 245 x 140 / 6,0
voltage (V)	220
frequency (Hz)	50
maximum speed (rpm)	4500
speed control (rpm)	increment of 100
maximum RCF (xg)	2490
RCF control (xg)	increment of 100
speed accuracy (rpm)	± 20
noise level (dB)	< 56
run time	30 sec. - 99 min. or continuous
acceleration / braking time (sec)	20 s ↑ 20 s ↓
safety devices	door interlock over - speed detection automatic internal diagnosis
additional features	sound alert function speed / RCF switch short time run function



Door interlock system for extra safety. Electronic brake for immediate stops when lid opens for user safety. Automatic release of the lid when the rotor stops to save processing time.



High strength plastic rotor and excellent balance technology to guarantee a quiet and stable operation.

Delivered complete with a 12 cavity angled rotor and suitable adaptors to be used with 15 ml conical tubes and all kinds of blood collection tubes.



User friendly large LCD display shows all informations including accumulated running time and last running parameters.

Both RPM and RCF can be set and displayed. The parameters can be modified after the set speed is reached.

CENTRIFUGE - "hematocrit"

- Offers ideal solutions for determination of erythrocytes, determination of the bilirubin content and extraction of DNA and RNA.
- Explosion proof and marked as CE, cTUVus, and FCC. MCA test according to IEC/EN61010-2-20.
- Passed EN61010-2-101:2002 particular requirements for in vitro diagnostic (IVD) medical equipment.
- Brushless DC motor accelerates the rotor to the set speed with low vibration and with a quiet operation less than 60 dB noise level.
- User friendly large LCD display shows all informations including accumulated running time and last running parameters.
- Also offers full-digit display and easy identification of parameters RPM or G-force can be set and displayed.
- Starts and reaches a max speed of 14.000 rpm with max 18.620 x g RCF in seconds. Speed can be set with an accuracy of +/- 30 rpm.
- Metal casing with low gravity, provides stable and reliable running at maximum speed.
- Timer can be set from 30 seconds to 99 minutes or continuous running. Timer starts once the target speed is reached for more accurate operation time.
- Short spin function is used for quick spins by pressing and holding the "pulse" key.
- The unique design with stable running and high accuracy of speed.
- Door interlock system for extra safety. Electronic brake for immediate stops when lid opens for user safety.
- Automatic release of the lid when the rotor stops. Supplied without rotors. Rotors should be ordered separately.

High strength plastic rotor and excellent balance technology to guarantee a quiet and stable operation.

24 cavity rotor for capillary tubes.
catalogue no: 603.06.101

24 cavity rotor for 2 ml/ 1,5 ml, 0,2 ml and 0,5 ml tubes and related tube inserts.
catalogue no: 603.06.102



catalogue no	603.06.001
dimensions / weight (mm / kg)	280x364x266 / 12
voltage (V)	220
frequency (Hz)	50
maximum speed (rpm)	14000
maximum RCF (xg)	18620
speed accuracy (rpm)	± 30
noise level (dB)	< 60
run time	30 sec. - 99 min. or continuous
acceleration / braking time (sec)	20 s ↑ 20 s ↓
safety devices	door interlock over - speed detection over - temperature detection automatic internal diagnosis automatic rotor identification
additional features	sound alert function speed / RCF swich short time run function



User friendly large LCD display shows all informations including accumulated running time and last running parameters.

Offers full-digit display and easy identification of parameters RPM or G-force can be set and displayed.

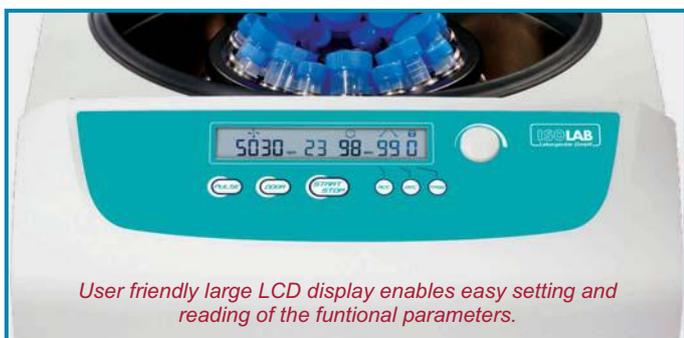
Parameters can be modified after the set speed is achieved. Quick spins are possible by pressing and holding PULSE key.

CENTRIFUGE - "multipurpose"

- High capacity universal centrifuge for multipurpose applications. Offers centrifuge up to 4 x 100 ml tubes.
- Brushless DC motor accelerates the rotor to the set speed with low vibration and also with a quiet operation less than 58 dB noise level.
- User friendly large LCD display enables easy setting and reading of the functional parameters.
- Both RPM and RCF can be set and displayed. The parameters can be modified after the set speed is reached.
- Features such as multiple acceleration and brake setting option, automatic rotor identification feature and memory capacity up to 10 different application guarantees reliable and fast centrifugation.
- Starts and reaches a maximum speed of 6000 rpm with max 4170 RCF in seconds. Speed can be set with an accuracy of +/- 20 rpm.
- Timer can be set from 30 seconds to 99 minutes or continuous running. Timer starts once the target speed is reached for more accurate operation time.
- Short spin function is used for quick spins by pressing and holding the "pulse" key.
- Multi voltage design guarantees stable running and high accuracy of speed.
- Featured with a dual door interlock system for twice safety. Electronic brake immediately stops when lid opens for user safety. Lid is released automatically when the rotor stops



Supplied without rotors and buckets. Rotors and buckets should be ordered separately



User friendly large LCD display enables easy setting and reading of the functional parameters.



Featured with a dual door interlock system for twice safety. Electronic brake immediately stops when lid opens for user safety. Lid is released automatically when the rotor stops

catalogue no	603.07.001
dimensions / weight (mm / kg)	445 x 579 x 269 / 36
voltage (V)	220
frequency (Hz)	50
maximum speed (rpm)	6000
maximum RCF (xg)	4170
speed accuracy (rpm)	± 20
noise level (dB)	< 56
run time	30 sec. - 99 min. or continuous
acceleration / braking time (sec)	25 s ↑ 25 s ↓
temperature range	(-20°C) to (+40°C)
safety devices	dual door interlock over - speed detection over temperature detection automatic internal diagnostic
additional features	speed / RCF switch short time run function sound alert function

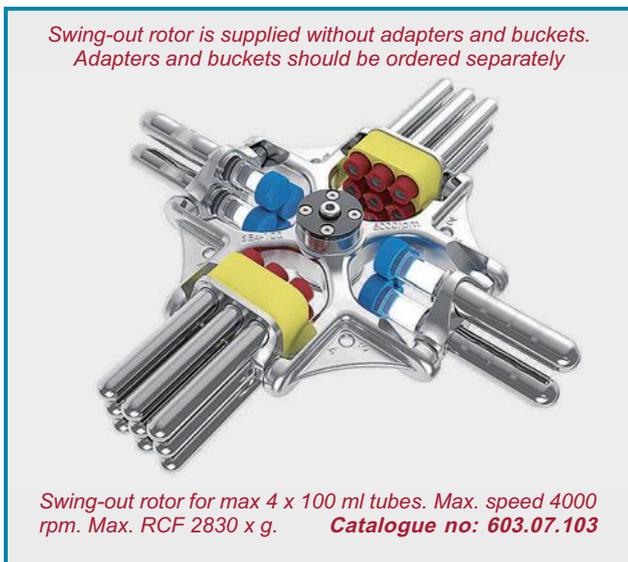
accessories for multipurpose centrifuge



*Fix angle rotor for 30 x 15 ml tubes. Max. speed 5000 rpm. Max. RCF 3300 x g. **Catalogue no: 603.07.101***

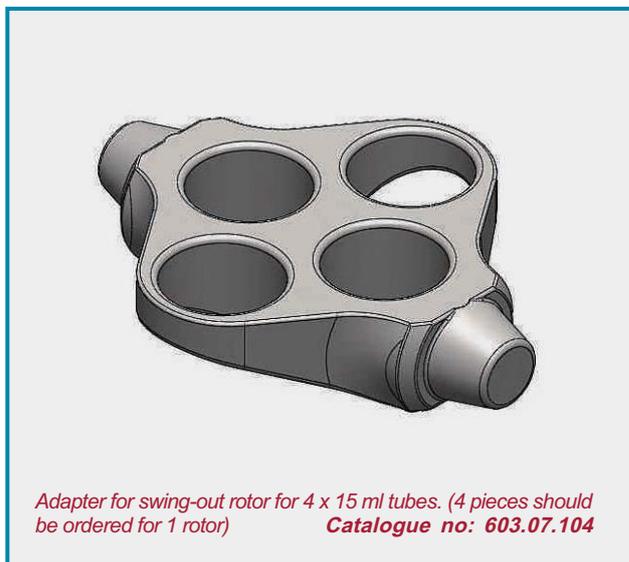


*Fix angle rotor for 6 x 50 ml tubes. Max. speed 6000 rpm. Max. RCF 4610 x g. **Catalogue no: 603.07.102***



Swing-out rotor is supplied without adapters and buckets. Adapters and buckets should be ordered separately

*Swing-out rotor for max 4 x 100 ml tubes. Max. speed 4000 rpm. Max. RCF 2830 x g. **Catalogue no: 603.07.103***



*Adapter for swing-out rotor for 4 x 15 ml tubes. (4 pieces should be ordered for 1 rotor) **Catalogue no: 603.07.104***



*Adapter for swing-out rotor for 2x 50 ml tubes. (4 pieces should be ordered for 1 rotor) **Catalogue no: 603.07.105***



*Adapter for swing-out rotor for 1 x 100 ml tubes. (4 pieces should be ordered for 1 rotor) **Catalogue no: 603.07.106***

distillation & filtration & separation & sample preparation

HOMOGENIZER - "light duty"

- ▶ Practical solution if mixing, emulsification, shredding or chopping is required for small samples.
- ▶ Easy to hold due to the light weight for one hand operation. Can be used both hand-held or post mounted.
- ▶ High torque motor with a variable speed adjustment enables rapid and effective disruption of a wide range of samples.
- ▶ Flexible configuration of different rotors and stators enables the homogenisator adaptive to most applications.
- ▶ Can rapidly homogenize samples in the range 0,1 ml to 50 ml or 1 ml - 250 ml of liquid depending on the rotor/stator type.
- ▶ During operation, the sample is drawn into the core of the homogenizer. The material is repeatedly cycled through narrow slits in the probe where it is rapidly disintegrated by high shear.
- ▶ Maximum speed of 30.000 rpm rate reduces processing time significantly.
- ▶ Complete homogenization of samples is usually achieved in a few seconds. Reliable results are assured with extremely high pression.
- ▶ Smooth motor drive makes working very safe and comfortable. Smooth acceleration also prevents unnecessary spills.
- ▶ Shafts, rotors and stators are constructed of quality AISI 316 stainless steel which is inert to aggressive solutions.
- ▶ Assembly and disassembly of rotors can be done without requirement of special tools.
- ▶ Shafts, rotors, stators are not supplied as a standard accessory. These should be ordered separately.

catalogue no	621.11.001
dimensions / weight (mm / kg)	46 x 55 x 230 / 0,6
motor type	carbon brush motor
power (W)	160
voltage (V)	220
frequency (Hz)	50
working volume (ml)	0,1 - 50 with shaft 621.11.050
working volume (ml)	1 - 250 with shaft 621.11.250
speed range (rpm)	8000 - 30000
speed control	6 stage
max. circum. speed (m/sec)	6,3 - 14
max. viscosity (mPas)	5000
overload protection	no
protection class	IP 20
permissible ambient Temperature (°C)	0 - 40
permissible relative humidity (%)	85
noise level (dB)	< 54
optional accessories	stand & bosshead & various shafts



Light duty homogenizer is supplied without bosshead, clamp, stand and rotor/stator set.

Bosshead manufactured from steel with opening distance of 0 - 20 mm.
cat. no: 615.01.012

Stirrer stand is made from powder coated cast steel.

Unique base design offers very stable holding of the assembled stirrer and also possibility of getting close to the stand rod.

Supplied complete with 12 mm diameter st. steel support rod.
cat. no: 049.09.180

Bosshead clamp is specially suitable to hold light duty homogenizer.
cat. no: 621.11.103

HOMOGENIZER - "heavy duty"

- Offers right solution for dispensing, homogenizing and mixing of samples in larger volumes.
- High torque motor with a variable speed adjustment enables rapid and effective disruption of a wide range of samples.
- Flexible configuration of different rotors and stators enables the homogeniser adaptive to most applications.
- Can rapidly homogenize samples in 10 ml to 8.000 ml of liquid depending on the rotor/stator type.
- During operation, the sample is drawn into the core of the homogenizer. The material is repeatedly cycled through narrow slits in the probe where it is rapidly disintegrated by high shear power.
- Maximum speed of 30.000 rpm rate reduces processing time significantly.
- Complete homogenization of samples is usually achieved in a few seconds. Reliable results are assured with extremely high precision.
- Smooth motor drive makes working very safe and comfortable. Smooth acceleration also prevents unnecessary spills.
- An overload protection feature significantly increases the life span of the motor.
- Shafts, rotors and stators are constructed of quality AISI 316 stainless steel which is inert to aggressive solutions.
- Assembly and disassembly of rotors can be done without requirement of special tools.
- Shafts, rotors, stators are not supplied as a standard accessory. These should be ordered separately.



catalogue no	621.12.001
dimensions / weight (mm / kg)	70 x 70 x 255 / 1,3
motor type	carbon brush motor
power (W)	500
voltage (V)	220
frequency (Hz)	50
working volume (ml)	10 - 5000 with shaft 621.12.905
working volume (ml)	100 - 8000 with shaft 621.12.908
speed range (rpm)	10000 - 30000
speed control	6 stage
max. circum. speed (m/sec)	22,7 - 36
max. viscosity (mPas)	10000
overload protection	yes
protection class	IP 20
permissible ambient Temperature (°C)	0 - 40
permissible relative humidity (%)	85
noise level (dB)	< 72
optional accessories	stand & bosshead & various shafts

HOMOGENIZER - "paddle blender"



- Designed for homogenisation of samples while isolating them from any possible contamination.
- Widely used in food, feed, cosmetics and pharmaceutical laboratories for homogenization processes during microbiological or toxicological testing.
- The two stainless steel paddles gently, but thoroughly homogenize the sample with the diluent and microorganisms are forced to join the liquid phase.
- High quality enduring motors ensure a safe and efficient homogenization with minimum sound level.
- Samples are prepared in disposable sterile bags so that the cross contamination is avoided. The UV light source in the homogenization chamber also reduce the risk of cross contamination.
- Heater control enables a temperature operating range from ambient to 60°C.
- Windowed door ensures permanent control over blending process for perfect results.
- Featured with a LCD control panel with programmable settings of all parameters.
- Supplied with a stainless steel bag stand for 4 bags with color differentiated bag clamps and two paddle protector.



catalogue no	608.01.001
dimensions / weight (mm / kg)	420 x 245 x 340 / 18,5
voltage (V)	220
frequency (Hz)	50
power (W)	500
capacity (ml)	3 - 400
time control (min.)	0,1 - 99
rap speed (times/sec)	3 - 12
UV sterilisation	yes
door with window	yes
permissible ambient temperature (°C)	0 - 60
permissible relative humidity (%)	80



Supplied complete with homogenizer bag holding stand that carries for bags with color differentiated bag clamps. Also two plastic paddle protectors are supplied.

distillation & filtration & separation & sample preparation



BAGS - "homogenization" - "sterile"

- Manufactured from polyethylene, Specially designed for fast and effective crushing of solid samples to the liquid phase.
- Sterilized with gamma irradiation, **free of RNase, DNase, and pyrogene.**
- Even at low temperatures they maintain the stability of the specimen's microbiological status.
- While working with infectious samples, bags can be sealed by any ordinary bag sealer to prevent the escape of aerosols.
- Alternative 3 products
 - Bag without filter
 - Bag with side filter
 - Bag with full filter

ACCESSORIES - "for homogenization bags"

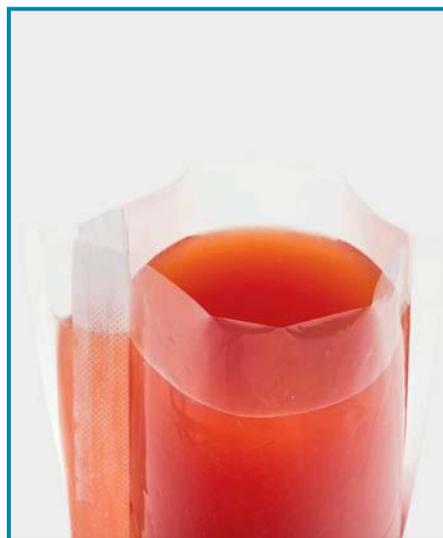
- **Bag stand** is manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel. Can carry 4 homogenisation bags of any type.
- Specially designed for hanging homogenisation bags. Accelerates the homogenisation applications.
- **Bag latches** are manufactured from a special grade of polypropylene for quick closing of the bags. Practical closing system guarantees tight closure. Color coded in 4 different colors for fast and easy identification.

bag stand	pack quantity	bag latches	pack quantity
608.01.101	1 piece	039.35.200	set of 4

bag with no filter



bag with side (lateral) filter



bag with full (page) surface filter



Bags without filter are generally used for standard and common practises.

Bags with side (lateral) filter divides the bag in 2 non-equal compartments. They are suitable for small samples such as PCR applications.

Bags with full (page) filter divides the bag in 2 equal compartments. After homogenisation solid sample remains in it's compartment while the liquid phase moves to the second one.

catalogue number	bag type	volume	width x height	wall thickness	pore size	packing specifications
039.23.003	no filter	400 ml	190 x 300 mm	70 microns	-	50 pcs / pack - 500 pcs / case
039.23.002	side filter	400 ml	190 x 300 mm	70 microns	< 250 microns	50 pcs / pack - 500 pcs / case
039.23.001	full filter	400 ml	190 x 300 mm	70 microns	< 280 microns	50 pcs / pack - 500 pcs / case

LABORATORY BLENDER SET



Easily cleanable stainless steel cutting blade.

blender set parts

- 400 W powerfull motor ensuring perfect blending.
- 1500 ml capacity stainless steel jar with handle and lid.
- 1500 ml capacity heat resistant glass jar with handle and lid.
- 300 ml capacity plastic grinder jar with lid.



catalogue no	602.21.001
voltage (V)	220
frequency (Hz)	50
power (W)	400
glass jar - capacity (ml)	1500
steel jar - capacity (ml)	1500
grinder jar - capacity (ml)	300
volume graduation	at only for glass jar
pulse function	Yes
speed function	2
Permissible Ambient Temperature (°C)	0 - 50
Permissible Relative Humidity (%)	80

- Blender set is ideal for grinding, mixing, and dispersion of large variety of products including ice.
- Powerfull blender motor ensures fast, perfect and homogenous blending.
- Two step speed control and pulse function provides excellent results during blending and mixing.
- Stainless steel unique formed cutting blade guarantees also perfect dry blending and is easy to clean after use.
- Provides highest standing stability due to the stable engine housing.
- Non-slipping rubber feet prevents the blender from "walking" during operation.
- Supplied as a set of housing and 3 blender jars.

LABORATORY KETTLE



Monoblock seamless stainless steel boiling vessel.
Insulated heating elements and perforated pouring filter.

- Kettle with 1500 ml volume and 1500 W heating.
- Featured with automatic stop after heating, on/off switch with indication lamp, fully insulated heating element and cord storage.
- Monoblock seamless stainless steel vessel with insulated heating element and perforated pouring filter.

catalogue no: 611.01.001

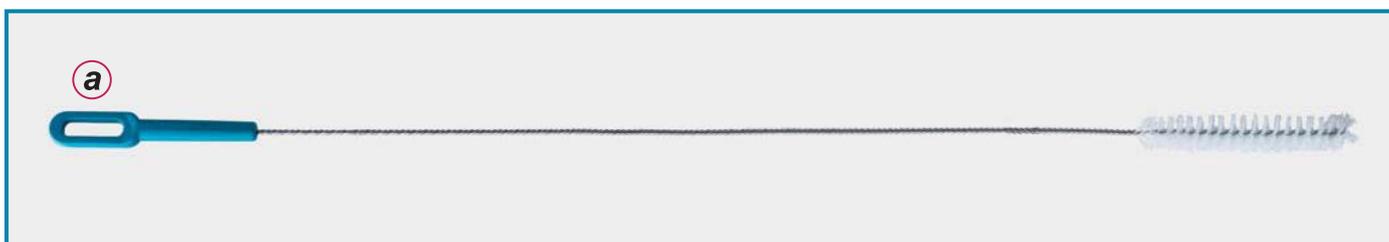
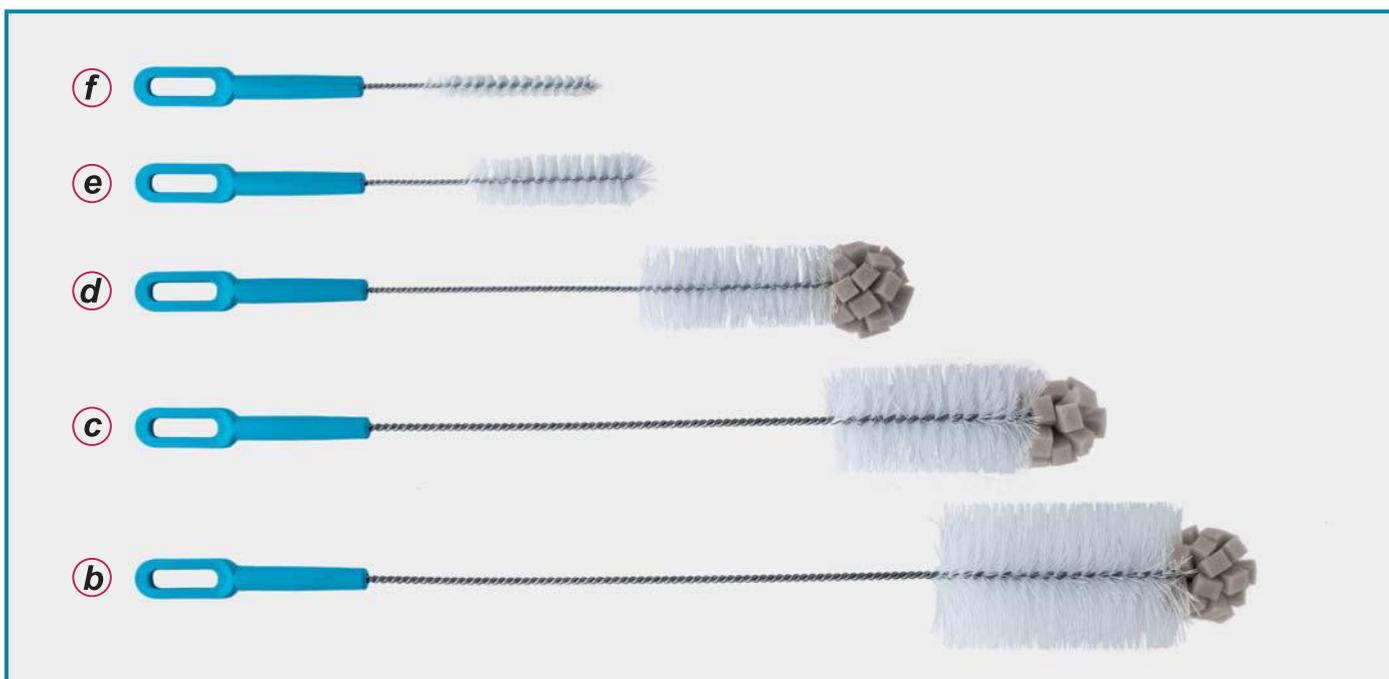




*cleaning & safety
protection & sterilization*



LABORATORY BRUSH - "natural fibre / perlon"



➤ Excellent tools for washing and cleaning of all type of laboratory bottles, flasks, tubes, condensers, burettes etc.

➤ Brush material is manufactured from highest quality of fibre/perlon for long life cycle.

➤ Brush stem is manufactured from corrosion proof twisted steel wire.

➤ Brush handle is manufactured from polypropylene and offers extreme easy handling and use of the brush.

➤ Unique handle design enables hanging of the brush to a convenient place for easy reach.

➤ Spherical sponge top part enables access to every corner of the labware and guarantees perfect cleaning results.



Unique handle design enables hanging of the brush to a convenient place for easy reach.



Spherical sponge top part enables access to every corner of the labware and guarantees perfect cleaning results.



Brush material is manufactured from highest quality of fibre/perlon for long life cycle.

catalogue number	brush code	product descriptions	stem length	brush diameter	brush length	pack quantity
071.02.001	a	Burette and tubings cleaning brush	845 mm	20 mm	125 mm	1 piece
071.02.002	b	Large size bottle cleaning brush	460 mm	70 mm	130 mm	1 piece
071.02.003	c	Medium size bottle cleaning brush	460 mm	50 mm	110 mm	1 piece
071.02.004	d	Small size bottle cleaning brush	380 mm	40 mm	110 mm	1 piece
071.02.005	e	Common test tubes cleaning brush	295 mm	25 mm	100 mm	1 piece
071.02.006	f	Narrow test tubes cleaning brush	235 mm	12 mm	80 mm	1 piece

LABORATORY BRUSHES - "non - absorbant foam"

➤ **Manufactured from non-absorbant reinforced foam which will not absorb water and not become soggy even after multiple use.** ➤ **Essentially much longer lasting than other common brushes.** ➤ **Cleans laboratory glassware with minimum effort and maximum efficiency.** ➤ **Will not chip, break or scratch laboratory glassware, can also be safely used on plastic labware.** ➤ **Ergonomically designed wide handles enables easy rotating of brush.**

LABORATORY BRUSH - "flexible"

➤ Specially recommended for labware with narrow neck and wider base such as flasks erlenmeyers, bottles etc.

➤ Perfectly adapts to the shape of the vessel to be cleaning.

➤ Brush diameter 20 mm total length is 370 mm.



catalogue number	pack quantity
071.05.001	1 piece

LABORATORY BRUSH - "round head"



➤ Specially recommended for all labware with cylindrical form such as cylinders, beakers, vertical tanks and other similar flasks.

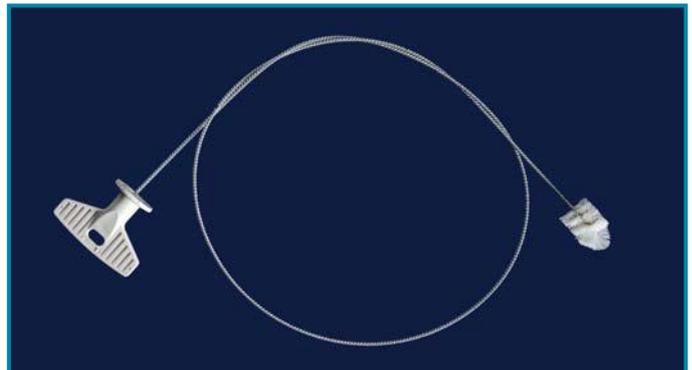
catalogue number	brush size	brush diameter	total length	pack quantity
071.05.002	short	60 mm	350 mm	1 piece
071.05.003	long	70 mm	400 mm	1 piece

LABORATORY BRUSH - "for burettes"

➤ Specially recommended for hoses, tubings and burettes with diameter from 12 mm to 25 mm.

➤ Perfectly adapts to the rounding of the tube and flexible long handle enables even the round labware can be cleaned effectively.

catalogue number	brush diameter	total length	pack quantity
071.05.005	20 mm	1200 mm	1 piece

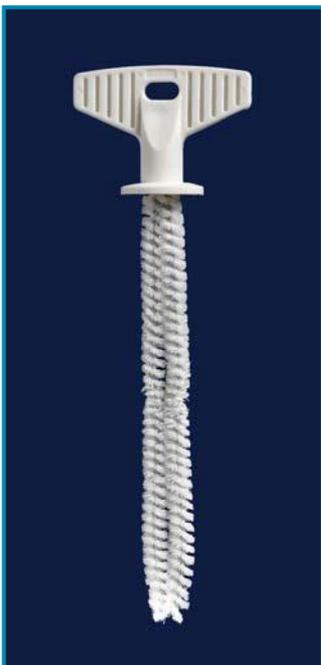


LABORATORY BRUSH - "for tubes"

➤ Specially recommended for tubes due to the unique design which fits to all tube sizes from the smallest to the largest diameter.

➤ Perfectly adapts to the diameter of the tube since brush can spread apart. So every rounding can be cleaned effectively.

catalogue number	brush diameter	total length	pack quantity
071.05.004	25 mm	180 mm	1 piece





LABORATORY BRUSH "hinged & swivel head"

- Specially recommended for curved and cornered shaped labware such as round bottom flasks.
- Uniquely designed convex swiveling brush head gets contact with all surface of the flask including difficult curves and corners and enables through cleaning.
- The brush head has a slightly convex shape for fast and effective cleaning even also at heavy soiled flasks.
- Strong yet flexible bristles provide long lasting trouble free life cycle. Good grip due to the solid and long wooden handle.
- The swivel brush part fits through NS 29/32 or larger or any non tapered neck with a diameter 24 mm or larger.

catalogue number	swivel head size	handle length	pack quantity
071.03.001	21x44x24 mm	360 mm	1 piece



BRUSH "for intensive cleaning"

- Specially recommended for all applications for intensive cleaning and even for dish washing.
- Brush part consists of soft nylon bristles providing long lasting trouble free life cycle.

catalogue number	pack quantity
071.06.001	1 piece



BRUSH "for dish washing"

- Specially recommended for all applications such as dish washing and intensive cleaning of large surfaces.
- Brush part consists several layers of sponges with different density and also a scrubbing layer at the bottom line.
- Handle offers the best grip option.

catalogue number	pack quantity
071.06.002	1 piece



Supplied together with 2 spare sponge.



BRUSH - "hygienical cleaning"

- Specially recommended for all applications where hygienical cleaning is required.
- Brush part consists of soft bristles for long lasting trouble free life cycle.
- Detergent dispenser at the handle of the brush guarantees an undisturbed continuous use of the brush.
- Pressing the brush head opens dispenser and releases detergent into the brush.

catalogue number	pack quantity
071.06.003	1 piece

cleaning & safety & protection & sterilization



CLEANWARE ORGANISER

- Ensures comfort at your lab with its bin at the back which is large enough sponge, wire wool or cleaning wipes.
- Stops the mess at your lab table providing more and convenient space for use.
- The soap dispenser ensures hygienic and practical consumption of liquid detergent.
- Cleanware organizer is supplied without the brushes shown at photo.

catalogue number	pack quantity
071.07.002	1 piece



TISSUES - "cellulose" - "paper"

- Manufactured from non-chlorine bleached cellulose as double ply sheets with 195 x 195 mm dimensions.
- Ultra soft, chemically inert, highly absorbent and low lint cellulose offers the best reliable results.
- Specially recommended for wiping and cleaning of labware and also for other use such as cleaning pipettes and slides, wiping small amounts of liquids etc.
- Supplied in a handy dispenser box for hygienic storage and easy removal.

catalogue number	pack quantity
080.65.002	100 pieces



WIPES - "microfibre"

- Manufactured from microfibre textile with high tensile strength with dimensions 300 x 400 mm.
- Specially recommended for lifting and trapping dirt from surfaces for fast and efficient cleaning. No chemicals are required during cleaning.
- Absorbs and retains up to 8 times its weight. Can be washable hundreds of times without getting tired.
- Supplied as two wipes: one for glass surfaces, the other for general use.

catalogue number	pack quantity
071.07.003	set of 2

CLEANING TOWEL

- Manufactured from pure cellulose with high degree of water absorption.
- Offers cost effective solutions to other alternatives.
- High capacity water absorption level guarantees multi-usage of these towels.
- Cut and packed according to the interior dimensions of the towel dispenser.

catalogue number	towel dimensions	pack quantity
080.65.004	230 x 220 mm	200 pieces



TOWEL DISPENSER

- Designed to be used with paper towel dispensers.
- Paper towels can be pulled from the bottom part for fast and easy dispense.
- Acrylic front panel enables visual control of the towel quantity.
- Can be easily mounted on the wall for practical use.

catalogue number	dimensions	pack quantity
080.67.001	266 x 287 x 107 mm	1 piece

cleaning & safety & protection & sterilization



TRAYS - "polypropylene"

- Manufactured from polypropylene for multipurpose use.
- Injection moulded as one piece, durable and featured with a strong rim around the body.
- Usable with food-stuff, hygienic and easy to clean.
- Easily stackable for reducing storage space.

catalogue number	base dimensions	height	pack quantity
062.40.901	183 x 127 mm	50 mm	1 piece
062.40.902	255 x 180 mm	60 mm	1 piece
062.40.905	355 x 245 mm	70 mm	1 piece



TRAYS - "stainless steel"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel for multipurpose use.
- Robust and seamless construction guarantees long life cycle.
- Smooth polished surfaces provides fast and easy cleaning.

catalogue number	base dimensions	height	pack quantity
062.42.910	400 x 500 mm	50 mm	1 piece
062.42.915	450 x 600 mm	50 mm	1 piece
062.42.920	500 x 700 mm	50 mm	1 piece



BUCKET - "with lid"

- Manufactured from HD-PE with a uniform wall thickness.
- Reinforced body prevents distortion when carried and ensures best possible impact strength.

catalogue number	volume	top dia. x height	pack quantity
062.60.901	1 L	120 x 122 mm	10 pieces
062.60.902	2 L	165 x 138 mm	10 pieces
062.60.903	3 L	190 x 132 mm	10 pieces
062.60.905	5 L	210 x 171 mm	10 pieces
062.60.909	9 L	259 x 226 mm	10 pieces
062.60.918	18 L	310 x 275 mm	10 pieces



BUCKET - "with spoud"

- Manufactured from polypropylene which stays hard and solid with the use of boiling water.
- Supplied with a carry handle and embossed volume scale inside the bucket.

catalogue number	volume	top dia. x height	pack quantity
062.61.909	9 L	265 x 250 mm	1 piece
062.61.914	14 L	302 x 295 mm	1 piece



BUCKET - "stainless steel"

- Manufactured from AISI 304 stainless steel with a fine and brilliant finish.
- Perfect choice for applications where durability and long-lasting service are mandatory.
- Provides high tensile strength, as well as easy cleaning, sanitizing and sterilization.

catalogue number	volume	pack quantity
062.62.910	10 L	1 piece
062.62.915	15 L	1 piece



WASTE BINS "steel & press on lid"

- Manufactured from stainless steel. Ideal for safe and easy disposal of wastes at laboratories.
- Featured with press-on-lid. Lid opens when a slight pressure is on the spring loaded pedal.

catalogue number	volume	pack quantity
062.72.908	8 L	1 piece
062.72.912	12 L	1 piece
062.72.916	16 L	1 piece
062.72.930	30 L	1 piece



WASTE BINS "polypropylene & press on lid"

- Manufactured from robust polypropylene. Ideal for safe and easy disposal of wastes at laboratories.
- Featured with press-on-lid. Lid opens when a slight pressure is on the spring loaded pedal.

catalogue number	volume	pack quantity
062.71.907	7 L	1 piece
062.71.911	11 L	1 piece
062.71.918	18 L	1 piece
062.71.930	30 L	1 piece



WASTE BINS "polypropylene & swing lid"

- Manufactured from robust polypropylene. Ideal for safe and easy disposal of wastes at laboratories.
- Featured with a swing lid. Lid opens back/forward with a gentle push.

catalogue number	volume	pack quantity
062.70.905	5 L	1 piece
062.70.918	18 L	1 piece
062.70.935	35 L	1 piece
062.70.950	50 L	1 piece



BAG STAND

- Manufactured from stainless steel for use with **039.30.001** bag.
- Ideal for disposal of small objects during daily use.
- Compact size does not consume space on desks.

catalogue number	stand diameter	pack quantity
062.30.002	125 ± 5 mm	1 piece



cleaning & safety & protection & sterilization



BAGS - "autoclavable" - "plain"

- Manufactured from a special grade of polypropylene with high tear and puncture resistance.
- Commonly used for safe disposal of contaminated laboratory waste such as used petri dishes, test tubes, sample vials, cultureware, and other biohazardous products.
- Also offers an alternative for storing and transportation of various products.
- Can resist pressure differences during autoclaving.
- Bags should be left open during autoclaving.
- Strong side seams stands safe under pressure or weight and guarantees safe holding of bag content.

catalogue number	bag type	width x height	pack quantity
039.30.001	plain	200 x 300 mm	100 pieces / pack
039.30.002	plain	300 x 600 mm	100 pieces / pack
039.30.003	plain	400 x 700 mm	100 pieces / pack
039.30.004	plain	590 x 890 mm	100 pieces / pack
039.30.005	plain	690 x 1100 mm	100 pieces / pack



BAGS - "autoclavable" - "imprinted"

- Manufactured from a special grade of polypropylene with high tear and puncture resistance.
- Commonly used for safe disposal of contaminated laboratory waste such as used petri dishes, test tubes, sample vials, cultureware, and other biohazardous products.
- Also offers an alternative for storing and transportation of various products.
- Can resist pressure differences during autoclaving.
- Bags should be left open during autoclaving.
- Strong side seams stands safe under pressure or weight and guarantees safe holding of bag content.
- On the bag surface a large writing area and necessary warnings are imprinted.

catalogue number	bag type	width x length	pack quantity
039.20.001	imprinted	320 x 640 mm	50 pieces / pack
039.20.002	imprinted	420 x 600 mm	50 pieces / pack
039.20.003	imprinted	555 x 745 mm	50 pieces / pack



BAGS - "with zip-lock" - "with write-on patch"

- Manufactured from clear and robust polyethylene for to be used with chemical, medical, food, biological samples of liquid, powder, solid and paste form.
- Non-sterile, Ideal for dust-free storing, collecting, protecting and shipping of specimens and samples.
- Write - on white patch offers a practical area for writing specific marks and notes.
- Rim channel seal can be opened and closed repeatedly with the guarantee of leak-proof closure.

catalogue number	w x L (mm)	pack quantity
039.08.100	70x100	100 pieces
039.08.150	100x150	100 pieces
039.08.220	150x220	100 pieces
039.08.300	200x300	100 pieces

BAG SEALERS



► Can easily seal both polypropylene and polyethylene bags and sheets and foils.

► Depending on the thickness of the bag material, welding can be done maximum in few seconds.

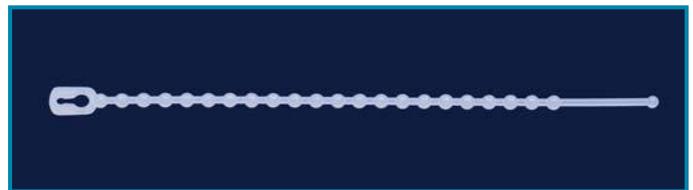
► Featured with a sliding blade which cuts excess material 19 mm from the seal.

► Heat control knob ensures safe and guaranteed sealing.

► Featured with a robust handle for better control of applied pressure.

► Guarantees extra safety since the heating element hot only during sealing.

catalogue number	sealing length	pack quantity
039.32.300	300 mm	1 pc/pack
039.32.500	500 mm	1 pc/pack



Offers very tight sealing of the bags. Cannot be opened again once closed.



Offers very tight sealing of the bags. Can be opened again once closed.

BAG TIES

► Manufactured from a special grade of polyamide with raster strips for single use.

► Offers very tight sealing of the bags. Ties cannot be opened again once closed.

► Guarantees high tensile strength, high chemical resistance also thermic resilient.

catalogue number	L x W (mm)	pack quantity
039.33.098	100x2,5	100 pieces
039.33.160	150x2,5	100 pieces
039.33.140	140x3,6	100 pieces
039.33.290	280x3,6	100 pieces
039.33.250	250x4,6	100 pieces
039.33.300	300x7,6	100 pieces

BAG LOCKS

► Manufactured from a special grade of polypropylene for quick closing of the bags.

► Unique design enables allows multiple use of the same bag lock.

catalogue number	length	width	pack quantity
039.34.105	105 mm	2,5 mm	100 pieces
039.34.150	150 mm	2,5 mm	100 pieces

BAG LATCHES

► Manufactured from a special grade of polypropylene for quick closing of the bags.

► Practical closing system guarantees perfect and tight closure of the bags.

► Color coded in 4 different colors for fast and easy identification.

catalogue number	length	width	pack quantity
039.35.075	75 mm	15 mm	4 pieces
039.35.145	145 mm	15 mm	4 pieces
039.35.200	200 mm	15 mm	4 pieces





DRAINING RACKS

- These professional draining racks covers all the cleaning demands of a modern laboratory.
- Manufactured from water resistant, sturdy polyresin thick plate for life time usage.
 - **Medium size rack** with 72 peg compartments
- Alternative 2 products:
 - **Large size rack** with 122 peg compartments
- The collecting tray at the bottom part collects the drained water and dispense by a hose supplied as a standard to the rack.
- Supplied complete with wall mounting kit, draining hose and fixing template.
- Draining racks are supplied with 16 small and 16 large pegs. Pegs can be ordered separately.



The collecting tray at the bottom part collects the drained water and dispense by a hose supplied as a standard to the rack.

catalogue number	rack width	rack height	peg quantity	pack quantity
071.01.002	500 mm	610 mm	72	1 piece
071.01.003	500 mm	1010 mm	122	1 piece

DRAINING PEGS



- Pegs are manufactured from ABS which is extremely resistant side effects.
 - **Large size pegs** in triangular form for to carry glassware wider than 15 mm neck diameter.
- Alternative 2 products:
 - **Small size pegs** in round form suitable to carry glassware wider than 6 mm neck diameter.
- Pegs are supplied disassembled and can easily be inserted into the related compartments on the draining rack.
- If necessary can be disassembled in few seconds and replaced another suitable hole. This feature enables easy cleaning option of the pegs and also offers flexibility of placing different size glassware on the rack panel.

catalogue number	peg type	peg length	pack quantity
071.01.101	large	120 mm	1 piece
071.01.102	small	120 mm	1 piece

ULTRASONIC CLEANER DETERGENT



- Highly effective special cleaner for cleaning items in ultrasonic baths intensively.
- Removes distillation deposits, tars, grease, resins, adhesives, fats, oils, metal oxides, mineral dirt and similar soiling without leaving traces only with consumption of less than 2 % of the tank volume.
- Supports ultrasonic cleaning process, ideal for washing operations which are normally too difficult for ultrasonics alone.
- Extremely gentle on ware with almost neutral pH value. Fully water soluble, low-foaming, low phosphate content, non-combustible, no gas formation, non-toxic, biodegradable.
- Although can be used cold water, using in hot water intensifies and accelerates the cleaning effect.

➤ It is recommended that new solution is added twice a day for 8 hours working period.

catalogue number	pack specs	pack quantity
621.01.101	P.P bottle	1 L

PIPETTE WASHING SET

- Washing system is ideal for gentle cleaning of pipettes based on pipetting principle. Solves the problem of washing pipettes quickly and safely.
- The polyethylene rinser fills via the spray nozzle situated on the top rim. This eliminates backsiphoning.
- Contaminated waters will syphon out totally, once the syphon point at the top of the rinser has been reached.
- Supplied as a complete system consists of a washing unit and a pipette basket.

catalogue number	pack quantity
071.10.001	1 piece



ULTRASONIC PIPETTE CLEANER

- Consists of a stainless steel pipette basket and a specially designed acrylic bath which provides visual control of the cleaning process.
- Offers a gentle yet effective cleaning option for 0,5 - 20 ml pipettes by ultrasonic waves.
- Guarantees most effective cleaning where the intricate fine parts are stained and can not be easily removed by an ordinary laboratory brush.
- Rapidly cleans and rinses the pipettes free from first, dust and all contaminants. Removes contaminants 10 times more effectively than classical cleaning methods. Definitely prevents glass breakage if used correctly.
- Even very narrow diameter pipettes can be cleaned definitely.
- Guarantees low consumption of water and cleaning detergent with the help of automatic water supply and drain of access water by siphon principle.
- All metal parts that contact to cleaning liquid are manufactured either from acrylic, or from stainless steel as resistant to rusting.
- Featured with a time switch which controls the operation time from 5 minutes to 120 minutes.

catalogue no	621.21.001
external dimensions (mm)	200 x 200 x 950
tank diameter (mm)	155
tank height (mm)	650
tank capacity (lt)	12
voltage / frequency (V / Hz)	220 / 50
ultrasonic power (W)	180
ultrasonic frequency (kHz)	40
time control (min.)	5 - 120



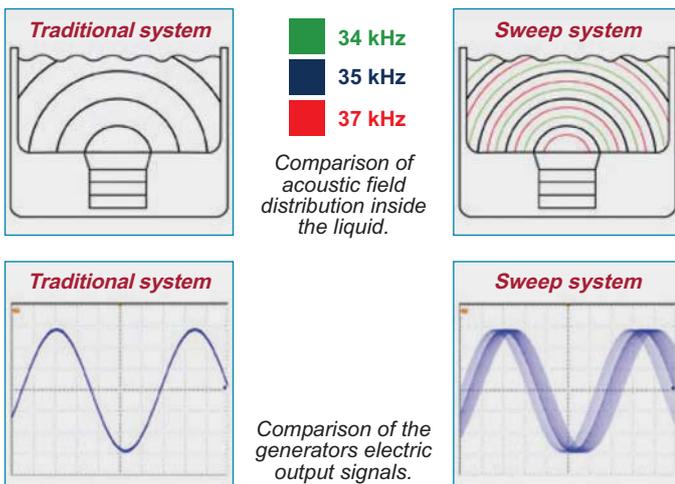
Ultrasonic pipette cleaner is supplied with the basket.

BATHS - "ultrasonic" - "with sweep & degass & pulse functions"

➤ New generation ultrasonic cleaners are features with "sweep", "degass" ve "pulse" functions. Most technical specifications are similar with classical ultrasonic cleaners:

sweep function

- The transducer system provides a sweep cycle from 37 kHz to 34 kHz and back to 37 kHz enabling a homogeneous field distribution.
- Offers faster cleaning with improved cavitation, increased distribution of ultrasonic energy, facilitate the ultrasonic wave crossing through the mesh wire basket for more effective cleaning.



degass function

- Accelerates the removal of gas contained in cleaning solutions by pulsing short breaks in the ultrasonic cycle which allows coalesced gas bubbles to rise to the surface and burst. Guarantees effective cleaning since the ultrasonic waves can pass more freely through liquid.

pulse function

- Activates the power so that power increases by approximately 20 % and guarantees inforcement of the peak performance. Provides faster cleaning with improved cavitation, increased distribution of ultrasonic energy eliminating the standing waves, facilitate the ultrasonic wave crossing through the mesh wire basket.

what does degass means

- Ultrasonic cleaning is accomplished by the energy released from the violent collapse of tiny vacuum-filled bubbles.
- Air bubbles and dissolved air in the freshly filled cleaning liquid absorb ultrasonic energy and significantly reduce the cleaning performance.
- A degas mode accelerates the removal of gas contained in cleaning solutions by pulsing short breaks in the ultrasonic cycle which allows coalesced gas bubbles to rise to the surface and burst.
- Degass function allows the ultrasonic cleaner to work much more effectively, since the ultrasonic waves can pass more freely through liquid.



catalogue no	621.06.003	621.06.006	621.06.010
ext. dimensions (mm)	265x165x225	365x175x285	420x265x285
tank dimensions (mm)	238x138x100	302x152x150	302x239x150
tank volume (L)	3,0	6,0	10,0
ultrasonic power (W)	160	240	320
frequency (kHz)	40	40	40
heating power (W)	180	300	300
max. heating (°C)	80	80	80
heating accuracy (°C)	± 1	± 1	± 1
time control (min)	1 - 60	1 - 60	1 - 60
drainage valve	N/A	N/A	yes
standard accesories	basket & lid	basket & lid	basket & lid

how to degass an ultrasonic bath

- Before the start of each working day it is best to degas the liquid in your ultrasonic cleaner tank.
- Fill the tank to the limit and add a spoon of cleaning detergent which helps to soften the water and assists degass process.
- Set heater thermostat to 60°C. After temperature is achieved run unit on cleaning cycle for about 10 minutes.
- Degassing will expel the air so that the unit operates with optimum performance and effectiveness.
- It is advised to degass your cleaner whenever you fill the tank with fresh water.

AUTOCLAVE - "horizontal"



➤ Offers ideal conditions for sterilization and autoclaving at all laboratories.

➤ Featured with 3 step vacuum technology providing up to -0,9 Bar vacuum which guarantees less than 0,2% residual humidity after run cycle.

➤ Complete and excellent sterilization is guaranteed by fully automatical run.

➤ Unique jet-type steam generator and an independent vacuum generator ensures excellent sterilization.

➤ Featured with advanced auto-test system and steam penetration test system.

➤ Sterilization chamber is manufactured from single piece stainless steel of 2,5 mm thickness.

➤ Sterilization parameters and other functions can be automatically controlled and observed by membrane keypad with digital LCD panel.

➤ Double lock door system ensures highest safety level during operation run cycle.

➤ Alarm function for waste water tank avoiding waste water to enter into the sterilization chamber.

➤ Featured with an integrated mini printer for recording and printing sterilization informations.



Double lock door system ensures highest safety level during operation run cycle.

Sterilization chamber is manufactured from stainless steel of 2,5 mm thickness.

catalogue no	601.01.023
external dimensions (mm)	740 x 550 x 500
chamber dimensions (mm)	245 Ø x 465
chamber volume (L)	23
voltage (V)	220
frequency (Hz)	50
power (kW)	2,0
sterilizing (pressure / temp.)	100 - 120 KPa / 121°C 200 - 220 KPa / 134°C
water tank capacity (lt)	1,5
water consumption / cycle (lt)	0,4
internal material	stainless steel
external material	epoxy powder coated steel
safety devices	over heat protection over pressure protection leakage breaker safety valve double lock door system waste water alarm



Sterilization parameters and all other functions can be automatically controlled and observed by membrane keypad with digital LCD panel.



Featured with an integrated mini printer for recording and printing all sterilization informations.

AUTOCLAVE - "vertical"

- This easy to use, desk top, vertical autoclave offers practical solutions for sterilization.
- Safe, reliable and complete sterilization is guaranteed by immersion type electrical heating elements with high thermal efficiency.
- Sterilization chamber is manufactured from single piece stainless steel of 2,5 mm thickness.
- "Over-temperature" and "over-pressure" systems ensures highest safety level during operation run cycle.
- Silicone sealing ring guarantees excellent and safe closure and prevents steam leakage offering always clean and dry environment.
- Featured with a LED screen electronic timer enabling the time control between 1 - 99 minutes.
- Operative pressure clearly visible and controllable by a pressure gauge. Also featured with buzzer type alarm function for low water level.



"Over-temperature" and "over-pressure" systems ensures highest safety level during operation cycle.

**TEST INDICATOR - "for steam sterilization"**

- Specially designed for steam sterilisation tests. Consist of a rolled paper with temperature sensitive stripes on the surface.
- These stripes changes color once the ambient temperature reaches steam sterilisation temperature level.
- Irreversible color change from pale yellow to dark brown proves that the sterilisation protocols has been successfully covered.
- Adhesive at the back of the rolled paper strongly adheres to paper, plastic and textile surfaces yet easily removable without leaving any trace.
- Slightly crepped paper surface allows easy marking by any kind of pen.



before sterilization



after sterilization



Featured with a LED screen electronic timer enabling the time control between 1 - 99 minutes.

catalogue no	601.02.024
external dimensions (mm)	390 x 400 x 690
chamber dimensions (mm)	280 Ø x 310
chamber volume (L)	24
voltage (V)	220
frequency (Hz)	50
power (kW)	2,0
sterilizing (pressure / temp.)	100 - 120 KPa / 121°C 200 KPa / 127°C
water tank capacity (lt)	1,5
water consumption / cycle (lt)	0,4
internal material	stainless steel
external material	stainless steel
safety devices	over heat protection over pressure protection leakage breaker safety valve door lock system

catalogue number	roll width	roll length	pack quantity
101.03.001	19 mm	50 m	1 piece



SAFETY BOXES

- Manufactured from polypropylene according to UN3291 standard. Labelled according to international standards.
- Resistant to solvents. Thick wall offers puncture resistance to all means.
- Ideal to safe disposal of contaminated products such as needles, syringes, lancets etc.
- For safety reasons the main lid is permanently locked and sealed once pressed on the body.
- Lid provided with a built-in flat opening for waste entry having a temporary and permanent closing system.

catalogue number	volume	dimensions	pack quantity
062.80.901	1.3 L	150 x 100 x 170	1 piece
062.80.903	3.0 L	190 x 110 x 120	1 piece
062.80.905	5.0 L	180 x 190 x 192	1 piece
062.80.912	12.0 L	220 x 260 x 270	1 piece
062.80.925	25.0 L	267 x 332 x 435	1 piece



Lid provided with a built-in flat opening for waste entry having a temporary and permanent closing system.



All safety boxes are labelled according to international standards for safe use.



Safety tray is supplied without the box

SAFETY TRAY

- Tray is manufactured from polypropylene for multi-use with different compartments.
- One of the compartments is specially designed to fit 1,3 Lt needle safety box.
- Box should be ordered separately.

catalogue number	pack quantity
062.80.001	1 piece

By using GHS pictograms you can label all dangerous and hazardous products in your lab and avoid injuries.

“**DANGER**” word indicates a hazardous situation which if, not avoided will result in death or serious injury.

“**WARNING**” word indicates a hazardous situation which if, not avoided will result in serious injury.

safety labels are printed with 4 languages



GHS 01
explosive

warning
danger



GHS 02
flame

warning
danger



GHS 03
oxidizing

warning
danger



GHS 04
gas cylinder

warning



GHS 05
corrosive

warning
danger



GHS 06
toxicity

danger



GHS 07
irritation

warning



GHS 08
health
hazardous

warning
danger



GHS 09
environment
hazardous

warning



SAFETY LABELS - “GHS pictograms”

► Designed for easy identification of materials with the universally applicable hazard symbols of the Globally Harmonised System of classification and labelling of chemicals.

► Manufactured from 150 µm glossy PE film with acrylic resin adhesive back. Surface featured with additional protective lacquer.

► This unique combination expands and retracts together with temperature fluctuations and guarantees always a strong adhesive bond.

► Chemically inert, water proof, moisture and most solvents and caustic agents. Can be used between - 20°C to + 80°C temperature range.

► Adheres to any clean surface including PTFE coated surfaces without cracking, peeling and degrading. Peels off without leaving any sticky residue.

► Alternative 2 label size:
 ► 26 x 37 mm labels
 ► 37 x 52 mm labels

► Supplied as rolls of 250 stickers packed in a dispenser box for practice use.

pictogram description	signal word	label size 26x37 mm	label size 37x52 mm	pack quantity
GHS 1	warning	099.11.001	099.11.003	250 pieces
GHS 1	danger	099.11.002	099.11.004	250 pieces
GHS 2	warning	099.12.001	099.12.003	250 pieces
GHS 2	danger	099.12.002	099.12.004	250 pieces
GHS 3	warning	099.13.001	099.13.003	250 pieces
GHS 3	danger	099.13.002	099.13.004	250 pieces
GHS 4	warning	099.14.001	099.14.003	250 pieces
GHS 5	warning	099.15.001	099.15.003	250 pieces
GHS 5	danger	099.15.002	099.15.004	250 pieces
GHS 6	danger	099.16.002	099.16.004	250 pieces
GHS 7	warning	099.17.001	099.17.003	250 pieces
GHS 8	warning	099.18.001	099.18.003	250 pieces
GHS 8	danger	099.18.002	099.18.004	250 pieces
GHS 9	warning	099.19.001	099.19.003	250 pieces



VISITORS GOWN

- Shirt collar design visitors gown without hood and without pockets.
- Closure is provided with snap fasteners.
- Featured with rubber fasteners at wrist.
- For single use. Manufactured for visitors protection at laboratories.
- Slightly porous texture of the textile guarantees air permeability and prevents sweating during use.
- Light weight. Easy to wear. Soft and flexible texture offers full comfort during use.
- Universal cut for fitting all body sizes.

catalogue number	pack quantity
080.50.001	1 piece



PROTECTOR SUIT

- Overall design protective suit with hood and without pockets.
- Closure is provided by zipper. Featured with rubber fasteners at wrist.
- For single use. Manufactured for employees and visitors protection at laboratories.
- Slightly porous texture of the textile guarantees air permeability and prevents sweating during use.
- Light weight. Easy to wear. Soft and flexible texture offers full comfort during use.

catalogue number	pack quantity
080.50.011	1 piece



PROTECTOR SUITS - 5/6

- Manufactured from spunbond meltblown, meltblown spunbond textile fiber providing an ideal balance of protection, durability and comfort.
- Offers chemical protection according to category III (type 5 & 6). Also offers an excellent barrier against fine particles down to 1 micron size.
- Protective suit with overall design perfectly suitable for clean room areas.
- Also practical use at pharmaceutical handling and many others.
- Guarantees air permeability and prevents sweating during use. Repels water based liquids and aerosols.
- Optimised body fit provides excellent wearer comfort. Featured with hood compatible with filtering face masks.
- Featured with rubber fasteners at wrist and around face.
- Closure is provided by auto-lock zipper with flap for increased protection.
- Light weight. Easy to wear. Flexible texture offers full comfort during use.

catalogue number	size	pack quantity
080.51.003	Medium	1 piece
080.51.004	Large	1 piece
080.51.005	X Large	1 piece
080.51.006	XX Large	1 piece



PROTECTOR SUITS - 4B

- Manufactured from high density antistatic polyethylene, providing an ideal balance of protection and comfort.
- Offers chemical protection according to category III (type 4B & 5 & 6). Also offers an excellent barrier against fine particles down to 1 micron size.
- Protective suit with overall design perfectly suitable for clean room areas.
- Also practical use at pharmaceutical handling, chemical processing, and many others.
- Guarantees air permability and prevents sweating during use. Repels water based liquids and aerosols.
- Optimised body fit provides excellent wearer comfort. Featured with hood compatible with filtering face masks. Featured with rubber fasteners at wrist and around face.
- Closure is provided by auto-lock zipper with flap for increased protection. Taped seams ensure additional protection.
- Light weight. Easy to wear. Flexible texture offers full comfort during use.

catalogue number	size	pack quantity
080.52.003	Medium	1 piece
080.52.004	Large	1 piece
080.52.005	X Large	1 piece
080.52.006	XX Large	1 piece



CAPS

- Manufactured from breathable, antistatic non-woven fabric.
- Fully protects hair from dust and other particles.
- Offers long life cycle due to tear-proof and water repellent characteristics.
- Featured with soft and elastic band for secure grab.

catalogue number	pack quantity
080.53.001	100 pieces



OVER SLEEVES

- Manufactured from breathable, high density antistatic polyethylene.
- Offers full cover over arms. Offers good chemical protection.
- Offers long life cycle due to tear-proof and water repellent characteristics.
- Featured with soft and elastic closures on both ends for safe closure.

catalogue number	pack quantity
080.53.011	200 pieces



OVER SHOES

- Manufactured from polyethylene for disposable use.
- Guarantees clean and sterile environment once worn on the shoes.

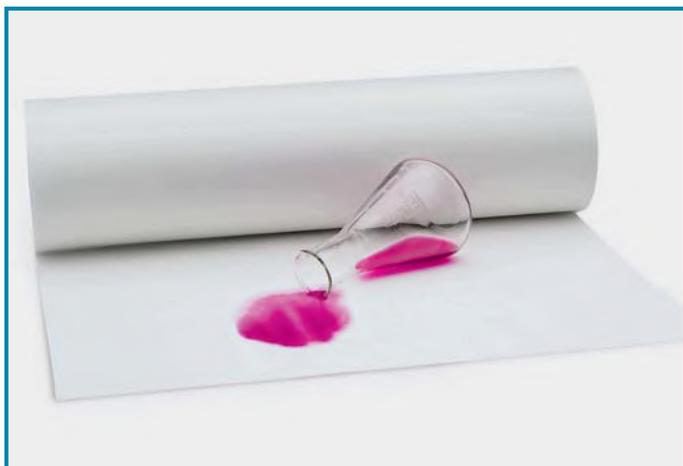
catalogue number	pack quantity
080.53.021	100 pieces



OVER BOATS

- Manufactured from breathable, high density antistatic polyethylene.
- Protect feet from dust and other particles.
- Offers long life cycle due to tear-proof and water repellent characteristics.
- Featured with soft and elastic closures on the end for safe closure.

catalogue number	pack quantity
080.53.031	200 pieces



DESK PROTECTOR - "paper"

➤ A practical desk protector offering full protection of desks against spilled solutions.

➤ Their thick protective layer eliminates the risk of glass breakage in case tilt over.

➤ **Thick and very absorbant paper layer** soaks the spilled liquid and protects the laboratory desk.

➤ Consists of 2 layers:

➤ **Flexible, slip-resistant, water-proof polyethylene layer** for preventing the spilled liquid penetration to the laboratory desk.

➤ Supplied as a roll of 50 meters length with 46 cm width.

catalogue number	pack quantity
080.66.001	1 piece



DESK PROTECTORS - "cork"

➤ Manufactured from non-porous, additive free, best quality natural cork for protection of laboratory desks.

➤ Their thick protective layer eliminates the risk of glass breakage in case tilt over.

➤ Offers full protection against over heated flasks.

➤ Their light yet robust construction enables multi- use options.

➤ Also significantly reduce vibration effects and noise.

catalogue number	dimensions	thickness	pack quantity
080.66.002	200 x 200 mm	10 mm	1 piece
080.66.003	300 x 300 mm	10 mm	1 piece



SURFACE PROTECTOR - "silicone"

➤ Manufactured from best quality natural silicone resistant both to heat and cold.

➤ Guarantees excellent chemical and temperature resistance between -60°C to +170°C.

➤ A practical desk protector offering full protection of desks against spilled solutions and over heated flask.

➤ Their thick protective layer eliminates the risk of glass breakage in case tilt over.

➤ Very flexible and slip-proof characteristics guarantees easy and safe hold of all flasks and also instruments.

➤ Alternative 2 products: ➤ with flat surface
➤ with corrugated surface

catalogue number	dimensions	thickness	pack quantity
080.66.004	290 x 410 mm	2,0 mm	1 piece
080.66.005	250 x 250 mm	3,0 mm	1 piece
080.66.006	350 x 350 mm	3,0 mm	1 piece





DESK CLEANER

- Ready-to-use alcohol based cleaner for dissolving and elimination dirt and other residues.
- Cleans and disinfects laboratory desks, benches, floors, walls and equipments in one operating cycle. Also effective against bacterias, fungi and viruses.
- Chlorine-free, phosphate-free, bio-degradable. Particularly gentle to all surfaces. Does not harm skin. Featured with a pleasant odour.
- Effects in a short time and dries quickly without leaving any residue.
- Supplied in a 500 ml easy to use spray bottle.

catalogue number	pack quantity
080.77.001	500 ml



CHEMICAL PADS

- Due to their microfibre structure they provide excellent absorption capacity. Consists of 8 layer highly absorbant fibers which altogether "imprisons" the liquids and never returns back.
- Quickly absorbs the spills of all kinds of liquids including water based liquids, solvents, alcohols, acids and alkalis and stores them absorbed.
- Featured with cavities on the pad surface for quicker and more effective absorption.
- The absorbed liquid can be extracted to be used again or to be disposed of separately.

catalogue number	pad sheet dimensions	thickness	pack quantity
080.76.001	50 x 40 cm	3,4 mm	10 pieces



CHEMICAL SORBENT GRANULES

- Manufactured from polymer based absorbent granules.
- Provide excellent absorption capacity up to 12 times of their weight.
- Quickly absorbs the spills of all kinds of liquids including water based liquids, solvents, alcohols, acids and alkalis and stores them absorbed.
- Also quickly and effectively neutralise acids and alkalies.
- Do not create dust. Do not trigger hazardous reactions with chemicals.



First, make a ring around the spilled liquid.



Absorbs the spills and stores and absorbed.

catalogue number	pack quantity
080.75.001	1 kg

Quickly absorbs the spills of liquids with absorption capacity up to 12 times of their weight.

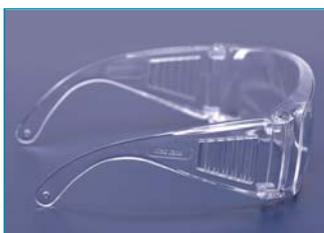
cleaning & safety & protection & sterilization



*Our eyes are the bridge between us and rest of the world.
So, the eyesight is crucial in our life.
And we have only two eyes!*

Unfortunately our eyes are constantly exposed to all manners of environmental effects.

ISOLAB proudly offers you a selection of spectacles, goggles, safety shields and eyewash bottles that covers all requirements of daily laboratory work.



SPECTACLE

- Manufactured from ultra clear, impact resistant, UV protected polycarbonate according to CE EN166 standard.
- Large panorama lens offers extremely wide and broad field of vision. Ultra light weight and silicone nose pad offers supreme wearing comfort.
- Featured with a clear scratch-proof, anti-fog, lens with 100 % UV protection.

SPECTACLE

- Manufactured from ultra clear, impact resistant, UV protected polycarbonate according to CE EN166 standard.
- Large panorama lens offers extremely broad field of vision.
- Recommended for factory visits, assembly lines and laboratory routine work.
- Guarantees full protection of eyes including eyebrow and eye sides.
- Offers supreme wearing comfort with super light weight.
- Ergonomically designed temples guarantees perfect fit.
- Slats in the templates for optimal indirect ventilation. Suitable for wearing over prescription spectacles.

- Side protector provides full protection of eyes including eyebrow and eye sides.
- Featured with side arm length adjustment with integrated stop lock for perfect fit of the spectacle to the face.

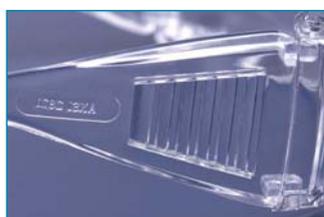
- Lens can be adjusted as inclination in 3 positions for proper and exact fit.

catalogue number	pack quantity
080.40.004	1 piece



Side - arm can be adjusted as length in 3 positions with integrated stop lock. Back and forward adjustment of the length enables a correct fit to any head shape.

Lens can be adjusted as inclination in 3 positions for proper and exact fit. Each user is able to find the perfect configuration with the adjustable lens inclination option.



Slats in the templates enables optimal indirect ventilation.

catalogue number	pack quantity
080.40.003	1 piece



Soft silicone ear pad all over the interior offers full wear comfort.

cleaning & safety & protection & sterilization

GOGGLE



- Comfortable, ergonomically designed goggle offers unrestricted 180° panoramic visibility.
- Also suitable for wearing over prescription spectacles.
- Ultra clear, scratch-proof, anti-fog visor guarantees very high mechanical stability.
- Provides a modern styling in combination with comfort. Offers supreme wearing comfort due to the light body.
- Can be adjusted quickly providing reliable all-round protection. Adapts to individual face curvature providing complete side protection.

catalogue number	pack quantity
080.40.007	1 piece

Additional ventilation via integrated air channels enables optimal indirect ventilation ensuring mist-free usage.



SPECTACLE



- Manufactured from ultra clear, impact resistant, UV protected polycarbonate according to CE EN166 standard.
- Large panorama lens offers extremely wide and broad field of vision. Ultra light weight and silicone nose pad offers supreme wearing comfort.
- Featured with a clear scratch-proof, anti-fog, lens with 100 % UV protection.
- Side protectors provides full protection of eyes including eyebrow and eye sides.
- Featured with a side arm length adjustment with integrated stop lock for perfect fit of the spectacle to the face.
- Lens can be adjusted as inclination in 3 positions for proper and exact fit.

catalogue number	pack quantity
080.40.001	1 piece



Side - arm can be adjusted as length in 3 positions with integrated stop lock. Back and forward adjustment of the length enables a correct fit to any head shape.



Lens can be adjusted as inclination in 3 positions for proper and exact fit. Each user is able to find the perfect configuration with the adjustable lens inclination option.



Soft silicone nose pad all over the nose offers full wear comfort.



Soft silicone ear pad all over the interior offers full wear comfort.



SPECTACLE

- Exactly same technical specifications as clear lens spectacle but with dark lenses for excellent UV 400 protection against direct sun light exposure.

catalogue number	pack quantity
080.40.011	1 piece



SPECTACLE

- Exactly same technical specifications as clear lens spectacle but with yellow lenses for excellent UV 254 protection against laser and UV light.

catalogue number	pack quantity
080.40.021	1 piece



SPECTACLE CABINET

- Manufactured from crystal clear acrylic with excellent field of vision for storing spectacles.
- Guarantees safe storage of spectacles from dust and other environmental effects.
- Also can be used to store similar size of other type objects.
- 4 shelves with generous openings provides easy access to partitions.
- Cover is featured with easy opening hinged lid. Magnetic clasp on the lid guarantees safe closure of the cabinet.
- Once opened, the lid stands open and enables easy filling and dispensing.

catalogue number	dimensions	pack quantity
080.40.101	110 x 260 x 400	1 piece



CLEANING TISSUES

- Manufactured from very thin best quality paper based on 100 % manile fibre. Cut with dimensions 100 x 150 mm.
- Guarantees fast and very effective cleaning of spectacles, goggles, microscope objectives, binoculars and all similar optical lens involved items.
- Never leaves any fibers or dust on the cleaned surface.
- These papers never scratches and damages the surfaces. They guarantee non-abrasive cleaning.
- Supplied in a handy booklet of 100 tissue sheet for hygienic storage and for easy dispensing.

catalogue number	dimensions	pack quantity
080.65.003	100 x 150 mm	1 booklet



ULTRASONIC BATH

- Designed for intensive yet gentle cleaning of small size objects such as spectacles.
- Assures uniform, precision cleaning over the entire surface.
- Featured with a digital LED panel for set & actual time.
- Precise time control is possible between 10 - 300 seconds with 1 second intervals.

catalogue no	621.08.001
ext. dimensions (mm)	205 x 145 x 125
tank dimensions (mm)	168 x 110 x 52
tank volume (L)	0,6
ultrasonic power (W)	35
frequency (kHz)	42
time control (sec)	10 - 300



LED LIGHT SOURCE

- Offers perfect illumination at dark working environments.
- Featured with a side clamp for easy and practical attachment of the light source to spectacles.
- Illumination angle is adjustable in all directions by swivel mechanism.
- Supplied with easily replaceable batteries with long life cycle.

catalogue number	pack quantity
069.03.005	1 piece



SAFETY SHIELD

- Manufactured from polypropylene with integrated forehead safety cover.
- Provides excellent protection of full face against chemical splashes and flying objects.
- 1,5 mm thick fold-up protective visor manufactured from ultra clear acylate with extra clear vision in all angles.
- Can be worn on the masks, goggles and spectacles. Ultra light weight guarantees full comfort.
- Rotating fastener for easy and fast adjustment to individual head shapes and sizes.
- Variable lift-up mechanism with locking option at any desired position and angle offers practical use.
- Soft sweat band eliminates sweat drops and offers comfortable use.

catalogue number	pack quantity
080.40.010	1 piece

Variable lift-up mechanism with locking at any position. Soft vinyl band offers comfortable use.



Rotating fastener for easy and fast adjustment to individual head size



EAR MUFF

- Low weight earmuff consists of two part ear pad with well ventilated and soft cushions.
- Offers perfect noise isolation and protection in extremely noisy environments.
- Steel suspensions headband system resistant to bending and providing comfortable pressure on ears.
- Quick-click adjustment enables headbands to adapt quickly to all head shapes and sizes and offers exceptional wearing comfort.
- Ear pads can be folded when not in use for protection against dust and other effects.

catalogue number	pack quantity
069.04.002	1 piece

EAR PLUGS

- Manufactured from non-allergic, very soft, comfortable to wear PU foam with excellent sound insulation .
- Unique design offers wearing comfort even when worn extended hours.
- Optimised bell shape guarantees perfect fit even to ears with smaller auditory canals with a simple insertion.
- Once used seals the ear channel without the risk of slipping out.
- Featured with a cord fixing two plugs each other reducing the risk of loss. Easy to store when not in use.



catalogue number	pack quantity
069.04.001	set of 2



EYE WASH BOTTLE - "standard size"

- Accidents can and do happen anytime. Every laboratory should have an emergency eye wash station for immediate access.
- Body manufactured from flexible and easy to squeeze polyethylene. The spray head and other parts manufactured from polystyrene.
- The spray head fits securely around the eye socket to hold eyelid in an open position during application.
- Eye wash bottle with 660 ml volume capacity provides a soft, broad and effective spray with a single action.
- The spray head has a perforated plate to break up the stream providing a gentle spray to the eye.
- A capped air vent valve prevents drawback of the contaminated eye wash back to the reservoir.
- Snap-on cap covers the spray head in a hygienic way and guarantees perfect protection of inside from dust and other environmental effects.
- Contaminated used solution exits through a drain tube which rotates in any direction.
- Eye wash bottle filled with sterile saline solution
- Alternative 2 products:
- Eye wash bottle filled with sterile neutralisation solution

catalogue number	solution descriptions	pack quantity
069.03.660	with 0,9 % saline rinsing solution	1 piece
069.04.660	with 4,9 % phosphate buffer neutralisation solution	1 piece



Eye wash bottle provides a soft, broad and excellent, effective spray with a single action.



Snap-on cap covers the spray head in a hygienic way and guarantees perfect protection of inside.



Bottle can be used also even when the injured person is lying down with the help of a sliding valve.



The spray head has a perforated plate to break up the stream providing a gentle spray to the eye.



The spray head fits securely around the eye socket to hold eyelid in an open position during application.



Contaminated used solution exits through a drain tube which rotates in any direction with 180 degree.



Compact size offers easy carry in a jacket pocket.

EYE WASH BOTTLE - "compact size"

- Manufactured as a personal eye wash bottle for emergency use.
 - Ideal size for persons being frequently present in different risky working areas.
 - Compact size with 175 ml volume capacity offers easy carry in a jacket pocket.
 - The spray head fits securely around the eye socket to hold eyelid in an open position during application.
 - Eye wash bottle provides a soft, broad and effective spray with a single action.
 - The spray head has a perforated plate to break up the stream providing a gentle spray to the eye.
 - A capped air vent valve prevents drawback of the contaminated eye wash back to the reservoir.
 - Snap-on cap covers the spray head in a hygienic way and guarantees perfect protection of inside from dust and other environmental effects.
 - Contaminated used solution exits through a drain tube which rotates in any direction.
- Eye wash bottle filled with sterile saline solution
- Alternative 2 products:
- Eye wash bottle filled with sterile neutralisation solution

catalogue number	solution descriptions	pack quantity
069.03.175	with 0,9 % saline rinsing solution	1 piece
069.04.175	with 4,9 % phosphate buffer neutralisation solution	1 piece

sterile rinsing solution

- Sterile saline rinsing solution contains 0,9% sodium chloride. Helpfull in rinsing away dust, debris and other harmful irritants.
- Does not involve any side effects since the pH value is similar to that of human tears.
- Prevents the foreign bodies from sticking into the eye and causing serious harm.
- Does not contain pathogens that could cause infection, and will not damage eye or skin tissue during prolonged flushing.

sterile neutralisation solution

- When acids and alkalis contact the eyes or skin damage can start immediately.
- pH neutralising solution contains a sterile 4,9% phosphate buffer solution.
- Helpfull in rinsing and neutralisation of acids and alkalis and other chemical contaminants to a harmless level in a very short time period.
- It is recommended to rinse the eye with saline solution after treatment with pH neutralisation solution.

BOTTLE STAND - "for standard eye wash bottle"



- For keeping eye wash bottles always "ready-for-use" stage.
- Keeps the bottle stable at his nest and guarantees easy and fast access to the bottle.
- Featured with a mirror and "how-to-use" instructions printed on the body.
- User looks directly into a mirror during rinsing.
- Supplied with necessary screw set for mounting on the wall.

catalogue number	pack quantity
069.05.001	1 piece



User looks directly into a mirror during rinsing. Focusing on the mirror with the eye lid open helps overcome the blinking reflex.

cleaning & safety & protection & sterilization

Masks below are manufactured for full protection against dust, small particles, smoke, vapors, bacteria and viruses depending on the type.

Kindly examine the table to select the right mask that fits to your requirement.

Hazard type	FFP 1	FFP 2	FFP 3
dust	✓	✓	✓
metal fume	✓	✓	✓
weld fume	✗	✓	✓
odour	✗	✗	✓
oil based particles	✗	✓	✓
toxic particles	✗	✓	✓
virusses	✗	✓	✓
bacteria	✗	✓	✓
protection factor	4 x O.E.L.	10 x O.E.L.	20 x O.E.L.



DUST MASK - "FFP-1"

DUST MASK - "FFP-2"

DUST MASK - "FFP-3"

- Offers protection against non-toxic harmful solid and liquid in concentrations up to 4 x OEL or 4 x APF.
- Specially recommended for calcium carbonate, china clay, cement, cellulose, cotton, sulfur, ferrous metals, vegetable oil and soft foods.
- Convex design, aluminium nosepiece and adjustable fitting straps guarantees excellent fit to different face shapes.
- Light weight provides strain and fatigue free use even with extended hours.
- Inner and external layers of the mask manufactured from soft microfiber which reduces the pressure on the face during use.
- Exhalation valve significantly minimise warm and humid airflow into the mask and reduce the risk of mist condensation on eye wears.

- Offers protection against low-to-average toxic solids, liquids and smoke in concentrations up to 12x OEL or 10 x APF.
- Addition to FFP-1 protection limits additionally offers protection against glass wool, mineral oils, most bacterias and fungi.
- Convex design, aluminium nosepiece and adjustable fitting straps guarantees excellent fit to different face shapes.
- Light weight provides strain and fatigue free use even with extended hours.
- Inner and external layers of the mask manufactured from soft microfiber which reduces the pressure on the face during use.
- Exhalation valve significantly minimise warm and humid airflow into the mask and reduce the risk of mist condensation on eye wears.

- Offers protection against highly toxic solids, liquids and smoke in concentrations up to 50 x OEL or 20 x APF.
- Addition to FFP-2 protection limits additionally offers protection against chrome, manganese, nickel, similar heavy metal particles, smokes and odores, strychnine, viruses and enzymes.
- Convex design, aluminium nosepiece and adjustable fitting straps guarantees excellent fit to different face shapes.
- Light weight provides strain and fatigue free use even with extended hours.
- Inner and external layers of the mask manufactured from soft microfiber which reduces the pressure on the face during use.

catalogue number	pack quantity
080.41.001	1 piece

catalogue number	pack quantity
080.41.002	1 piece

catalogue number	pack quantity
080.41.003	1 piece



MASK - "half face"

- Designed and manufactured according to DIN EN 140 and EN 14387 standards for protection of mouth and nose.
- All parts contacting with the face are manufactured from silicone.
- Featured with a cool flow valve for extremely low exhalation resistance and prevents built-up heat in the mask.
- Easy to adjust and drop-down straps enables easy and fast wear of the mask.
- Strong and wide flange seals provides security even while walking.
- Ergonomically designed, soft silicone facepiece perfectly fits to the contours of the face without pressure points providing full comfort.
- Extremely comfortable canister filter system with exchangeable cartridge filter ensures low breathing resistance.
- Supplied with a multiple gas cartridge for protection from dust, fine particles, mist, smoke, organic vapours and gases with boiling point 65°C or above.

catalogue number	product descriptions	pack quantity
080.44.001	half face mask	1 piece
080.44.101	spare gas cartridge	1 piece



MASK - "full face"

- Designed and manufactured according to EN 136:1998 for protection of full face.
- All parts contacting with the face are manufactured from silicone.
- Featured with anti-stretch, anti-fogging, non-reflecting and distortion-free polycarbonate shield with large field of vision.
- Featured with a cool flow valve for extremely low exhalation resistance and prevents built-up heat in the mask.
- Easy to adjust and drop-down straps enables easy and fast wear of the mask.
- Strong and wide flange seals provides security even while walking.
- Ergonomically designed, soft silicone facepiece perfectly fits to the contours of the face without pressure points providing full comfort.
- Extremely comfortable canister filter system with exchangeable cartridge filter ensures low breathing resistance.
- Supplied with a multiple gas cartridge for protection from dust, fine particles, mist, toxic smoke (accept carbon dioxide and monoxide), organic or inorganic vapours and gases with boiling point 65°C or above, sulfur dioxide, acidic gasses and ammonia gas.

catalogue number	product descriptions	pack quantity
080.45.001	full face mask	1 piece
080.45.101	spare gas cartridge	1 piece

cleaning & safety & protection & sterilization



Skin is our largest organ. Uses 1/3 of our blood and consumes 1/3 of our blood. Harmonize our body temperature and protects us from environmental effects.

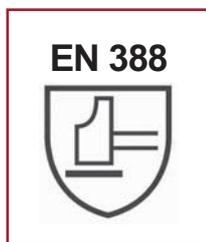
Unfortunately our skin is constantly exposed to all manners of environmental effects.

ISOLAB proudly offers you a selection of gloves, skin protection and skin care products that covers all requirements of daily laboratory work.

international harmonised pictograms for protection classifications of gloves.



protection against chemical risks.



protection against mechanical risks.



protection against thermal risks



protection against radiation risks



protection against cold risks



acceptable quality level for penetration



GLOVES - "nitrile" - "0,06 mm standard thickness"

- Manufactured pure nitrile free from phthalate softeners and latex proteins which cause allergy to the skin.
- Provides a standard thickness of 0,06 mm which is recommended for daily laboratory use.
- Classified as CE category 1. Tested an accordance with EN420:2003 standard.
- Provided with AQL 1,5 offering the highest level of protection according to EN374-2:2003 against penetration of micro-organisms.
- 40 % more stronger and 60 % more leaner than latex gloves.
- Provides full protection against wide range of chemicals including cytotoxic drugs.
- Easy to wear. Unique production techniques offers excellent mechanical strength providing multi-use options.
- Excellent fit to the hands guarantees maximum comfort.
- Slightly textured finger parts guarantees excellent grip option.

catalogue number	size	color	AQL	length	thickness	pack quantity
080.15.001	Small (7)	purple	1.50	240 mm	0,06 mm	100 pieces
080.15.002	Medium (8)	purple	1.50	240 mm	0,06 mm	100 pieces
080.15.003	Large (9)	purple	1.50	240 mm	0,06 mm	100 pieces
080.15.004	X Large (10)	purple	1.50	240 mm	0,06 mm	100 pieces

GLOVES - "nitrile" - "0,12 mm extra thickness"

- Manufactured pure nitrile free from phthalate softeners and latex proteins which cause allergy to the skin.
- Provides extra thickness of 0,12 mm which is recommended for daily laboratory use.
- Thick gloves are specially designed for life science, biomedical research, forensic science and drug handling applications.
- **Extra thickness guarantees extra safety.**
- Classified as CE category 1. Tested an accordance with EN420:2003 standard.
- Provided with AQL 1,5 offering the highest level of protection according to EN374-2:2003 against penetration of micro-organisms.
- 40 % more stronger and 60 % more leaner than latex gloves.
- Provides full protection against wide range of chemicals including cytotoxic drugs.
- Easy to wear. Unique production techniques offers excellent mechanical strength providing multi-use options.
- Excellent fit to the hands guarantees maximum comfort. Slightly textured finger parts guarantees excellent grip option.



catalogue number	size	color	AQL	length	thickness	pack quantity
080.16.001	Small (7)	blue	1.50	240 mm	0,12 mm	100 pieces
080.16.002	Medium (8)	blue	1.50	240 mm	0,12 mm	100 pieces
080.16.003	Large (9)	blue	1.50	240 mm	0,12 mm	100 pieces
080.16.004	X Large (10)	blue	1.50	240 mm	0,12 mm	100 pieces

DISPENSER BOX "for nitrile glove boxes"

- Manufactured from crystal clear acrylic with excellent field of vision for storing and dispensing nitrile glove boxes.
- Perfect tools for storing and easy dispensing 4 different sizes gloves simultaneously.
- 4 compartments with easy inserts perfectly fits to the outer dimensions of the extra thick glove boxes and holds them stable at their positions.
- Designed for use either on desk top or wall mounted.
- Delivered with necessary attachment screws to be mount to the wall.
- Alternative 2 products:
 - box for standard gloves
 - box for thick gloves
- Box for standard gloves can also accomodates the cleaning tissue box **catalogue number 080.65.002**.

catalogue number	dimensions	pack quantity
080.05.001	215 x 70 x 465 mm	1 piece
080.05.002	260 x 85 x 525 mm	1 piece



Box for standard gloves can also accomodates the cleaning tissue box catalogue number 080.65.002.



cleaning & safety & protection & sterilization



GLOVES - "nitrile" - "for chemical protection"

- Manufactured from pure nitrile free from phthalate softeners and latex proteins which can cause allergy to the skin.
- Easy to wear due to the anatomical shape.
- Since classified as CE category III they can be used both at laboratories and industry.
- Excellent fit and flexible texture offers full dexterity and comfort during use.
- Offers excellent protection against alcohols, oils, greases, and hydrocarbons.
- Cotton flock liner inside the glove absorbs moisture and prevents sweating during use.
- Provide superior mechanical resistance against abrasion and perforation.
- Slightly textured fingers and palm guarantees excellent grip and handling option both for dry, wet and oily products.

catalogue number	size	length	thickness	internal finish	external finish	pack quantity
080.21.007	Small (7)	320 mm	0,38 mm	flocked	embossed	1 pair
080.21.008	Medium (8)	320 mm	0,38 mm	flocked	embossed	1 pair
080.21.009	Large (9)	320 mm	0,38 mm	flocked	embossed	1 pair
080.21.010	X Large (10)	320 mm	0,38 mm	flocked	embossed	1 pair



GLOVES - "nitrile" - "for chemical protection"

- Manufactured from pure nitrile free from phthalate softeners and latex proteins which can cause allergy to the skin.
- Easy to wear due to the anatomical shape and to the multi-layer technology.
- Since classified as CE category III they can be used both at laboratories and industry.
- Excellent fit and flexible texture offers full dexterity and comfort during use.
- Offers excellent protection against alcohols, oils, greases, and hydrocarbons.
- Cotton flock liner inside the glove absorbs moisture and prevents sweating during use.
- Provide superior mechanical resistance against abrasion and perforation.
- Slightly textured fingers and palm guarantees excellent grip and handling option both for dry, wet and oily products.

catalogue number	size	length	thickness	internal finish	external finish	pack quantity
080.22.007	Small (7)	355 mm	0,85 mm	flocked	embossed	1 pair
080.22.008	Medium (8)	355 mm	0,85 mm	flocked	embossed	1 pair
080.22.009	Large (9)	355 mm	0,85 mm	flocked	embossed	1 pair
080.22.010	X Large (10)	355 mm	0,85 mm	flocked	embossed	1 pair



GLOVES - "neopren" - "for chemical protection"

- Manufactured from polychloroprene which can cause allergy to the skin.
- Easy to wear due to the anatomical shape. Extremely supple due to the multi-layer technology.
- Classified as CE category III they can be used both at laboratories and industry.
- Excellent fit and flexible texture offers full dexterity and comfort during use.
- Offer protection against semi-concentrated acids, concentrated bases, concentrated saline solutions, glycerol, solvents, alcohols, fats and oils.
- Cotton flock liner inside the glove absorbs moisture and prevents sweating during use.
- Provide superior mechanical resistance against abrasion and perforation.
- Slightly textured fingers and palm guarantees excellent grip and handling option both for dry, wet and oily products.

catalogue number	size	length	thickness	internal finish	external finish	pack quantity
080.23.007	Small (7)	310 mm	0,55 mm	flocked	embossed	1 pair
080.23.008	Medium (8)	310 mm	0,55 mm	flocked	embossed	1 pair
080.23.009	Large (9)	310 mm	0,55 mm	flocked	embossed	1 pair
080.23.010	X Large (10)	310 mm	0,55 mm	flocked	embossed	1 pair

GLOVES - "polyurethane" - "for mechanical protection"

- Offers excellent abrasion resistance and protection of hands from environmental effects.
- Since classified as CE category II they can be used both at laboratories and industry.
- Extremely light weight. Excellent fit to the hands guarantees maximum comfort. Offers perfect grasp of the wrist.
- Provide superior mechanical strength.
- Easy to wear. Soft and flexible texture due to the polyurethane coating offers full comfort during use.
- Slightly porous texture of the upper part guarantees air permeability and prevents sweating during use.
- Slightly textured fingers and palm guarantees excellent grip.
- Offers handling option both for dry, wet and even oily products.

catalogue number	size	length	thickness	internal finish	external finish	pack quantity
080.24.007	Small (7)	270 mm	light weight	flocked	polyurethane	1 pair
080.24.008	Medium (8)	270 mm	light weight	flocked	polyurethane	1 pair
080.24.009	Large (9)	270 mm	light weight	flocked	polyurethane	1 pair
080.24.010	X Large (10)	270 mm	light weight	flocked	polyurethane	1 pair

**GLOVES - "for cut resistance"**

- Offers extremely high cutting resistance of level 5 EN 388 and 38 N in ISO 13997 for safe handling and assembly of sharp-edged objects.
- Classified as CE category II they can be used both at laboratories and industry.
- Anatomical shape ensures dexterity. Excellent fit to the hands guarantees maximum comfort.
- Offers perfect grasp of the wrist
- Also provide superior mechanical strength against abrasion and puncture.
- Easy to wear. Soft and flexible texture offers full comfort during use.
- Slightly porous texture of the upper part guarantees air permeability and prevents sweating during use.

catalogue number	size	length	internal finish	external finish	pack quantity
080.25.007	Small (7)	280 mm	flocked	ventilated	1 pair
080.25.008	Medium (8)	280 mm	flocked	ventilated	1 pair
080.25.009	Large (9)	280 mm	flocked	ventilated	1 pair
080.25.010	X Large (10)	280 mm	flocked	ventilated	1 pair

**GLOVES - "for thermal resistance"**

- Manufactured from nitrile foam. Suitable for handling hot objects up to 125°C for short time contact. Also ideal for handling of materials after heat processing
- Classified as CE category II they can be used both at laboratories and industry.
- Thin anatomical shape ensures dexterity. Excellent fit to the hands guarantees maximum comfort. Offers perfect grasp of the wrist .
- Provide superior mechanical strength.
- Easy to wear. Soft and flexible texture offers full comfort during use.
- Slightly porous texture of the upper part guarantees air permeability and prevents sweating during use.
- Nitrile spheres at the palm and finger parts guarantees perfect insulation with excellent grip option.

catalogue number	size	length	internal finish	external finish	pack quantity
080.26.007	Small (7)	280 mm	flocked	dotted	1 pair
080.26.008	Medium (8)	280 mm	flocked	dotted	1 pair
080.26.009	Large (9)	280 mm	flocked	dotted	1 pair
080.26.010	X Large (10)	280 mm	flocked	dotted	1 pair



cleaning & safety & protection & sterilization



GLOVES - "for cold protection"

- Specially designed to work in cold environments.
- Offers full protection against even very cold temperatures such as -140°C .
- Recommended to be used in cold treatment plants, handling dry ice, working with coolents.
- Even working at very low temperatures with extended hours it still remain flexible.

catalogue no	size	length	thickness	pack quantity
080.10.001	universal	350 mm	extra thick	1 pair



GLOVES - "for heat protection"

- Manufactured from soft, flexible, heat resistant pliant terry cotton material.
- Easy to wear. Soft and flexible texture offers full comfort during use.
- Offers maximum isolation and protection up to 250°C when working with autoclaves and muffle furnaces.
- Guarantees a long life cycle since they can be machine washable.

catalogue no	size	length	thickness	pack quantity
080.11.001	universal	345 mm	extra thick	1 pair



GLOVES - "for physical protection"

- Manufactured from light weight 100 % cotton for multi-use.
- Thick yet stretchable. Protects the sensitive skin.
- Unique design provides both left and right handed use.
- Makes unlined gloves easier to pull or to wear. Also prevents from moderate levels of cold and heat.
- Easy to wear. Soft and flexible texture offers full comfort during use.
- Guarantees a long life cycle since they can be machine washable.

catalogue no	size	length	thickness	pack quantity
080.13.001	universal	260 mm	extra thick	1 pair



GLOVES - "silicone"

- Manufactured from best quality natural silicone resistant both to heat and cold.
- Guarantees excellent chemical and temperature resistance between -60°C to $+170^{\circ}\text{C}$.
- Very flexible and slip-proof characteristics guarantees easy and safe grip of all kinds of flasks and vessels

alternative 2 products

- Glove with 5 finger compartments
- Glove with single hand compartment

catalogue number	glove type	pack quantity
080.18.001	5 fingers	1 piece
080.18.002	full hand	1 piece



FINGER PROTECTORS

- Manufactured from best quality natural silicone resistant both to heat and cold.
- Guarantees excellent chemical and temperature resistance between -60°C to $+170^{\circ}\text{C}$.
- They offer a practical and economical alternative to gloves.



- Very flexible and slip-proof characteristics guarantee easy and safe grip of all kinds of flasks and vessels.

alternative 2 products

- Protector for 2 fingers
- Protector for full hand

- 2 finger protector is recommended for handling test tubes. Full hand protector is recommended for all kind of flasks.

catalogue number	glove type	pack quantity
080.17.001	for 2 fingers	1 piece
080.17.002	for 5 fingers	1 piece





SKIN PROTECTION CREAM

- Developed for laboratory pre-work. Ideal for protecting the skin against dyes, resins, solvents, acids and alkalis.
- Free from silicone. Can be absorbed quickly without leaving any residue.
- Protects and smooths your skin with a breathable, thin protective film. Gives the skin elasticity and suppleness through its special caring agents.
- Does not effect the skin nature and the sense of touch. Suitable for all skin types since the pH value matches the skin pH value.

catalogue
number

080.31.001

pack
quantity

200 ml



SKIN CARE CREAM

- Highly effective after-work conditioning cream for effective skin care for hard-working skins. Also provides effective care for face and hands.
- Calms the skin, support the re-generation process and restore the lost moisture. Also provides the skin elasticity and suppleness. Free from silicone. Can be absorbed quickly without leaving any greasy residue.
- Protects and smooths your skin with a breathable, thin protective film. Suitable for all skin types since the pH value matches the skin pH value.

catalogue
number

080.31.002

pack
quantity

200 ml



SKIN CLEANSER LOTION

- An effective skin cleanser for use in laboratories. Developed for gentle but effective cleaning of stressed skin.
- Suitable for sensitive skins since creamy foam is free from perfume and preservatives. Prevents chapping and dryness.
- Free from silicone. Can be absorbed quickly without leaving any greasy residue.
- Protects and smooths your skin with a breathable, thin protective film. Suitable for all skin types since the pH value matches the skin pH value.

catalogue
number

080.31.004

pack
quantity

200 ml



SKIN COMFORT CREAM

- Highly effective for skin comfort specially when using gloves. Prevents sweat built up and significantly reduces swelling.
- Developed specially for wearing safety gloves. Provides the skin elasticity and suppleness, Also offers easy putting-on and taking-off of the gloves.
- Significantly reduces the unpleasant side-effects of wearing hand protection gloves at the laboratory.
- Free from silicone. Suitable for all skins. Can be absorbed quickly without leaving any greasy residue.

catalogue
number

080.31.003

pack
quantity

200 ml



SKIN CARE SET

- Set consists of skin protection cream, skin care cream, skin cleaner solution and skin comfort cream. Supplied with a easy use, practical dispenser stand.

catalogue
number

080.31.005

pack
quantity

set of 4

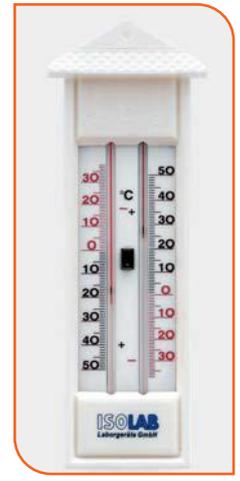


ISOLAB

Laborgeräte GmbH



*density & sedimentation
temperature & time
pH & weight measurement*





DENSITY BOTTLES "non - calibrated"

- Manufactured according to ISO 3507 standard.
- For easy differentiation both the body and the stopper carries the same identification code number.
- Featured with a stopper with excellently polished upper and lower ends.
- Nominal volume and inscriptions are printed with blue enamel.

catalogue number	volume	pack quantity
023.01.005	5 ml	1 piece
023.01.010	10 ml	1 piece
023.01.025	25 ml	1 piece
023.01.050	50 ml	1 piece
023.01.100	100 ml	1 piece



DENSITY BOTTLES "calibrated"

- Manufactured according to ISO 3507 standard.
- For easy differentiation both the body and the stopper carries the same identification code number.
- Calibrated together with the stopper with a precision of 0,001 ml. Net volume is engraved on the body.
- For easy differentiation both the body and the stopper carries the same identification code number.
- Featured with a stopper with excellently polished upper and lower ends.
- Nominal volume and inscriptions are printed with blue enamel.

catalogue number	volume	pack quantity
023.02.005	5 ml	1 piece
023.02.010	10 ml	1 piece
023.02.025	25 ml	1 piece
023.02.050	50 ml	1 piece
023.02.100	100 ml	1 piece



DENSITY BOTTLES "calibrated with thermometer"

- Manufactured according to ISO 3507 standard.
- Featured with a thermometer of scale range +10°C to +40°C, with scale 0,5°C.
- For easy differentiation both the body and the stopper carries the same identification code number.
- Calibrated together with the stopper with a precision of 0,001 ml. Net volume is engraved on the body.
- For easy differentiation both the body and the stopper carries the same identification code number.
- Featured with a stopper with excellently polished upper and lower ends.
- Nominal volume and inscriptions are printed with blue enamel.

catalogue number	volume	pack quantity
023.03.005	5 ml	1 piece
023.03.010	10 ml	1 piece
023.03.025	25 ml	1 piece
023.03.050	50 ml	1 piece
023.03.100	100 ml	1 piece



IMHOFF CONES

➤ Manufactured from borosilicate glass 3.3 according for sedimentation tests according to DIN 12672 standard.

➤ Featured with volume graduation of 1000 ml.

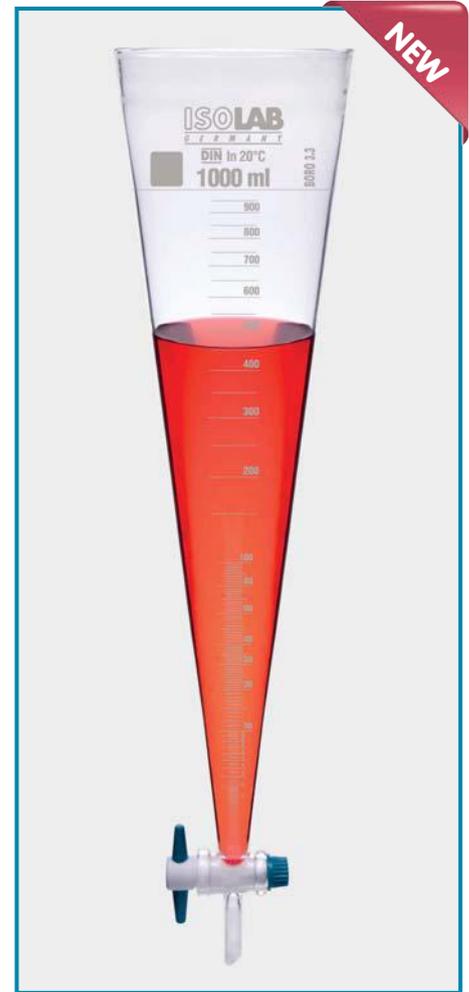
➤ Volume graduations and inscriptions are printed with white enamel.

Alternative 2 products:

- Cones without stopcock
- Cones with stopcock

graduation range	subdivision
0 - 2 ml	0,1 ml
> 2 - 10 ml	0,5 ml
> 10 - 40 ml	1,0 ml
> 40 - 100 ml	2,0 ml
> 100 - 1000 ml	50,0 ml

catalogue number	cone type	pack quantity
043.20.001	without stopcock	1 piece
043.20.002	with stopcock	1 piece
043.21.001	plastic - SAN	1 piece



IMHOFF CONE STANDS

➤ Manufactured to hold two imhoff sedimentation cones of any type.

➤ Compact design allows easy carry of imhoff cones even when the cones are filled.

➤ The unique designs provides easy carry of any all types of imhoff cones with or without stopcock.

Alternative 2 products:

- Stand made from PMMA & steel
- Stand made from PMMA

catalogue number	rack type	pack quantity
043.22.001	PMMA & steel	1 piece
043.22.002	PMMA	1 piece



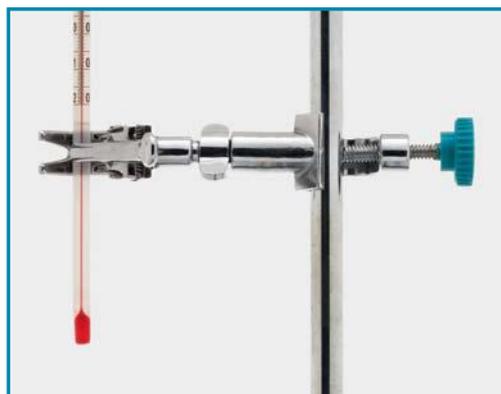


THERMOMETERS - "glass"

- Manufactured from solid stem glass rods with approximately 75 mm immersion depth.
- Printed large graduation on the front wall offers easy temperature reading.
- Large alcohol column with red color enables easy and accurate readout.
- The amber front scale of the thermometer reflects the images more clearly.

catalogue number	operation range °C	subdivision	pack quantity
059.02.001	-20/+ 50	0.5 °C	10 pieces
059.02.002	-20/+110	0.5 °C	10 pieces
059.02.003	-10/+150	1 °C	10 pieces
059.02.004	-10/+200	1 °C	10 pieces

THERMOMETER CLAMP "with bosshead"



- Manufactured from high quality, corrosion resistant chromated steel for holding thermometers in the most secure way.
- Featured with a swivel bosshead which provides 360° swivel of the clamped object around their axis.
- Bosshead locking feature guarantees perfect position hold of the clamped objects.
- Fixing head featured with flexible springs offers easy insertion and extraction of the thermometers.
- Clamps can be opened and closed smoothly with a 30 mm grip diameter.

catalogue number	pack quantity
060.04.001	1 piece

STAND "adjustable height"



- Manufactured from acrylic for holding 72 thermometers in 12 x 6 array.
- Handles at both sides guarantees easy hold and secure grip.
- Adjustable height upper layer provides multi use options with shorter objects.

catalogue number	dimensions	pack quantity
059.05.001	210 x 110 x 220 mm	1 piece



Adjustable height upper layer provides multi use options with shorter objects.



THERMOMETER
"insertion"

- For temperature measurement in liquids, semi-solids. Specially offers practical solutions with foodstuff.
- Stainless steel probe with 127 mm length can easily be inserted into semi-solid samples.
- Offers temperature measurement on a large and clear 19 x 8 mm LCD display.
- Water resistant sturdy plastic housing offers long life cycle.
- Temperature measurement range is -58°F to +158°F (+/- 0,2°F) or -50°C to +300°C (+/- 0,1°C) selectively.
- °F & °C values are exchangeable by a switch control at the front panel.
- Supplied with a plastic sleeve for the protection of the measuring probe.

catalogue
number

060.01.001

pack
quantity

1 piece



THERMOMETER
"portable"

- For temperature measurement in liquids, semi-solids. Specially offers practical solutions with foodstuff.
- Stainless steel probe with 120 mm length can easily be inserted into semi-solid samples.
- Offers temperature measurement on a large and clear 34x14 mm LCD display.
- Water resistant sturdy plastic housing offers long life cycle.
- Temperature measurement range is -58°F to +572°F (+/- 2°F) or -50°C to +300°C (+/- 0,5°C) selectively.
- °F & °C values are exchangeable by a switch control at the front panel.
- Supplied with a plastic sleeve for the protection of the measuring probe.

catalogue
number

060.01.002

pack
quantity

1 piece



THERMOHYGROMETER
"portable"

- Pen shape, thermohygrometer is featured with a rotary probe enabling fast readings.
- Water resistant sturdy plastic housing with 138 mm length offers long life cycle.
- Featured with a clips for safe and practical use.
- Offers dual display for humidity and temperature on a large and clear 52 x 13 mm LCD display.
- Featured with maximum & minimum reading memory.
- Humidity measurement range is 20% RH – 95 %RH with +/- 3%RH accuracy.
- Temperature measurement range is 32 - 122°F (+/- 2°F) or 0 - 50°C (+/- 1°C) selectively.
- °F & °C values are exchangeable by a simple switch control at the back.
- Supplied with an instruction manual with a battery.

catalogue
number

060.03.002

pack
quantity

1 piece



THERMOMETER "desk-top"

- This desk top electronic thermometer can be also used as wall hanged.
- With the help of two probes can be used for in-door and out-door temperature measurement simultaneously.
- The folding stand at the back housing offers a convenient angle for easy reading of the results.
- Water resistant sturdy plastic housing with 135 x 75 x 19 mm dimensions offers long life cycle.
- Offers dual display for humidity and temperature on a large and clear 51 x 41 mm LCD display.
- Featured with maximum & minimum temperature reading memory with an alarm function and date / time display.
- Temperature measurement range is -4°F to +122°F (+/- 0,2°F) or -20°C to +50°C (+/- 0,1°C) selectively.
- °F & °C values are exchangeable by a switch control at the front panel.
- Supplied with an instruction manual with a battery.

catalogue
number

060.02.001

pack
quantity

1 piece



THERMOHYGROMETER "desk-top"

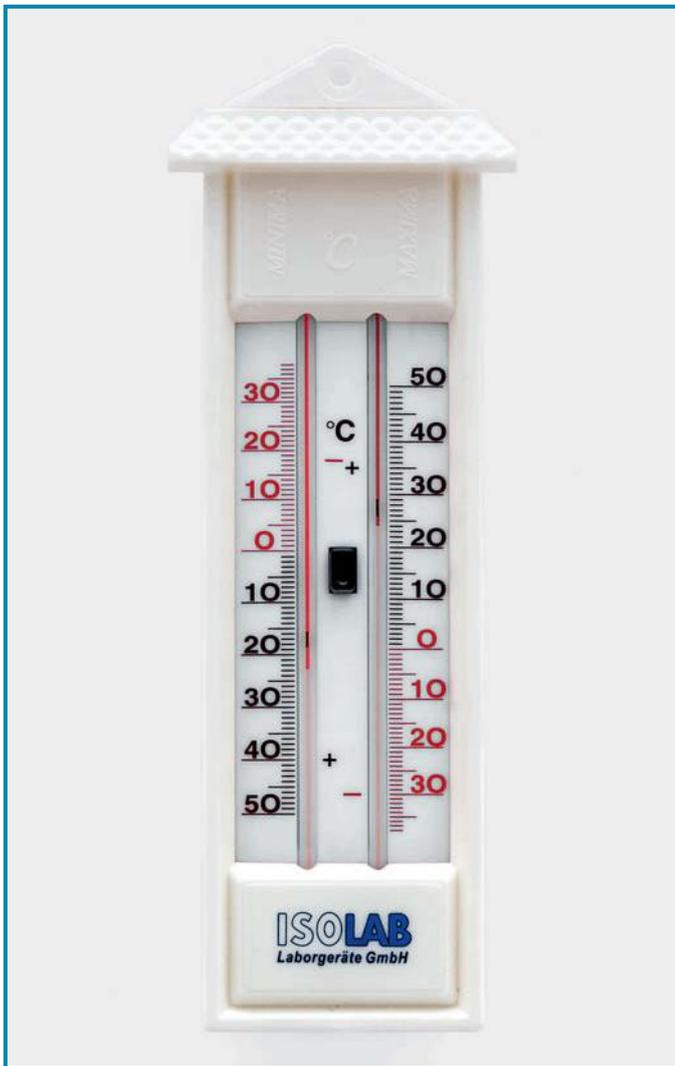
- This desk top thermo-hygrometer can be also used as wall hanged.
- The folding stand at the back housing offers a convenient angle for easy reading of the results.
- Water resistant sturdy plastic housing with 109 x 70 x 19 mm dimensions offers long life cycle.
- Offers dual display for humidity and temperature on a large and clear 40 x 30 mm LCD display.
- Featured with maximum & minimum temperature reading memory with an alarm function.
- Humidity measurement range is 10% RH – 99 %RH with +/- 1%RH accuracy.
- Temperature measurement range is -58°F to +158°F (+/- 0,2°F) or -50°C to +70°C (+/- 0,1°C) selectively.
- °F & °C values are exchangeable by a switch control at the front panel.
- Supplied with an instruction manual with a battery.

catalogue
number

060.03.001

pack
quantity

1 piece



MAXIMUM & MINIMUM THERMOMETER "mechanical"

- Suitable both for out-door or in-door applications.
- Weather resistant, robust housing is featured with an inclined shelter for further protection.
- Offers a measuring range from -30°C to $+50^{\circ}\text{C}$ with a precision of 1°C .
- Featured with a push button switch for automatic resetting.

catalogue number	temperature range	dimensions	pack quantity
059.03.001	$-30^{\circ}\text{C} / +50^{\circ}\text{C}$	63 x 22 x 230 mm	1 piece



MAXIMUM & MINIMUM THERMOMETER "electronic"

- Suitable both for out-door or in-door applications.
- Weather resistant, robust housing is featured with an inclined shelter for further protection.
- Offers a measuring range from -50°C to $+70^{\circ}\text{C}$ with a precision of $0,1^{\circ}\text{C}$.
- Featured with a push button switches for automatic resetting and selecting.

Offers 3 parameters

- Maximum temperature
- Minimum temperature
- Actual temperature

catalogue number	temperature range	dimensions	pack quantity
059.03.002	$-50^{\circ}\text{C} / +70^{\circ}\text{C}$	80 x 30 x 150 mm	1 piece

density & sedimentation & temperature & time & pH & weight measurement



STOPWATCH - "mechanical"

- Mechanical stopwatch offers counting up to 30 minutes with 0,2 second resolution.
- Chrome plated sturdy housing with 50 mm diameter and 110 gram weight offers long life cycle.

catalogue number	diameter	pack quantity
055.01.001	50 mm	1 piece



STOPWATCH - "electronic"

- Electronic stopwatch offers counting up to 59 minutes, 59 seconds with 0,01 second resolution.
- Water resistant sturdy plastic housing with 63 mm diameter and very light weight offers long life cycle.
- Offers multiple functions:
 - As a time recorder
 - As a chronometer
 - As a 24 hour timer with alarm function.

catalogue number	dimensions	pack quantity
055.02.001	63 x 76 x 20 mm	1 piece



TIMER - "mechanical"

- Mechanical timer counts up to 60 minutes with 1 minute resolution.
- Sturdy housing with 60 x 60 x 34 mm dimensions offers long life cycle.
- Can be used on bench top or also can be hanged to any smooth surface.
- Does not requires batteries. Just winding will be enough to start the time counting.
- A clear bell ring signals at the end of the preset time.
- Can be interrupted during work and reset any time.

catalogue number	dimensions	pack quantity
056.01.001	60 x 60 x 34 mm	1 piece

TIMER - "mechanical"

- Mechanical timer counts up to 60 minutes with 1 minute resolution.
- Sturdy housing with 93 x 75 x 59 mm dimensions offers long life cycle.
- Does not require batteries. Just winding will be enough to start the time counting.
- A clear bell ring signals at the end of the preset time.
- Can be interrupted during work and reset any time.

catalogue number	dimensions	pack quantity
055.03.001	93 x 75 x 59 mm	1 piece

**TIMER - "electronic"**

- Electronic timer counts up to 59 minutes, 59 seconds with a 4 digit display. Also featured with count-down function.
- A large LCD screen with 50 x 26 mm dimensions provides easy reading option from relatively long distances.
- Sturdy housing with 69 x 69 x 15 mm dimensions offers long life cycle.
- The folding stand at the back housing offers a convenient angle for easy reading of the results.
- A clip at the back side of the watch enables easy wall mounting.
- A clear bell ring signals at the end of the preset time.

catalogue number	dimensions	pack quantity
056.02.001	69 x 69 x 15 mm	1 piece

**TIMER - "electronic"**

- Electronic timer counts up to 19 hours, 59 minutes with a 4 digit display for extended hours.
- Also featured with count-up and count-down functions.
- A large LCD screen with 32 x 12 mm dimensions provides easy reading option from relatively long distances.
- Sturdy housing with 53 x 62 x 12 mm dimensions offers long life cycle.
- The folding stand at the back housing offers a convenient angle for easy reading of the results.
- A clip at the back of the watch enables easy wall mounting.
- A clear bell ring signals at the end of the preset time.

catalogue number	dimensions	pack quantity
056.03.001	53 x 62 x 12 mm	1 piece



density & sedimentation & temperature & time & pH & weight measurement

METER - "portable" - "pH & mV & temperature measurement"



- Offers an economical solution for measuring pH & mV and temperature. Simple to calibrate by one keyboard.
- Easy to replace electrode. The new electrode will be recognised automatically and shown at the display.
- Ergonomic, lightweight and waterproof (which can even float on water) housing enables perfect outdoor practice.
- Measured values are shown by a microprocessor based large LCD display.
- Stores maximum and minimum measured values in memory.
- Offers a switchable temperature selection of °C or °F.
- Featured with a low battery and energy consumption indicator.
- Automatic switch-off function close the circuit after 10 minutes of non use.
- Supplied in a carrying case, with instruction manual and calibration standard set.

Meters are supplied in a sturdy carry case complete with hand held stripe, pH buffer solutions, cleaning solution, instruction manual and other standard accessories.



catalogue no: 616.01.001	pH	mV	Temp
<i>range</i>	-2.00 / 16.00 pH	-1000 / 1000	0 / 90°C
<i>accuracy</i>	± 0.01+1 digit	± 2 + 1 digit	±1 + 1 digit
<i>resolution</i>	0.01 pH	1 mv	0.1°C
<i>compensation</i>	0 / 90°C		

METER - "portable" - "pH & mV & temperature & conductivity & TDS & salt measurement"



NEW



Supplied with a protective cap



All measurements are done by single electrode.

- Offers an economical solution for measuring pH & mV & temperature. & conductivity & TDS & salt with one single electrode.
- Ergonomic, lightweight and waterproof (which can even float on water) housing enables perfect outdoor practice.
- Simple to calibrate by one keyboard.
- Memory function stores and recalls different measurements.
- Microprocessor based large LCD displays show the measured values and the temperature simultaneously.

- Featured with automatic temperature compensation (ATC) . Offers a switchable temperature selection of °C or °F.
- Easy to replace electrode. The new electrode will be recognised automatically and shown at the display.
- Featured with a low battery and energy consumption indicator.
- Automatic switch-off function close the circuit after 10 minutes of non use.
- Supplied in a carrying case, with instruction manual and calibration standard set.



Meters are supplied in a sturdy carry case complete with hand held stripe, pH buffer solutions, cleaning solution, instruction manual and other standard accessories.

catalogue no: 616.02.002	pH	mV	Temp	Conductivity	TDS	Salt
<i>range</i>	-2.00 / 16.00 pH	-1999 / 2000	0 / 110°C	0 / 2000 µs 2.00 / 100.00 ms	0 / 1300 ppm 1.30 / 13.00 ppt	0 / 1000 ppm 1.00 / 50.00 ppt
<i>accuracy</i>	± 0.01+1 digit	± 2 + 1 digit	±0,2 + 1 digit	± 2 % FS		
<i>resolution</i>	0.01 pH	0,1 / 1 mv	0.1°C	0.1 µS / 0.01 mS	1 ppm / 0.01 ppt	
<i>compensation</i>	0 / 100°C			0 / 50°C		

density & sedimentation & temperature & time & pH & weight measurement

METERS - "table top"



- Featured with microprocessor based design and rugged housing with splash proof keyboard.
- Microprocessor based large LCD display enables fast and accurate measurements.
- Automatic calibration enables fast measuring cycles.
- Easy replacement of electrode and the type of the electrode would be recognised automatically and shown on the display during insertion.
- Can measure and display (depending on model) pH & mV & temperature & conductivity & TDS & salt & dissolved oxygen in seconds.
- The large backlight LCD displays pH or mV or conductivity or TDS or salt or dissolved oxygen and temperature simultaneously.
- Offers a switchable temperature selection of °C or °F.
- Featured with an automatic temperature compensation (ATC).
- Stores maximum and minimum measured values in memory. Memory function can keep and recall up to 150 data.



Table top meters have a special platform with a magnetic stirrer which enables fast and accurate measurements and results.

Membrane keypad with large backlight LCD displays pH or mV or conductivity or TDS or salt or dissolved oxygen and temperature simultaneously.

catalogue no: 616.11.001

	pH	ORP	Temp
range	-2.00 / 16.00 pH	-1999 / -200 mV -199.9 / 499.9 mV 500 / 2000 mV	0 / 110°C
accuracy	± 0.01+1 digit	± 2 + 1 digit	±1+1 digit
resolution	0.01 pH	0.1 / 1 mv	0.1°C
compensation	ATC: 0 / 100°C	N/A	

catalogue no: 616.12.001

	pH	ORP	Temp	Conductivity	TDS	Salt	DO	O2
range	-2.00 / 16.00 pH	-1999 / -200 mV -199.9 / 499.9 mV 500 / 2000 mV	0 / 110°C	0.0 / 199.9 µS 200 / 1999 µS 2.00 / 19.99 mS 20.0 / 100.0 mS	0.0 / 131.9 ppm 132 / 1319 ppm 1.32 / 13.19 ppt 13.2 / 66.7 ppt	0.0 / 99.9 ppm 100 / 999 ppm 1.00 / 9.99 ppt 10.0 / 50.0 ppt	0 / 20.00 mg/L 0 / 20.00 ppm	0 / 200.0 %
accuracy	± 0.01+1 digit	± 2 + 1 digit	±1+1 digit	± 2 % FS			± 0.2 + 1 digit	± 2 % FS
resolution	0.01 pH	0.1 / 1 mv	0.1°C	0.1 µS / 0.1 mS	0.1 ppm / 0.1 ppt	0.1 ppm / 0.1 ppt	0.01 mg/L	0.10%
compensation	ATC: 0 / 100°C	N/A		ATC: 0 / 60°C			ATC: 0 / 60°C MSC: 0 / 50 ppt MAC: 0 / 20000 ft	

ACCESORIES - "for pH meters"

SOAKING SOLUTION

Storage: Room Temperature (15°C-25°C)
 Note: 1. For laboratory and industrial use only.
 2. In case of contact with skin or eyes, rinse immediately with plenty of water.
 3. DO NOT EAT/DRINK.
 4. Keep bottle tightly closed.

*Soaking solution - 50 ml
 Catalog No: 616.01.101*

Electrolyte

Oxygen Probe Filling Solution

Storage: Room Temperature (15°C-25°C)
 Note: 1. For laboratory and industrial use only.
 2. In case of contact with skin or eyes, rinse immediately with plenty of water.
 3. DO NOT EAT/DRINK.
 4. Keep bottle tightly closed.

*DO solution - 50 ml
 Catalog No: 616.11.107*

CALIBRATION SOLUTION

Conductivity 1413 µS/cm @25°C/77°F
 TDS 940 ppm @25°C/77°F
 Electrical Conductivity 1.41 EC @25°C/77°F

Storage: Room Temperature (15°C-25°C)
 Note: 1. For laboratory and industrial use only.
 2. In case of contact with skin or eyes, rinse immediately with plenty of water.
 3. DO NOT EAT/DRINK.
 4. Keep bottle tightly closed.

*Conductivity solution - 120 ml
 Catalog No: 616.11.101*

CALIBRATION SOLUTION

Conductivity 12,880 µS/cm @25°C/77°F

Storage: Room Temperature (15°C-25°C)
 Note: 1. For laboratory and industrial use only.
 2. In case of contact with skin or eyes, rinse immediately with plenty of water.
 3. DO NOT EAT/DRINK.
 4. Keep bottle tightly closed.

*Conductivity solution - 120 ml
 Catalog No: 616.11.102*

for 616.01.001

*pH electrode
 Catalog No: 616.01.103*

for 616.01.001

*ORP electrode
 Catalog No: 616.01.104*

for 616.02.002

*pH electrode
 Catalog No: 616.02.101*

for 616.02.002

*ORP electrode
 Catalog No: 616.02.102*

for 616.11.001 & 616.12.001

*pH electrode
 Catalog No: 616.11.103*

for 616.12.001

*Conductivity electrode
 Catalog No: 616.11.104*

for 616.12.001

*DO probe
 Catalog No: 616.11.105*

for 616.11.001 & 616.12.001

*Temperature probe
 Catalog No: 616.11.108*

density & sedimentation & temperature & time & pH & weight measurement

PH BUFFER SOLUTIONS

- Ready to use pH buffer solutions with color coding, accuracy +/- 0,01 pH at 20°C.
- Traceable to NIST in unique designed, practical twin-neck dosing bottles!
- **Unique and innovative design of the “twin neck” dosing bottles offers multiple advantages:**
- No need for a separate measuring container during calibration.
- No waste of buffer since exact and correct quantity of buffer is dispensed into the calibrating chamber at all times.
- Ideally suited for field work and easy to carry.

Operation is simple, fast and easy;

- Open safety lock of the integrated calibration chamber.
- Fill calibration chamber from buffer reservoir by pressing the bottle gently.
- Calibrate pH electrode then discard used buffer solution. Bottle is now ready for the following use.



catalogue number	pH range	color	volume	pack quantity
502.04.250	pH 4.00	red	250 ml	1 piece
502.04.500	pH 4.00	red	500 ml	1 piece
502.04.901	pH 4.00	red	1000 ml	1 piece
502.07.250	pH 7.00	yellow	250 ml	1 piece
502.07.500	pH 7.00	yellow	500 ml	1 piece
502.07.901	pH 7.00	yellow	1000 ml	1 piece
502.10.250	pH 10.00	blue	250 ml	1 piece
502.10.500	pH 10.00	blue	500 ml	1 piece
502.10.901	pH 10.00	blue	1000 ml	1 piece



Fill calibration chamber from buffer reservoir by gently pressing the bottle.



Calibrate pH electrode.



Then discard used buffer solution. Bottle is now ready for the following use.



LITMUS PAPERS

- Litmus papers are the simplest and easiest way to measure pH values where no precise pH value is required.
- They are useful for determining whether a solution is acidic or basic.

Alternative 2 products

- Red litmus papers
- Blue litmus papers
- The red litmus paper has a pH measurement range 5,0 pH to 8,0 pH. The color changes from red to blue.
- The blue litmus paper has a pH measurement range 8,0 pH to 5,0 pH. The color changes from blue to red.

catalogue number	type	booklet quantity	pack quantity
101.01.001	red	20 pieces	200 pieces
101.01.002	blue	20 pieces	200 pieces



PH INDICATOR STRIPS



UNIVERSAL PH PAPER



- They provide precise pH measurement of solutions by using single color change.
- Consists of 4 different pH measurement color pads chemically bounded to a cellulose fiber stick.
- Since the pads do not bleed, pad colors do not interfere with each other after the test and ensures reliable pH measurement.
- They can measure pH values between 0,0 pH to 14,0 pH with 0,2 pH intervals.

- After the measurement, the pH value can be found by matching the colors on the pads with the reference color chart printed at the back side of the box.
- Fingers are protected from the test solution since the test pads are located at the extreme end of the strips.
- Manufactured as a strip of 6 mm width and 80 mm length. 100 pieces strip is packed in a clear polystyrene box for hygienic storage and for easy dispensing.

catalogue number	brand	pH - range	strip width	strip length	pack quantity
101.02.001	ISOLAB	0 - 14 pH	6 mm	80 mm	100 pieces
101.02.003	M&Nagel	0 - 14 pH	6 mm	80 mm	100 pieces

- Most commonly used pH papers for a wide field of application of pH measurement.

- They can measure pH values between 1,0 pH to 14,0 pH with 1 pH intervals.

- They provide easy pH measurement of solutions by using single color change .

- After the measurement the pH value can be found by matching the color on the paper with the reference color chart printed at the back side of the box.

- Supplied as a roll of 6 mm width and 5 meters length. Each roll is packed in a clear polystyrene box for hygienic storage and for easy dispensing.

catalogue number	pH - range	strip width	pack quantity
101.02.002	1 - 14 pH	6 mm	5 meters



PEHANON STRIPS

- A very special test strip for pH measurement which unifies the pH-indicator with the reference pH color chart on the same strip. pH values can be determined without a separate color chart.
- They provide precise pH measurement of solutions by using single color change. They can measure pH values between 3,8 pH to 5,5 pH with 0,2 pH intervals.
- Fast results are guaranteed since they do not require an addition step of matching the pad color with a reference color scale. The user can be sure to get accurate pH values at all times.
- The handle will remain dry and clean since the invisible hydrophobic barrier just above the top color field prevents capillary action of the test solution.
- Manufactured as a strip of 6 mm width and 80 mm length. 200 pieces strip is packed in a box for hygienic storage and for easy dispensing.

catalogue number	pH - range	pack quantity
101.03.002	3.8 - 5.5 pH	200 pieces



PEROXIDE STRIPS

- A very special "ready-to-use" test strip for peroxide measurement.
- Can be considered as ready to use kit that gives precise results in few seconds.
- Precise graduations as 0 – 1 – 3 – 10 – 30 – 100 guarantees reliable test results.
- The color chart is adjusted by certified standard solutions which are directly traceable to NIST standards.
- For reliable test results and logevity of the strip closing the cap after removing the strip is recommended.
- The desiccant in the stopper also effectively protects the strip against moisture.
- Manufactured as a strip of 6 mm width and 95 mm length. 100 pieces strip is packed in a box for hygienic storage and for easy dispensing.

catalogue number	strip width	strip length	pack quantity
101.03.003	6 mm	95 mm	100 pieces



AQUADUR STRIPS

- A special "ready-to-use" test strip for determination of water hardness.
- Can precisely determine water hardness in a liquid very precisely from very soft water to very hard water.
- Clear color changes from green to red guarantees reliable test results.
- Since the color change is very clear and sharp they do not require any reference color scale for matching.
- < 50 ppm : very soft water
- 50 - 120 ppm : soft water
- 120 - 240 ppm : medium water
- 240 - 360 ppm : hard water
- > 360 ppm : very hard water
- Manufactured as a strip of 6 mm width and 95 mm length.
- 100 pieces strip is packed in a box for hygienic storage and for easy dispensing.

catalogue number	strip width	strip length	pack quantity
101.03.004	6 mm	95 mm	100 pieces

density & sedimentation & temperature & time & pH & weight measurement



BALANCE - "0,0001 gr precision"

- Provides comfortable and reliable weighing with 0,0001 gr precision with single cell weighing system.
- Microprocessor controlled weighing technology guarantees fast and precise results at any time.
- Equipped with internal fully automatic calibration for quick setting of the balance.
- Featured with easy-to-read, large, backlite LCD display with advanced eye protection system. The user can easily read the indications in the display without the risk of reading errors.
- State-of-art touch button screen with ergonomically optimised keypad for left and right handed users. When a key is pressed, the pad responds immediately, even if the user is wearing protective gloves.
- Compact size suitable for small spaces. Occupies minimal space on the laboratory bench, yet maintains optimal performance.
- Robust housing protects internal components from environmental effects. The smooth surface allows the spills and finger prints to be wiped off easily.
- Removable, stainless steel pan with 90 mm diameter allows easy cleaning.
- RS-232 interfaces provide high speed communication with computers and printers.
- Equipped with internal re-chargeable battery. Supplied with a dust cover and calibration weight.

<i>catalogue no</i>	602.31.001
<i>weighing range (g)</i>	220
<i>readability (g)</i>	0,0001
<i>reproducibility (mg)</i>	± 0,1
<i>linearity (mg)</i>	± 0,2
<i>pan diameter (mm)</i>	90
<i>weighing units</i>	mg, g, kg, lb, oz, ozt, gn, ct
<i>calibration</i>	internal, fully automatic
<i>display</i>	LCD
<i>cabin type</i>	full
<i>overall dimensions (mm)</i>	342 x 212 x 341
<i>interface</i>	RS 232



Glass windshield with sliding doors offer optimal visibility and guarantees easy access to the weighing pan.



Featured with easy-to-read, large, backlite LCD display with advanced eye protection system.

STATISTICAL PRINTER

- Practical and easy to use printer that can be attached to all balances via RS232C interface.



➤ Weighing results can be statistically evaluated. Min value, standard deviation, total weight are automatically printed out due to built-in statistic and totalization function.

➤ Also offers complete documentation of all data including calibration, weighing results, correct date and time informations.

<i>catalogue no</i>	602.31.101
<i>features</i>	date, time, statistic and totalization
<i>printer</i>	dot matrix printer
<i>no of characters per line</i>	24 character
<i>printing speed</i>	faster than 1 line per second
<i>paper size</i>	57,5 x 0,5 mm
<i>power supply</i>	100 - 270 V / 50 - 60 Hz
<i>dimensions (mm)</i>	210 x 135 x 88
<i>net weight (gr)</i>	2000

density & sedimentation & temperature & time & pH & weight measurement

BALANCE - "0,001 gr precision"

- Provides comfortable and reliable weighing with 0,001 gr precision with single cell weighing system.
- Microprocessor controlled weighing technology guarantees fast and precise results at any time.
- Equipped with external weight calibration system for quick setting.
- Featured with easy-to-read, large, backlite LCD display. The user can easily read the indications in the display without the risk of reading errors.
- State-of-art touch button screen with ergonomically optimised keypad for left and right handed users. When a key is pressed, the pad responds immediately, even if the user is wearing protective gloves.
- Compact size suitable for small spaces. Occupies minimal space on the laboratory bench, yet maintains optimal performance.
- Robust housing protects internal components from environmental effects. The smooth surface allows the spills and finger prints to be wiped off easily.
- Removable, stainless steel pan with 85 mm diameter allows easy cleaning.
- RS-232 interfaces provide high speed communication with computers and printers.
- Equipped with internal re-chargeable battery. Supplied with a dust cover and calibration weight.



Glass windshield with sliding doors offer optimal visibility of the weighing samples and guarantees easy access to the weighing pan.

catalogue no	602.31.002
weighing range (g)	320
readability (g)	0,001
reproducibility (mg)	± 2
linearity (mg)	± 3
pan diameter (mm)	85
weighing units	g, kg, lb, oz, ozt, gn, ct
calibration	external, with calibration weight
display	LCD
cabin type	full
overall dimensions (mm)	280 x 210 x 275
interface	RS 232



Lever indicator and adjusting feet ensure proper balance setup for optimum weighing results.



Featured with easy-to-read, large, backlite LCD display with advanced eye protection system.

density & sedimentation & temperature & time & pH & weight measurement

BALANCE - "0,01 gr precision"

- Provides comfortable and reliable weighing with 0,01 gr precision with single cell weighing system.
- Microprocessor controlled weighing technology guarantees fast and precise results at any time.
- Equipped with external weight calibration system for quick setting.
- Featured with easy-to-read, large, backlite LCD display. The user can easily read the indications in the display without the risk of reading errors.
- State-of-art touch button screen with ergonomically optimised keypad for left and right handed users. When a key is pressed, the pad responds immediately, even if the user is wearing protective gloves.
- Compact size suitable for small spaces. Occupies minimal space on the laboratory bench, yet maintains optimal performance.

- Robust housing protects internal components from environmental effects. The smooth surface allows the spills and finger prints to be wiped off easily.

- Windshield (accept model 602.31.005) with sliding doors offer optimal visibility of the weighing samples and guarantees easy access to the weighing pan.

- Lever indicator and adjusting feet ensure proper balance setup for optimum weighing results.

- Removable, stainless steel pan allows easy cleaning.

- RS-232 interfaces provide high speed communication with computers and printers.

- Equipped with internal re-chargeable battery. Supplied with a dust cover and calibration weight.



Featured with easy-to-read, large, backlite LCD display. The user can easily read the indications in the display without reading errors.



Lever indicator and adjusting feet ensure proper balance setup for optimum weighing results.

catalogue no	602.31.003	602.31.004	602.31.005	602.31.006
weighing range (g)	1200	2200	3200	4200
readability (g)	0,01	0,01	0,01	0,01
reproducibility (mg)	± 20	± 20	± 20	± 20
linearity (mg)	± 20	± 30	± 30	± 40
pan dimensions (mm)	Ø 130	Ø 130	Ø 130	185 x 160
weighing units	g, kg, lb, oz, ozt, gn, ct			
calibration	external, with weight	external, with weight	external, with weight	external, with weight
display	LCD	LCD	LCD	LCD
cabin type	half size	half size	non	non
overall dimensions (mm)	280 x 210 x 180	280 x 210 x 180	280 x 210 x 100	280 x 210 x 100
interface	RS 232	RS 232	RS 232	RS 232

density & sedimentation & temperature & time & pH & weight measurement



BALANCE - "0,1 gr precision"

- Provides comfortable and reliable weighing with 0,1 gr precision with single cell weighing system.
- Microprocessor controlled weighing technology guarantees fast and precise results at any time.
- Equipped with external calibration system for quick setting.
- Featured with easy-to-read, large, backlite LCD display. The user can easily read the indications in the display without the risk of reading errors.
- State-of-art touch button screen with ergonomically optimised keypad for left and right handed users. When a key is pressed, the pad responds immediately, even if the user is wearing protective gloves.
- Compact size suitable for small spaces. Occupies minimal space on the laboratory bench.
- Robust housing protects internal components from environmental effects.
- Lever indicator and adjusting feet ensure proper balance setup for optimum weighing results.
- Removable, stainless steel pan with dimensions 185 x 160 mm allows easy cleaning.
- RS-232 interfaces provide high speed communication with computers and printers.
- Equipped with internal re-chargeable battery. Supplied with a dust cover and calibration weight.

catalogue no	602.31.007
weighing range (g)	6200
readability (g)	0,1
reproducibility (mg)	± 100
linearity (mg)	± 200
pan dimensions (mm)	185 x 160
weighing units	g, kg, lb, oz, ozt, gn, ct
calibration	external
display	LCD
cabin type	non
overall dimensions (mm)	280 x 210 x 100
interface	RS 232



BALANCE - "0,01 gr precision"

- Provides comfortable and reliable weighing with 0,01 gr precision.
- Compact size suitable to fit even into a pocket. Occupies minimal space on the laboratory bench, yet maintains optimal performance. Ideal assistant where mobility and precision are required.
- Microprocessor controlled weighing technology guarantees fast and precise results at any time.
- State-of-art touch button screen with ergonomically optimised keypad for left and right handed users. When a key is pressed, the pad responds immediately, even if the user is wearing protective gloves.
- Robust housing protects internal components from environmental effects. The smooth surface allows the spills and finger prints to be wiped off easily.
- Stainless steel pan with 100x 100 mm dimensions allows easy cleaning.
- Battery operated. Featured with auto power off after 30 seconds for energy saving.



Featured with easy-to-read, large, backlight LCD display.

catalogue no	602.32.001
weighing range (g)	500
readability (g)	0,01
reproducibility (mg)	± 50
linearity (mg)	± 50
pan dimensions (mm)	100 x 100
weighing units	g, oz, gn
calibration	-----
display	LCD
cabin type	non
overall dimensions (mm)	127 x 106 x 19
interface	-----



WEIGHING DISHES (BOATS) - "diamond form"

- Manufactured from polystyrene for many applications such as weighing, dispensing and storing.
- Since the anti-static property of the raw material eliminates the static built-up, they are specially recommended for weighing fine powders.
- They can also be used as freeze and mixing trays for small batches and also during microwave moisture analysis.
- Guarantees excellent chemical and temperature resistance between -10°C to +70°C.
- Flat bottom ensures perfect stability on counters while smooth and non-porous inner surface provides accurate pour-outs with minimal sample loss.
- Available 2 products: ➤ Non-sterilised
➤ Gamma sterilised



With a slight pressure to the sides weighing dishes can easily be converted into a pouring funnel for easy and non-spill transfer of samples.

non-sterile	sterile	dish volume	dish color	non-sterile pack qty.	sterile pack qty.
037.05.005	037.15.005	5 ml	white	100 pieces	10 pieces
037.05.030	037.15.030	30 ml	white	100 pieces	10 pieces
037.05.100	037.15.100	100 ml	white	100 pieces	10 pieces
037.06.005	037.16.005	5 ml	black	100 pieces	10 pieces
037.06.030	037.16.030	30 ml	black	100 pieces	10 pieces
037.06.100	037.16.100	100 ml	black	100 pieces	10 pieces



WEIGHING DISHES (BOATS) - "square form"

- Manufactured from polystyrene for many applications such as weighing, dispensing and storing.
- Since the anti-static property of the raw material eliminates the static built-up, they are specially recommended for weighing fine powders.
- They can also be used as freeze and mixing trays for small batches and also during microwave moisture analysis.
- Guarantees excellent chemical and temperature resistance between -10°C to +70°C.
- Flat bottom ensures perfect stability on counters while smooth and non-porous inner surface provides accurate pour-outs with minimal sample loss.
- Available 2 products: ➤ Non-sterilised
➤ Gamma sterilised



With a slight pressure to the sides weighing dishes can easily be converted into a pouring funnel for easy and non-spill transfer of samples.

non-sterile	sterile	dish volume	dish color	non-sterile pack qty.	sterile pack qty.
037.09.007	037.19.007	7 ml	white	100 pieces	10 pieces
037.09.100	037.19.100	100 ml	white	100 pieces	10 pieces
037.09.250	037.19.250	250 ml	white	100 pieces	10 pieces
037.11.007	037.21.007	7 ml	black	100 pieces	10 pieces
037.11.100	037.21.100	100 ml	black	100 pieces	10 pieces
037.11.250	037.21.250	250 ml	black	100 pieces	10 pieces

density & sedimentation & temperature & time & pH & weight measurement



WEIGHING DISHES - "for moisture analysis"

- Manufactured from high grade, oil free, durable and light gauge aluminum.
- Unique design guarantees excellent use with moisture determination balances.
- Can also be used as a mixing or weighing pan.
- Wall with 8 mm height guarantees spill-free application.
- Easily stackable due to the tapered body form for reducing storage space.

catalogue number	Ø x H (mm)	pack quantity
037.25.100	100x8	50 pieces



WEIGHING DISHES - "with handle"

- Manufactured from high grade, oil free, durable and light gauge aluminium. Featured with compressed walls for extra stability.
- Designed to be used as weighing dishes, evaporating dishes or drying dishes.
- Featured with a handle which enables easy holding of the dish. Can also be used as a marking surface.

catalogue number	Ø x H (mm)	pack quantity
037.24.045	49x12	100 pieces
037.24.055	60x15	100 pieces
037.24.065	66x16	100 pieces



WEIGHING DISHES - "general purpose"

- Manufactured from high grade, oil free, durable and light gauge aluminium. Featured with compressed walls for extra stability.
- Unique design offers variety of applications. They can be used as weighing dishes, as mixing dishes also even as dishes for storing samples.
- Easily stackable due to the tapered body form for reducing storage space.

catalogue number	Ø x H (mm)	pack quantity
037.23.070	70x22	100 pieces
037.23.085	88x38	100 pieces
037.23.110	110x34	100 pieces



WEIGHING SCOOPS - "glass"

- Made from glass with flat base ensuring stability on the balance pans.
- Hollow stem enables very easy powder transfer.

catalogue number	max. volume	pack quantity
037.07.001	3 ml	1 piece
037.07.002	6 ml	1 piece
037.07.003	10 ml	1 piece



WEIGHING SCOOPS - "stainless steel"

- Manufactured from stainless steel.
- Highly polished smooth interior provides accurate pour-outs without sample loss.

catalogue number	length	pack quantity
037.04.001	95 mm	1 piece
037.04.002	117 mm	1 piece
037.04.003	128 mm	1 piece



WATCH GLASSES - "glass"

➤ Manufactured from borosilicate glass according to DIN 12341 standard.

➤ Ideal tools also for evaporation applications and for covering the hot beakers.

➤ Fire polished edges prevents chipping and avoids breakage.

catalogue number	Ø (mm)	pack quantity
037.01.050	50	10 pieces
037.01.060	60	10 pieces
037.01.070	70	10 pieces
037.01.080	80	10 pieces
037.01.100	100	10 pieces
037.01.125	125	10 pieces
037.01.150	150	10 pieces
037.01.200	200	10 pieces



WEIGHING BOTTLES - "glass"

➤ Manufactured from borosilicate 3.3 glass complete with a lid.

➤ The interchangeable lids perfectly fits to the NS necks. Once closed they provide hermetical closure.

➤ White marking area on side wall enables easy marking and labelling.

catalogue number	Ø x H (mm)	pack quantity
037.02.254	25 x 40	1 piece
037.02.353	35 x 30	1 piece
037.02.402	40 x 25	1 piece
037.02.305	30 x 50	1 piece
037.02.503	50 x 30	1 piece
037.02.357	35 x 70	1 piece
037.02.603	60 x 30	1 piece
037.02.408	40 x 80	1 piece
037.02.803	80 x 30	1 piece
037.02.508	50 x 80	1 piece



WEIGHING PAPER

➤ Manufactured from impervious and transparent paper specially suitable for weighing.

➤ Leaves no residue and impurity during and after weighing application.

➤ Cut as 100 x 100 mm dimensions and packed as a booklet of 250 papers.

catalogue number	pack quantity
037.33.001	1 booklet



WEIGHING BRUSH

➤ Ideal tool for cleaning weighing boats, balance pans, weighing dishes and any similar object.

➤ Manufactured from extremely soft anti-static natural hair.

➤ Pointed tip provides guarantees excellent effective cleaning.

➤ Featured with a round woodned stem providing an efficient grip.

catalogue number	pack quantity
037.32.001	1 piece

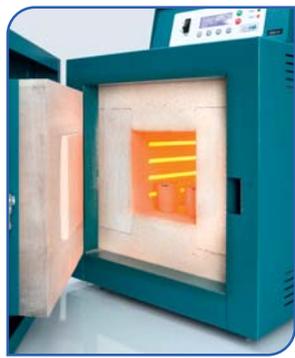


ISO LAB

Laborgeräte GmbH



*stirring & mixing
shaking & heating
cooling*





MAGNETIC STIRRER - "with hot plate"

- Explosion proof, maintenance free brushless DC motor with low noise level offers a stirring volume up to 20 lt with a smooth start and quick stop.
- Ceramic top plate guarantees perfect chemical resistance against acids. Also provides impact resistant, easily cleanable, scratch proof surface with excellent heat distribution.
- Integrated design of the heater and the top plate provides excellent heat transfer rate and quick heat up capability.
- Hermetically sealed aluminium alloy housing protects all mechanical and electronic components from aggressive effects and guarantees safety with a long life time.
- Electronic speed control from 100 to 1500 rpm provides a gentle revolution and precise stirring speed.
- PID temperature technology enables excellent heating control from ambient temperature to 550°C.
- Offers integrated temperature control (+/- 0,2°C accuracy) with external PT1000 temperature sensor and support rod.
- Overheat protection circuit turns off the heater if the top plate temperature reaches 580°C for any reason.
- Hot surface warning display indicates any residual heat even if switched off. LCD display will show "HOT" if hotplate temperature is over 50°C.
- Large LCD panel for simultaneous display for set & actual temperature and set & actual speed.
- Special software enables control and documentation of all values via RS232 interface.
- Supplied complete with PT1000 temperature sensor, support rod and fixing clamp.



Explosion proof, maintenance free brushless DC motor with low noise level offers a stirring volume up to 20 lt with a smooth start and quick stop.

Electronic speed control from 100 to 1500 rpm provides a gentle revolution and precise stirring speed even at high temperature.



Large LCD panel for simultaneous display for set & actual temperature and set & actual speed.

Hot surface warning display indicates any residual heat even if switched off. LCD display will show "HOT" if hot plate temperature is over 50°C.

catalogue number	613.06.001
dimensions / weight (mm / kg)	215 x 360 x 112 / 5,3
top plate dimensions (mm)	184 x 184
top plate material	glass ceramic
motor type	brushless DC motor
power (W)	1050
voltage (V)	100 - 240
frequency (Hz)	50 / 60
max. stirring capacity (L)	20
speed range (rpm)	100 - 1500
speed & temp. display	LCD
heating output (W)	1000
heating range (°C)	room temp. - 550
heating accuracy (°C)	±1 < 100; ±1 % > 100
safety temperature (°C)	580
heating warning (°C)	50
permissible ambient temperature (°C)	5 - 40
permissible relative humidity (%)	80
remote cont. (RS232) interface	yes
standard accesories	external temp. sensor PT 1000
time control (minute)	N/A

MAGNETIC STIRRER - "with hot plate"

- Explosion proof, maintenance free brushless DC motor with low noise level offers a stirring volume up to 20 lt with a smooth start and quick stop.
- Ceramic top plate guarantees perfect chemical resistance against acids. Also provides impact resistant, easily cleanable, scratch proof surface with excellent heat distribution.
- Integrated design of the heater and the top plate provides excellent heat transfer rate and quick heat up capability.
- Hermetically sealed aluminium alloy housing protects all mechanical and electronic components from aggressive effects and guarantees safety with a long life time.
- Electronic speed control from 100 to 1500 rpm provides a gentle revolution and precise stirring speed.
- PID temperature technology enables excellent heating control from ambient temperature to 340°C.
- Offers integrated temperature control (+/- 0,2°C accuracy) with external PT1000 temperature sensor and support rod.
- Overheat protection circuit turns off the heater if the top plate temperature reaches 360°C for any reason.
- Hot surface warning display indicates any residual heat even if switched off. LCD display will show "HOT" if hot plate temperature is over 50°C.
- Large LCD panel for simultaneous display for set & actual temperature and set & actual speed.
- Special software enables control and documentation of all values via RS232 interface.
- Supplied complete with PT1000 temperature sensor, support rod and fixing clamp.



613.02.002 magnetic stirrer has an automatic timer function which enables time control from 1 minute to 99 hour and 59 min.

catalogue number	613.02.001	613.02.002
dimensions / weight (mm / kg)	160 x 280 x 85 / 2,8	
top plate dimensions (mm)	Ø135	
top plate material	ceramic coated stainless steel	
motor type	brushless DC motor	
power (W)	550	
voltage (V)	100 - 240	
frequency (Hz)	50 / 60	
max. stirring capacity (L)	20	
speed range (rpm)	100 - 1500	
speed & temp. display	LCD	
heating output (W)	500	
heating range (°C)	room temp. - 340	
heating accuracy (°C)	±1 < 100; ±1 % > 100	
safety temperature (°C)	360	
heating warning (°C)	50	
permissible ambient temperature (°C)	5 - 40	
permissible relative humidity (%)	80	
remote cont. (RS232) interface	yes	
standard accesories	external temp. sensor PT 1000	
time control	N/A	1 min to 99 hr - 59 min

heating blocks - "for magnetic stirrers"

Manufactured from aluminium alloy with perfect heat transfer. Suitable for round bottom flasks.

The hole existing on the block enables insertion of the PT1000 external temperature sensor for precise control of the block temperature.



catalogue number	flask volume	block material	pack quantity
613.02.050	50 ml	aluminium	1 piece
613.02.100	100 ml	aluminium	1 piece
613.02.250	250 ml	aluminium	1 piece
613.02.500	500 ml	aluminium	1 piece

stirring & mixing & shaking & heating & cooling



MAGNETIC STIRRER - "with hot plate"

- Maintenance free brushless DC motor with low noise level offers a stirring volume up to 3 lt with a smooth start and quick stop.
- Ceramic coated stainless steel top plate guarantees perfect chemical resistance specially against strong acids. Also provides impact resistant, easily cleanable, scratch proof surface with excellent heat distribution.
- Integrated design of the heater and the top plate provides excellent heat transfer rate and quick heat up capability.
- ABS housing protects all mechanical and electronic components from aggressive effects and guarantees safety with a long life time.
- Electronic speed control from 100 to 1500 rpm provides a gentle revolution and precise stirring speed.
- PID temperature technology enables excellent heating control from ambient temperature to 280°C.
- Offers integrated temperature control (+/- 0,2°C accuracy) with external PT1000 temperature sensor and support rod.
- Overheat protection circuit turns off the heater if the top plate temperature reaches 320°C for any reason.
- Hot surface warning display indicates any residual heat even if switched off. LCD display will show "HOT" if hotplate temperature is over 50°C.
- Large LCD panel for simultaneous display for set & actual temperature and set & actual speed.
- Supplied complete with PT1000 temperature sensor, support rod and fixing clamp.



Maintenance free brushless DC motor with low noise level offers a stirring volume up to 3 lt with a smooth start and quick stop.



Hot surface warning display indicates any residual heat even if switched off. LCD display will show "HOT" if hot plate temperature is over 50°C.

catalogue number	613.01.001
dimensions / weight (mm / kg)	150 x 260 x 80 / 1,8
top plate dimensions (mm)	Ø135
top plate material	ceramic coated stainless steel
motor type	DC motor
power (W)	515
voltage (V)	100 - 240
frequency (Hz)	50 / 60
max. stirring capacity (L)	3
speed range (rpm)	100 - 1500
speed & temp. display	LED
heating output (W)	500
heating range (°C)	room temp. - 280
heating accuracy (°C)	±1 < 100; ±1 % > 100
safety temperature (°C)	320
heating warning (°C)	50
permissible ambient temperature (°C)	5 - 40
permissible relative humidity (%)	80
remote cont. (RS232) interface	N/A
standard accesories	external temp. sensor PT 1000
time control (minute)	N/A



MAGNETIC STIRRER - "without hot plate"

- Maintenance free DC motor with low noise level offers a stirring volume up to 3 lt with a smooth start and quick stop.
- Electronic speed control from 100 to 1500 rpm provides a gentle revolution and precise stirring speed even at maximum speed range.
- Large LED panel offers simultaneous display for set & actual speed.
- ABS housing protects all mechanical and electronic components from aggressive effects and guarantees safety with a long life time.
- Also provides impact resistant, easily cleanable, scratch proof surface.



Large LED panel offers simultaneous display for set & actual speed.

catalogue number	613.03.001
dimensions / weight (mm / kg)	150 x 260 x 80 / 1,8
top plate dimensions (mm)	Ø135
power (W)	15
voltage (V)	200 - 240
frequency (Hz)	50 / 60
max. stirring capacity (L)	3
speed range (rpm)	100 - 1500
speed & temp. display	LED



MAGNETIC STIRRER - "without hot plate"

- This ultra-flat, compact designed magnetic stirrer with only 350 gr weight can be carried even in a pocket.
- Specially recommended for titration applications.
- Offers a stirring volume up to 0,8 lt with a smooth start and quick stop.
- Electronic speed control from 15 to 1500 rpm provides a gentle revolution and precise stirring speed even at maximum speed range.
- Featured with bi-directional automatic reverse rotation function for better and more efficient mixing results.
- ABS housing protects all mechanical and electronic components from aggressive effects and guarantees safety with a long life time.
- Also provides impact resistant, easily cleanable, scratch proof surface.



Featured with bi-directional automatic reverse rotation function for better and more efficient mixing results.

catalogue number	613.07.001
dimensions / weight (mm / kg)	115 x 175 x 12 / 0,35
mixing plate diameter (mm)	100
power (W)	5
voltage (V)	220 - 240
frequency (Hz)	50 / 60
max. stirring capacity (L)	0,8
speed range (rpm)	15 - 1500
speed & temp. display	---



MAGNETIC STIRRER - "without hot plate"

- This light weight, compact designed magnetic stirrer is specially recommended for titration applications.
- Electronic speed control from 300 to 2.000 rpm provides a gentle revolution and precise stirring speed even at maximum speed range.
- High performance brushless DC motor offers a stirring volume up to 1,5 lt with a smooth start and quick stop.
- PET housing protects all mechanical and electronic components from aggressive effects and guarantees safety with a long life time
- Anti-slip silicone feet pads minimize vibration and guarantees excellent stability.
- Featured with an adjustable clamp holder suitable to hold electrodes and similar other probes.

catalogue number	613.05.001
dimensions / weight (mm / kg)	150 x 145 x 50 / 0,3
top plate dimensions (mm)	Ø120
top plate material	PET
motor type	DC motor
power (W)	7,2
voltage (V)	200 - 240
frequency (Hz)	50 / 60
max. stirring capacity (L)	1,5
speed range (rpm)	300 - 2000
speed & temp. display	N/A



MAGNETIC STIRRER - "without hot plate"

- This light weight, compact designed magnetic stirrer is specially recommended for titration applications.
- Electronic speed control from 15 to 2.000 rpm provides a gentle revolution and precise stirring speed even at maximum speed range.
- High performance brushless DC motor offers a stirring volume up to 1,5 lt with a smooth start and quick stop.
- ABS housing protects all mechanical and electronic components from aggressive effects and guarantees safety with a long life time.
- Stainless steel stirring plate provides impact resistant, easily cleanable, scratch proof surface.
- Featured with an adjustable clamp holder suitable to hold electrodes and similar other probes.

catalogue number	613.04.001
dimensions / weight (mm / kg)	150 x 135 x 53 / 0,71
top plate dimensions (mm)	Ø120
top plate material	steel
motor type	DC motor
power (W)	15
voltage (V)	220 - 240
frequency (Hz)	50 / 60
max. stirring capacity (L)	1
speed range (rpm)	0 - 2000
speed & temp. display	N/A

NEW



**MAGNETIC STIRRER - “multi position”
“without hot plate”**

- Specially designed for applications where more than one stirring position is required.
- Maintenance free brushless DC motor with low noise level offers a smooth start and quick stop.
- Featured with 10 stirring positions with each guarantees stirring capacity up to 0,4 lt.
- Stainless steel stirring plate provides impact resistant, easily cleanable, scratch proof surface.
- Stirring plate is covered with an anti-slip silicone film for advanced protection.
- Electronic speed control from 15 to 1.100 rpm provides a gentle revolution and precise stirring speed even at maximum speed range.

catalogue number	613.08.001
dimensions / weight (mm / kg)	182 x 552 x 65 / 3,2
top plate dimensions (mm)	180 x 450
top plate material	steel
Stirring positions	10
motor type	Brushless - DC motor
power (W)	20
voltage (V)	100 - 240
frequency (Hz)	50 / 60
max. stirring capacity (L)	40
speed range (rpm)	15 - 1100
speed & temp. display	N/A

**MAGNETIC STIRRER - “multi position”
“with hot plate”**

- Specially designed for applications where more than one stirring position is required.
- Maintenance free brushless DC motor with low noise level offers a smooth start and quick stop.
- Featured with 10 stirring positions with each guarantees stirring capacity up to 0,4 lt.
- Stainless steel stirring plate provides impact resistant, easily cleanable, scratch proof surface. Stirring plate is covered with an anti-slip silicone film for advanced protection.
- Hot plate enables heating control from ambient to 120°C.
- Electronic speed control from 15 to 1.100 rpm provides a gentle revolution and precise stirring speed even at maximum speed range.

catalogue number	613.32.001
dimensions / weight (mm / kg)	182 x 552 x 65 / 3,2
top plate dimensions (mm)	180 x 450
top plate material	steel
Stirring positions	10
motor type	Brushless - DC motor
power (W)	490
voltage (V)	100 - 240
frequency (Hz)	50 / 60
max. stirring capacity (L)	40
speed range (rpm)	15 - 1100
speed & temp. display	N/A

stirring & mixing & shaking & heating & cooling



MAGNETIC STIRRING BARS "cylindrical"

- Manufactured from ALNICO (an alloy of aluminium, nickel, iron and cobalt) magnets encapsulated with PTFE coating.
- Cylindrical magnetic stirring bars offers for a wide variety of applications providing excellent mixing effect.
- Polished finish provides excellent centering and smooth uninterrupted stirring.
- Their perfect contact with the base of the flask reduce the risk of ricochet during stirring.

catalogue number	length	diameter	pack quantity
057.01.010	10 mm	6 mm	10 pieces
057.01.015	15 mm	6 mm	10 pieces
057.01.020	20 mm	6 mm	10 pieces
057.01.025	25 mm	6 mm	10 pieces
057.01.030	30 mm	6 mm	10 pieces
057.01.035	35 mm	6 mm	10 pieces
057.01.040	40 mm	8 mm	10 pieces
057.01.045	45 mm	8 mm	10 pieces
057.01.050	50 mm	8 mm	6 pieces
057.01.060	60 mm	9 mm	6 pieces
057.01.070	70 mm	9 mm	6 pieces
057.01.080	80 mm	9 mm	6 pieces



MAGNETIC STIRRING BARS "oval - elliptical"

- Manufactured from ALNICO (an alloy of aluminium, nickel, iron and cobalt) magnets encapsulated with PTFE coating.
- These elliptic magnetic stirrer bars provides excellent mixing effect specially when used with round bottom flasks.
- Their egg shape guarantees unrestricted spinning and effective mixing by perfect adaptation of the vessel contour.

catalogue number	length	diameter	pack quantity
057.05.020	20 mm	8 mm	1 piece
057.05.025	25 mm	10 mm	1 piece
057.05.030	30 mm	11 mm	1 piece
057.05.035	35 mm	12 mm	1 piece
057.05.040	40 mm	15 mm	1 piece



MAGNETIC STIRRING BARS "cross form"

- Manufactured from ALNICO (an alloy of aluminium, nickel, iron and cobalt) magnets encapsulated with PTFE coating.
- Cross formed magnetic stirring bar creates a deep vortex even at relatively slow speeds and provides an excellent mixing effect.
- Their angled body form reduce the friction effect during stirring and provide excellent centering and smooth uninterrupted stirring.
- Their perfect contact with the base of the flask reduce the risk of ricochet during stirring.

catalogue number	dimensions	pack quantity
057.06.037	37 x 37 mm	1 piece



BOXES - "with compartments"

- Manufactured from polystyrene or acrylic featured with different size compartments.
- Offers practical positioning and easy reach of different size magnetic bars and a magnetic bar retriever.
- Also can be used for positioning and storing all other small size products.
- Featured with a lid protecting the box interior from environmental conditions and also reduce the risk of lost.
- Alternative 2 products:
 - Polystyrene small box
 - Acrylic large box

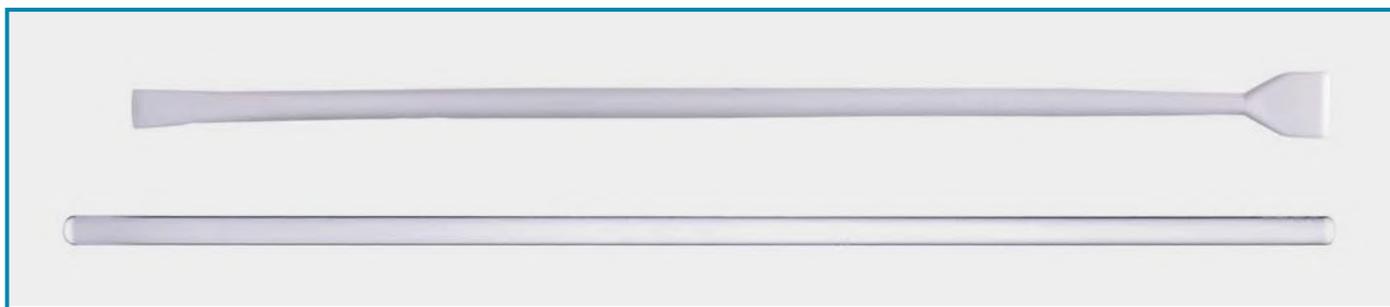
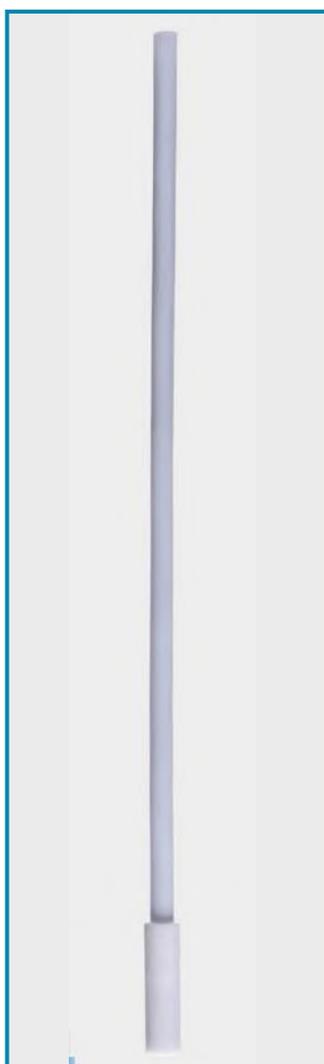


Other technical specifications can be seen at catalogue page no 67.

MAGNETIC BAR RETRIEVERS

- Constructed with a PTFE encapsulated powerful magnet at the end of a long stem.
- Essential tool for picking up the magnetic stirring bars from flasks after use without losing them.
- They offer risk-free removal of magnetic stirring bars even from aggressive liquids and reduce the risk of magnetic bar loss.
- Alternative 2 products: ➤ **Bar retriever with solid stem**
➤ **Bar retriever with flexible stem**
- Magnetic bar retriever with flexible stem guarantees easy reach to the edges of the cornered flasks such as Erlenmeyers.

catalogue number	retriever model	stem length	pack quantity
057.02.001	solid stem	270 mm	1 piece
057.02.002	flexible stem	330 mm	1 piece



STIRRING RODS - "glass" - "polypropylene"

- Offers practical solutions for mixing and stirring solutions.
- Alternative 2 products: ➤ **Glass stirring rods**
➤ **Polypropylene stirring rods**
- Glass rods are manufactured from rods with different diameters and lengths. Their flame polished ends prevent unexpected breakage during applications.
- Polypropylene stirring rod is featured with a flattened end for effective mixing. Featured with a spatula form for easy removal of samples.



glass stirring rod	length	diameter	pack quantity
057.03.200	200 mm	5 mm	10 pieces
057.03.250	250 mm	6 mm	10 pieces
057.03.300	300 mm	6 mm	10 pieces

polypropylene stirring rod	length	diameter	pack quantity
057.04.250	250 mm	6 mm	10 pieces

MECHANICAL STIRRER - "light duty"

- Highly reliable design for stirring low to medium viscous media with a vibration free and silent operation.
- Maintenance free, silent and explosion proof DC motor offers a stirring volume up to 20 lt with a smooth start without sample overflow and a quick stop.
- Sturdy aluminium main body efficiently absorbs and emits the heat generated by the motor.
- Electronic speed control from 0 to 2200 rpm provides a gentle revolution and precise stirring speed even at high temperatures.
- Large LED panel for simultaneous display for set & actual speed.
- Overload safety feature automatically stops the operation and protects all mechanical and electronic components.
- Stirring shafts can be easily inserted to their position by "push through" system.
- Stirring shaft, stand and fixing clamp are not supplied as a standard accessory. These should be ordered separately.

accessories for mechanical stirrer - "stand & bosshead"

catalogue number	615.01.001
dimensions / weight (mm / kg)	83 x 220 x 186 / 2,6
motor type	brushless DC motor
power (W)	70
voltage (V)	100 - 240
motor rating output (W)	50 / 60
frequency (Hz)	50
max. stirring capacity (L)	20
speed range (rpm)	0 - 2200
speed display	LED
speed display resolution (rpm)	± 1
max. torque (Ncm)	40
max. viscosity (mPas)	10000
overload protection	yes
motor protection	yes
chuck range diameter (mm)	0,5 - 10
permissible ambient Temperature (°C)	5 - 40
permissible relative humidity (%)	80
remote Cont. (RS232) interface	N/A
optional accessories	stirrers & stand & bosshead



Bosshead manufactured from steel with opening distance of 0 - 20 mm.

Sturdy construction specially enables holding heavy objects such as stirrers.
Catalogue No: 615.01.012

Stirrer stand is made from powder coated cast steel.

Unique base design offers very stable holding of the assembled stirrer and also possibility of getting close to the stand rod.

Supplied complete with 14 mm diameter stainless steel support rod.
Catalogue No: 049.09.250

MECHANICAL STIRRER - "heavy duty"

- Highly reliable design for stirring low to relatively viscous media with a vibration free and silent operation.
- Maintenance free, silent and explosion proof DC motor offers a stirring volume up to 40 lt with a smooth start without sample overflow and a quick stop.
- Sturdy aluminium main body efficiently absorbs and emits the heat generated by the motor.
- Electronic speed control with an accuracy +/- 3 rpm from 50 to 2200 rpm provides a gentle revolution and precise stirring speed even at high temperatures.
- Large LCD panel for simultaneous display for set & actual speed.
- Overload safety feature automatically stops the operation and protects all mechanical and electronic components.
- Stirring shafts can be easily inserted to their position by "push through" system.
- Stirring shaft, stand and fixing clamp are not supplied as a standard accessory. These should be ordered separately.



Large LCD display panel for indication of actual speed.

**accessories for mechanical stirrer - "stirring shafts"**

catalogue number	shaft type	shaft dia. & length	shaft material	shaft recommended for
615.01.101	cross	9,0 x 400 mm	st. steel	medium & high speed
615.01.102	blade	6,8 x 400 mm	st. steel	low & medium speed
615.01.103	cross	8,5 x 350 mm	PTFE	medium & high speed
615.01.104	blade	6,8 x 350 mm	PTFE	low & medium speed

catalogue number	615.02.001
dimensions / weight (mm / kg)	83 x 220 x 186 / 2,8
motor type	brushless DC motor
power (W)	130
voltage (V)	100 - 240
motor rating output (W)	100
frequency (Hz)	50 / 60
max. stirring capacity (L)	40
speed range (rpm)	50 - 2200
speed display	LCD
speed display resolution (rpm)	± 1
max. torque (Ncm)	60
max. viscosity (mPas)	50000
overload protection	yes
motor protection	yes
chuck range diameter (mm)	0,5 - 10
permissible ambient Temperature (°C)	5 - 40
permissible relative humidity (%)	80
remote Cont. (RS232) interface	yes
optional accessories	stirrers & stand & bosshead



VORTEX MIXER - "LED display"

- Offers touch and continuous orbital mixing for variety of applications. Provides efficient mixing with infinitely adjustable electronic speed control from 0 to 3000 rpm.
- Operation time can be set and controlled electronically between 1 second to 100 minutes. User friendly large LED displays enables easy setting and reading of speed and time.
- Guarantees perfect mixing of a 50 ml tube in 3 seconds with 6 mm diameter orbital movement.
- Unique counter-balance system creates maximum vortex power while minimizing the noise and excessive vibration.
- Aluminium cast base avoids unnecessary "walking" and slip resistant silicone feet pads minimizes the vibration enabling an excellent stable operation by a tight hold to the work bench.
- Reliable and extremely quiet motor guarantees an even distributed efficient mixing for all speeds ranges.
- Head is easily removable and replaceable with optional adapters that offers multiple use with different tube diameters.
- Can be used both in cold rooms, incubators and anaerobic and aerobic chambers due to the small foot print and extremely compact design.

catalogue number	622.03.001
dimensions / weight (mm / kg)	107 x 146 x 166 / 3,0
power (W)	36
voltage (V)	100 - 240
frequency (Hz)	50 / 60
mixing motion	orbital
orbital diameter (mm)	6
speed range (rpm)	0 - 3000
speed & time display	LED
run time	continuous / touch operation
protection class	IP 21



VORTEX MIXER - "advanced"

- Offers touch and continuous orbital mixing for variety of applications.
- Provides efficient mixing with infinitely adjustable speed control from 0 to 3000 rpm.
- Guarantees perfect mixing of a 50 ml tube in 3 seconds with 6 mm diameter orbital movement.
- Unique counter-balance system creates maximum vortex power while minimizing the noise and excessive vibration.
- Aluminium cast base avoids unnecessary "walking" and slip resistant silicone feet pads minimizes the vibration enabling an excellent stable operation by a tight hold to the work bench.
- Reliable and extremely quiet motor guarantees an even distributed efficient mixing for all speeds ranges.
- Head is easily removable and replaceable with optional adapters that offers multiple use with different tube diameters.
- Can be used both in cold rooms, incubators and anaerobic and aerobic chambers due to the small foot print and extremely compact design.

catalogue number	622.01.001
dimensions / weight (mm / kg)	107 x 146 x 166 / 3,0
power (W)	36
voltage (V)	100 - 240
frequency (Hz)	50 / 60
mixing motion	orbital
orbital diameter (mm)	6
speed range (rpm)	0 - 3000
speed display	scale
run time	continuous / touch operation
protection class	IP 21



MIXER - "vortex" - "basic"

- Offers perfect orbital vortex mixing with a single touch.
- Provides efficient mixing with fixed speed of 3000 rpm.
- Guarantees perfect mixing of a 50 ml tube in 3 seconds with 5,5 mm diameter orbital movement.
- Unique counter-balance system creates maximum vortexing while minimizing the noise and excessive vibration.
- Aluminium cast base avoids unnecessary "walking" and slip resistant silicone feet pads minimizes the vibration enabling an excellent stable operation by a tight hold to the work bench.
- Reliable and extremely quiet motor guarantees an even distributed efficient mixing.
- Can be used both in cold rooms , incubators and anaerobic and aerobic chambers due to the small foot print and extremely compact design.

catalogue number	622.02.001
dimensions / weight (mm / kg)	100 diameter x 80 / 0,55
power (W)	12
voltage (V)	100 - 240
frequency (Hz)	50 / 60
mixing motion	orbital
orbital diameter (mm)	5,5
speed range (rpm)	3000
speed display	-----
run time	touch operation
protection class	IP 21



MIXER - "microplate"

- Offers continuous orbital mixing of microplates for variety of applications in life science.
- Maintenance free DC motor with low noise level enables a smooth start and quick stop.
- Infinitely adjustable speed control from 0 to 1500 rpm guarantees a gentle revolution and optimal mixing.
- Aluminium cast housing avoids the vibration enabling an excellent stable operation.
- Top plate is easily removable and replaceable with optional adapters that can hold different tube sizes.
- Can be used both in cold rooms, incubators and anaerobic and aerobic chambers due to the small foot print and extremely compact design.

catalogue number	613.11.001
dimensions / weight (mm / kg)	260 x 150 x 80 / 3,0
power (W)	20
voltage (V)	100 - 240
frequency (Hz)	50 / 60
shaking movement	orbital
orbital diameter (mm)	4,5
speed range (rpm)	0 - 1500 (single plate)
speed display	scale
run time	continuous operation
permissible ambient temperature (°C)	5 - 40
permissible relative humidity (%)	80
protection class	IP21
optional accesories	various attachments

ROTATOR - "horizontal" - "LCD display"



Rotator supplied without tube holders. Please select the suitable tube holder from options shown at the bottom of the page.

➤ Offers continuous or time controlled vertical rotational mixing for variety of applications such as general mixing, hybridization and hematology applications.

➤ Adjustable speed control from 10 to 70 rpm provides a regulated gentle revolution and precise stirring speed.

➤ Rotisserie type vertical rotor mixing angle is adjustable from 0 to 90 degree angle.

➤ Infinitely adjustable time control from 1 to 1199 minutes.

➤ Reliable and extremely quiet motor guarantees an even distributed efficient mixing for all speeds ranges.

➤ Large LCD panel provides simultaneous display for time & speed.

➤ Tube holders can easily removable and replaceable with optional holders that can hold different tube sizes.

➤ Rotator supplied without tube holders. Please select the suitable tube holder from options shown at the bottom of the page.

catalogue number	618.01.001
dimensions / weight (mm / kg)	220 x 510 x 260 / 8,0
motor type	DC motor
power (W)	40
voltage (V)	100 - 240
frequency (Hz)	50 / 60
speed range (rpm)	10 - 70
speed & temp. display	LCD
tilt angle (°)	0 - 90
time control range (min)	1 - 1199
run time	timer & continuous operation
permissible ambient temperature (°C)	5 - 40
permissible relative humidity (%)	80
protection class	IP 21
optional accesories	various rotisseries



Rotisserie accesory for 1,5 ml centrifuge tubes hold horizontally.



Rotisserie accesory for 15 ml centrifuge tubes hold horizontally.



Rotisserie accesory for 50 ml centrifuge tubes hold horizontally.

catalogue number	tube size	tube quantity
618.01.101	1,5 ml	32 tubes

catalogue number	tube size	tube quantity
618.01.102	15 ml	16 tubes

catalogue number	tube size	tube quantity
618.01.103	50 ml	16 tubes

ROTATOR - "horizontal & circular" - "W/O display"



618.11.001

618.12.001

- Offers an economical solution for continuous horizontal mixing of biological samples.
- Compact and space saving design offers multiple advantages.
- Adjustable speed control from 0 to 80 rpm provides a regulated gentle revolution and precise stirring speed.
- Reliable and extremely quiet motor guarantees an even distributed efficient mixing for all speed ranges.
- Supplied complete with the rotisserie and tube attachments.

catalogue number	618.11.001	618.12.001
dimensions / weight (mm / kg)	150 x 530 x 190 / 1,7	300 x 220 x 310 / 2,0
motor type	DC motor	DC motor
power (W)	20	20
voltage (V)	100 - 240	100 - 240
frequency (Hz)	50 / 60	50 / 60
speed range (rpm)	0 - 80	0 - 80
tilt angle (°)	90	90
run time	continuous	continuous
protection class	IP21	IP21

TUBE ROTATOR - "W/O display"

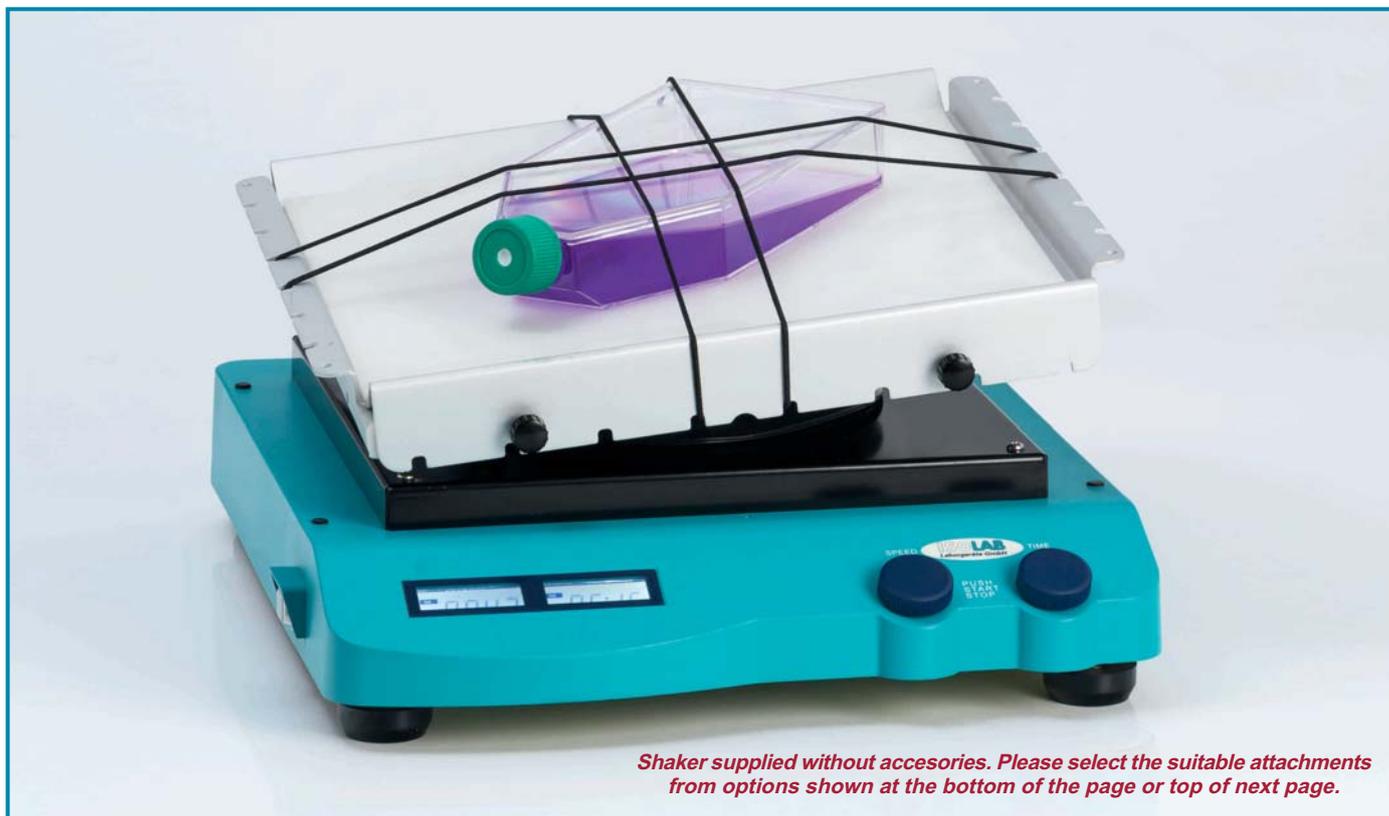


Siliconize rubber rollers ensures perfect holding of tube and guarantees effective rolling.

- Ideal for mixing blood samples, viscous samples, liquid/solid suspensions with continuous operation.
- Provides a gentle but highly efficient rocking and rolling mixing up to 4 kg total weight.
- As the roller mechanism rotates through each complete revolution, the right side of each roller is gently elevated about 13 mm and return back to the original horizontal position. This gentle up/down motion provides a "wave effect" and guarantees a homogeneous mixing.
- Maintenance free brushless DC motor with low noise level enables a smooth start and quick stop.
- Infinitely adjustable speed control from 0 to 70 rpm provides a gentle revolution and optimal mixing.
- Can be used both in cold rooms, incubators and anaerobic and aerobic chambers due to the small foot print and extremely compact design.

catalogue number	operation mode	max. load	speed range	dimensions
620.01.001	continuous	4 kg	0 - 70 rpm	450x260x120

SHAKER - "3D" - "orbital" - "LCD display"



Shaker supplied without accessories. Please select the suitable attachments from options shown at the bottom of the page or top of next page.

- Provides a continuous or time controlled 3 dimensional mixing up to 5 kg weight with a 7,9 degree fixed tilt angle.
- Maintenance free brushless DC motor with low noise level enables a smooth start and quick stop.
- Infinitely adjustable speed control from 0 to 70 rpm provides a gentle revolution and optimal mixing.
- Operation can be adjustable from 1 to 1199 minutes via a precise time control mechanism.
- Unique counter-balance system creates maximum shaking while minimizing the noise and excessive vibration.
- Large LCD panel provides simultaneous display for set & actual time and set & actual speed.
- Top plate is easily removable and replaceable with optional adapters and accessories.

catalogue number	619.01.001
dimensions / weight (mm / kg)	430 x 360 x 106 / 9,0
motor type	DC motor
power (W)	40
voltage (V)	100 - 240
frequency (Hz)	50 / 60
max. load capacity (kg)	5
rocking motion	3D orbital
speed range (rpm)	10 - 70
speed & time display	LCD
tilt angle (°)	7,9
time control range (min)	1 - 1199
run time	timer & continuous operation
permissible ambient temperature (°C)	5 - 40
permissible relative humidity (%)	80
protection class	IP21



*Fixing clip attachment to be used with various flask clip holders.
catalogue no: 619.01.104*



Stainless steel fixing clip adapters for various flasks to be used with clip attachment plate.

catalogue number	flask volume
619.01.050	50 ml
619.01.100	100 ml
619.01.250	250 ml
619.01.500	500 ml

accessories for "3D" shaker



SHAKER - "3D" - "orbital" - "W/O display"



- Provides a continuous or time controlled 3 dimensional mixing up to 3 kg weight with a 7 degree fixed tilt angle.
- Maintenance free brushless DC motor with low noise level enables a smooth start and quick stop.
- Infinitely adjustable speed control from 0 to 80 rpm provides a gentle revolution and optimal mixing.
- Unique counter-balance system creates maximum shaking while minimizing the noise and excessive vibration.
- Can be used both in cold rooms , incubators and anaerobic and aerobic chambers due to the small foot print and extremely compact design.

<i>catalogue number</i>	619.02.001
<i>dimensions / weight (mm / kg)</i>	330 x 270 x 130 / 2,7
<i>motor type</i>	DC motor
<i>power (W)</i>	20
<i>voltage (V)</i>	100 - 240
<i>frequency (Hz)</i>	50 / 60
<i>max. load capacity (kg)</i>	3
<i>rocking motion</i>	3D orbital
<i>speed range (rpm)</i>	0 - 80
<i>tilt angle (°)</i>	7
<i>run time</i>	continuous operation
<i>protection class</i>	IP21



MUFFLE FURNACE

- Offers ideal conditions for ashing, heat treatment, preheating, melting and quality control.
- Integrated heater design and efficient insulation provides homogenous heat distribution and enables rapid heating up.
- Heating elements are protected by quartz tubes for higher life span.
- Chamber and door interior plated with refractory bricks of highest quality. Maximized insulation to ensure minimum energy consumption.
- Excellent insulation also eliminates heat transfer and guarantees risk free "safe touch" during and after run cycle.
- Heating parameters and other functions can be automatically controlled and observed by membrane keypad with digital LCD panel.
- Ergonomic and reliable PID control unit is conveniently placed above the body for better reach and inspection.
- Integrated PID control unit offers a user friendly menu and interface with 4-line wide screen display.
- Featured with evacuation chimney powered by a fan.
- Safety features such as sound warning in case of errors and step stansitions and automatic cut off system in case of overheat.

catalogue number	606.01.005	606.01.007	606.01.010
external dimensions (mm)	430 x 600 x 610	530 x 580 x 600	550 x 620 x 610
furnace dimensions (mm)	150 x 230 x 150	200 x 230 x 160	250 x 230 x 180
furnace volume (L)	5	7	10
voltage (V)	220	220	220
frequency (Hz)	50	50	50
heating (kW)	2,0	2,5	2,8
temperature range (°C)	90 to 1100	90 to 1100	90 to 1100
temperature set accuracy (°C)	1	1	1
temperature uniformity (°C)	± 5	± 5	± 5
controller	PID multi functional, alarm, auto tuning		
internal material	refractory bricks		
external material	epoxy powder coated steel		
insulation	glass wool		
safety devices	over heat protection over current protection sound alert function		



Unique design for efficient heat distribution. Heating elements are protected by quartz tubes for higher life span.



PID control unit offers many advantages

- User friendly menu with 4 line wide display.
- 2 programme memories and direct or 2 step heating programme
- Control option of heating rate 3 - 20°C / minute with +/- 1°C temperature accuracy.
- Digital total heating time counter and average working temperature indicator.
- Opportunity of keeping programmes in memory.

WATER BATHS

- ▶ Water tank is manufactured from cavitation-proof, seamless and corrosion resistant stainless steel.
- ▶ Alarm and timer functions can be automatically controlled by membrane keypad with digital LED panel.
- ▶ Integrated heater design provides homogenous heat distribution rate and enables rapid heating up.
- ▶ Integrated PID temperature technology enables excellent heating control from ambient +5°C to 99°C with accuracy of +/- 0,1°C.
- ▶ Integrated overheat protection with alarm circuit automatically turns off heating in case of overheating.
- ▶ Automatic timer with aural and visual alarm functions enables selective operation as "continuous" mode or 99 minutes and 99 hours.
- ▶ Perforated bottom tray protects heating element and temperature sensor.
- ▶ Delivered complete with flat type stainless steel lid.



Seamless, robust cavitation-proof, stainless steel water tank. Perforated bottom tray protects heating element and temperature sensor. Baths are supplied with stainless steel flat lid.



Membrane keypad with digital LED panel with timer, alarm and auto-tuning functions. Timer with delayed on/off function can be set selectively either to 99 min. 59 sec. or 99 hour 59 min.



catalogue number	602.01.001	602.02.001
external dimensions (mm)	327 x 265 x 280	537 x 327 x 280
tank dimensions (mm)	300 x 240 x 150	500 x 295 x 150
tank volume (L)	11	22
heating output (W)	700	1400
heating range (°C)	ambient + 5 to 99	ambient + 5 to 99
heating control	PID technology	PID technology
heating accuracy (°C)	± 0,1	± 0,1
tank temp. uniformity	± 1	± 1
voltage (V)	220	220
frequency (Hz)	50	50
time & temp. display	LED	LED
time control	99 min. - 99 hour	99 min. - 99 hour
over heat protection	yes	yes
Standard Accesories	st. steel lid	st. steel lid

WATER CONDITIONER

- ▶ Highly effective special softener for water baths.
- ▶ Prevents algae and bacteria formation of the water in water baths.
- ▶ Extremely gentle on ware with almost neutral pH value.
- ▶ Fully water soluble, low-foaming, low phosphate content, non-combustible, no gas formation, non-toxic, non-aggressive, biodegradable.



Recommended 5 ml added to 1 liter new changed fresh water.

catalogue number	pack quantity
602.01.101	500 ml bottle

DRYING OVENS



- Offers Ideal conditions for drying, and sterilization for all laboratory applications.
- Integrated heater design provides homogenous heat distribution rate and enables rapid heating up.
- Gravity flow natural convection guarantees homogenous and smooth heating.
- Dust and turbulence free air recirculation provides ideal conditions specially for powders.
- Fully insulated chamber and door interior are manufactured from seamless stainless steel.
- Heating and timer, functions can be automatically controlled by membrane keypad with digital LED panel.
- Integrated PID temperature technology enables excellent heating control from ambient +10°C to 250°C with accuracy of +/- 1°C.
- Integrated overheat protection with alarm circuit automatically turns off heating in case of overheating.
- Automatic timer with audial and visual alarm functions enables selective operation as "continuous" mode or 99 minutes and 99 hours.
- Automatic circuit breakers ensure user safety in case of over temperature and over current problems.
- Delivered complete with adjustable sliding racks.

catalogue number	615.11.056	615.11.100
external dimensions (mm)	545 x 500 x 770	645 x 550 x 870
internal dimensions (mm)	400 x 350 x 400	500 x 400 x 500
working volume (L)	56	100
voltage (V)	220	220
frequency (Hz)	50	50
heating (kW)	1,5	2,0
temperature range (°C)	ambient + 15 to 250	ambient + 15 to 250
temperature set accuracy (°C)	± 1,0	± 1,0
temperature uniformity (°C)	± 3,0 at 120°C	± 3,0 at 120°C
convection	natural convection	
controller	PID multi functional, alarm, auto tuning	
timer	0 - 99 minute, 99 hour - continuous	
internal material	stainless steel	
external material	epoxy powder coated steel	
shelves	adjustable, 2 or 3 shelves	
insulation	glass wool	
safety devices	over heat protection over current protection leakage breaker	



INCUBATORS

- Offers ideal conditions for incubation, and sterilization for all laboratory applications.
- Air circulation by a silent motor forced convection guarantees more accurate and uniform temperature control.
- Tempered safety glass inner door enables easy sample viewing without chamber been effected by external factors.
- Integrated heater design provides homogenous heat distribution rate and enables rapid heating up.
- Fully insulated chamber and door interior are manufactured from seamless stainless steel.
- Heating and timer, functions can be automatically controlled by membrane keypad with digital LED panel.
- Integrated PID temperature technology enables excellent heating control from ambient +5°C to 70°C with accuracy of +/- 0,1°C.
- Integrated overheat protection with alarm circuit automatically turns off heating in case of overheating.
- Automatic timer with audial and visual alarm functions enables selective operation as "continuous" mode or 99 minutes and 99 hours.
- Automatic circuit breakers ensure user safety in case of over temperature and over current problems.
- Delivered complete with adjustable sliding racks.



catalogue number	609.01.056	609.01.100
external dimensions (mm)	520 x 470 x 680	580 x 540 x 975
internal dimensions (mm)	400 x 350 x 400	400 x 400 x 600
working volume (L)	56	100
voltage (V)	220	220
frequency (Hz)	50	50
heating (W)	150	250
temperature range (°C)	ambient + 5 to 70	ambient + 5 to 70
temperature set accuracy (°C)	± 0,1	± 0,1
temperature uniformity (°C)	± 0,5 at 37°C	± 0,5 at 37°C
convection	forced convection, air circulation	
controller	PID multi functional, alarm, auto tunning	
timer	99 hour, 59 minute - continuous	
internal material	stainless steel	
external material	epoxy powder coated steel	
shelves	adjustable, 2 or 3 shelves	
door (internal - external)	tempered safety glass - silicone packing double door	
safety devices	over heat protection over current breaker	

HEATING MANTLES - "without stirrer"



- Designed heating and boiling liquids in various size of round bottom flasks from 100 ml to 10.000 ml.
- Time proportional heater control with excellent repeatability enables a temperature operating range to 450°C.
- Heating element is made of highly flexible heat-resistant glass yarn which performs a maximum temperature of 900°C.
- Flexible heating element absorbs shocks, minimizing the risk of flask breakage and guarantees uniform heat distribution.
- Outer casing is manufactured from easy to clean powder coated steel.
- Glass fibre outer insulation with excellent ventilation slots keeps the outer casing cool at all times.
- Featured with non-skid rubber feet enabling perfect stability during operation.
- Control panel has separate indicator lamps for power and heat functions.



Heating element is made of highly flexible heat-resistant glass yarn which performs at maximum 450°C.



Control panel has separate indicator lamps for power and heat functions.

catalogue number	608.11.100	608.11.250	608.11.500	608.11.901	608.11.902	608.11.904	608.11.906	608.11.910
Voltage (V)	220							
Frequency (Hz)	50							
Power (W)	100	150	250	350	450	700	900	1200
Max. Heating (°C)	450							
Capacity (ml)	100	250	500	1000	2000	4000	6000	10000

HEATING MANTLES - "with stirrer"

- Designed to control both heating power and stirring speed independently.
- Time proportional heater control with excellent repeatability enables a temperature control to 450°C.
- Heating element is made of highly flexible heat-resistant glass yarn which performs a maximum temperature of 900°C.
- Flexible heating element absorbs shocks, minimizing the risk of flask breakage and guarantees uniform heat distribution.
- Provides a stirring speed up to 1.400 rpm with an integrated magnetic stirrer.
- For effective stirring, place the correct model and size of magnetic stirrer into the flask and increase the stirring speed slowly from minimum level.
- Outer casing is manufactured from easy to clean powder coated steel.
- Glass fibre outer insulation with excellent ventilation slots keeps the outer casing cool at all times.
- Featured with non-skid rubber feet enabling perfect stability during operation.
- Control panel has separate indicator lamps for heating and stirring functions.



Provides a stirring speed up to 1.400 rpm with an integrated magnetic stirrer.

For effective stirring, place the correct model and size of magnetic stirrer into the flask and increase the stirring speed slowly from minimum level.



Control panel has separate indicator lamps for heating and stirring functions.

catalogue number	608.12.100	608.12.250	608.12.500	608.12.901	608.12.902	608.12.904
voltage (V)	220					
frequency (Hz)	50					
power (W)	100	150	250	350	450	700
max. heating (°C)	450					
capacity (ml)	100	250	500	1000	2000	4000
stirring (rpm)	0 - 1400					



HEATING MANTLES "with stirrer" - "with precise temperature control"

- Designed to control both heating power and stirring speed independently.
- Time proportional heater control with excellent repeatability enables a temperature control to 450°C.
- Heating element is made of highly flexible heat-resistant glass yarn which performs a maximum temperature of 900°C.
- Flexible heating element absorbs shocks, minimizing the risk of flask breakage and guarantees uniform heat distribution.
- Provides a stirring speed up to 1.400 rpm with an integrated magnetic stirrer.
- For effective stirring, place the correct model and size of magnetic stirrer into the flask and increase the stirring speed slowly from minimum level.
- Outer casing is manufactured from easy to clean powder coated steel.
- Glass fibre outer insulation with excellent ventilation slots keeps the outer casing cool at all times.
- Featured with non-skid rubber feet enabling perfect stability during operation.

catalogue no	608.13.100	608.13.250	608.13.500	608.13.901	608.13.902
voltage (V)	220				
frequency (Hz)	50				
power (W)	100	150	250	350	450
max. heating (°C)	450				
capacity (ml)	100	250	500	1000	2000
stirring (rpm)	0 - 1400				



HEATING MANTLES "without stirrer" - "multi row"

- Offers practical and economical solutions where more than one mantle is required.
- Designed heating and boiling liquids in various size of round bottom flasks from 250 ml to 1.000 ml.
- Time proportional heater control for each compartment with excellent repeatability enables a temperature operating range to 450°C.
- Heating element is made of highly flexible heat-resistant glass yarn which performs a maximum temperature of 900°C.
- Flexible heating element absorbs shocks, minimizing the risk of flask breakage and guarantees uniform heat distribution.
- Glass fibre outer insulation with excellent ventilation slots keeps the outer casing cool at all times.
- Featured with non-skid rubber feet enabling perfect stability during operation.
- Control panel has separate indicator lamps for power and heat functions.

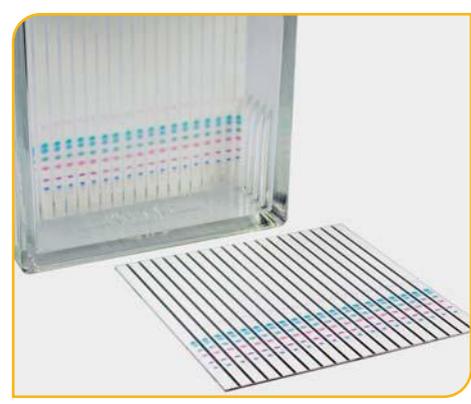
catalogue number	capacity	row number	power
608.14.250	250 ml	4 row	4 x 150 W
608.14.500	500 ml	4 row	4 x 250 W
608.14.901	1000 ml	4 row	4 x 350 W
608.16.250	250 ml	6 row	6 x 150 W
608.16.500	500 ml	6 row	6 x 250 W
608.16.901	1000 ml	6 row	6 x 350 W

catalogue number	product description
608.14.101	support and clamp set for 4 row mantle
608.16.102	support and clamp set for 6 row mantle

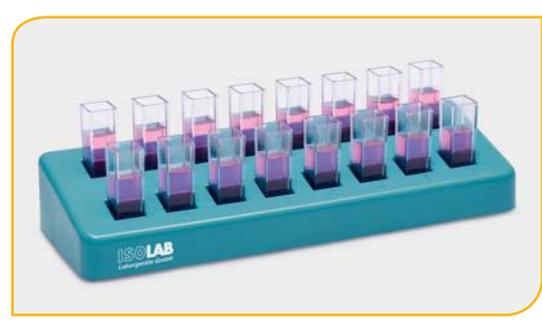


ISOLAB

Laborgeräte GmbH



chromatography & spectroscopy



SYRINGE FILTERS - "non-sterile"

- Specially designed for HPLC sample preparations with the best quality tear proven membranes. Fully autoclavable.
- Since the housing is ultrasonically sealed they offer excellent pressure stability.
- Sample distribution rings of the body directs samples for uniform filtration with a guarantees of high flow rate and filtration speed on both directions restricting the liquid overload.
- Unique female luer-lock secures connections with syringes. Body design enables to be used with all robotic machines.
- Membrane type and porosity printed on each filter. Different colour coded sealing rings enables easy differentiation of the membrane type.
- Available 2 products:
 - Syringe filters with 0,45 µm pore size
 - Syringe filters with 0,22 µm pore size



ISOLAB 0,45 µm filters	Macherey - Nagel 0,45 µm filters	filter membrane material	code name	pore size	diameter	pack quantity
094.01.001	094.02.001	regenerated cellulose	RC	0.45	25 mm	100 pieces
094.01.002	094.02.002	polytetrafluoroethylene	PTFE	0.45	25 mm	100 pieces
094.01.003	094.02.003	polyvinylidenedifluoride	PVDF	0.45	25 mm	100 pieces
094.01.004	094.02.004	polyester	PET	0.45	25 mm	100 pieces
094.01.005	094.02.005	cellulosemixedesters	MV	0.45	25 mm	100 pieces
094.01.006	094.02.006	cellulose acetate	CA	0.45	25 mm	100 pieces
094.01.007	094.02.007	nylon / polyamide	PA	0.45	25 mm	100 pieces
094.01.008	094.02.008	polyethersulfone	PES	0.45	25 mm	100 pieces

ISOLAB 0,22 µm filters	Macherey - Nagel 0,22 µm filters	filter membrane material	code name	pore size	diameter	pack quantity
094.03.001	094.04.001	regenerated cellulose	RC	0.22	25 mm	100 pieces
094.03.002	094.04.002	polytetrafluoroethylene	PTFE	0.22	25 mm	100 pieces
094.03.003	094.04.003	polyvinylidenedifluoride	PVDF	0.22	25 mm	100 pieces
094.03.004	094.04.004	polyester	PET	0.22	25 mm	100 pieces
094.03.005	094.04.005	cellulosemixedesters	MV	0.22	25 mm	100 pieces
094.03.006	094.04.006	cellulose acetate	CA	0.22	25 mm	100 pieces
094.03.007	094.04.007	nylon / polyamide	PA	0.22	25 mm	100 pieces
094.03.008	094.04.008	polyethersulfone	PES	0.22	25 mm	100 pieces

MV = cellulose mixed esters, **CA** = cellulose acetate, **RC** = regenerated cellulose, **PA** = polyamide, **PTFE** = polytetrafluoroethylene, **PVDF** = polyvinylidene difluoride, **PES** = polyethersulfone, **PET** = polyester

PVDF: Hydrophilic membrane
For polar solutions, water-soluble oligomers and polymers like proteins, binding capacity for proteins 20 µg per 25 mm filter.

PES: Hydrophilic membrane
For aqueous and slightly organic liquids with higher flow rates, very low adsorption for pharmaceuticals and proteins, good stability against acids and bases.

PA: Rather hydrophilic membrane
For aqueous and organic / aqueous medium polar liquids.

PTFE: hydrophobic membrane
For nonpolar liquids and gases which are resistant to all kinds of solvents flushing with alcohol, followed by water, makes the membrane more hydrophilic.

CA: Hydrophilic membrane
For filtration of water-soluble oligomers and polymers, especially suited for biological macromolecules, extremely low binding capacity for proteins 21 µg per 25 mm filter.

MV: Hydrophilic membrane with very low adsorption
For aqueous or polar solutions.

RC: Hydrophilic membrane with very low adsorption
For aqueous and organic / aqueous liquids i.e. polar and medium polar sample solutions Binding capacity for proteins 84 µg per 25 mm filter.

PET: Hydrophilic multipurpose membrane
For polar as well as nonpolar solvents, not cytotoxic, does not block the growth of microorganisms and higher cells.

SYRINGE FILTERS - "sterile"

- Specially designed for HPLC sample preparations with the best quality tear proven membranes. Fully autoclavable.
 - Since the housing is ultrasonically sealed they offer excellent pressure stability.
 - Sample distribution rings of the body directs samples for uniform filtration with a guarantees of high flow rate and filtration speed on both directions restricting the liquid overload.
 - Unique female luer-lock secures connections with syringes. Body design enables to be used with all robotic machines.
 - Membrane type and porosity printed on each filter.
 - Different colour coded sealing rings enables easy differentiation of the membrane type.
- Available 2 products:
- Syringe filters with 0,45 µm pore size
 - Syringe filters with 0,22 µm pore size



ISOLAB 0,45 µm filters	Macherey - Nagel 0,45 µm filters	filter membrane material	code name	pore size	diameter	pack quantity
094.05.001	094.06.001	regenerated cellulose	RC	0.45	25 mm	50 pieces
094.05.002	094.06.002	polytetrafluoroethylene	PTFE	0.45	25 mm	50 pieces
094.05.003	094.06.003	polyvinylidenedifluoride	PVDF	0.45	25 mm	50 pieces
094.05.004	094.06.004	polyester	PET	0.45	25 mm	50 pieces
094.05.005	094.06.005	cellulosemixedesters	MV	0.45	25 mm	50 pieces
094.05.006	094.06.006	cellulose acetate	CA	0.45	25 mm	50 pieces
094.05.007	094.06.007	nylon / polyamide	PA	0.45	25 mm	50 pieces
094.05.008	094.06.008	polyethersulfone	PES	0.45	25 mm	50 pieces

ISOLAB 0,22 µm filters	Macherey - Nagel 0,22 µm filters	filter membrane material	code name	pore size	diameter	pack quantity
094.07.001	094.08.001	regenerated cellulose	RC	0.22	25 mm	50 pieces
094.07.002	094.08.002	polytetrafluoroethylene	PTFE	0.22	25 mm	50 pieces
094.07.003	094.08.003	polyvinylidenedifluoride	PVDF	0.22	25 mm	50 pieces
094.07.004	094.08.004	polyester	PET	0.22	25 mm	50 pieces
094.07.005	094.08.005	cellulosemixedesters	MV	0.22	25 mm	50 pieces
094.07.006	094.08.006	cellulose acetate	CA	0.22	25 mm	50 pieces
094.07.007	094.08.007	nylon / polyamide	PA	0.22	25 mm	50 pieces
094.07.008	094.08.008	polyethersulfone	PES	0.22	25 mm	50 pieces

SYRINGES - "sterile" - "single use"



- 2 pieces syringes are suitable for HPLC applications. Sterile, pyrogen-free and for single use, latex and silicone oil free.
 - Consists of very clear, highly transparent and absolutely leak-tight polypropylene barrel and polyethylene piston.
 - Smooth piston movement offers reduced sliding force.
 - Defined safety stop to avoid accidental pull-out of plunger and loss of sample.
 - Design of the finger grip flanges ensure stability and comfort during injection.
- Other technical specifications can be seen at catalogue page no 261.**

NMR TUBES



➤ Manufactured from borosilicate 3.3 glass with precise tolerances for consistent high accuracy.

➤ Applicable until 600 MHz.

➤ Fire polished rims avoids accidental breakage risks during use.

➤ Due to their close tolerances accuracy they are most suitable for high-throughput NMR systems.

➤ Their straightness all over the tube length, their precise wall thickness and perfect wall thickness distribution guarantees accurate and quick test results.

➤ Sold without caps. Please order the caps separately.

NMR TUBE CAPS



➤ Manufactured from polypropylene with a perfect fit to 5 mm NMR tubes

➤ Large ridges with increased grip.

➤ Cap inner design ensures hermetical and leak-proof closure.

➤ Color coded caps enables fast, easy and practical identification of tube content.

catalogue number	cap color	pack quantity
072.01.003	red	100 pieces
072.01.004	green	100 pieces
072.01.005	yellow	100 pieces
072.01.006	blue	100 pieces



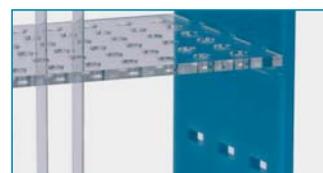
NMR TUBE STAND

➤ Manufactured from acrylic for holding 72 NMR tubes in 12 x 6 array.

➤ Handles at both sides guarantees easy hold and secure grip.

➤ Adjustable height upper layer provides multi use options with shorter objects.

➤ Overall dimensions are: 110x210x220 mm.



Adjustable height upper layer provides multi use options.

catalogue number	pack quantity
059.05.001	1 piece

catalogue number	external diameter	internal diameter	wall thickness	length	pack quantity
072.01.001	4,95 ± 0,05	4,19 ± 0,05	0,38 mm	178 mm	100 pieces
072.01.002	4,95 ± 0,05	4,19 ± 0,05	0,38 mm	203 mm	100 pieces

MEMBRANE FILTERS

➤ Membrane filtration offer a very convenient, fast and economical separation method.

They offer below mentioned advantages;

- ✓ Excellent level of particle retention
- ✓ Large load carry capacity
- ✓ High permeability to air
- ✓ Non-hygroscopic and biologically inert
- ✓ Chemical resistance to most solvents and reagents.
- ✓ Very high temperature resistance

➤ Available 2 products: ➤ filters with 0,45 µm pore size
➤ filters with 0,20 µm pore size



CM: cellulose mixed ester membrane

Particularly suitable for aqueous solutions. They are hydrophilic. Thermally stable to 121°C. Ideal for gravimetric analysis and are often used for contamination tests.

NC: nitrocellulose membranes

They are easily wettable and suited for filtration of aqueous solutions. In dry atmosphere these membranes are thermally stable at 125°C and can be autoclaved at 121°C.

RC: regenerated cellulose membranes

These membranes are resistant to most organic solvents. They are mostly used for filtration of solvent mixtures and ultra-purification and degassing of HPLC eluents.

TE: polytetrafluoroethylene membranes

Particularly suitable with aggressive media, as well as to concentrated acids and bases. They are hydrophobic, they can be used up to 145°C.

PE: polyester membranes

They are hydrophilic. Particularly suitable for fine titration, dust analysis, aerosol analysis and ultra-purification of solvents.

CA: cellulose acetate membranes

They have a low protein binding capacity and they are suited for aqueous and alcoholic media. They are hydrophobic and can be used for hot gases up to 180°C.

catalogue number	membrane material	code name	pore size	diameter	pack quantity
104.01.001	cellulose mixed ester	CM	0,20 µm	47 mm	100 pieces
104.01.002	cellulose mixed ester	CM	0,45 µm	47 mm	100 pieces
104.01.003	nitrocellulose	NC	0,20 µm	47 mm	100 pieces
104.01.004	nitrocellulose	NC	0,45 µm	47 mm	100 pieces
104.01.005	regenerated cellulose	RC	0,20 µm	47 mm	100 pieces
104.01.006	regenerated cellulose	RC	0,45 µm	47 mm	100 pieces
104.01.007	polytetrafluoroethylene	TE	0,20 µm	47 mm	100 pieces
104.01.008	polytetrafluoroethylene	TE	0,45 µm	47 mm	100 pieces
104.01.009	polyester	PE	0,20 µm	47 mm	100 pieces
104.01.010	polyester	PE	0,40 µm	47 mm	100 pieces
104.01.011	cellulose acetate	CA	0,20 µm	47 mm	100 pieces
104.01.012	cellulose acetate	CA	0,45 µm	47 mm	100 pieces



CUVETTES - "polystyrene" - "12,5 x 12,5 x 45 mm"

- Manufactured from glass-clear **polystyrene** with 12,5 x 12,5 x 45 mm overall dimensions as single use.
- Can be both used for chemistry and life science applications.
- Wavelength operating range from 340 to 900 nm. Offers a light path of 10 mm with clear and clean optical path length.
- Optimised shape and narrow wall thickness provides increased heat transfer resulting in more constant sample temperatures during measurements.
- Grouped by mould cavity and packed in same box to ensure lowest variation of absorption coefficient.
- Eliminates cross contamination risk associated with washing and re-using such as glass cuvettes.
- Available 2 products:
 - Macro cuvettes
 - Semi-micro cuvettes
- Supplied as 100 cuvettes packed in a styrofoam box with a cover.

catalogue number	cuvette type	product descriptions	material	wavelength range	light path	volume	internal width	pack quantity
098.02.002	macro	with clear wall & without cap	polystyrene	340 - 900 nm	10 mm	2,5-4,5 ml	10 mm	100 pieces
098.02.001	semi-micro	with clear wall & without cap	polystyrene	340 - 900 nm	10 mm	1,5-3,0 ml	4 mm	100 pieces



CUVETTES - "glass" - "12,5 x 12,5 x 45 mm"

- Manufactured from polished **quartz glass** or polished **optical glass** with 12,5 x 12,5 x 45 mm dimensions as multi use.
- They offer clear and clean optical path length and fit to all standard spectrophotometer cuvette holders.
- Can be both used for chemistry and life science applications.
- Quartz cuvettes provide wavelength operating range from 190 to 2.500 nm.
- Optical glass cuvettes provide wavelength operating range from 340 to 2.500 nm.
- Optimised shape, precise dimensions with tolerance less than 0,1 % mm and excellent wall thickness provides accurate results during measurements.
- Available 3 products:
 - Macro cuvettes
 - Semi-micro cuvettes
 - Micro cuvettes
- Supplied as 2 cuvettes packed in a polystyrene box for protection from dust and other environmental effects.

catalogue number	cuvette type	product descriptions	material	wavelength range	light path	volume	internal width	pack quantity
098.01.001	macro	with clear wall & PTFE cap	ES Quartz	190 - 2500 nm	10 mm	3,50 ml	10 mm	2 pieces
098.01.002	semi-micro	with frosted wall & PTFE cap	ES Quartz	190 - 2500 nm	10 mm	1,40 ml	4 mm	2 pieces
098.01.003	micro	with frosted wall & PTFE cap	ES Quartz	190 - 2500 nm	10 mm	0,70 ml	2 mm	2 pieces
098.01.004	macro	with clear wall & PTFE cap	optical glass	340 - 2500 nm	10 mm	3,50 ml	10 mm	1 piece
098.01.005	semi-micro	with frosted wall & PTFE cap	optical glass	340 - 2500 nm	10 mm	1,40 ml	4 mm	2 pieces
098.01.006	micro	with frosted wall & PTFE cap	optical glass	340 - 2500 nm	10 mm	0,70 ml	2 mm	2 pieces

CUVETTES - "glass" - "12,5 x 52,5 x 45 mm"

- Manufactured from polished **quartz glass** or polished **optical glass** with 12,5 x 52,5 x 45 mm dimensions as multi use.
- They offer clear and clean optical path length and fit to all standard spectrophotometer cuvette holders.
- Can be both used for chemistry and life science applications.
- Quartz cuvettes provide wavelength operating range from 190 to 2.500 nm.
- Optical glass cuvettes provide wavelength operating range from 340 to 2.500 nm.
- Optimised shape, precise dimensions with tolerance less than 0,1 % mm and excellent wall thickness provides accurate resulting during measurements.
- Available 3 products:
 - Macro cuvettes
 - Semi-micro cuvettes
 - Micro cuvettes
- Supplied as 2 cuvettes packed in a polystyrene box for protection from dust and other environmental effects.



catalogue number	cuvette type	product descriptions	material	wavelength range	light path	volume	internal width	pack quantity
098.01.007	macro	with clear wall & PTFE cap	ES Quartz	190 - 2500 nm	50 mm	17,5 ml	10 mm	1 piece
098.01.008	semi-micro	with frosted wall & PTFE cap	ES Quartz	190 - 2500 nm	50 mm	7,00 ml	4 mm	2 pieces
098.01.009	micro	with frosted wall & PTFE cap	ES Quartz	190 - 2500 nm	50 mm	3,50 ml	2 mm	2 pieces
098.01.010	macro	with clear wall & PTFE cap	optical glass	340 - 2500 nm	50 mm	17,5 ml	10 mm	1 piece
098.01.011	semi-micro	with frosted wall & PTFE cap	optical glass	340 - 2500 nm	50 mm	7,00 ml	4 mm	2 pieces
098.01.012	micro	with frosted wall & PTFE cap	optical glass	340 - 2500 nm	50 mm	3,50 ml	2 mm	2 pieces

BOX - "for cuvettes"

- Manufactured from polypropylene for safe handling and holding 12 spectrophotometer cuvettes with 10 mm width.
- Hinged lid secures clasps and offers convenient use of the box. Removable cuvette insert helps easy cleaning.
- The inside height designed to accommodate all spectrophotometer cuvettes.

catalogue number	dimensions	pack quantity
098.03.001	120 x 112 x 60 mm	1 piece



RACK - "for cuvettes"

- Manufactured from polypropylene for safe handling and holding 16 spectrophotometer cuvettes with 10 mm width.
- Alphanumeric index on cuvette rows enables easy identification of tube positions.
- 2 tier body form offers clear visibility option from horizontal direction.

catalogue number	dimensions	pack quantity
098.03.002	210 x 70 x 35 mm	1 piece





THIN LAYER CHROMATOGRAPHY

➤ Thin Layer Chromatography (TLC), like all chromatographic techniques, based on multistage distribution process involving;

✓ **Suitable absorbants (as stationary phase) coated as a thin layer onto a suitable support such as glass, aluminium or polyester sheet.**

✓ **Solvents or solvent mixtures as the mobile phase.**

✓ **Sample molecules**

➤ Although the TLC principle is known more than 100 years, today TLC has gained increasing importance.

➤ Applicability of TLC was enhanced by development of new absorbants and supports.

➤ The basic steps of TLC are the following;

✓ **Sample preparation.** ✓ **Sample application.** ✓ **Development of chromatogram.** ✓ **Evaluation in TLC**



SIL G - "unmodified standard silica layers"

➤ Silica 60, specific surface (BET) - 500 m²/g, mean pore size 60A, specific pore volume 0,75 ml/g, particle size 5 - 17 um:standard grade.

➤ Thickness of layer for analytical plates 0,25 mm. For preparative plates 0,5 and 1,0 mm. For 2,0 mm preparative layers a slightly closer material is used.

➤ Indicators: manganese activated zinc silicate with green fluorescence for short-wave UV (254 nm); special inorganic fluorescent pigment with blue fluorescence for long-wave UV (366 nm).

➤ Binders: highly polymeric products, which are stable in almost all organic solvents and resistant towards aggressive visualisation reagents.

ALUGRAM - "Xtra" - "SIL G"

➤ Silica 60, specific surface (BET) - 500 m²/g, mean pore size 60A, specific pore volume 0,75 ml/g, particle size 5 - 17 um standard grade.

Offers outstanding advantages as;

✓ **Outstanding wettability for precise colorization results, even with 100 % aqueous detection reagents.**

✓ **Best separation efficiency and reproducibility for each lot.**

✓ **Easy and reliable cutting due to an optimized binder system without flaking of silica.**

➤ Binders: highly polymeric products, which are stable in almost all organic solvents and resistant towards aggressive visualisation reagents, also completely stable in purely aqueous eluents.

catalogue number	product descriptions	material	dimensions	thickness of layer	pack quantity
108.01.001	TLC precoated plates SIL G-25	glass sheet	20 x 20 cm	0,25 mm	25 pieces
108.01.002	TLC precoated plates SIL G-25 / UV 254	glass sheet	20 x 20 cm	0,25 mm	25 pieces
108.01.003	TLC precoated plates SIL G-25 / UV 254 + 366	glass sheet	20 x 20 cm	0,25 mm	25 pieces
108.01.004	TLC precoated plates SIL G-50	glass sheet	20 x 20 cm	0,50 mm	20 pieces
108.01.005	TLC precoated plates SIL G-50 / UV 254	glass sheet	20 x 20 cm	0,50 mm	20 pieces
108.01.006	TLC precoated plates SIL G-100	glass sheet	20 x 20 cm	1,00 mm	15 pieces
108.01.007	TLC precoated plates SIL G-100 / UV 254	glass sheet	20 x 20 cm	1,00 mm	15 pieces
108.01.008	TLC precoated plates SIL G-200	glass sheet	20 x 20 cm	2,00 mm	12 pieces
108.01.009	TLC precoated plates SIL G-200 / UV 254	glass sheet	20 x 20 cm	2,00 mm	12 pieces
108.01.010	POLYGRAM sheets SIL G	polyester sheet	20 x 20 cm	0,20 mm	25 pieces
108.01.011	POLYGRAM sheets SIL G / UV 254	polyester sheet	20 x 20 cm	0,20 mm	25 pieces
108.01.012	ALUGRAM sheets SIL G	aluminium sheet	20 x 20 cm	0,20 mm	25 pieces
108.01.013	ALUGRAM sheets SIL G / UV 254	aluminium sheet	20 x 20 cm	0,20 mm	25 pieces
108.01.014	ALUGRAM "Xtra" sheets SIL G	aluminium sheet	20 x 20 cm	0,20 mm	25 pieces
108.01.015	ALUGRAM" Xtra" sheets SIL G / UV 254	aluminium sheet	20 x 20 cm	0,20 mm	25 pieces

TLC SEPARATION CHAMBER

- Rectangular shaped TLC developing tanks are used to develop 20x20 cm TLC plates.
- TLC developing tanks are used to run up to 5 TLC plates for separation. It is important to maintain saturated conditions during the analysis which can be achieved by using small tanks, filter paper liners and sufficient solvents.
- The tank can be equilibrated for 30 minutes prior to running the plate to yield good result.
- TLC Developing Tanks supplied with the developing tank and lid together.

catalogue number	pack quantity
108.01.016	1 piece



TLC SPRAYER - "with gas canister"

- TLC sprayer provide a fine, uniform spray all over the TLC plate surfaces for optimization of TLC plates.
- With it's unique design offer easy-to-use and easy-to-clean options.
- Based on a simple technology where the aerosol canister is situated above the reservoir bottle.
- A small press of the lever highly pressurises the lower glass reservoir bottle releasing a fine mist of spray.
- Propellant mixture is eco-friendly and does not harms the nature.
- Guarantees homogenous distribution, even coverage and minimum reagent consumption.
- Gas canister serves as handle. Cap fits to all 38 - 40 thread reagent bottles.

catalogue number	pack quantity
108.02.001	1 piece



Filling: Pour the TLC reagent into the bottle. Never fill above the shoulder line.



Mounting: Attach TLC spreyer to the bottle by turning anti-clockwise. Never shake the sprayer during mounting.



Spraying: Start spraying with the sprayer and release the button while the sprayer is still moving at the end of the TLC plate to avoid reagent loss. For best performance a spraying angle between 90° and 45° is required.



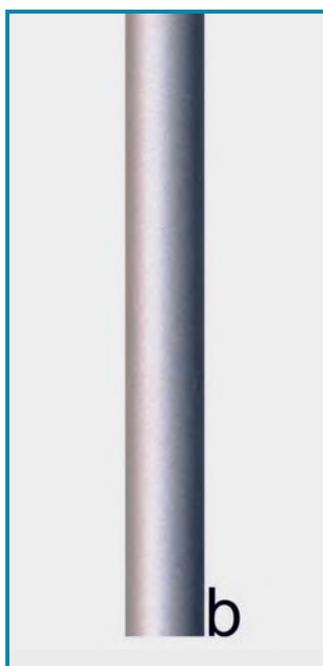
Also always hold the sprayer at a distance between 15 cm to 30 cm from TLC plate surface.





a

“A” type needles are designed for optimum penetration with 17° bevel. Also minimizes the necessary piercing force and diameter of injection channel.



b

“B” type needles has a 90° bevel for precise pipetting. This design release drops completely, for maximum reproducibility. Ideal for HPLC sample injection.



c

“C” type needles are designed for autosamplers. The tapered tip and the 90° square end eliminate burns. Ideal for PTFE laminated seals and regular septas.



d

“D” type needles are featured with a side opening for dispensing and filling. This design avoids plugging and minimizes septum damage. Ideal for thicker septas.

SYRINGES - “for dosage of liquids” – “0 dead volume needle” – “serie T”



Plunger: stainless steel (plunger runs inside the needle) / **Barrel:** borosilicate glass / **Presicion:** < +/- 1% of the volume
Main use: sample dosage for gas chromatography & dosage of small volume samples & for thin layer chromatography

catalogue number	syringe volume	needle type	needle serie	needle descriptions	pack quantity
094.31.005	0,5 µl	A	T	“0” dead volume syringe	1 piece
094.31.010	1,0 µl	A	T	“0” dead volume syringe	1 piece
094.31.020	2,0 µl	A	T	“0” dead volume syringe	1 piece
094.31.050	5,0 µl	A	T	“0” dead volume syringe	1 piece
094.31.100	10 µl	A	T	“0” dead volume syringe	1 piece
094.31.250	25 µl	A	T	“0” dead volume syringe	1 piece
094.32.005	0,5 µl	B	T	“0” dead volume syringe	1 piece
094.32.010	1,0 µl	B	T	“0” dead volume syringe	1 piece
094.32.020	2,0 µl	B	T	“0” dead volume syringe	1 piece

catalogue number	syringe volume	needle type	needle serie	needle descriptions	pack quantity
094.32.050	5,0 µl	B	T	“0” dead volume syringe	1 piece
094.32.100	10 µl	B	T	“0” dead volume syringe	1 piece
094.32.250	25 µl	B	T	“0” dead volume syringe	1 piece
094.33.010	1,0 µl	D	T	“0” dead volume syringe	1 piece
094.33.020	2,0 µl	D	T	“0” dead volume syringe	1 piece
094.33.050	5,0 µl	D	T	“0” dead volume syringe	1 piece
094.33.100	10 µl	D	T	“0” dead volume syringe	1 piece
094.33.250	25 µl	D	T	“0” dead volume syringe	1 piece

SYRINGES - "for dosage of liquids" – "fixed needle" – "serie FN"



Plunger: stainless steel / **Barrel:** borosilicate glass / **Presicion:** < +/- 1% of the volume
Main use: sample dosage for gas chromatography & HPLC valves & autosamplers

catalogue number	syringe volume	needle type	needle serie	needle descriptions	pack quantity
094.11.005	5 µl	A	FN	fixed needle	1 piece
094.11.010	10 µl	A	FN	fixed needle	1 piece
094.11.025	25 µl	A	FN	fixed needle	1 piece
094.11.050	50 µl	A	FN	fixed needle	1 piece
094.11.100	100 µl	A	FN	fixed needle	1 piece
094.11.250	250 µl	A	FN	fixed needle	1 piece
094.11.500	500 µl	A	FN	fixed needle	1 piece
094.12.005	5 µl	B	FN	fixed needle	1 piece
094.12.010	10 µl	B	FN	fixed needle	1 piece
094.12.025	25 µl	B	FN	fixed needle	1 piece
094.12.050	50 µl	B	FN	fixed needle	1 piece
094.12.100	100 µl	B	FN	fixed needle	1 piece
094.12.250	250 µl	B	FN	fixed needle	1 piece
094.12.500	500 µl	B	FN	fixed needle	1 piece

catalogue number	syringe volume	needle type	needle serie	needle descriptions	pack quantity
094.13.005	5 µl	C	FN	fixed needle	1 piece
094.13.010	10 µl	C	FN	fixed needle	1 piece
094.13.025	25 µl	C	FN	fixed needle	1 piece
094.13.050	50 µl	C	FN	fixed needle	1 piece
094.13.100	100 µl	C	FN	fixed needle	1 piece
094.13.250	250 µl	C	FN	fixed needle	1 piece
094.13.500	500 µl	C	FN	fixed needle	1 piece
094.14.005	5 µl	D	FN	fixed needle	1 piece
094.14.010	10 µl	D	FN	fixed needle	1 piece
094.14.025	25 µl	D	FN	fixed needle	1 piece
094.14.050	50 µl	D	FN	fixed needle	1 piece
094.14.100	100 µl	D	FN	fixed needle	1 piece
094.14.250	250 µl	D	FN	fixed needle	1 piece
094.14.500	500 µl	D	FN	fixed needle	1 piece

SYRINGES - "for dosage of liquids" – "removable needle" – "serie RN"

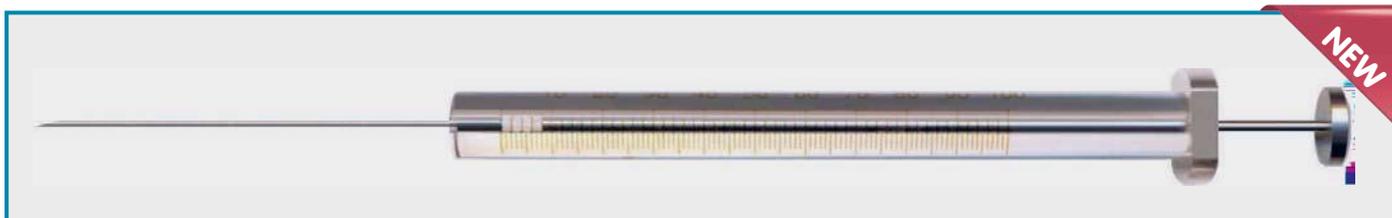


Plunger: stainless steel / **Barrel:** borosilicate glass / **Presicion:** < +/- 1% of the volume
Main use: sample dosage for gas chromatography & HPLC valves & autosamplers

catalogue number	syringe volume	needle type	needle serie	needle descriptions	pack quantity
094.21.005	5 µl	A	RN	removable needle	1 piece
094.21.010	10 µl	A	RN	removable needle	1 piece
094.21.025	25 µl	A	RN	removable needle	1 piece
094.21.050	50 µl	A	RN	removable needle	1 piece
094.21.100	100 µl	A	RN	removable needle	1 piece
094.21.250	250 µl	A	RN	removable needle	1 piece
094.21.500	500 µl	A	RN	removable needle	1 piece

catalogue number	syringe volume	needle type	needle serie	needle descriptions	pack quantity
094.22.005	5 µl	B	RN	removable needle	1 piece
094.22.010	10 µl	B	RN	removable needle	1 piece
094.22.025	25 µl	B	RN	removable needle	1 piece
094.22.050	50 µl	B	RN	removable needle	1 piece
094.22.100	100 µl	B	RN	removable needle	1 piece
094.22.250	250 µl	B	RN	removable needle	1 piece
094.22.500	500 µl	B	RN	removable needle	1 piece

SYRINGES - "for dosage of gas & liquids" – "fixed needle" – "serie H"

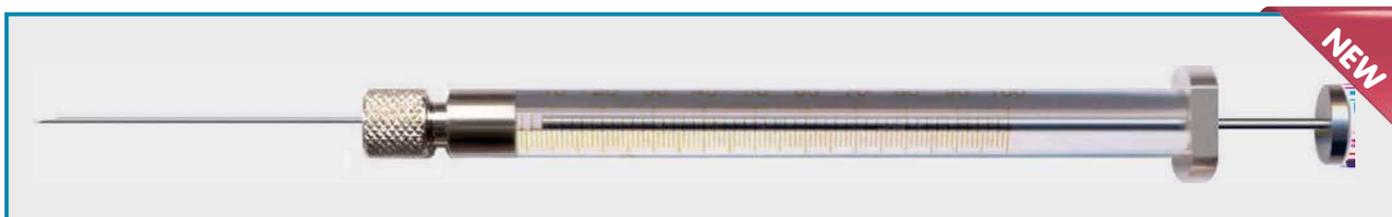


Plunger: stainless steel with PTFE seal / **Barrel:** borosilicate glass / **Presicion:** < +/- 1% of the volume
Main use: sample dosage for gas chromatography & HPLC valves & autosamplers & dosage of aggressive fluids

catalogue number	syringe volume	needle type	needle serie	needle descriptions	pack quantity
094.41.005	5 µl	A	H	fixed needle	1 piece
094.41.010	10 µl	A	H	fixed needle	1 piece
094.41.025	25 µl	A	H	fixed needle	1 piece
094.41.050	50 µl	A	H	fixed needle	1 piece
094.41.100	100 µl	A	H	fixed needle	1 piece
094.41.250	250 µl	A	H	fixed needle	1 piece
094.41.500	500 µl	A	H	fixed needle	1 piece
094.41.901	1,0 ml	A	H	fixed needle	1 piece
094.41.902	2,5 ml	A	H	fixed needle	1 piece
094.41.905	5,0 ml	A	H	fixed needle	1 piece
094.41.910	10,0 ml	A	H	fixed needle	1 piece
094.42.005	5 µl	B	H	fixed needle	1 piece
094.42.010	10 µl	B	H	fixed needle	1 piece
094.42.025	25 µl	B	H	fixed needle	1 piece
094.42.050	50 µl	B	H	fixed needle	1 piece
094.42.100	100 µl	B	H	fixed needle	1 piece

catalogue number	syringe volume	needle type	needle serie	needle descriptions	pack quantity
094.42.250	250 µl	B	H	fixed needle	1 piece
094.42.500	500 µl	B	H	fixed needle	1 piece
094.42.901	1,0 ml	B	H	fixed needle	1 piece
094.42.902	2,5 ml	B	H	fixed needle	1 piece
094.42.905	5,0 ml	B	H	fixed needle	1 piece
094.42.910	10,0 ml	B	H	fixed needle	1 piece
094.43.005	5 µl	D	H	fixed needle	1 piece
094.43.010	10 µl	D	H	fixed needle	1 piece
094.43.025	25 µl	D	H	fixed needle	1 piece
094.43.050	50 µl	D	H	fixed needle	1 piece
094.43.100	100 µl	D	H	fixed needle	1 piece
094.43.250	250 µl	D	H	fixed needle	1 piece
094.43.500	500 µl	D	H	fixed needle	1 piece
094.43.901	1,0 ml	D	H	fixed needle	1 piece
094.43.902	2,5 ml	D	H	fixed needle	1 piece
094.43.905	5,0 ml	D	H	fixed needle	1 piece
094.43.910	10,0 ml	D	H	fixed needle	1 piece

SYRINGES - "for dosage of gas & liquids" – "removable needle" – "serie H"



Plunger: stainless steel with PTFE seal / **Barrel:** borosilicate glass / **Presicion:** < +/- 1% of the volume
Main use: sample dosage for gas chromatography & HPLC valves & autosamplers & dosage of aggressive fluids

catalogue number	syringe volume	needle type	needle serie	needle descriptions	pack quantity
094.51.005	5 µl	A	H	removable needle	1 piece
094.51.010	10 µl	A	H	removable needle	1 piece
094.51.025	25 µl	A	H	removable needle	1 piece
094.51.050	50 µl	A	H	removable needle	1 piece
094.51.100	100 µl	A	H	removable needle	1 piece
094.51.250	250 µl	A	H	removable needle	1 piece
094.51.500	500 µl	A	H	removable needle	1 piece
094.51.901	1,0 ml	A	H	removable needle	1 piece
094.51.902	2,5 ml	A	H	removable needle	1 piece
094.51.905	5,0 ml	A	H	removable needle	1 piece
094.51.910	10,0 ml	A	H	removable needle	1 piece
094.52.005	5 µl	B	H	removable needle	1 piece
094.52.010	10 µl	B	H	removable needle	1 piece
094.52.025	25 µl	B	H	removable needle	1 piece
094.52.050	50 µl	B	H	removable needle	1 piece
094.52.100	100 µl	B	H	removable needle	1 piece

catalogue number	syringe volume	needle type	needle serie	needle descriptions	pack quantity
094.52.250	250 µl	B	H	removable needle	1 piece
094.52.500	500 µl	B	H	removable needle	1 piece
094.52.901	1,0 ml	B	H	removable needle	1 piece
094.52.902	2,5 ml	B	H	removable needle	1 piece
094.52.905	5,0 ml	B	H	removable needle	1 piece
094.52.910	10,0 ml	B	H	removable needle	1 piece
094.53.005	5 µl	D	H	removable needle	1 piece
094.53.010	10 µl	D	H	removable needle	1 piece
094.53.025	25 µl	D	H	removable needle	1 piece
094.53.050	50 µl	D	H	removable needle	1 piece
094.53.100	100 µl	D	H	removable needle	1 piece
094.53.250	250 µl	D	H	removable needle	1 piece
094.53.500	500 µl	D	H	removable needle	1 piece
094.53.901	1,0 ml	D	H	removable needle	1 piece
094.53.902	2,5 ml	D	H	removable needle	1 piece
094.53.905	5,0 ml	D	H	removable needle	1 piece

SYRINGES - "polypropylene" - "sterile" - "single use"



- 2 pieces syringes are suitable for HPLC applications.
- Sterile, pyrogen-free and for single use, latex and silicone oil free.
- Consists of very clear, highly transparent and absolutely leak-tight polypropylene barrel and polyethylene piston.
- Ergonomically designed for single-handed operation. Featured with accurate graduated scale marking.
- Smooth piston movement offers reduced sliding force.
- Defined position at "0" volume level to feel when piston is completely inserted.

- Defined safety stop to avoid accidental pull-out of plunger and loss of sample.
- Design of the finger grip flanges ensure stability and comfort during injection.

- Supplied without syringe needles. Packed in individual blister packaging.

catalogue number	volume	overall length	pack quantity
094.91.002	2 ml	87 mm	300 pieces
094.91.005	5 ml	87 mm	225 pieces
094.91.010	10 ml	100 mm	150 pieces
094.91.020	20 ml	115 mm	100 pieces

SYRINGES - "glass" - "with luer-lock"



- Manufactured from borosilicate glass. Featured with a stainless steel luer-lock system.
- Luer-lock grabs the needle or syringe filter stem and guarantees leak-proof delivery of the liquid even under high pressure.
- Luer-Barrel and the piston can be repeatedly autoclavable.
- Ergonomically designed for single-handed operation.
- Featured with accurate graduated scale marking.

- Smooth piston movement offers reduced sliding force.
- Desing of the finger grip flanges ensure stability and comfort during injection.

catalogue number	volume	overall length	pack quantity
094.92.001	1 ml	85 mm	1 piece
094.92.005	5 ml	105 mm	1 piece
094.92.010	10 ml	130 mm	1 piece
094.92.020	20 ml	145 mm	1 piece
094.92.050	50 ml	180 mm	1 piece

CHROMATOGRAPHY VIALS & SEPTAS & CAPS

In chromatography a wide variety of vials are used as sample containers. As they are mainly used by automatic instruments strict obedience of all dimensions is essential for trouble-free tests. Besides of these physical properties the vials have to fulfill requirements regarding inertness and cleanness.



chromatography vials

- ✓ Vials are either manufactured from glass or plastic. Glass vials are manufactured from 1st hydrolic glass tubings with low expansion coefficient.
- ✓ Hydrolic glass quality offers perfect resistance to all chemicals, higher hydrolic resistance and resistance to high degrees.
- ✓ Plastic vials are manufactured from polypropylene with a very good resistance to most of the chemicals and high hydrolic resistance.



septas & caps

- ✓ Sealing units for vials are combination of caps and septas. Caps can be offered either with slit or without slit.
- ✓ For problem-free and correct results seals should also be inert and uncontaminated.
- ✓ Almost all septa are laminated on one side with PTFE, which has a high chemical resistance and forms an inert barrier between the sample in the vial and the cap of the septa.



vial packing

- ✓ Some vials (specially small size ones such as N8, N9 and N11) are packed in a polystyrene boxes.
- ✓ This kind of packing provides guarantees protection against dust and other environmental effects.
- ✓ The glass clear polystyrene box makes the vials allways visible at all times.



cap packing

- ✓ Caps are usually packed in temper-proof evident zip-locked bags.
- ✓ These bags allow easy identification of the content due to the transparent P.E material.
- ✓ The zip-lock enables resealing of the bag after used.



VIALS - "glass"
"screw cap" - "N8"

- Manufactured from hydrolic No:1 glass. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with volume graduations and marking area.

catalogue number	vial dimensions	volume	color	pack quantity
095.00.001	11,6 x 32 mm	1,5 ml	clear	100 pieces
095.00.002	11,6 x 32 mm	1,5 ml	amber	100 pieces



VIALS - "glass"
"screw cap" - "N8"

- Manufactured from hydrolic No:1 glass with already assembled cap & septa for easier and practical use.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with volume graduations and marking area.

catalogue number	vial dimensions	volume	color	pack quantity
095.00.003	11,6 x 32 mm	1,5 ml	clear	100 pieces
095.00.004	11,6 x 32 mm	1,5 ml	amber	100 pieces



INSERTS - "glass"
"for N8 size vials"

- Manufactured from hydrolic No:1 glass with perfect shape.
- Very low dimensional tolerance and exact wall thickness for perfect fit to vials with N8 neck size.
- Offer perfect solutions for applications where sample volume is limited.

catalogue number	product specifications	volume	vial dimensions	pack quantity
097.05.106	conical bottom	0,1 ml	5,0x31,0 mm	100 pieces
097.05.107	with P.P spring	0,1 ml	5,0x29,0 mm	100 pieces
097.05.108	flat bottom	0,25 ml	5,0x31,5 mm	100 pieces

CAPS & SEPTAS - "for N8 vials"



- Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.
- Packed in temper-proof evident, transparent, zip-locked bags that allow easy identification.
- The zip-lock enables resealing of the bag after use.

catalogue number	product specifications	pack quantity
096.00.001	silicone / PTFE - without slit	100 pieces
096.00.002	silicone / PTFE - with slit	100 pieces
096.00.003	rubber / FEP - without slit	100 pieces



VIALS - "glass"
"screw cap" - "N9"

- Manufactured from hydrolic No:1 glass. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with volume graduations and marking area.

catalogue number	vial dimensions	volume	color	pack quantity
095.01.001	11,6 x 32 mm	1,5 ml	clear	100 pieces
095.01.002	11,6 x 32 mm	1,5 ml	amber	100 pieces



VIALS - "glass"
"screw cap" - "N9"

- Manufactured from hydrolic No:1 glass. **Supplied with already assembled cap & septa for easier and practical use.**
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with volume graduations and marking area.

catalogue number	vial dimensions	volume	color	pack quantity
095.01.005	11,6 x 32 mm	1,5 ml	clear	100 pieces
095.01.006	11,6 x 32 mm	1,5 ml	amber	100 pieces



INSERTS - "glass" "for N9 size vials"

- Manufactured from hydrolic No:1 glass with perfect shape.
- Very low dimensional tolerance and exact wall thickness for perfect fit to vials with N9 neck size.
- Offer perfect solutions for applications where sample volume is limited.

catalogue number	product specifications	volume	vial dimensions	pack quantity
097.05.110	conical bottom	0,2 ml	6,0x31,0 mm	100 pieces
097.05.111	with P.P spring	0,1 ml	5,7x29,0 mm	100 pieces
097.05.109	flat bottom	0,3 ml	5,8x31,5 mm	100 pieces



VIALS - "glass" "screw cap" - "N9" "with integrated insert"

- Manufactured from hydrolic No:1 glass. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with a 0,2 ml integrated insert.

catalogue number	vial dimensions	volume	color	pack quantity
095.01.003	11,6 x 32 mm	0,2 ml	clear	100 pieces
095.01.004	11,6 x 32 mm	0,2 ml	amber	100 pieces



VIALS - "P.P." "screw cap" - "N9"

- Manufactured from polypropylene. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with volume graduations and marking area.

catalogue number	vial dimensions	volume	color	pack quantity
095.11.001	11,6 x 32 mm	1,5 ml	clear	100 pieces



VIALS - "P.P." "screw cap" - "N9" "with integrated insert"

- Manufactured from polypropylene. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with a 0,7 ml integrated insert.

catalogue number	vial dimensions	volume	color	pack quantity
095.11.003	11,6 x 32 mm	0,7 ml	clear	100 pieces

CAPS & SEPTAS - "for N9 vials"

- Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.
- Packed in temper-proof evident, transparent, zip-locked bags that allow easy identification.
- The zip-lock enables resealing of the bag after use.



catalogue number	product specifications	pack quantity
096.01.001	silicone / PTFE - without slit	100 pieces
096.01.002	silicone / PTFE - with slit	100 pieces
096.01.003	rubber / FEP - without slit	100 pieces



VIALS - "glass" "screw cap" - "N10"

- Manufactured from hydrolic No:1 glass. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with volume graduations and marking area.

catalogue number	vial dimensions	volume	color	pack quantity
095.04.001	11,6 x 32 mm	1,5 ml	clear	100 pieces
095.04.002	11,6 x 32 mm	1,5 ml	amber	100 pieces



INSERTS - "glass" "for N10 size vials"

- Manufactured from hydrolic No:1 glass with perfect shape.
- Very low dimensional tolerance and exact wall thickness for perfect fit to vials with N10 neck size.
- Offer perfect solutions for applications where sample volume is limited.

catalogue number	product specifications	volume	vial dimensions	pack quantity
097.05.110	conical bottom	0,2 ml	6,0x31,0 mm	100 pieces
097.05.111	with P.P spring	0,1 ml	5,7x29,0 mm	100 pieces
097.05.109	flat bottom	0,3 ml	5,8x31,5 mm	100 pieces

CAPS & SEPTAS - "for N10 vials"



- Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.
- Packed in temper-proof evident, transparent, zip-locked bags that allow easy identification.
- The zip-lock enables resealing of the bag after use.

catalogue number	product specifications	pack quantity
095.04.003	silicone / PTFE - without slit	100 pieces
095.04.004	silicone / PTFE - with slit	100 pieces
095.04.005	rubber / TEF - without slit	100 pieces



VIALS - "glass" "crimp cap" - "N11"

- Manufactured from hydrolic No:1 glass. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with volume graduations and marking area.

catalogue number	vial dimensions	volume	color	pack quantity
095.02.001	11,6 x 32 mm	1,5 ml	clear	100 pieces
095.02.002	11,6 x 32 mm	1,5 ml	amber	100 pieces



VIALS - "glass" "crimp cap" - "N11" "with integrated insert"

- Manufactured from hydrolic No:1 glass. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with a 0,2 ml integrated insert.

catalogue number	vial dimensions	volume	color	pack quantity
095.02.003	11,6 x 32 mm	0,2 ml	clear	100 pieces
095.02.004	11,6 x 32 mm	0,2 ml	amber	100 pieces



VIALS - "P.P." "snap ring" - "N11" "with integrated insert"

- Manufactured from polypropylene. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.
- Featured with a 0,3 ml integrated insert.

catalogue number	vial dimensions	volume	color	pack quantity
095.12.007	11,6 x 32 mm	0,3 ml	clear	100 pieces
095.12.008	11,6 x 32 mm	0,3 ml	amber	100 pieces



INSERTS - "glass" "for N11 size vials"

- Manufactured from hydrolic No:1 glass with perfect shape.
- Very low dimensional tolerance and exact wall thickness for perfect fit to vials with N11 neck size.
- Offer perfect solutions for applications where sample volume is limited.

catalogue number	product specifications	volume	vial dimensions	pack quantity
097.05.106	conical bottom	0,1 ml	5,0x31,0 mm	100 pieces
097.05.107	with P.P spring	0,1 ml	5,0x29,0 mm	100 pieces
097.05.108	flat bottom	0,25 ml	5,0x31,0 mm	100 pieces
097.05.110	conical bottom	0,2 ml	6,0x31,0 mm	100 pieces
097.05.111	with P.P spring	0,1 ml	5,7x29,0 mm	100 pieces
097.05.109	flat bottom	0,3 ml	6,0x31,0 mm	100 pieces

CAPS & SEPTAS - "for N11 vials"



- Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.

- Packed in temper-proof evident, transparent, zip-locked bags that allow easy identification.

- The zip-lock enables resealing of the bag after use.

catalogue number	cap type	product specifications	pack quantity
096.02.001	crimp	silicone / PTFE - without slit	100 pieces
096.02.002	crimp	rubber / TEF - without slit	100 pieces
096.02.003	snap	silicone / PTFE - without slit	100 pieces
096.02.004	snap	silicone / PTFE - with slit	100 pieces



VIALS - "glass" - "screw cap" - "N13"

- Manufactured from hydrolic No:1 glass. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.

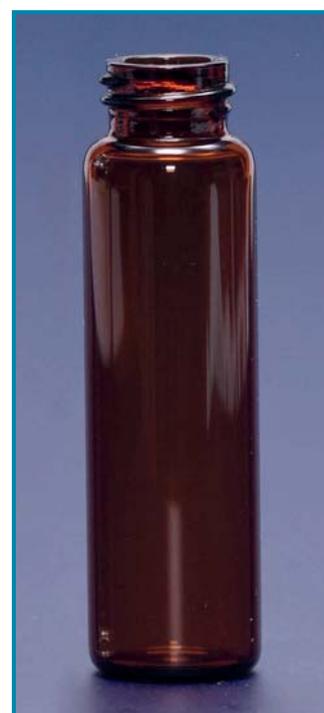
catalogue number	vial dimensions	volume	color	pack quantity
095.05.001	14,75 x 45 mm	4,0 ml	clear	100 pieces
095.05.002	14,75 x 45 mm	4,0 ml	amber	100 pieces



VIALS - "glass" - "screw cap" - "N15"

- Manufactured from hydrolic No:1 glass. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.

catalogue number	vial dimensions	volume	color	pack quantity
095.06.001	18,5 x 66 mm	12,0 ml	clear	100 pieces
095.06.002	18,5 x 66 mm	12,0 ml	amber	100 pieces



CAPS & SEPTAS - "for N13 vials"



- Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.
- Packed in temper-proof evident, transparent, zip-locked bags that allow easy identification. The zip-lock enables resealing of the bag after use.

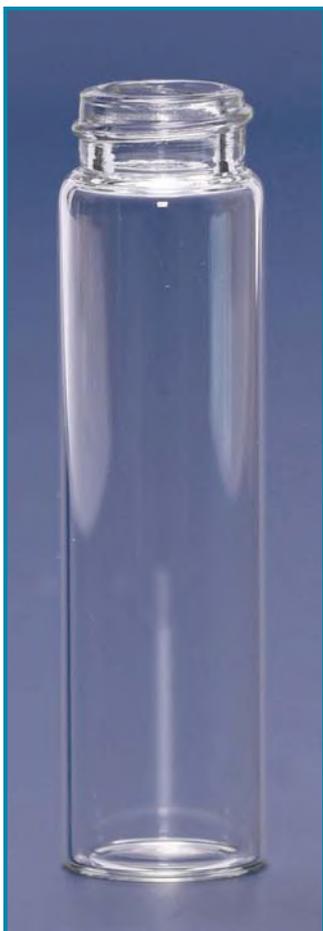
catalogue number	product specifications	pack quantity
096.05.003	silicone / PTFE - without slit	100 pieces
096.05.004	rubber / FEP - without slit	100 pieces

CAPS & SEPTAS - "for N15 vials"



- Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.
- Packed in temper-proof evident, transparent, zip-locked bags that allow easy identification. The zip-lock enables resealing of the bag after use.

catalogue number	product specifications	pack quantity
095.06.003	white septum / beige PTFE - without hole	100 pieces



VIALS - "glass" - "screw cap" - "N20"

- Manufactured from hydrolic No:1 glass. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.

catalogue number	vial dimensions	volume	color	pack quantity
095.03.001	22,7 x 86,0 mm	22,0 ml	clear	100 pieces
095.03.002	22,7 x 86,0 mm	22,0 ml	amber	100 pieces



VIALS - "glass" - "crimp cap" - "N20"

- Manufactured from hydrolic No:1 glass. Supplied without caps & septas.
- Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.

catalogue number	vial dimensions	volume	color	pack quantity
095.03.003	20,5 x 54,5 mm	10,0 ml	clear	100 pieces
095.03.004	20,5 x 54,5 mm	10,0 ml	amber	100 pieces
097.03.001	22,5 x 46,0 mm	10,0 ml	clear	100 pieces
097.03.002	22,5 x 46,0 mm	10,0 ml	amber	100 pieces
097.04.001	22,5 x 75,5 mm	20,0 ml	clear	100 pieces
097.04.002	22,5 x 75,5 mm	20,0 ml	amber	100 pieces



CAPS & SEPTAS - "for N20 vials"

➤ Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.

➤ Packed in temper-proof evident, transparent, zip-locked bags that allow easy identification. The zip-lock enables resealing of the bag after use.

catalogue number	product specifications	pack quantity
096.05.001	silicone / PTFE - without hole	100 pieces

CAPS & SEPTAS - "for N20 crimp vials"

➤ Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.

➤ Packed in temper-proof evident, transparent, zip-locked bags that allow easy identification. The zip-lock enables resealing of the bag after use.

catalogue number	product specifications	pack quantity
096.03.001	silicone / PTFE - without slit	100 pieces

VIALS - "glass" - "screw cap" - "N24"

➤ Manufactured from hydrolic No:1 glass. Supplied without caps & septas.

➤ Offers perfect shape, very low dimensional tolerance and exact wall thickness for optimum performance.

catalogue number	vial dimensions	volume	color	pack quantity
095.03.011	27,5 x 95,0 mm	40,0 ml	clear	100 pieces
095.03.012	27,5 x 95,0 mm	40,0 ml	amber	100 pieces

**CAPS & SEPTAS - "for N24 vials"**

➤ Offer optimum system performance. Designed to work excellently with needles. All of them are specially sized for proper sealings.

➤ Packed in temper-proof evident, transparent, zip-locked bags that allow easy identification.

catalogue number	product specifications	pack quantity
096.05.011	silicone / PTFE - without hole	100 pieces
096.05.012	silicone / PTFE - with hole	100 pieces





Offers adjustable crimping pressure by a easily accessible and well visible knob on the crimping head.

CRIMPERS & DECAPPERS - "manual"

- Manual crimpers and decappers are much lighter than the standard alternatives. They never create fatigue after long extended working periods.
- Ergonomical design offers improved comfort over blocky metal grips.
- Offers adjustable crimping pressure by a easily accessible and well visible knob on the crimping head.
- Activated by bottom handle motion guarantees faster and safer hold of the tool during crimping.
- Due to the design of the crimper head better vertical clearance over the vial is assured.



Bottom pull handle design for faster and safer hold of the tool during crimping and decapping.

catalogue number	product descriptions	pack quantity
097.01.011	crimper - for N 11 caps	1 piece
097.01.020	crimper - for N 20 caps	1 piece
097.02.011	decapper - for N 11 caps	1 piece
097.02.020	decapper - for N 20 caps	1 piece



CRIMPERS & DECAPPERS - "motorised"

- Motorised crimpers and decappers are featured with a powerfull motor with a fast cycle.
- They never create fatigue after long extended working periods.
- Ergonomical design offers improved comfort over blocky metal grips.
- Offers adjustable working pressure by an electronic control for accurate and reproducible results.
- Convenient controls on top of the instrument provides easy and fast adjustment of the working pressure.
- Due to the design of the crimper head better vertical clearance over the vial is assured.
- Featured with a long lasting battery and can be operated while charging.
- Can be charged with the supplied power supply. Delivered with a plug set for operations at differenet countries.

catalogue number	product descriptions	pack quantity
097.03.011	crimper - for N 11 caps	1 piece
097.03.020	crimper - for N 20 caps	1 piece
097.04.011	decapper - for N 11 caps	1 piece
097.04.020	decapper - for N 20 caps	1 piece



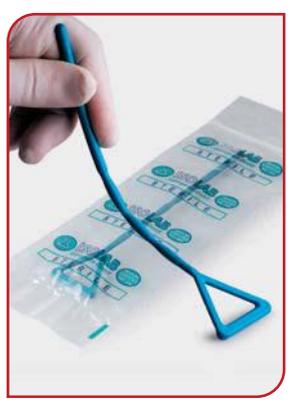
If the cap is to tight adjust the level by pressing 

If the cap is to tight adjust the level by pressing 

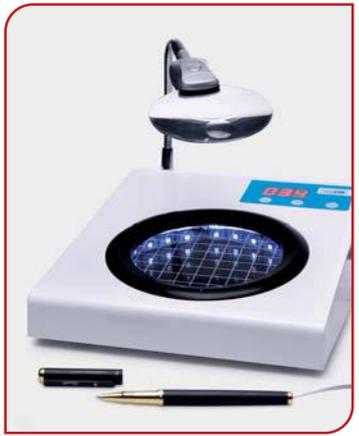


ISOLAB

Laborgeräte GmbH



life sciences microscopy microbiology





TUBES - "centrifuge" "clear" - "conical bottom" - "screw cap"

- Manufactured from ultra clear, high grade polypropylene by fully automatic, human touch free machines.
- Ultra rugged tube wall guarantees resistance to high centrifugal forces up to 6.000 RCF.
- Autoclavable at 121°C for 20 minutes. Caps should not be kept closed during autoclaving process. Otherwise tubes can be deformed.
- Alternative 2 products
 - aseptic tubes
 - sterile tubes
- Aseptic tubes are manufactured in germ-free, class 10.000 sterile production areas with extreme sterility control.
- Sterile tubes are manufactured in germ-free, class 10.000 sterile production areas and then re-sterilised by gamma irradiation.
- Sterile tubes are supplied with a certificate as a guarantee of "**DNase, RNase & pyrogen free**" product.
- Caps are manufactured from polyethylene with large ridges for increased grip for easy opening and closing. This feature specially increases the speed when working with gloves.
- Cap inner design ensures hermetical and leak-proof closure. Caps can be opened and closed with single hand. A 3/4 turn of the cap will be sufficient for full closure.
- Graduations on side wall offers visual control of the filled volume. Graduations are in 0,5 ml increment for 15 ml tubes. For 50 ml tubes the volume increment is 2,5 ml.
- Printed marking area on side wall enables easy marking and labelling.
- Flat cap top provides multiple options for marking and labelling of the tube.
- Precise volume marks at the tube bottom clearly and visually shows the liquid volume at the tube bottom.
- Individually single packed sterile tubes has printed lot number, production date and expiry date on the package.



CERTIFICATE of COMPLIANCE and "BioClean" QUALITY

Product Name	
Catalog Number	
Product Lot No	
Material Used	
Production Date	
Expiration Date	

This package contains a **gamma irradiated** high quality product manufactured in a PCR-clean and germ-free Class 10,000 clean room (according to U.S. Federal Standard 209D) environment.

This certificate is issued to confirm that this lot of products had been manufactured and tested under a registered and audited ISO 9001 quality system and conforms the below mentioned material specs and passed all tests successfully.

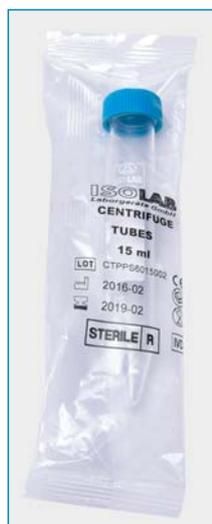
Test Procedure	Results
Leak Test	Pass
Centrifuge Test	Pass
Visual attributes	Pass
Packaging	Pass
Endotoxin - Pyrogen	Free
Human DNA - Dnase	Free
Rnase - PCR inhibitor	Free



Sterile tubes are supplied with a certificate as a guarantee of "**DNase, RNase & pyrogen free**".

"**DNase, RNase and Pyrogen free**" certificate shows the result criterias and guarantees the documentation of the quality.

Certification process starts from inspection of raw materials, covers the entire production steps and ends with final tests after production of each lot.



Individually single packed sterile tubes has printed lot number, production date and expiry date on the package.



Sterile tubes are manufactured in germ-free, class 10,000 sterile production areas and then re-sterilised by gamma irradiation.

Sterile tubes are supplied with a certificate as a guarantee of "**DNase, RNase & pyrogen free**".

catalogue number	volume	tube dimensions	product specifications	packing specifications	pack quantity	box quantity
078.02.001	15 ml	17 x 120 mm	non sterilized	pack in bag	50 pieces	500 pieces
078.02.003	50 ml	30 x 120 mm	non sterilized	pack in bag	50 pieces	500 pieces
078.02.007	15 ml	17 x 120 mm	sterilized - aseptic	pack in bag	50 pieces	500 pieces
078.02.008	50 ml	30 x 120 mm	sterilized - aseptic	pack in bag	50 pieces	500 pieces
078.02.002	15 ml	17 x 120 mm	sterilized - DNA & RNA free	single flow pack	50 pieces	500 pieces
078.02.004	50 ml	30 x 120 mm	sterilized - DNA & RNA free	single flow pack	50 pieces	500 pieces

TUBES - “centrifuge” “amber” - “conical bottom” - “screw cap”

- Manufactured from high grade polypropylene by fully automatic, human touch free machines. Specially recommended to be used with UV light sensitive samples.
- Ultra rugged tube wall guarantees resistance to high centrifugal forces up to 6.000 RCF.
- Autoclavable at 121°C for 20 minutes. Caps should not be kept closed during autoclaving process. Otherwise tubes can be deformed.
- Alternative 2 products
 - aseptic tubes
 - sterile tubes
- Aseptic tubes are manufactured in germ-free, class 10.000 sterile production areas with extreme sterility control.
- Sterile tubes are manufactured in germ-free, class 10.000 sterile production areas and then re-sterilised by gamma irradiation.
- Sterile tubes are supplied with a certificate as a guarantee of “**DNase, RNase & pyrogen free**” product.
- Caps are manufactured from polyethylene with large ridges for increased grip for easy opening and closing. This feature specially increases the speed when working with gloves.
- Cap inner design ensures hermetical and leak-proof closure. Caps can be opened and closed with single hand. A 3/4 turn of the cap will be sufficient for full closure.
- Graduations on side wall offers visial control of the filled volume. Graduations are in 0,5 ml increment for 15 ml tubes. For 50 ml tubes the volume increment is 2,5 ml.
- Printed marking area on side wall enables easy marking and labelling.
- Flat cap top provides multiple options for marking and labelling of the tube.
- Precise volume marks at the tube bottom clearly and visually shows the liquid volume at the tube bottom.
- Individually single packed sterile tubes has printed lot number, production date and expiry date on the package.



Sterile tubes are manufactured in germ-free, class 10.000 sterile production areas and then re-sterilised by gamma irradiation.

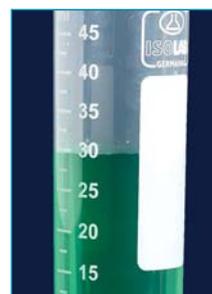
Sterile tubes are supplied with a certificate as a guarantee of “**DNase, RNase & pyrogen free**”.



Unique cap design with large ridges enables single hand operation. A ¾ turn of the cap will be sufficient for hermetical and leak-proof closure of the tube.



Precise volume marks at the tube bottom clearly and visually shows the liquid volume at the tube bottom.



Printed marking area on side wall enables easy marking and labelling. Clear graduations for easy volume reference.

catalogue number	volume	tube dimensions	product specifications	packing specifications	pack quantity	box quantity
078.12.001	15 ml	17 x 120 mm	non sterilized	pack in bag	50 pieces	500 pieces
078.12.003	50 ml	30 x 120 mm	non sterilized	pack in bag	50 pieces	500 pieces
078.12.007	15 ml	17 x 120 mm	sterilized - aseptic	pack in bag	50 pieces	500 pieces
078.12.008	50 ml	30 x 120 mm	sterilized - aseptic	pack in bag	50 pieces	500 pieces
078.12.002	15 ml	17 x 120 mm	sterilized - DNA & RNA free	single flow pack	50 pieces	500 pieces
078.12.004	50 ml	30 x 120 mm	sterilized - DNA & RNA free	single flow pack	50 pieces	500 pieces



TUBES - "centrifuge" "clear" - "self standing" - "screw cap"

- Manufactured from ultra clear, high grade polypropylene by fully automatic, human touch free machines.
- Ultra rugged tube wall guarantees resistance to high centrifugal forces up to 6.000 RCF.
- Autoclavable at 121°C for 20 minutes. Caps should not be kept closed during autoclaving process. Otherwise tubes can be deformed.
- Alternative 2 products
 - aseptic tubes
 - sterile tubes
- Aseptic tubes are manufactured in germ-free, class 10.000 sterile production areas with extreme sterility control.
- Sterile tubes are manufactured in germ-free, class 10.000 sterile production areas and then re-sterilised by gamma irradiation.
- Sterile tubes are supplied with a certificate as a guarantee of "DNase, RNase & pyrogen free" product.
- Self stands on the laboratory benches without the need of any tube support.
- Caps are manufactured from polyethylene with large ridges for increased grip for easy opening and closing. Other technical specifications are exactly similar to the conical bottom centrifuge tubes.

catalogue number	volume	tube dimensions	product specifications	packing specifications	pack quantity	box quantity
078.02.005	50 mm	30 x 120 mm	non sterilized	pack in bag	50 pieces	500 pieces
078.02.009	50 mm	30 x 120 mm	sterilized - aseptic	pack in bag	50 pieces	500 pieces
078.02.006	50 mm	30 x 120 mm	sterilized - DNA & RNA free	single flow pack	50 pieces	500 pieces



TUBES - "centrifuge" "amber" - "self standing" - "screw cap"

- Manufactured from high grade polypropylene by fully automatic, human touch free machines. Specially recommended to be used with UV light sensitive samples.
- Ultra rugged tube wall guarantees resistance to high centrifugal forces up to 6.000 RCF.
- Autoclavable at 121°C for 20 minutes. Caps should not be kept closed during autoclaving process. Otherwise tubes can be deformed.
- Alternative 2 products
 - aseptic tubes
 - sterile tubes
- Aseptic tubes are manufactured in germ-free, class 10.000 sterile production areas with extreme sterility control.
- Sterile tubes are manufactured in germ-free, class 10.000 sterile production areas and then re-sterilised by gamma irradiation.
- Sterile tubes are supplied with a certificate as a guarantee of "DNase, RNase & pyrogen free" product.
- Self stands on the laboratory benches without the need of any tube support.
- Caps are manufactured from polyethylene with large ridges for increased grip for easy opening and closing. Other technical specifications are exactly similar to the conical bottom centrifuge tubes.

catalogue number	volume	tube dimensions	product specifications	packing specifications	pack quantity	box quantity
078.12.005	50 mm	30 x 120 mm	non sterilized	pack in bag	50 pieces	500 pieces
078.12.009	50 mm	30 x 120 mm	sterilized - aseptic	pack in bag	50 pieces	500 pieces
078.12.006	50 mm	30 x 120 mm	sterilized - DNA & RNA free	single flow pack	50 pieces	500 pieces

TAGS - "for centrifuge tube caps"

- Recommended to be used on caps of 15 ml and 50 ml centrifuge tubes for marking and writing.
- Manufactured from polyfiber grade flexible paper with acrylic resin adhesive back.
- This unique combination expands and retracts together with temperature fluctuations and guarantees always a strong adhesive bond.
- Chemically inert, resists to water, moisture and most organic solvents and caustic agents. Can be used between -196°C to + 80°C temperature range.
- Adheres to any clean surface including PTFE coated surfaces without cracking, peeling and degrading. Peels off without leaving any sticky residue.

For other technical specifications and details please visit our catalogue page no 112.

**TAGS - "for centrifuge tube bodies"**

- Recommended to be used on centrifuge tube bodies of 15 ml and 50 ml for marking and writing.
- Manufactured from polyfiber grade flexible paper with acrylic resin adhesive back.
- This unique combination expands and retracts together with temperature fluctuations and guarantees always a strong adhesive bond.
- Chemically inert, resists to water, moisture and most organic solvents and caustic agents. Can be used between -40°C to + 121°C temperature range. Also withstands steam autoclaving cycle and gamma irradiation.
- Adheres to any clean surface including PTFE coated surfaces without cracking, peeling and degrading. Peels off without leaving any sticky residue.

For other technical specifications and details please visit our catalogue page no 113.

**ROTATOR - "for centrifuge tubes"**

- Ideal for mixing blood samples, viscous samples, liquid/solid suspensions with continuous operation.
- Provides a gentle but highly efficient rocking and rolling mixing up to 4 kg total weight.
- As the roller mechanism rotates through each complete revolution, the right side of each roller is gently elevated about 24 mm and return back to the original horizontal position. This gentle up/down motion provides a "wave effect" and guarantees a homogeneous mixing.

For other technical specifications and details please visit our catalogue page no 239.

catalogue number	operation mode	max. load	speed range	dimensions
620.01.001	continuous	4 kg	0 - 70 rpm	450x260x120



Siliconize rubber rollers ensures perfect holding of tube and guarantees effective rolling.



TUBE RACK - "push& hold"

- Manufactured from high grade polypropylene for safe holding and carrying conical bottom centrifuge tubes.
- Uniquely designed to carry 25 centrifuge tubes in 5 x 5 array.
- Unique designed tube compartments holds the tube in their position firmly.
- Very easy to use; Just press the tubes slightly into the tube compartments and leave.
- Easily stackable when empty for reducing storage space.
- Alphanumerical index on tube rows enables easy identification of tube positions.

catalogue number	tube diameter	tube quantity	tube array	pack quantity
078.06.015	15 mm	25	5 x 5	1 piece
078.06.050	50 mm	25	5 x 5	1 piece



Unique design has an angular end to provide easy stacking for space saving purpose.



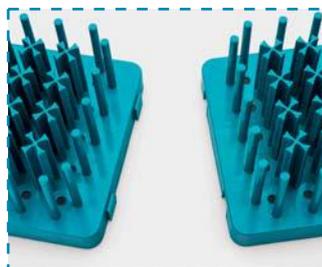
Suitable to hold 15 ml and 50 ml centrifuge tubes with conical bottom.



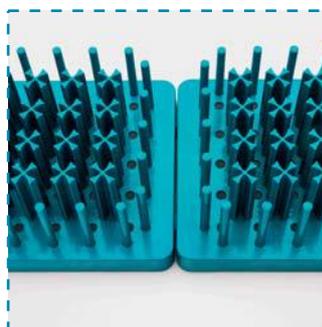
TUBE RACK - "hedgehog"

- Manufactured from "modified" high density ABS which enables the rack to be used in water baths without the risk of floating.
- 2 rack carries 2 different size tubes.
 - 50 x 15 ml (5 x 10 array) centrifuge tubes
 - 25 x 50 ml (5 x 5 array) centrifuge tubes
- Cross formed tube support rods enables uniform aligning of tubes and guarantees upright and stable positioning of tubes.
- Unique rack design allows easy viewing of the tube contents.
- Racks are designed with an interlocking system for connection to each other in order to form multi rack rows.

catalogue number	tube volume	tube quantity	tube array	pack quantity
079.08.015	15 ml	50	5 x 10	1 piece
079.08.050	50 ml	25	5 x 5	1 piece



Interlocking system for linking the racks in multiple rows.



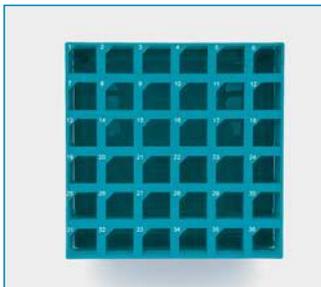
Racks can be linked together to form a multiple rack system.



TUBE BOXES - "press-on lid"

- Manufactured from high grade polypropylene for safe holding and carrying conical bottom centrifuge tubes.
- 2 box carries 2 different size tubes.
 - 36 x 15 ml (6 x 6 array) centrifuge tubes
 - 16 x 50 ml (4 x 4 array) centrifuge tubes
- Easily stackable for reducing storage space.
- Clear press-on lid enables easy identification of box content and protects the tubes from dust, moisture and other environmental effects.
- Alphanumeric index on tube rows enables easy identification of tube positions.

catalogue number	tube volume	tube array	pack quantity
078.07.015	15 ml	6 x 6	1 piece
078.07.050	50 ml	4 x 4	1 piece



Printed alpha numeric grid reference on the top tier of the rack allows easy sample identification.

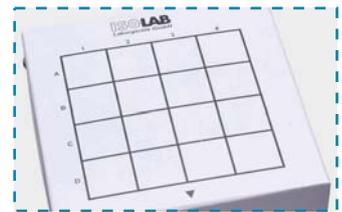


Transparent lid guarantees secure closure of the box providing easy view of the box interior.



TUBE BOXES - "cardboard"

- Manufactured from freeze resistant, water repellent, durable cardboard covered with superior quality chromated paper coating. Easily stackable for reducing storage space.
- Chemically resistant to alcohols and mild organic solvents. Offers temperature resistance between -196°C to +121°C.
- Alternative 2 products
 - Boxes with press-on lid
 - Boxes with hinged lid
- Press on lids perfectly fits to the box body and provides a tight closure. Protects the box interior from dust all environmental effects.
- Hinged lids also guarantees perfect and tight closure. The lid is attached to the box with screws avoiging the risk of lid lost and intermingle.
- Alphanumeric index on the lid enables easy identification of tube positions.
- Write on area at the side wall provides a convenient area for special notes.



with press on lid	with hinged lid	tube volume	tube quantity	tube array	pack quantity
078.20.015	078.21.015	15 ml	36	6 x 6	1 piece
078.20.050	078.21.050	50 ml	16	4 x 4	1 piece



Press on lids perfectly fits to the box body and provides a tight closure. Protects the box interior from dust all environmental effects.



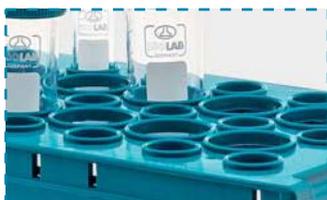
Hinged lids also guarantees perfect and tight closure. The lid is attached to the box with screws avoiging the risk of lid lost and intermingle.



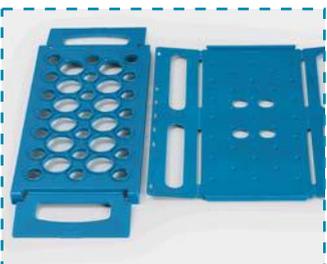
RACKS - "monoblock"

- Manufactured from modified polypropylene which enables the racks to be used in water baths without floating.
- 3 racks carries 2 different size tubes.
 - 50 x 15 ml (5 x 10 array) centrifuge tubes
 - 28 x 50 ml (4 x 7 array) centrifuge tubes
 - 21 x 15 ml + 12 x 50 ml centrifuge tubes
- Offers a very long life cycle due to the very robust construction.
- Raised tube sockets guarantees firm hold of the tubes at their exact positions.
- Alphanumeric index on the lid enables easy identification of tube positions.
- Racks are supplied already assembled. Can be easily dismantled in few seconds for reducing storage area.

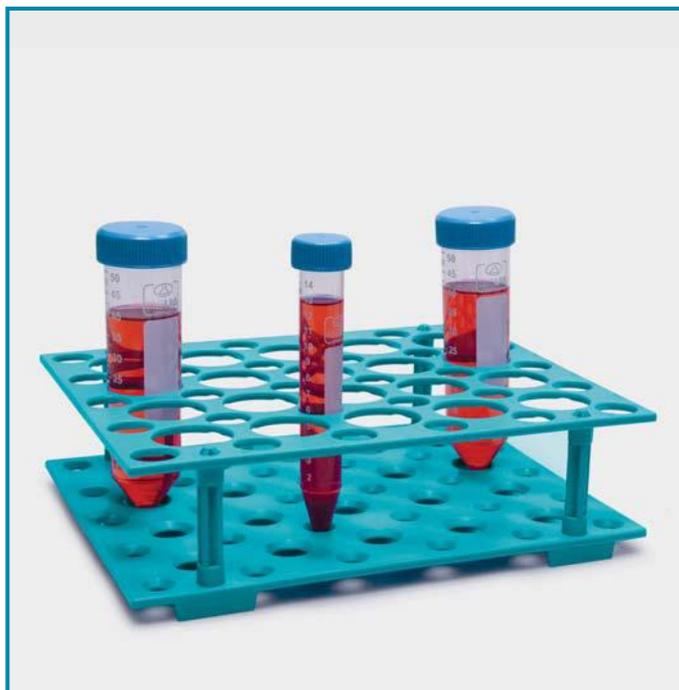
catalogue number	tube volume	tube quantity	tube array	pack quantity
079.03.003	15 ml	50	5 x 10	1 piece
079.03.005	50 ml	26	4 x 6 / 7	1 piece
079.03.006	15 & 50 ml	21 & 12	assorted	1 piece



Raised tube supports strongly holds the tubes in their position.



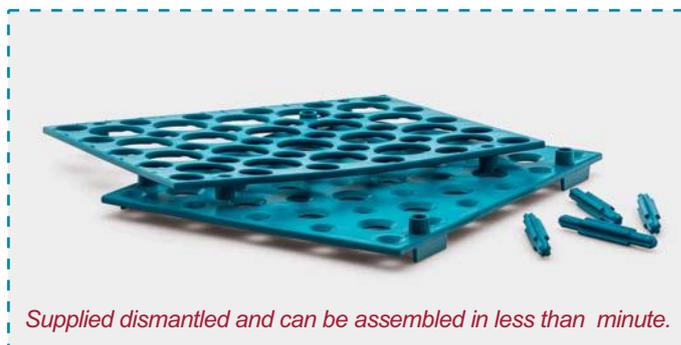
Monoblock tube rack can be folded for space saving solution.



RACK - "snapable"

- Manufactured from high grade POM for safe holding and carrying conical bottom centrifuge tubes.
- Uniquely designed to carry 30 x 15 ml and 20 x 50 ml centrifuge tubes simultaneously.
- Rack is supplied already disassembled. Unique and practical "snapping" system allows the rack "ready to use" in few seconds.
- Alphanumeric index on the lid enables easy identification of tube positions.

catalogue number	tube volume	tube quantity	tube array	pack quantity
079.04.001	15 & 50 ml	30 & 20	assorted	1 piece



Supplied dismantled and can be assembled in less than minute.



Holes at the bottom plate guarantees firm hold of tubes in their position.



RACK - "4 sides"

- Manufactured from modified polypropylene which enables the racks to be used in water baths without floating.
- 4 sides offer 4 different tube holding alternative.
 - Side 1: holds 8 x 30 mm dia. tube with 2 x 4 array
 - Side 2: holds 20 x 20 mm dia. tube with 4 x 5 array
 - Side 3: holds 24 x 17 mm dia. tube with 3 x 8 array
 - Side 4: holds 40 x 12 mm dia. tube with 4 x 10 array
- Racks are designed with an interlocking system for connection to each other in order to form multi rack rows.

catalogue number	tube diameter	tube volume	tube quantity	tube array	pack quantity
080.01.001	30 mm	50 ml	8	2 x 4	1 piece
	20 mm		20	4 x 5	
	17 mm	15 ml	24	3 x 8	
	12 mm		40	4 x 10	

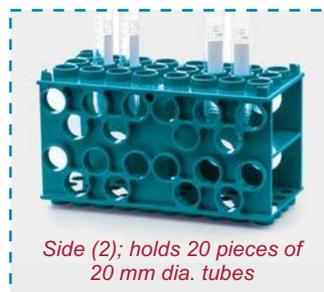


Racks are designed with an interlocking system for connection to each other in order to form multi rack rows.

RACK - "4 sides"

- Manufactured from modified polypropylene which enables the racks to be used in water baths without floating.
- 4 sides offer 4 different tube holding alternative.
 - Side 1: holds 48 x 5 mm dia. tube with 6 x 8 array
 - Side 2: holds 15 x 12 mm dia. tube with 3 x 3 array
 - Side 3: holds 8 x 17 mm dia. tube with 2 x 4 array
 - Side 4: holds 2 x 30 mm dia. tube with 2 x 1 array
- Racks are designed with an interlocking system for connection to each other in order to form multi rack rows.
- Alphanumerical index on tube rows enables easy identification of tube positions.

catalogue number	tube diameter	tube volume	tube quantity	tube array	pack quantity
080.02.001	5 mm		48	48 x 5	1 piece
	12 mm		15	15 x 12	
	17 mm	15 ml	8	8 x 17	
	30 mm	50 ml	2	2 x 30	





CENTRIFUGE TUBES - "micro" - "with flat & safe-lock cap"

- Manufactured from ultra clear, high grade polypropylene by fully automatic, human touch free machines.
- Ultra rugged tube wall guarantees resistance to high centrifugal forces up to 20.000 RCF. Optimum tube design offers micro pestle compatibility.
- Reinforced tube bottom ensures added protection against deformation and leakage. Conical bottom form guarantees excellent fit to almost all centrifuge rotors.
- Highly polished interior wall guarantees low liquid retention and ensures minimum sample loss.
- Autoclavable at 121°C for 20 minutes. Caps should not be kept closed during autoclaving process. Otherwise tubes can be deformed.
- Alternative 2 products
 - aseptic tubes
 - sterile tubes
- Aseptic tubes are manufactured in germ-free, class 10.000 sterile production areas with extreme sterility control.
- Sterile tubes are manufactured in germ-free, class 10.000 sterile production areas and then re-sterilised by gamma irradiation.
- Sterile tubes are supplied with a certificate as a guarantee of "DNase, RNase & pyrogen free" product.
- Improved cap design ensures smooth opening and closing with one hand.
- Cap inner design ensures hermetical and leak-proof closure. Cap can be pierced easily with any syringe needle.
- Graduations on the side wall offers visual control of the filled volume.
- Frosted marking area on side wall enables easy marking and labelling.
- Flat cap top provides multiple options for marking and labelling of the tube. Individually single packed sterile tubes has printed lot number, production date and expiry date on the package.
- Alternative 2 caps
 - flat cap
 - safe-lock cap



Sterile tubes are manufactured in germ-free, class 10.000 sterile production areas and then re-sterilised by gamma irradiation.



Sterile tubes are supplied with a certificate as a guarantee of "DNase, RNase & pyrogen free".

"DNase, RNase and Pyrogen free" certificate shows the result criterias and guarantees the documentation of the quality.

Certification process starts from inspection of raw materials, covers the entire production steps and ends with final tests after production of each lot.



Flat caps ensures smooth opening and closing with one hand. Once closed they guarantee leak-proof closure.



Safe-lock caps has a small clasp that clips onto the rim of the tube preventing accidental openings specially during heating.

micro tubes with flat cap

non sterilized	sterilized	volume	skirt	pack quantity	box quantity
078.03.001	078.03.021	0.5 ml	non	500 pieces	5000 pieces
078.03.002	078.03.022	1.5 ml	non	500 pieces	5000 pieces
078.03.003	078.03.023	2.0 ml	non	500 pieces	5000 pieces
078.03.004	078.03.024	2.0 ml	yes	500 pieces	5000 pieces

micro tubes with safe-lock cap

non sterilized	sterilized	volume	pack quantity	box quantity
078.05.002	078.05.022	1.5 ml	500 pieces	5000 pieces

PESTLES - "micro tube" - "disposable"

- Manufactured from polypropylene with two pestle ends with round tip.
- Excellent for resuspending bacterial cells, precipitates of nucleic acids or proteins and homogenizing samples in a microcentrifuge tube.
- The two identical round tipped ends perfectly fits to the interior of 1,5 & 2,0 ml micro tubes.

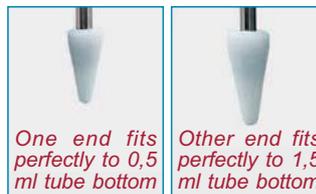


Both ends perfectly fits to the interior of 1,5 & 2,0 ml micro tubes.



PESTLES - "micro tube" - "re-usable"

- Consists of a stainless steel shaft of 150 mm length and two pestle ends with round tip manufactured from PTFE. Autoclavable and re-usable.
- Excellent for resuspending bacterial cells, precipitates of nucleic acids or proteins and homogenizing samples in a microcentrifuge tube.
- One pestle end fits perfectly to 1,5 ml micro tube bottom and the other pestle end fits to 0,5 ml tube bottom.



catalogue number	length	recommended for	pack quantity
078.08.120	100 mm	2,0 ml tubes	10 pieces

catalogue number	length	recommended for	pack quantity
078.18.001	150 mm	0,5 & 1,5 ml tubes	1 piece

TISSUE GRINDER - "for microcentrifuge tubes"

- Excellent tool for sample preparations, for resuspending bacterial cells, precipitates of nucleic acids or proteins and homogenizing samples in a microcentrifuge tube.
- Also ideal for stirring and mixing liquid samples in small size tubes.
- Operates with 3,7V lithium battery with a speed of 1.200 RPM.
- Very easy to use. Sturdy construction guarantees very long life span.
 - Disposable - polypropylene pestle.
- Alternative 2 pestle types:
 - Re-usable stainless steel pestle.
- Polypropylene disposable pestles are delivered either as "non-sterile" or as "gamma-sterile".
- Stainless steel re-usable pestle heads are autoclavable and can be used for a very long time.
- Tissue grinder is supplied without pestles. Pestles should be ordered separately.



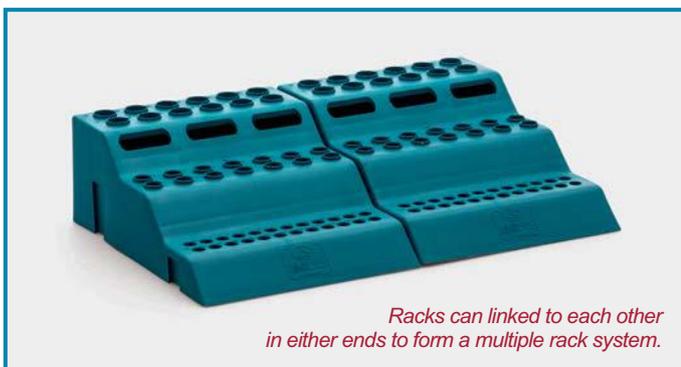
catalogue number	product descriptions	pack quantity
078.19.001	tissue grinder	1 piece
078.17.001	stirring rods - disposable - non-sterile	50 pieces
078.17.002	stirring rods - disposable - sterile	50 pieces
078.17.003	stirring rods - re-usable - st. steel	1 piece



RACK - "for micro tubes" - "3 tier"

- Manufactured from polypropylene with 3 tier rack for increased storage of micro tubes.
- Uniquely designed to carry 3 different size micro tubes on each tier.
 - Bottom row carries 24x0,2 ml (2 x 12 array) micro tubes
 - Middle row carries 14x0,5 ml (2 x 7 array) micro tubes
 - Upper row carries 12x1,5 ml (2 x 6 array) micro tubes
- Racks can easily be connected to each other in either ends to form a longer rack system.
- Raised tube slots guarantees firm and stable hold of tubes in vertical position.
- Alphanumerical index on tube rows enables easy identification of tube positions.

catalogue number	dimensions	tube volume	tube quantity	tube array	pack quantity
080.01.003	165x126x58 mm	1,5 ml	12	2 x 6	1 piece
		0,5 ml	14	2 x 7	
		0,2 ml	24	2 x 12	



Racks can linked to each other in either ends to form a multiple rack system.



RACK - "for micro tubes" - "double side"

- Manufactured from polypropylene for increased storage of micro tubes.
- Rack has two sides and each side accomodates different size and combination of microcentrifuge tubes.
- Uniquely designed to carry different size micro tubes on both sides.
 - Upper side carries 96 x 1,5 ml (6x16 array) micro tubes
 - Reverse side carries 48x0,5 ml (6x8 array) and 96 x 0,2 ml (8x12 array) micro tubes.
- Alphanumerical index on tube rows enables easy identification of tube positions.
- Clear box lid enables easy identification of rack content and protects the tubes from dust, moisture and other environmental effects.

catalogue number	dimensions	tube volume	tube quantity	tube array	pack quantity
080.06.002	209x117x57 mm	1,5 ml	96	6 x 16	1 piece
		0,5 ml	48	6 x 8	
		0,2 ml	96	8 x 12	



Clear box lid enables easy identification of box content and protects the tubes from environmental effects.



Supplied dismantled as a sheet and can easily be assembled in few seconds.

MICROTUBE RACK - "foldable"

- Manufactured from polypropylene for carrying 100 pieces 1,5 or 2,0 ml micro tubes.
- After replacement of the tubes racks can be stacked on top of each other for space saving solution.
- Alphanumerical index on tube rows enables easy identification of tube positions.
- Marking areas on wall sides enables easy marking and labelling.
- Supplied dismantled as a sheet and can easily be assembled in few seconds.
- Also can be dismantled in few seconds and forms a flat layer for safe and efficient storage purpose.

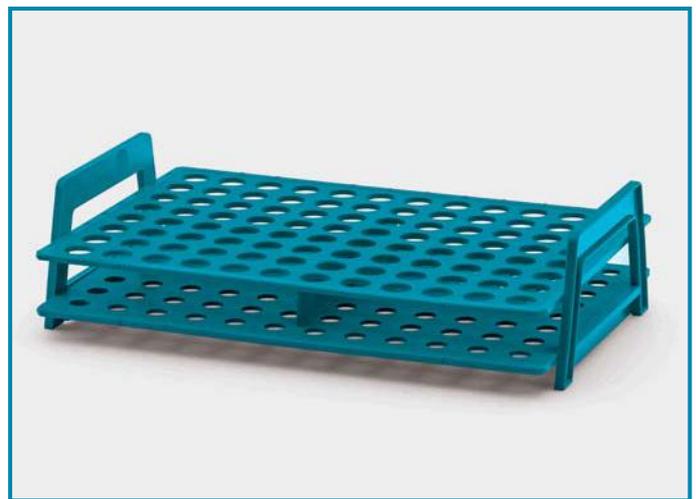
catalogue number	dimensions	tube quantity	pack quantity
080.01.005	110x263x45 mm	100	1 piece



Supplied dismantled as a sheet and can easily be assembled in few seconds. Also can be dismantled in few seconds and forms a flat layer for safe and efficient storage purpose.



Alphanumerical index on tube rows enables easy identification of tube positions.



MICROTUBE RACK - "monoblock"

- Manufactured from polypropylene for carrying 96 pieces 1,5 or 2,0 ml micro tubes with 8 x 12 array.
- After replacement of the tubes racks can be stacked on top of each other for space saving solution.
- Alphanumerical index on tube rows enables easy identification of tube positions.
- Marking areas on wall sides enables easy marking and labelling.

catalogue number	dimensions	tube quantity	pack quantity
080.01.004	201x131x54 mm	96	1 piece



LABELS - "for microtubes"

- Manufactured from polyfiber grade flexible paper with acrylic resin adhesive back. Adheres to any clean surface and peels off without leaving any sticky residue.
- Resists to water and most organic solvents and bases. Can be used between -196°C to + 80°C temperature range.

For other technical specifications and details kindly visit our catalogue page no 112.



CRYO TUBES - "external thread" - "sterile"

- Designed for the optimised storage and conservation of biological material, human and animal cells at very low temperatures in the gas phase of liquid nitrogen or in cryogenic freezers.
- Manufactured from ultra clear, high grade polypropylene by fully automatic, human touch free machines. Highly polished interior wall guarantees low liquid retention and ensures minimum sample loss.
- Autoclavable at 121°C for 20 minutes. Caps should not be kept closed during autoclaving process. Otherwise tubes can be deformed.
- Cryo tubes are manufactured in germ-free, class 10.000 sterile production areas and then re-sterilised by gamma irradiation.
- Tubes are supplied with a certificate as a guarantee of "DNase, RNase & pyrogen free" product.
- Since both cap and tube are made of same material with same coefficient of expansion secure seal at all temperatures is guaranteed.
- External thread cap design allows 28 % more free space in the tube in comparison of internal thread cap design.
- Caps are featured with cavities for different colored cap inserts which enables easy identification of tube contents.
- Cap inner design ensures hermetical and leak-proof closure. Silicone washer inside the cap ensures positive sealing at any temperature and prevents leakage.
- Caps can be opened and closed with single hand. A 3/4 turn of the cap will be sufficient for full closure.
- Unique star-base foot design enables free standing option. Base design allows the tube to be fixed at the cryo vial racks. Tube caps can be opened by single hand without the need of picking up the tubes.

catalogue number	tube volume	tube height	tube diameter	tube base	tube thread	packing specifications
091.11.102	2.0 ml	48,6 mm	12,4 mm	self standing	external	100 pcs / bag - 10 bag / ctn
091.11.105	5.0 ml	90,4 mm	12,4 mm	self standing	external	100 pcs / bag - 10 bag / ctn



CAP INSERTS

- Caps are featured with cavities for different colored cap inserts which enables easy identification of tube contents.
- Manufactured from P.P with different colors for easy identification of cryo tubes. They fit precisely into the caps by slight pressing. They can be dismantled easily.

catalogue number	cap inserts disc color	pack quantity
091.15.001	white	100 pieces
091.15.002	blue	100 pieces
091.15.003	yellow	100 pieces
091.15.004	red	100 pieces
091.15.005	green	100 pieces



Unique star-base foot design enables free standing option.

Base design allows the tube to be fixed at the cryo vial racks. Tube caps can be opened by single hand without the need of picking up the tubes.



Printed marking area on side wall enables easy marking and labelling.



Cap inner design ensures hermetical and leak-proof closure.

Silicone washer inside the cap ensures positive sealing at any temperature and prevents leakage.

Caps can be opened and closed with single hand. A 3/4 turn of the cap will be sufficient for full closure.



Graduations on the side wall offers visual control of the filled volume.

WORKSTATION - "for cryo tubes"

- Manufactured from polycarbonate which can stand both cryogenic freezing and autoclaving.
- Uniquely designed to carry 50 cryo tubes in 5 x 10 array
- Unique star-base foot design prevents the tubes from rotating during screwing or un-screwing of the caps.
- This feature also allows single hand operation even with wearred gloves.
- Alphanumerical index on tube rows enables easy identification of tube positions.



catalogue number	dimensions	tube volume	tube quantity	tube array	pack quantity
092.01.001	195x101x24 mm	2 & 5 ml	50	5 x 10	1 piece

CRYO TUBE CANES

- Made from aluminium for holding cryo tubes. Ideal tool to insert the cryo tubes into cryo freezer storage or into dewar flasks.
- With their total length of 300 mm they can carry 3 pieces 5,0 ml cryo tubes at a row.
- With their total length of 290 mm they can carry 5 pieces 2,0 ml cryo tubes at a row.

catalogue number	pack quantity
092.35.001	12 pieces
092.35.002	12 pieces



LABELS - "for cryo tubes"

- Manufactured from polyfiber grade flexible paper with acrylic resin adhesive back.
- This unique combination expands and retracts together with temperature fluctuations and guarantees always a strong adhesive bond.
- Chemically inert, resists to water, moisture and most organic solvents and caustic agents.
- Can be used between -196°C to + 80°C temperature. Also withstands steam autoclaving cycle and gamma irradiation
- Adheres to any clean surface including PTFE coated surfaces without cracking, peeling and degrading. Peels off without leaving any sticky residue.

For other technical specifications and details kindly visit our catalogue page no 113.



GLOVES - "cold resistant"

- Excellent gloves to work with coolants, cryo vials and with dry ice.
- Offers full protection of hand even at - 140°C ultra low temperature environment.
- Even after working extended hours they still stay flexible and guarantee the best comfort for hands.

For other technical specifications and details kindly visit our catalogue page no 200.



NEW



CRYO TUBE BOXES - "hinged lid" - "forward slope"

- Manufactured from polycarbonate with high mechanical strength and high temperature resistance between -196°C to +121°C.
- Uniquely designed to carry 81 cryo tubes in 9 x 9 array "Hedgehog" designed tube compartments holds the tube in their position firmly.
- Unique design with vent and drainage holes guarantees best, efficient air circulation.
- Forward slope base ensure quick visual orientation. Easily stackable for reducing storage space.
- Hinged lid with built-in stop allows easy one-handed access to tubes.
- Clear box lid enables easy identification of box content and protects the tubes from dust, moisture and other environmental effects.
- Alphanumeric index both on tube rows and the lid enables easy identification of tube positions.
- Box is supplied together with a disposable forceps - made from ABS - with fine end for easy handling and fast removal of tubes.

catalogue number	dimensions	tube volume	tube quantity	tube array	pack quantity
093.01.001	134x134x54 mm	2.0 ml	81	9 x 9	1 piece
093.01.002	134x134x96 mm	5.0 ml	81	9 x 9	1 piece



"Hedgehog" designed tube compartments holds the tube in their position firmly.



Hinged lid with built-in stop allows easy one-handed access to tubes.



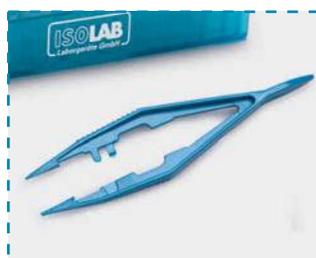
Forward slope base ensure quick visual orientation. Easily stackable for reducing storage space.



Vent and drainage holes at four sides of the box guarantees best and efficient air circulation.



Alphanumeric index both on tube rows and the lid enables easy identification of tube positions.



Box is supplied together with a disposable forceps with fine end for easy handling of tubes.



TUBE BOX - "hinged lid"

- Manufactured from polypropylene with high mechanical strength and high temperature resistance between -96°C to +121°C.
- Uniquely designed to carry 100 cryo tubes in 10 x 10 array
- Easily stackable for reducing storage space.
- Hinged lid with built-in stop allows easy one-handed access to tubes.
- Clear box lid enables easy identification of box content and protects the tubes from dust, moisture and other environmental effects.
- Alphanumerical index both on tube rows and the lid enables easy identification of tube positions.

catalogue number	dimensions	pack quantity
080.01.002	141x151x53 mm	1 piece



TUBE BOXES - "for cryo tubes"

- Manufactured from freeze resistant, water repellent, durable cardboard covered with superior quality white chromated paper coating.
- Chemically resistant to alcohols and mild organic solvents. Offers temperature resistance between -196°C to +121°C.
- Uniquely designed to carry 81 cryo tubes in 9 x 9 array
- Available 2 products:
 - Boxes with press-on lid
 - Boxes with hinged lid
- Press on lids perfectly fits to the box body providing a tight closure. Protects the interior from environmental effects.
- Hinged lids also guarantees perfect and tight closure. Since the lid is attached to the box with screws the risk of lid lost and intermingle is avoided.

with press on lid	with hinged lid	tube volume	tube quantity	tube array	pack quantity
092.22.101	092.23.101	2.0 ml	81	9 x 9	1 piece
092.22.102	092.23.102	5.0 ml	81	9 x 9	1 piece



Clear box lid enables easy identification of box content and protects the tubes from dust, and other environmental effects.



Press on lids perfectly fits to the box body and provides a tight closure. Protects the box interior from dust all environmental effects.



Hinged lids also guarantees perfect and tight closure. The lid is attached to the box with screws avoiding the risk of lid lost and intermingle.



Alphanumerical index both on tube rows and the lid enables easy identification of tube positions.



All lids are featured with a writing area for easy marking and classification of the interior contents.



FREEZING BOX - "with clear lid"

- Ideal to protect enzymes, and other biochemical reagents under cool environment.
- The polycarbonate cooler body is filled with a non-toxic gel which cannot contact with the tubes.
- Box should be freezed at -20°C for 24 hours before use. Afterwards can keep the micro tubes and cryo vials at $+4^{\circ}\text{C}$ for long periods.
- Clear lid enables easy identification of box content and protects the tubes from dust, moisture and other environmental effects.
- Featured with a stainless steel handle with secure grip for safe transfer of the box.
- Non-skid silicone feet guarantees safe and stable stand on the laboratory desks.
- Supplied with tube adaptors enabling to be used with different diameter tubes.

catalogue number	lid type	tube volume	tube quantity	tube array	pack quantity
092.18.001	clear lid	0,5 to 2,0 ml	32	4 x 8	1 piece



Supplied with tube adaptors enabling to be used with different diameter tubes.



FREEZING BOX - "gel-filled lid"

- Ideal to protect enzymes, and other biochemical reagents under cool environment.
- The polycarbonate cooler body and the lid are filled with a non-toxic gel which cannot contact with the tubes.
- Box should be freezed at -20°C for 24 hours before use. Afterwards guarantees to keep the micro tubes and cryo vials at -15°C for long periods.
- Clear lid enables easy identification of box content and protects the tubes from dust, moisture and other environmental effects.
- Featured with a stainless steel handle with secure grip for safe transfer of the box.
- Non-skid silicone feet guarantees safe and stable stand on the laboratory desks.
- Supplied with tube adaptors enabling to be used with different diameter tubes.

catalogue number	lid type	tube volume	tube quantity	tube array	pack quantity
092.18.003	gel filled lid	0,5 to 2,0 ml	32	4 x 8	1 piece



Supplied with tube adaptors enabling to be used with different diameter tubes.





ICE BUCKETS

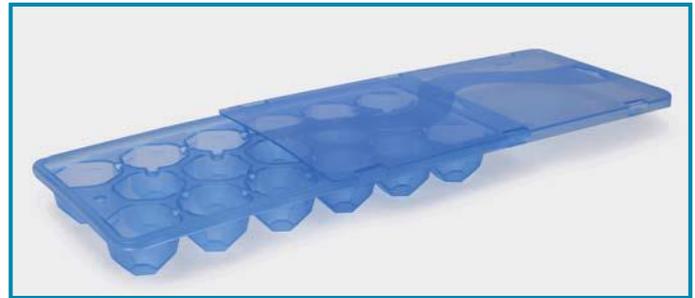
- Manufactured from rigid, single-moulded polyurethane with excellent insulation properties.
- Recommended for ice, dry ice, ice-salt slurries and liquid nitrogen involved techniques.
- Guarantees perfect durability needed for chilling temperature sensitive samples.
- Guarantees temperature resistance between -196°C to +90°C.
- Lid featured with a recessed knob keeps the evaporation at the minimum level.
- Easily stackable due to the tapered body form for reducing storage space.

catalogue number	volume	dimensions	pack quantity
092.19.001	1 L	265 x 195 x 115	1 piece
092.19.004	4 L	380 x 260 x 141	1 piece
092.19.009	9 L	518 x 286 x 162	1 piece

GLOVES - "cold resistant"

- Excellent gloves to work with coolants, cryo vials and with dry ice.
- Offers full protection of hand even at - 140°C ultra low temperature environment.
- Even after working extended hours they still stay flexible and guarantee the best comfort for hands.

catalogue number	glove length	pack quantity
080.10.001	350 mm	1 pair



ICE CUBE TRAYS

- Manufactured from food grade, virgin polypropylene.
- Compact designs allows practical use even with small freezers.
- Sliding lid totally covers the tray and keeps the ice cubes free from environmental effects.
- Sliding lid also guarantees the dislodge of exact amount of ice cubes without spillage of the rest.
- Available 2 products:
 - Large ice cube trays
 - Small ice cube trays

catalogue number	product descriptions	dimensions	pack quantity
092.16.001	Large ice cube trays	238 x 110 x 32 mm	1 piece
092.16.002	Small ice cube trays	265 x 110 x 35 mm	1 piece





PCR TUBES - "single cavity" - "flat cap"

- Single cavity PCR tubes for thermal transfer and PCR applications are manufactured from ultra clear, virgin polypropylene by fully automatic, human touch free machines.
- Manufactured in class 10.000 sterile areas as **"DNase, RNase, Endotoxin, ATP & pyrogen free"** product.
- Uniform and thin wall design accelerates the thermal heat transfer and shortens the PCR reaction and cycling times.
- With 2,1 cm height and 0,2 ml volume design offers compatibility with most leading thermal cyclers.
- Cap inner design ensures hermetical and leak-proof closure.
- Once cap is closed the tubes guarantee perfect sealing during thermal cycling preventing evaporation.
- Cap can be opened and closed with one hand without the risk of sample contamination.
- Group packed with lot number, production date and expiry date printed on the package.

catalogue number	pack quantity
123.01.002	500 pieces

PCR TUBES - "8 strip" - "with flat cap"

- 8 strip 0,2 ml PCR tubes for thermal transfer and PCR applications are manufactured from ultra clear, high grade polypropylene by fully automatic, human touch free machines.
- They perfectly fit to all PCR plates and provide fast filling option by 8 channel pipettors.
- Manufactured in class 10.000 sterile areas as **"DNase, RNase & pyrogen free"** product.
- Uniform and thin wall design accelerates the thermal heat transfer and shortens the PCR reaction and cycling times.
- Unique design offers compatibility with most leading thermal cyclers. Can be used as single tubes when cut.
- Once caps are closed the tubes guarantee perfect sealing during thermal cycling preventing evaporation.
- Caps can be opened and closed with one hand without the risk of sample contamination.
- Alternative 2 products ➤ **strips with attached caps**
➤ **strips with separate caps**
- Group packed with lot number, production date and expiry date printed on the package.



catalogue number	product descriptions	pack quantity	box quantity
123.01.028	strips with attached caps	12 pieces	10 packs
123.03.028	strips with separate caps	12 pieces	10 packs



Sterile tubes are manufactured in germ-free, class 10.000 sterile production areas and then re-sterilised by gamma irradiation.

CERTIFICATE OF COMPLIANCE and "BioClean" QUALITY

Product Name: _____
 Catalog Number: _____
 Control Lot No: _____
 National Stock: _____
 Production Date: _____
 Expiration Date: _____

This package contains a gamma irradiated high quality product manufactured in a 100% clean and germ-free class 10,000 clean room (according to U.S. Federal Standard 209C) environment.

This certificate is issued to confirm that the lot of products has been manufactured and tested under a registered and audited ISO 9001 quality system and contains the best-qualified material stock and passed all tests successfully.

Test Procedure	Result
Visual Test	Pass
Microscopic Test	Pass
Visual Microscopic	Pass
Fluorescence Test	Pass
Endotoxin Test	Pass
ATP Test	Pass
Pyrogen Test	Pass

ISOLAB Laborgeräte GmbH

Sterile tubes are supplied with a certificate as a guarantee of **"DNase, RNase & pyrogen free"**.

"DNase, RNase and Pyrogen free" certificate shows the result criterias and guarantees the documentation of the quality.

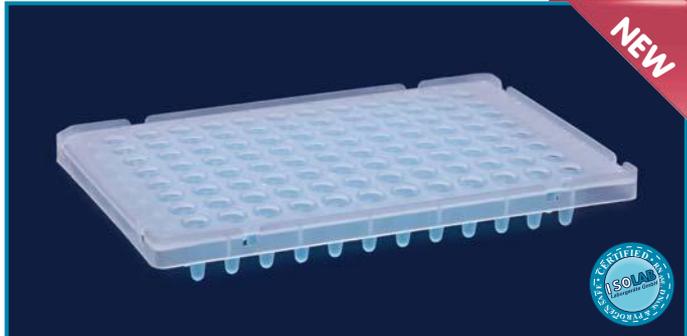
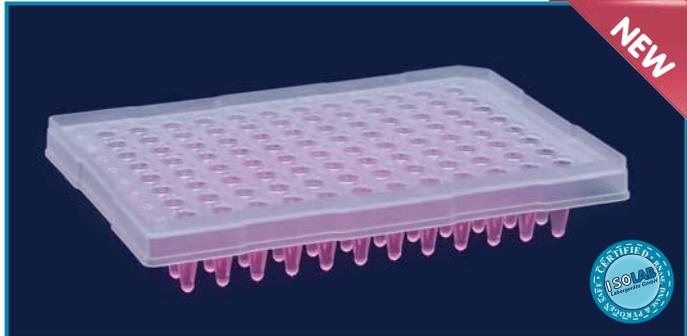
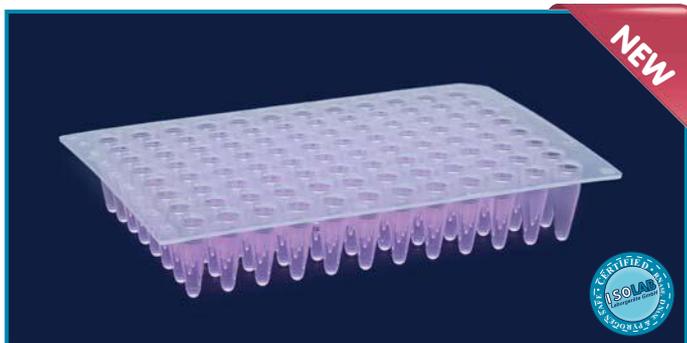
Certification process starts from inspection of raw materials, covers the entire production steps and ends with final tests after production of each lot.



qPCR TUBES - "8 strip" - "with flat cap"

- 8 strip 0,1 ml PCR tubes for thermal transfer and PCR applications are manufactured from ultra clear, high grade polypropylene by fully automatic, human touch free machines.
- Manufactured in class 10.000 sterile areas as "DNase, RNase & pyrogen free" product.
- Uniform and thin wall design accelerates the thermal heat transfer and shortens the PCR reaction and cycling times.
- Low profile, 16 mm tube height design offers compatibility with most leading qPCR machines.
- Once caps are closed the tubes guarantee perfect sealing during thermal cycling preventing evaporation.
- Caps can be opened and closed with one hand without the risk of sample contamination.
- Group packed with lot number, production date and expiry date on the package.

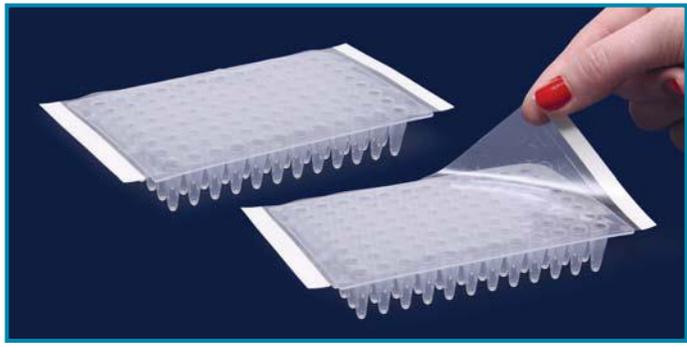
catalogue number	pack quantity	box quantity
123.02.028	12 pieces	10 packs



PCR PLATES

- 96 well PCR plates for thermal transfer and PCR applications are manufactured from ultra clear, virgin polypropylene by fully automatic, human touch free machines.
- Manufactured in class 10.000 sterile areas as "DNase, RNase & pyrogen free" product.
- Alternative 3 products
 - Non- skirted PCR plates with 0,2 ml well volume
 - Semi skirted PCR plates with 0,2 ml well volume
 - Semi skirted qPCR plates with 0,1 ml well volume
- Uniform and thin wall design accelerates the thermal heat transfer and shortens the PCR reaction and cycling times.
- Unique design offers compatibility with most leading PCR and qPCR cyclers.
- Alphanumerical index on tube rows enables easy identification of tube positions.
- Single packed with lot number, production date and expiry date printed on the package.

catalogue number	product descriptions	pack quantity
123.01.096	0,2 ml - 96 well non skirted PCR plate	10 pieces
123.02.096	0,2 ml - 96 well semi skirted PCR plate	10 pieces
123.03.096	0,1 ml - 96 well semi skirted qPCR plate	10 pieces



SEALING FILM

- Manufactured from polyester based film with acrylic adhesive back.
- Guarantees excellent chemical and temperature resistance between -40°C to +120°C.
- Can be used with all kinds of microplates including raised rim and skirted ones. Transperancy allows optical analysis possibility of PCR applications.
- Prevents cross contamination between samples and wells. Also does not interfere with cycle reactions and do not cause spills on PCR samples.
- Allows more accurate positioning and more secure sealing around each well.

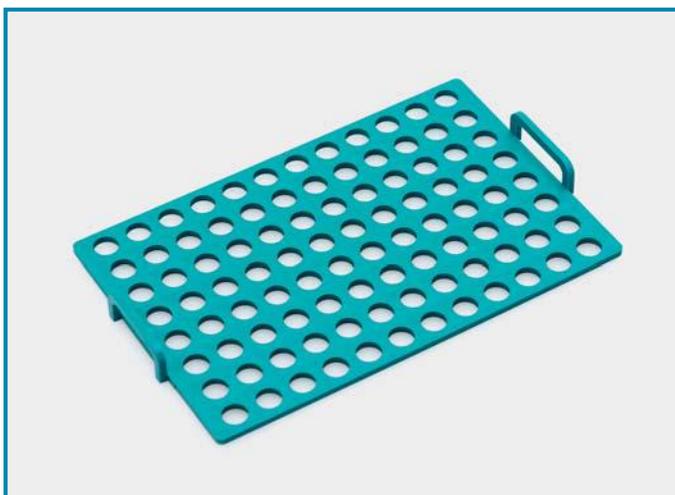
catalogue number	pack quantity
124.01.001	10 pieces



FREEZING BOXES - "for PCR tubes"

- Ideal to protect PCR tubes and strips at +4°C when working at laboratory ambient temperature.
- The polycarbonate cooler body is filled with a non-toxic gel which cannot contact with the tubes.
- Box should be freezed at -20°C for 24 hours before use. Afterwards guarantees to keep the PCR tubes and strips at +4°C for long periods.
- Clear lid enables easy identification of box content and protects the tubes from environmental effects.
- Featured with a stainless steel handle with secure grip for safe transfer of the box.
- Non-skid silicone feet guarantees safe and stable stand on the laboratory desks.

catalogue number	dimensions	pack quantity
092.18.008	164 x 215 x 149 mm	1 piece



PCR TRANSFER TRAY

- Manufactured from polypropylene for easy and fast carry and transfer of PCR tubes and PCR strips.
- A real time saver for everyone working with individual PCR tubes or strips of 8 and 12 tubes.
- Unique thin design guarantees perfect rest over 96 well tube racks and thermal cyclers.
- Two handles on both sides provide easy lift and carry during transportation of PCR tubes and strips.

catalogue number	tray dimensions	pack quantity
089.08.001	114 x 74 x 11 mm	1 piece



MIXER - "microplate"

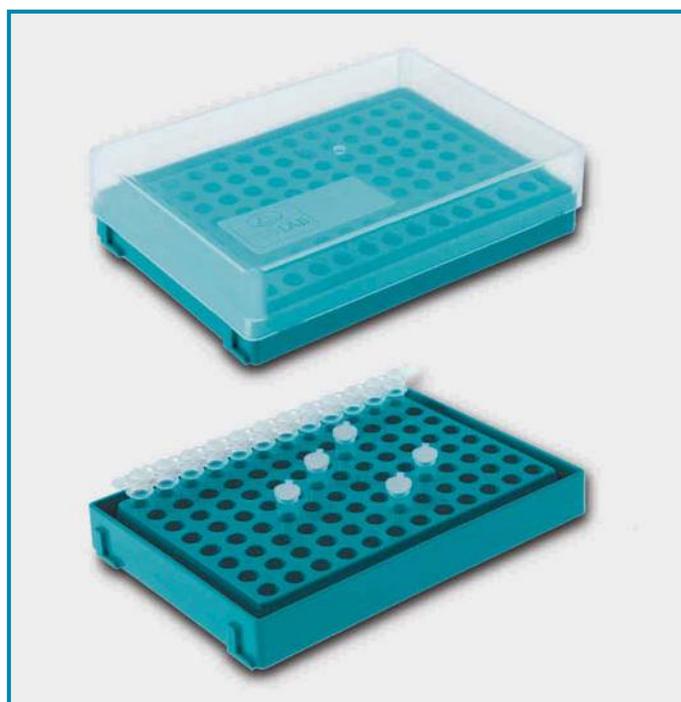
- Offers continuous orbital mixing of microplates for variety of applications in life science.
- Maintenance free DC motor with low noise level enables a smooth start and quick stop.
- Infinitely adjustable speed control from 0 to 1500 rpm guarantees a gentle revolution and optimal mixing.
- Aluminium cast housing avoids the vibration enabling an excellent stable operation.
- Top plate is easily removable and replaceable with optional adapters that can hold different tube sizes.
- Can be used both in cold rooms, incubators and anaerobic and aerobic chambers due to the small foot print and extremely compact design.

For other technical specifications and details kindly visit our catalogue page no 237.

PCR RACK

- Manufactured from polypropylene for “before” and “after” use at PCR sampling and applications.
- Rack can carry 3 different size PCR tubes & PCR strips.
 - 96 x 0,2 ml PCR tubes (8x12 array)
 - 12 x strip of 8 PCR tubes (8x12 array)
 - 8 x strip of 12 PCR tubes (8x12 array)
- The rack can be used alone or inserted into a workstation.
- Alphanumerical index on tube rows enables easy identification of tube positions.
- Translucent and clear lid fully covers the rack protecting rack interior from dust and other environmental effects.
- Lid also allows safe storage of racks on each other for reducing storage space.

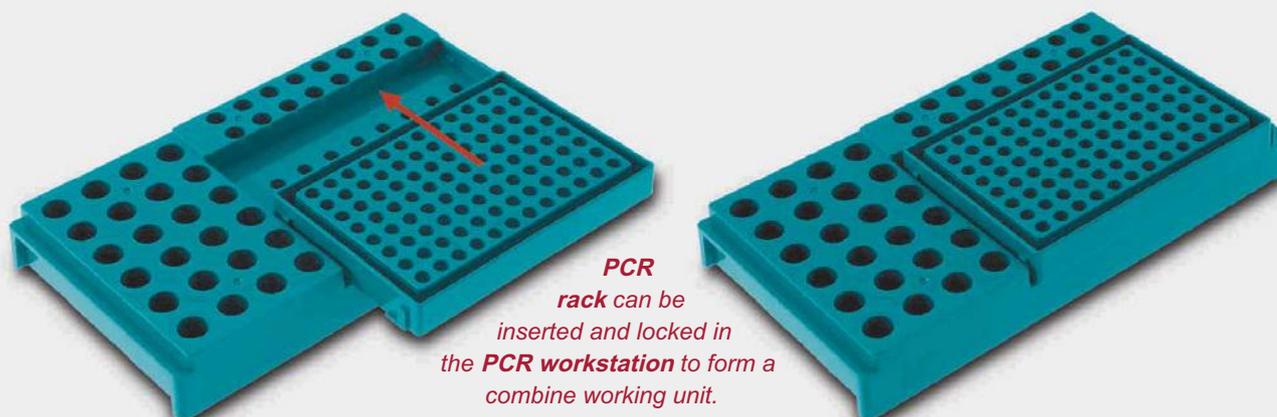
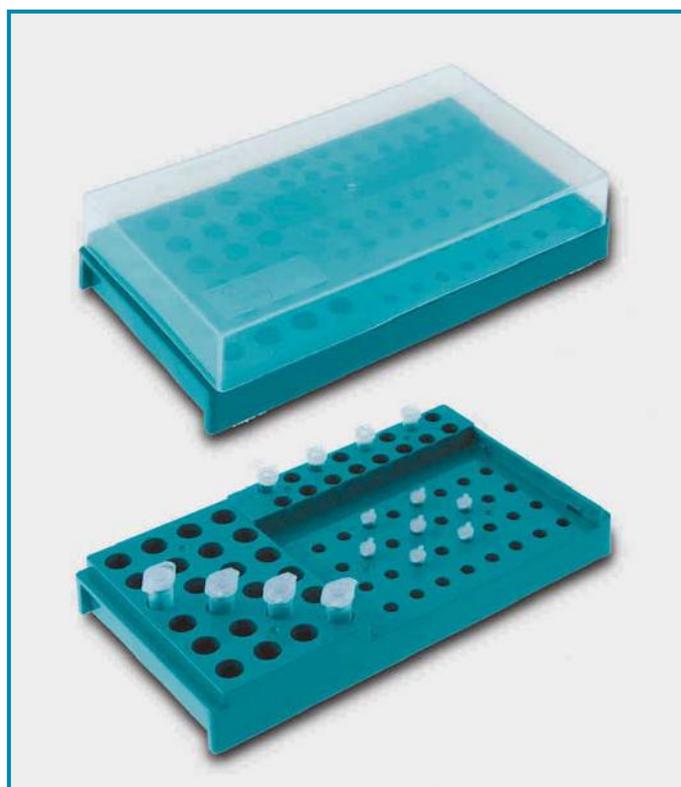
catalogue number	for PCR tubes	tube quantity (wells)	rack dimensions	pack quantity
089.03.012	0.2 ml	96 pcs	125 x 88 x 31 mm	1 piece



PCR WORKSTATION

- Manufactured from polypropylene for accommodation of different size PCR tubes and PCR strips.
- Rack can carry 3 different size tubes
 - 32 x 0,2 ml PCR tubes (4x8 array)
 - 16 x 0,5 ml PCR tubes (2x8 array)
 - 24 x 1,5 ml micro tubes (4x6 array)
- Alphanumerical index on tube rows enables easy identification of tube positions.
- Translucent and clear lid fully covers the rack protecting rack interior from dust and other environmental effects.
- Frosted marking areas on lid sides provides a convenient area for marking and labelling.
- Lid also allows safe storage of racks on each other for reducing storage space.
- PCR rack can be inserted into the working station in order to form a combined and practical working unit.

catalogue number	rack dimensions	pack quantity
089.03.013	210 x 115 x 50 mm	1 piece



PCR rack can be inserted and locked in the **PCR workstation** to form a combine working unit.

PIPETTES - "serological" - "polystyrene"

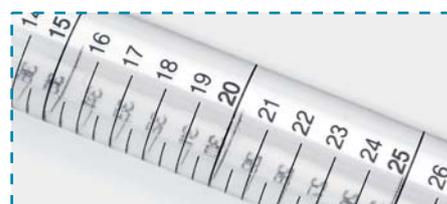
- Manufactured from virgin polystyrene with excellent optical transparency.
- Sterilized with gamma irradiation. Free of RNase, DNase, DNA and pyrogene
- Unique design offers a smooth interior which prevents cell-hanging and clumping inside the pipette wall.
- Stable and break-resistant pipette tip offers constant the reproducible flow in each time.
- Optimised mouthpiece perfectly fits to all types of pipette pumps and balls.
- Filter plug at the mouthpiece prevents overflow of liquid and also eliminates contamination.
- Color coded ring mark at suction stem allows fast identification and sourcing.
- The sharp, black, highly visible permanent graduations prevent ambiguity and guarantee precise reading and accurate dispensing.
- Reverse graduations show actual removed or remaining volumes on all pipettes larger than 1 ml volume.
- Pipettes are supplied individually wrapped in fiber-free color coded paper as easy-to-open packing.



Volume identification by color coding on pipette enables easy volume identification during working.



Filter plug at the mouthpiece of the pipette prevents exterior effects and minimize contamination.



Accurate volume identification by highly visible bidirectional graduation printed on pipette side body.

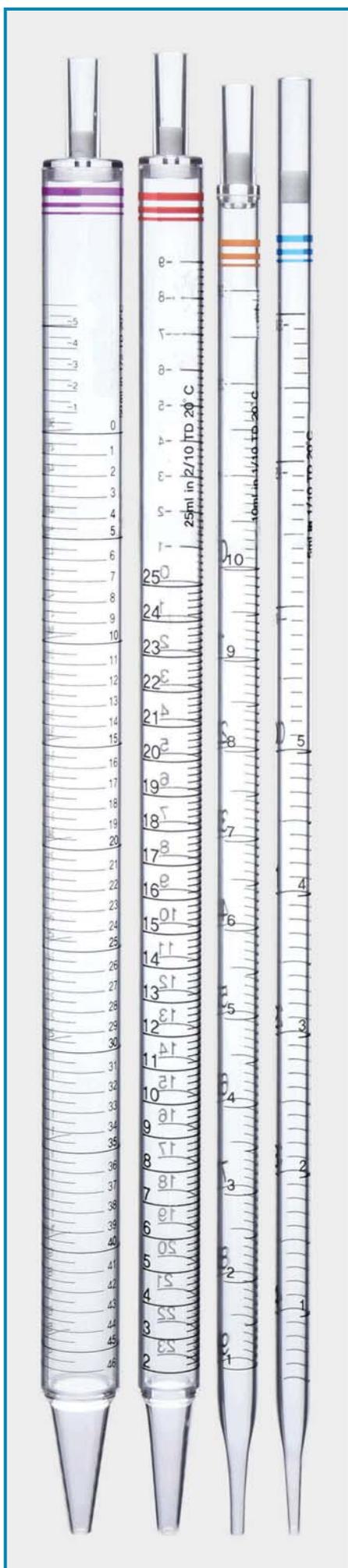
Ascending and descending scales facilitate reading both dispensing and remaining volume.

catalogue number	pipette volume	line color	pack quantity	box quantity
083.03.001	1 ml	yellow	200 pieces	800 pieces
083.03.002	2 ml	green	150 pieces	600 pieces
083.03.005	5 ml	blue	100 pieces	400 pieces
083.03.010	10 ml	orange	100 pieces	400 pieces
083.03.025	25 ml	red	50 pieces	200 pieces
083.03.050	50 ml	purple	40 pieces	160 pieces

RACK - "for pipettes"

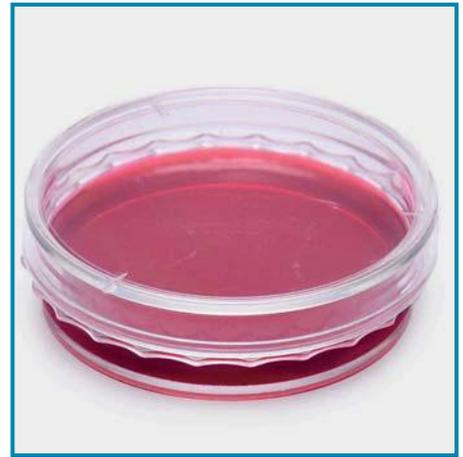
- Manufactured from acrylic for easy organisation of all kind of pipettes.
- 4 shelves guarantees easy and fast reach of all pipettes between 1 ml to 50 ml size within arm's reach.
- Angled design of the pipette shelves prevents the risk of pipettes falling out even the shelf is fully filled.

For other technical specifications and details kindly visit our catalogue page no 20.



PETRI DISHES - "for cell culture" - "sterile"

- Manufactured from optically clear, transparent polypropylene specially for cell culture practices.
- Production is done by fully automatic, human touch free machines.
- Manufactured in germ-free, class 10.000 sterile production areas and then re-sterilised by gamma irradiation.
- Supplied with a certificate as a guarantee of "DNase, RNase & pyrogen free" product.
- Ideal body form guarantees excellent use with automatic filling machines.
- External grip edges in the gripping ring prevents accidental dropping of the dish bottom.
- Stacking ring on the lid and the corresponding base part guarantees secure stacking option.
- Surface treated uniform flat growth surface guarantees excellent suspension for cultures.

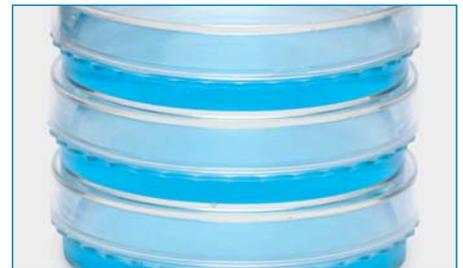


catalogue number	diameter	height	growth area	working volume	surface treatment	external grip	pack quantity	box quantity
120.03.035	35 mm	10 mm	9.4 cm ²	3 ml	yes	yes	10 pieces	500 pieces
120.03.060	60 mm	15 mm	21.5 cm ²	5 ml	yes	yes	10 pieces	500 pieces
120.03.090	100 mm	20 mm	55.0 cm ²	12.5 ml	yes	no	10 pieces	200 pieces



External grip edges in the gripping ring prevents accidental dropping of the dish bottom.

Stacking ring on the lid and the corresponding base part guarantees secure stacking option.



CELL SCRAPERS - "for cell culture" - "sterile"

- Specially designed to facilitate collection of attached cells on culture dishes.
- Manufactured in germ-free, class 10.000 sterile production areas and then re-sterilised by gamma irradiation.
- Supplied with a certificate as a guarantee of "DNase, RNase & pyrogen free" product.
- Handle is manufactured from polypropylene. Scraper head is manufactured from flexible polyethylene.
- Scraper blade rotates around the its axis enabling easy and flexible applications.
- The rotating blade also guarantees the efficient collection of cells from any angle.
- Ultra smooth blade surfaces offers problem-free collection without the risk of cutting or gauging the agar surface.
- Hexagonal shaft improves grip, assists orientation and makes diluting and streaking easy.
- Hexagonal handle also enables orientation of the loop head with a fixed angle.
- Individually single packed with lot number, production date and expiry date printed on the package.



Rotating scraper blade offers easy and flexible applications and enables the collection of cells from any angle.

catalogue number	total length	blade width	box quantity
121.01.013	225 mm	13 mm	100 pieces
121.02.020	290 mm	20 mm	100 pieces



FLASKS - "for cell culture"

- Manufactured from optically clear polystyrene in germ-free, class 10.000 sterile production areas and then re-sterilised by gamma irradiation. Supplied with a certificate as a guarantee of "DNase, RNase & pyrogen free" product.
- Offers absolutely flat growth surface with surface activated growth area for fast and efficient growth.
- Special design offers minimized contamination risk. Angled design of the flask neck allows easy access to each corner with 100 % cell retrieval without leaving any dead corners.
- Available 2 caps:
 - Plug cap for airtight culture
 - Vent cap for open culture
- Caps are made from polypropylene with large ridges with increased grip. Cap inner design ensures hermetical and leak-proof closure.
- Caps can be opened and closed with single hand. A 2/3 turn of the cap will be sufficient for hermetic and leak-proof closure.
- Graduations on the side wall offers visual control of the filled volume. Marking area on side wall enables easy marking and labelling.
- Individually single packed with lot number, production date and expiry date printed on the package.



Angled design of the flask neck allows easy access to each corner with 100 % cell retrieval without leaving any dead corners.



Ergonomic design minimize contamination and raised corners at the body enables easy and slip-free stacking possibility.



plug seal cap usually used for airtight culture applications. Can be used also for open culture when the cap is unscrewed.



vent cap is designed for open culture applications. Includes a contamination preventing hydrophobic membrane 0,2 µm.

catalogue number	growth area	working volume	cap type	surface treatment	pack quantity	box quantity
120.01.025	25 cm ²	7 ml	vent cap with filter	yes	5 pieces	200 pieces
120.01.075	75 cm ²	25 ml	vent cap with filter	yes	5 pieces	100 pieces
120.01.175	175 cm ²	50 ml	vent cap with filter	yes	5 pieces	40 pieces
120.02.025	25 cm ²	7 ml	plug seal cap	yes	5 pieces	200 pieces
120.02.075	75 cm ²	25 ml	plug seal cap	yes	5 pieces	100 pieces
120.02.175	175 cm ²	50 ml	plug seal cap	yes	5 pieces	40 pieces



MULTIWELL PLATES - "for cell culture"

- Widely used plates for handling multiple samples in a single experiment during culture
- Manufactured from optically clear polystyrene in germ-free, class 10.000 sterile production areas and then re-sterilised by gamma irradiation.
- Supplied with a certificate as a guarantee of "DNase, RNase & pyrogen free" product.
- Offers absolutely flat growth surface with surface activated growth area for fast and efficient growth.
- Unique design guarantees minimized cross contamination.
- They offer also easy handling with slip-free stacking possibility.
- Lid with air-venting system for controlled gas exchange with low evaporation.
- Vented base guarantees excellent air flow between stacked dishes to prevent condensation.
- Sloped edge allows placement of the lid in one single position.
- Individually single packed with lot number, production date and expiry date printed on the package.



Ergonomic design offers minimized contamination risk and easy handling with slip-free stacking possibility.



Individual packing eliminates the possible risks of contaminations. Designed to prevent cross contamination.

catalogue number	external dimensions	well dimension	growth area	working volume	surface treatment	pack quantity	box quantity
122.01.006	85.4 x 127.6 mm	35.0 mm	9.6 cm ²	3 ml	yes	1 piece	50 pieces
122.01.012	85.4 x 127.6 mm	22.1 mm	3.8 cm ²	2 ml	yes	1 piece	50 pieces
122.01.024	85.4 x 127.6 mm	15.6 mm	1.9 cm ²	1 ml	yes	1 piece	50 pieces
122.01.096	85.4 x 127.6 mm	6.4 mm	0.32 cm ²	0.2 ml	yes	1 piece	50 pieces

CENTRIFUGE TUBES - "for cell culture"

- Manufactured from **FDA approved** ultra clear, high grade polypropylene. Can resist centrifugation up to 6.000 RCF.
- Sterilized with gamma irradiation, **free of RNase, DNase, and pyrogene.**
- Individual packing eliminates the possible risks of contaminations.
- Their conical bottoms make them suitable for centrifugation tests in immunology, microbiology etc.



For other technical specifications and details please visit our catalogue page no 272.

MAGNIFIER - "table top"

- Multifunctional table-top magnifier offers magnification power of 3X and 5X depending on view direction.
- Can be operated by one hand. Offers smooth and easy use with distant and near vision lenses.
- 4 LED bulbs with on/off control provides super bright powerful illumination.
- Two separate flexible gooseneck holder enables magnifying lens and illumination angle adjustable in multiangular axes.
- Shadow and flicker free illumination without heat development provides optimal concentration of light.
- Aspherical lens provides spherical aberration and distortion free images with edge-to-edge sharpness.
- Removable main body can be fixed at table corner with a clamp.
- Sturdy base plate increase the standing efficiency.
- The clamp mechanism at the base enables fixation of objects firmly in place.

catalogue number	pack quantity
065.10.001	1 piece

MAGNIFIER - "handy type"

- Hand magnifier offers magnification power of 3X and 5X depending on view direction.
- Handle perfectly fits to hand with a comfortable grip.
- Aspherical lens provides spherical aberration and distortion free images with edge-to-edge sharpness.
- LED bulb with on/off control provides super bright powerful illumination.
- A rotatable joystick switch enables adjustment of illumination angle in all angles.

catalogue number	external dimensions	lens dimensions	pack quantity
065.10.006	230 x 100 mm	100 mm	1 piece

MAGNIFIER - "pocket type"

- Perfect magnifier for reading small prints with magnification power of 2X.
- 3 LED bulbs with on/off control provides super bright powerful illumination.
- Ergonomic design enables intuitive movement on the reading material. Delivered in a soft protective bag

catalogue number	external dimensions	lens dimensions	pack quantity
065.10.004	60 x 145 mm	60 x 100 mm	1 piece



REFRACTOMETER - "digital"

- With a wide measuring range offers a precise measurement and determination of refractive index and Brix values of liquid samples.
- Portable, light weight, compact design guarantees fast and easy measurements also eliminates the reading errors.
- Operation is extremely simple: only with a few drops of sample guarantees fast and reliable measurements.
- Zero point check and calibration can be done with water.
- LED light source around the prism warns the user during the calibration or measurement process
- Simple and easy to change measuring from % Brix to refractive index. Features with automatic temperature compensation (ATC)

catalogue number	measuring range % Brix	measuring range refractive index	division Brix / RI	ATC
618.32.001	0 - 95	1,3330 - 1,5400	0,1 / 0,0001	yes



REFRACTOMETER - "hand type"

- A practical alternative for practical yet quick measurement of concentrations of liquids.
- Portable and hand-held design enables both laboratory and field applications.
- Models with automatic temperature compensation are specially suitable for field use.
- With focussing eyepiece with soft rubber eyecups for reducing straylight ingress and also avoiding scratches at spectacle lenses.
- Calibration is easily done by turning the adjustment screw.

catalogue number	measuring range % Brix	division %	ATC
618.21.001	0 - 10	0,1	yes
618.22.001	0 - 18	0,1	yes
618.23.001	0 - 32	0,2	yes
618.24.001	0 - 80	0,5	no
618.25.001	0 - 90	0,5	no

REFRACTOMETER - "ABBE"

- Large optical prism enables excellent boundary line brightness and contrast during measurements.
- Adjustable wide field eyepiece with 10X magnification, enables bright and clear images. Super contrast, optical system with 30X magnification guarantees sharp images.
- Equipped with movable, hinged covers to keep light out. Offers connection possibility to a thermostatic circulator.
- Featured with a digital thermometer with a large LCD display. Temperature reading is selectable as °C or °F with a precision of 0,1°C or 0,1°F.

catalogue no	618.41.001
external dimensions (mm)	270 x 180 x 370
refractive index (nD)	1,3000 - 1,7000
dissolved solid Brix (%)	0 - 95
accuracy	± 0,0002
water inlet / outlet Ø (mm)	10
digital thermometer	LCD display - 34 x 14 mm
temperature range (°C)	0 - 70
temperature uniformity (°C)	± 0,1



- Ideal for precise measurement and determination of refractive index and % Brix values of liquid, solid, semi-solid and powder samples. Simple handling and easy to use. Calibration can be done easily with supplied calibration prism.

MICROSCOPE - "biological"



- Ideal for academic and clinical research with excellent optical system, outstanding resolution and definition.
- Unique design with backward nosepiece offers larger working space and enables convenient handling.
- Featured with a 360° rotatable binocular head inclined at 30° with interpupillary distance adjustable 50 mm - 75 mm.
- Wide field eyepiece with 10X magnification power, 20mm lens diameter enables bright and clear images
- 4X, 10X, 40X and 100X plan achromatic objectives guarantees net and sharp images.
- NA 1,25 abbe condenser with iris diaphragm and filter holder guarantees ideal contrast.
- 142x138 mm square mechanical stage with 76 mm left-right and 55 mm back-forward movement offers easy use
- Coarse and fine adjustment is enabled with upper limit safety with 0,002 mm fine division and 20 mm maximum moving limit.
- Each rotation of control knob enables 37,7 mm coarse stroke and 0,2 mm fine stroke.
- Featured with a power supply 100 Volt - 220 Volt multi input rating and easily replaceable, super bright and powerful LED illumination with adjustable light power.

- Supplied with dust cover and immersion oil.

catalogue number	pack quantity
613.21.001	1 piece



Binocular head inclined at 30° with interpupillary distance adjustable 50 mm - 75 mm.



Featured with a power supply 100 Volt - 220 Volt multi input rating and easily replaceable, super bright and powerful. LED illumination with adjustable light power.



142x138 mm square mechanical stage with 76 mm left-right and 55 mm back-forward movement offers easy use.



Coarse and fine adjustment is enabled with upper limit safety with 0,002 mm fine division and 20 mm maximum moving limit. Each rotation of control knob enables 37,7 mm coarse stroke and 0,2 mm fine stroke.

MICROSCOPE - "biological"

- Ideal for academic and clinical use in biology, pathology, histology, virology, immunology, genetics and other related applications.
- Unique design with outward quadruple nosepiece offers larger working space and enables convenient handling.
- Featured with a 360° rotatable binocular head inclined at 30° with interpupillary distance adjustable 50 mm - 75 mm.
- Wide field eyepiece with 10X magnification power, 18 mm lens diameter enables bright and clear images
- 4X , 10X, 40X and 100X achromatic objectives guarantees net and sharp images.
- NA 1,25 abbe condenser with iris diaphragm and filter holder guarantees ideal contrast.
- 125x115 mm square mechanical stage with 73 mm left-right and 33 mm back-forward movement offers easy use
- Coarse and fine adjustment is enabled with upper limit safety with 0,002 mm fine division and 20 mm moving limit
- Each rotation of control knob enables 42,4 mm coarse stroke and 0,2 mm fine stroke.
- Featured with a power supply 100 Volt - 220 Volt multi input rating and easily replaceable, super bright and powerful halogen lamp illumination with adjustable light power.
- Supplied with dust cover and immersion oil.

catalogue number	pack quantity
613.23.001	1 piece



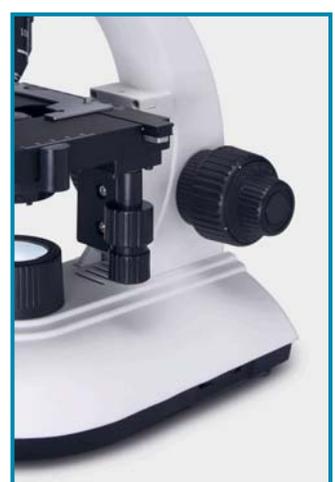
Binocular head inclined at 30° with interpupillary distance adjustable 50 mm - 75 mm.



125x115 mm square mechanical stage with 73 mm left-right and 33 mm back-forward movement offers easy use.



Featured with a power supply 100 Volt - 220 Volt multi input rating and easily replaceable, super bright and powerful halogen lamp illumination with adjustable light power.



Coarse and fine adjustment is enabled with upper limit safety with 0,002 mm fine division and 20 mm moving limit. Each rotation of control knob enables 42,4 mm coarse stroke and 0,2 mm fine stroke.



MICROSCOPE - "stereo"

- Offers ergonomic design, sharp image quality, high resolution and wide field of viewing for academic, industrial and clinical applications.
- Featured with a 360° rotating binocular head inclined at 45° with interpupillary distance adjustable 52 mm - 75 mm.
- Wide field eyepiece with 10X magnification power with 20mm view field enables bright and clear images
- Adjustable objective with 0,7 X to 4,5X magnification power provides a wide and clear viewing field of 20 mm diameter with zoom ratio of 1:6,4
- Featured with a power supply 100 Volt - 220 Volt multi input rating and easily replaceable, super bright and powerful LED illumination from bottom and overhead.
- Supplied with dust cover, and circular examination glass plate and an additional examination plate with one side black and other side white.

catalogue number	pack quantity
613.22.001	1 piece



Binocular head inclined at 45° with interpupillary distance adjustable 50 mm - 75 mm.



Adjustable objective with 0,7 X to 4,5X magnification power provides a wide and clear viewing field of 20 mm diameter with zoom ratio of 1:6,4



Featured with a power supply 100 Volt - 220 Volt multi input rating and easily replaceable, super bright and powerful. **LED illumination from bottom.**



Featured with a power supply 100 Volt - 220 Volt multi input rating and easily replaceable, super bright and powerful. **LED illumination from overhead.**

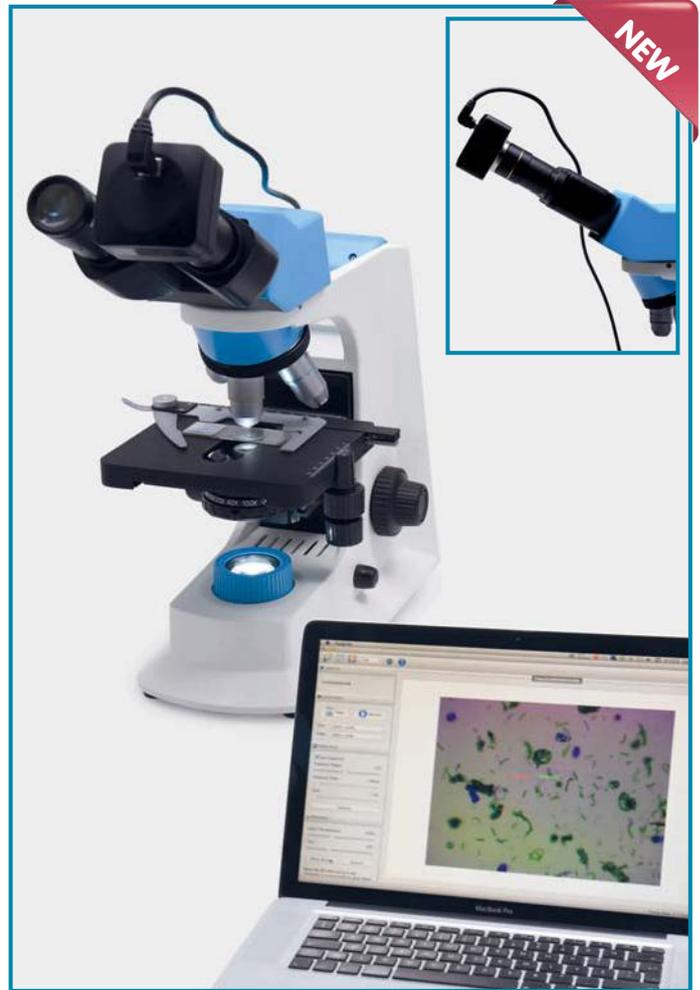
IMAGE PROJECTOR

- Consists of a scientific research camera with Aptina CMOS sensor for advanced video and image processing.
- Offers excellently clear projection of the images from microscopes to screens and practical photo and video shootings.
- Featured with hardware resolution among 0,35M to 14M and USB 2.0 interface for high speed data transmission.
- Ultra-fine color engine guarantees perfect color reproducibility.
- Other pces are; Maximum resolution: 8.000.000 Pixels / Pixel size: 1,67 μm x 1,67 μm / Dynamic range: 65,2 dB. / SN ratio: 34 dB / Spectral range: 380 – 650 nm / Exposure: 0,38 ms – 2000 ms, ROI Auto & Manual
- Sturdy zinc aluminium housing for a very long life cycle.

catalogue number	pack quantity
613.31.001	1 piece



Very easy to use; first remove the eyepiece from the ocular tube. Then screw the image projector to the eyepiece and insert the eyepiece to the ocular tube.



LENS CLEANING TISSUES

- Manufactured from very thin best quality paper based on %100 manile fibre. Cut with dimentionns 100 x 150 mm.
- Guarantees fast and very effective cleaning of spectacles, goggles, microscope objectives, binoculars and all similar optical lens involved items.
- Never leaves any fibres or dust on the cleaned surface.
- These papers never scratches and damages the surfaces. They guarantee non-abrasive cleaning.
- Supplied in a handy booklet of 100 tissue sheet for hygienic storage and for easy dispensing.



For other technical specifications and details kindly visit our catalogue page no 190.

BLOOD COUNTING CHAMBERS

- Manufactured from special optical glass according to DIN 12847 standard.
- It is possible to count different types of cells such as leukocyte, erythrocytes with simple methods under a microscope.
- Tolerance of the depth of the chamber does not exceeds 2 %.
- Counting grids are engraved into two polished surfaces at the central station.
- "Neubauer - improved" chamber with grid consists of 3 x3 large squares with areas of 1 mm² each.
- Alternative 2 products:
 - "Thoma - new" chamber with 0,1 mm depth. The grid covers an area of 1,1 x 1,1 mm².
- Supplied in a polystyrene box together with two haemocytometer cover glasses.

catalogue number	product descriptions	pack quantity
075.03.001	Neubauer Improved	1 piece
075.03.002	Thoma - New	1 piece

COVER GLASSES - "for counting chambers"

- Manufactured from special optical glass with ground and polished edges.
- These cover glasses are used to cover specimens in counting chambers.
- With their excellent flat surfaces they adhere perfectly on the chambers and defines the volume of the cell suspension over the counting grid.
- Their substantial thickness of 0,4 mm offers perfect results without bending under capillary forces.
- Their practical dimentions of 20 x 26 mm enables use with amost chamber types.

catalogue number	pack quantity
075.04.001	10 pieces

TALLY COUNTER

- Effective and practical counter with a sturdy, chrome finished housing can count up to 9.999.
- Offers multi-purpose use such as counting blood cells, colonies, drops of liquid.
- Counter is protected by a glass window. Featured with a quick-reset knob.

catalogue number	pack quantity
081.14.001	1 piece



COVER GLASSES

- Manufactured from optical grade, hydrolic 1 class borosilicate glass according to DIN ISO 8255 standard.
- Fully automatic production cycles ensures dust-free, absolutely clean cover glasses with excellent flatness and smooth surfaces.
- With their thickness varying 0,13 mm - 0,17 mm they guarantee perfect clearness.
- Their edges are cut with highest precision assuring flawless results.
- Alternative 2 products ➤ **economical quality cover glasses**
➤ **superior quality cover glasses**

economic quality	superior quality	dimensions	pack quantity	box quantity
075.00.001	075.01.001	18 x 18 mm	100 pieces	10 pack
075.00.002	075.01.002	20 x 20 mm	100 pieces	10 pack
075.00.003	075.01.003	22 x 22 mm	100 pieces	10 pack
075.00.004	075.01.004	24 x 24 mm	100 pieces	10 pack
075.00.005	075.01.005	24 x 32 mm	100 pieces	10 pack
075.00.006	075.01.006	24 x 50 mm	100 pieces	10 pack
075.00.007	075.01.007	24 x 60 mm	100 pieces	10 pack



SLIDES

- Manufactured from optical grade, hydrolic 3 class soda lime glass according to DIN ISO 8037/1 standard.
- Fully automatic production cycles ensures dust-free, absolutely clean cover glasses with excellent flatness and smooth surfaces.
- With their extremely flat pre-cleaned surfaces free of dust and oil and their 1 mm thickness they assure flawless results.
- Alternative 2 products ➤ **economical quality cover glasses**
➤ **superior quality cover glasses**
- Superior quality color coded slides has ground edges with 45° edge angle.
- Color coded with 5 different colors enables fast, easy identification.



Superior quality color coded slides with 5 different colors provides easy identification of samples.



Superior quality slides has ground edges with 45° edge angle.



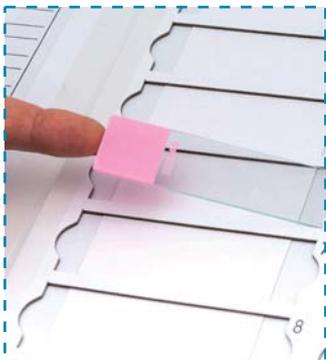
economic quality	superior quality	product descriptions	edge angle	color code	pack quantity	box quantity
075.05.001		Cut edges, Plain	90° Degree	-----	50 pieces	50 pack
075.05.002		Cut edges, Frosted one end one side	90° Degree	-----	50 pieces	50 pack
075.05.003		Ground edges, Plain	90° Degree	-----	50 pieces	50 pack
075.05.004		Ground edges, Frosted one end two side	90° Degree	-----	50 pieces	50 pack
	075.02.005	Ground edges, Color Frosted	45° Degree	white	50 pieces	50 pack
	075.02.006	Ground edges, Color Frosted	45° Degree	yellow	50 pieces	50 pack
	075.02.007	Ground edges, Color Frosted	45° Degree	green	50 pieces	50 pack
	075.02.008	Ground edges, Color Frosted	45° Degree	pink	50 pieces	50 pack
	075.02.009	Ground edges, Color Frosted	45° Degree	blue	50 pieces	50 pack



SLIDE WALLET - "cardboard"

- Manufactured from thick and robust cardboard with 20 pieces slide capacity.
- Consists of 2 parts:
 - A base with slide compartments
 - Two folding covers, covering the base
- Once the covers are closed the wallet interior is protected from dust and other environmental effects.
- Unique recessed design of the slide compartments avoids the risk of covers touching the slides.
- Alphanumerical index on slide rows enables easy identification of slide positions.
- Printed marking area on side walls of the covers enables easy marking and labelling.
- Slide compartments has finger slots for easy and fast removal of the slides.

catalogue number	dimensions	pack quantity
076.01.001	205x340x10 mm	1 piece



Slide compartments has finger slots for easy and fast removal of the slides.



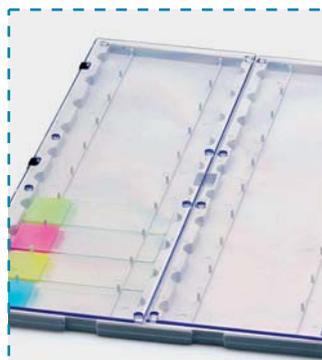
Hinged covers protects the slides in the wallet from environmental effects.



SLIDE WALLET - "polystyrene"

- Manufactured from thick and robust polystyrene with 20 pieces slide capacity.
- Consists of 2 parts:
 - A base with slide compartments
 - Two folding covers, covering the base
- Once the covers are closed the wallet interior is protected from dust and other environmental effects.
- Covers can be folded and hid under the base enabling easier handling of the slides.
- Clear covers offers visual visibility of the slides placed in wallet interior.
- Unique recessed design of the slide compartments avoids the risk of covers touching the slides.
- Alphanumerical index on slide rows enables easy identification of slide positions.
- Printed marking area on side walls of the covers enables easy marking and labelling.
- Slide compartments has finger slots for easy removal of the slides.

catalogue number	dimensions	pack quantity
076.01.002	194 x 292 x 13 mm	1 piece



Clear hinged covers protects the slides in the wallet from environmental effects. Covers also offers clear visibility of the slides.



Removal of the slides are done easily by pressing the edge of the slide. This action automatically lifts the other side of the slide.

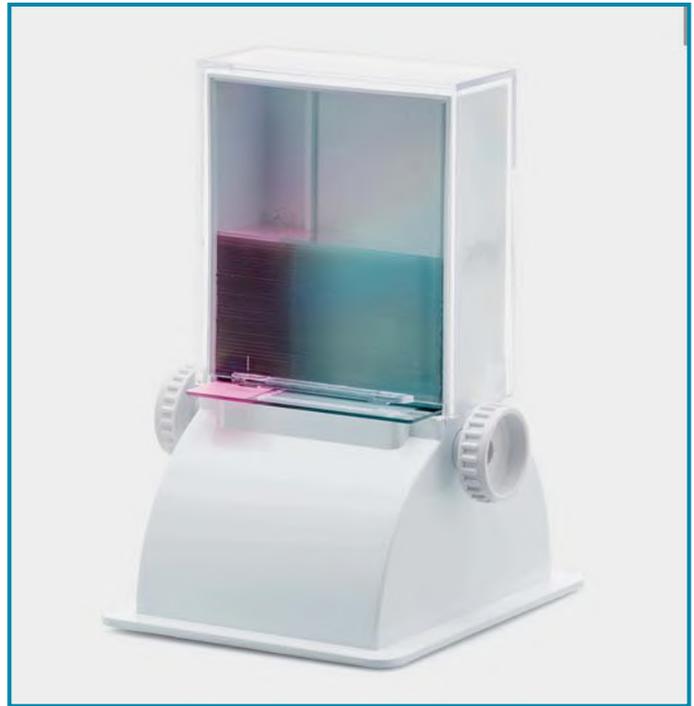


SLIDE WALLET RACK

- Manufactured from thick and robust acrylic for easy and safe storage of 5 slide wallets.
- Unique design providing easy insertion and removal of the slide wallets also protects the wallet interior from environmental effects.
- Easily stackable due to the body form for reducing storage space.



catalogue number	dimensions	pack quantity
076.01.003	205 x 340 x 100 mm	1 piece



SLIDE DISPENSER

- Side compartment can hold 90 standard microscope slides with 26 x 76 mm dimensions.
- Each turn of control knobs placed on both side pushes a single slide from the reservoir bottom.
- Clear front panel offers visual visibility of the slides placed in slide dispenser.
- For better performance only dry slides should be placed into the dispenser.

catalogue number	dimensions	pack quantity
076.04.001	112 x 121 x 162 mm	1 piece



FORCEPS - "for cover glass"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Most commonly used forceps for handling cover glasses. Featured with a flat and inclined tip
- Robust and seamless construction guarantees long life cycle.
- Grid lines on the middle part of the body enables safe and easy handling.

catalogue number	forceps form	forceps length	pack quantity
048.03.001	curved	105 mm	1 piece
048.03.002	straight	105 mm	1 piece

SLIDE MAGAZINE



➤ Offers most convenient, organised and versatile way of storing standard microscope slides.

➤ System consists of a slide box and a removable tray manufactured from polystyrene.

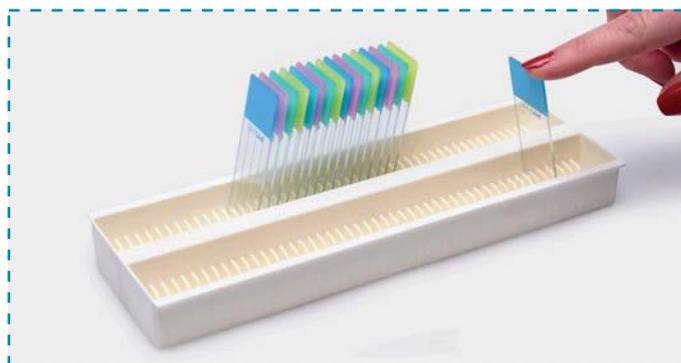
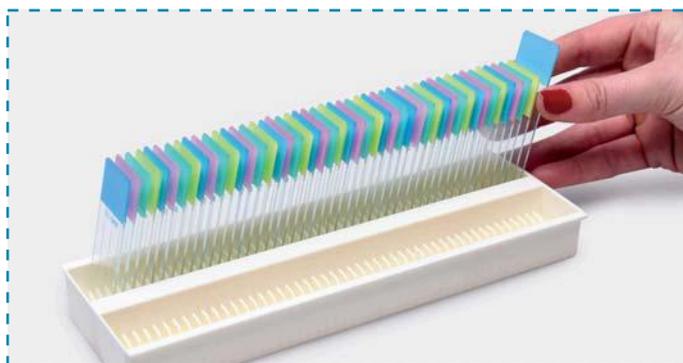
➤ Can hold 200 slides as standard. Also can store 400 slides if the slides are placed back-to-back at the slide compartment lots.

➤ All slides are stored upright position for easy insertion and removal.

➤ A hinged clear lid offers visual visibility of the slides placed in slide magazine.

➤ Once hinged lid is closed the magazine interior is protected from dust and other environmental effects.

catalogue number	dimensions	pack quantity
076.03.001	82 x 245 x 86 mm	1 piece



Removable tray can be taken out from the magazine box for easier handling. Alphanumerical index on slide rows enables easy identification of slide positions.

Slides can be tilted backward and forward by single finger for easier handling. This feature also enables easy and fast reading of the barcodes and labels without removing the slides.

SLIDE MAILERS

➤ Manufactured polypropylene for storing and shipping of slides. Flat mailers can carry 1 or 2 or 3 slides depending on the type.

➤ Easy-to-close snaps holds the mailers always securely closed while keeping the interior away from environmental effects.

➤ Box mailer with slotted channels can hold 5 slides separated from each other.

➤ The hinged lid protects the mailer interior from environmental effects.

slide mailers	slide capacity	pack quantity	box quantity
076.05.001	1 slide	1 piece	100 pieces
076.05.002	2 slides	1 piece	100 pieces
076.05.003	3 slides	1 piece	100 pieces
076.05.004	5 slides	1 piece	100 pieces





SLIDE BOXES - “with plastic latch”

- Manufactured from robust ABS providing perfect storage and transportation option of slides.
- Moulded grooved slide slots holds the microscope slides at the position.
- Hinged lid offers safe closing and easy opening. Once the lid is closed the box interior is protected from dust and other environmental effects.
- The plastic latch guarantees the tight hold of the closed lid.
- Easily stackable due to the stacking feet for reducing storage space.
- Both the linings and the slide slots featured with numerical index offers coordinative use with the slide inventory sheet placed inside the lid.

slide boxes	slide capacity	pack quantity
076.02.000	25 slides	1 piece
076.02.001	50 slides	1 piece
076.02.002	100 slides	1 piece

SLIDE BOXES - “with steel latch”

- Manufactured from robust ABS providing perfect storage and transportation option of slides.
- Moulded grooved slide slots holds the microscope slides at the position.
- Hinged lid offers safe closing and easy opening. Once the lid is closed the box interior is protected from dust and other environmental effects.
- The steel latch guarantees the tight hold of the closed lid. Soft cork lining at the bottom ensures slide safety.
- Easily stackable due to the stacking feet for reducing storage space.
- Both the linings and the slide slots featured with numerical index offers coordinative use with the slide inventory sheet placed inside the lid.

catalogue number	slide capacity	pack quantity
076.02.012	100 slides	1 piece



Both the linings and the slide slots featured with numerical index offers coordinative use with the slide inventory sheet placed inside the lid.

Easily stackable due to the stacking feet for reducing storage space.



Both the linings and the slide slots featured with numerical index offers coordinative use with the slide inventory sheet placed inside the lid.

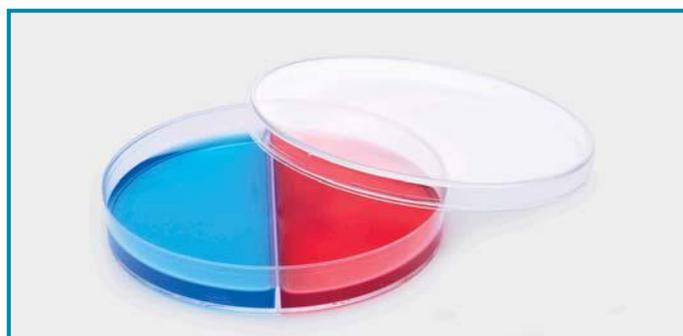
The steel latch guarantees the tight hold of the closed lid. Soft cork lining at the bottom ensures slide safety.



PETRI DISHES - "glass"

- Manufactured from heat resistant glass with counter sinking process which guarantees bubble-free dishes.
- Lids perfectly fits to the body enabling easy handling.
- Extremely flat bottom base guarantees an even media dispersion and uniform cell growth.
- Fire polished body and lid edges enables safe use by reducing the risk of breakage.

catalogue number	diameter	height	pack quantity
081.01.060	60 mm	15 mm	18 pieces
081.01.080	80 mm	15 mm	18 pieces
081.01.100	100 mm	20 mm	18 pieces
081.01.120	120 mm	20 mm	18 pieces
081.01.150	150 mm	25 mm	18 pieces



PETRI DISHES - "polystyrene" - "sterile"

- Manufactured from optically clear, transparent polystyrene for multiple use in microbiology and bacteriology.
- Manufactured by fully automatic, human touch free machines.
- Ideal body form guarantees excellent use with automatic filling machines.
- Vented lids enables consistent and effective practice.

- Alternative 2 products
 - Aseptic petri dishes
 - Sterile petri dishes

- Aseptic petri dishes are manufactured in germ-free, class 10.000 sterile production areas with extreme sterility control.
- Sterile petri dishes are manufactured in germ-free, class 10.000 sterile production areas and then re-sterilized by gamma irradiation.

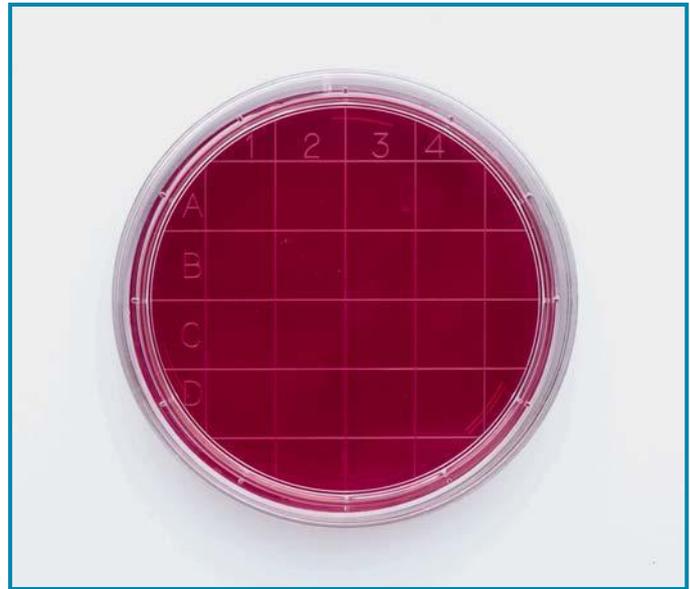
- Sterile petri dishes are supplied with a certificate as a guarantee of "DNase, RNase & pyrogen free" product.

clean room produced	diameter x height	section	pack quantity	box quantity
081.02.061	60 x 15 mm	1 section	10 pieces	500 pieces
081.02.091	90 x 17 mm	1 section	20 pieces	500 pieces
081.02.092	90 x 17 mm	2 section	20 pieces	500 pieces
081.02.093	90 x 17 mm	3 section	20 pieces	500 pieces
081.02.094	90 x 17 mm	4 section	20 pieces	500 pieces
081.02.121	120 x 17 mm	1 section	20 pieces	500 pieces

gamma sterilized	diameter x height	section	pack quantity	box quantity
081.02.161	60 x 15 mm	1 section	10 pieces	500 pieces
081.02.191	90 x 17 mm	1 section	20 pieces	360 pieces
081.02.192	90 x 17 mm	2 section	20 pieces	360 pieces
081.02.193	90 x 17 mm	3 section	20 pieces	360 pieces
081.02.194	90 x 17 mm	4 section	20 pieces	360 pieces
081.02.221	120 x 17 mm	1 section	20 pieces	400 pieces

PETRI DISHES - “contact” - “rodac”

- Manufactured from optically clear, transparent polystyrene for determining bacterial contamination of surfaces such as the skin and all other surfaces. Also facilitates the counting of colonies.
- Manufactured by fully automatic, human touch free machines. Ideal body form guarantees excellent use with automatic filling machines.
- Featured with a moulded grid at the bottom which enables the identification of the detected contamination / cm².
- Alternative 2 products
 - Aseptic petri dishes
 - Sterile petri dishes
- Aseptic petri dishes are manufactured in germ-free, class 10.000 sterile production areas with extreme sterility control.
- Sterile petri dishes are manufactured in germ-free, class 10.000 sterile production areas and then re-sterilized by gamma irradiation.
- Sterile petri dishes are supplied with a certificate as a guarantee of “**DNase, RNase & pyrogen free**” product.



clean room produced	gamma sterilized	diameter x height	pack quantity	box quantity
081.04.060	081.04.160	66 x 15 mm	10 pieces	500 pieces

PETRI DISHES - “for cell culture” - “sterile”

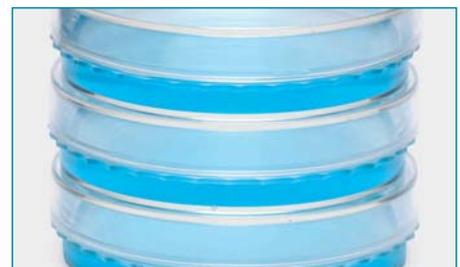
- Manufactured from optically clear, transparent polystyrene specially for cell culture practices.
- Production is done by fully automatic, human touch free machines. Ideal body form guarantees excellent use with automatic filling machines.
- Manufactured in germ-free, class 10.000 sterile production areas and then re-sterilized by gamma irradiation.
- Supplied with a certificate as a guarantee of “**DNase, RNase & pyrogen free**” product.
- External grip edges in the gripping ring prevents accidental dropping of the dish bottom.
- Stacking ring on the lid and the corresponding base part guarantees secure stacking option.
- Surface treated uniform flat growth surface guarantees excellent suspension for cultures.



catalogue number	diameter	height	growth area	working volume	surface treatment	external grip	pack quantity	box quantity
120.03.035	35 mm	10 mm	9.4 cm ²	3 ml	yes	yes	10 pieces	500 pieces
120.03.060	60 mm	15 mm	21.5 cm ²	5 ml	yes	yes	10 pieces	500 pieces
120.03.090	100 mm	20 mm	55.0 cm ²	12.5 ml	yes	no	10 pieces	200 pieces



External grip edges in the gripping ring prevents accidental dropping of the dish bottom.



Stacking ring on the lid and the corresponding base part guarantees secure stacking option.



SEALING TAPE - "for petri dishes"

- Perfect tool to protect petri dish interior contents from dust, moisture and other environmental effects.
- Waterproof. Chemically inert and resistant to most organic solvents and caustic agents.
- Remains flexible in moderate freezing temperatures. Can resist up to 100°C.
- Stretches and widens-up 50 % of original length.
- Clings around the petri dish body and seals irregular perimeters of petri dishes with leak-proof tightness.
- Also can be used to seal bottle necks and caps.

catalogue number	tape width	pack quantity
058.07.001	19 mm	1 piece



PETRI DISH STAND - "acrylic"

- Manufactured from clear acrylic with for safe storing, transportation of petri dishes.
- Also provides streamline benchtop sample processing and protects petri dishes from dust, moisture and other environmental effects.
- Center divider provides space for labelling and incorporates built in finger grip for easy handling.
- Holes on the upper part enables easy and fast grip of the fingers during transportation.

catalogue number	for petri dishes	dish holding capacity	pack quantity
081.13.060	60 mm diameter	30	1 piece
081.13.090	90 mm diameter	60	1 piece



PETRI DISH BASKET - "st. steel"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Ideal tool for transportation and autoclaving of petri dishes.
- Can carry 15 petri dishes up to 100 mm diameter.

catalogue number	pack quantity
081.20.001	1 piece

COLONY COUNTER

- Ideal for fast and practical manual counting of colonies on any agar in petri dishes. The versatile unique design accepts petri dishes from 40 mm to 100 mm.
- Intelligent counter with LED digitron display allows fast and precise count of the colonies between 0 - 999. Numericals on the counter can be adjusted backward and forward manually.
- Featured with a 90 mm diameter magnifier attached to a goose neck, flexible holder.
- Flexible holder enables both magnifying lens position and illumination angle adjustable in multiangular axes.
- High quality magnifier with 3x / 9x magnification power provides distortion free images with edge-to-edge sharpness.
- Two LED lights under the magnifier provides super bright overhead illumination for more accurate count.
- 115 mm diameter counting plate allows practical use of dishes up to 100 mm diameter.
- 1 square centimeter cross sectional template of the counting plate guarantees reliable counting.
- Counting table is featured with a backward LED illumination with variable light control.
- Circular LED illumination system offers a shadow and flicker free illumination without heat development with optimal concentration of light.
- Marking is done by a "felt pin pen" which is connected to the system by cable.



catalogue number	for petri dishes	external dimensions	pack quantity
603.11.001	40 - 100 mm dia.	210 x 255 x 160 mm	1 piece



Circular LED illumination system offers a shadow and flicker free illumination without heat development with optimal concentration of light.

1 square centimeter cross sectional template of the counting plate guarantees reliable counting.



High quality magnifier with 3x / 9x magnification power provides distortion free images with edge-to-edge sharpness.

Two LED lights under the magnifier provides super bright overhead illumination.



Marking is done by a "felt pin pen" which is connected to the system by cable.

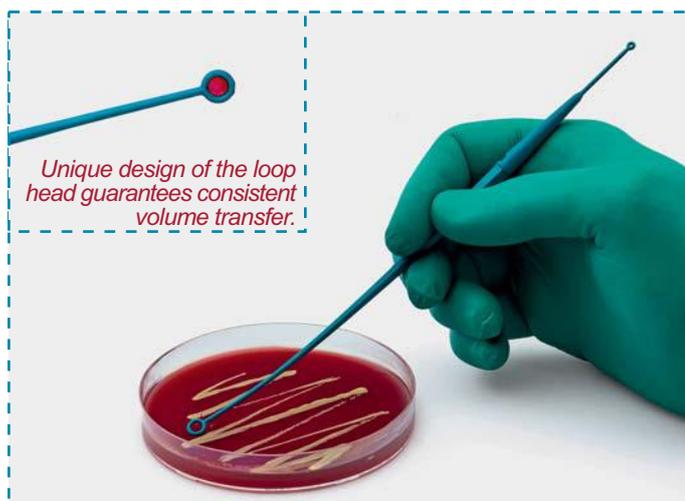
Intelligent counter with LED digitron display allows fast and precise count of the colonies between 0 - 999.

INOCULATION LOOPS - "HIPS" - "sterile"



➤ Manufactured from HIPS in germ-free, class 10.000 sterile production areas and then re-sterilized by gamma irradiation.

➤ Supplied with a certificate as a guarantee of "DNase, RNase & pyrogen free" product.



Loops do not cut or gouge the agar surface during streaking. Ergonomical design of the loop handle improves grip and easy orientation of the loop head due to the large handle.

➤ Highly flexible body form enables comfortable and efficient planting and avoids streaking of cultures.

➤ Anti-static property of the raw material eliminates problems caused by electrostatic effects and guarantees consistent complete liquid transfer.

➤ Hexagonal loop shaft improves grip, assists orientation and makes diluting and streaking easy.

➤ Hexagonal loop handle also enables orientation of the loop head with a fixed angle.

➤ Ultra smooth loop surfaces allows easy streaking and offers problem-free planting without the risk of cutting or gauging the agar surface.

➤ Double use loops has one side a fine tip specially designed for holding, transporting and counting colonies. The loop at the other for streaking in petri dishes.

➤ Color coded loops enables fast, easy and practical identification of loop type.

catalogue number	loops specification	pack quantity	box quantity
082.01.001	one end needle / one end 1 μ l	10 pieces	1000 pieces
082.01.002	one end needle / one end 10 μ l	10 pieces	1000 pieces
082.01.003	one end 1 μ l / one end 10 μ l	10 pieces	1000 pieces

INOCULATING TURNTABLE

➤ Manually operated turntable guarantees smooth and easy rotation on both directions. Also enables easy and fast allocation of bacteria across petri dish surface.

➤ Double sided construction accomodates petri dishes from 60 to 150 mm diameter by inverting the turntable.

➤ Ball bearings provide a smooth and effortless spinning ensuring rapid inoculation steps and extended operation life.

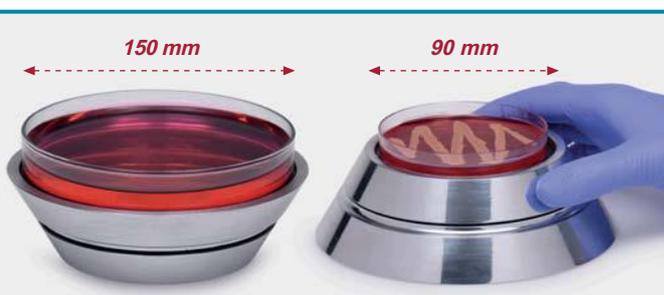
➤ Light weight but robust body manufactured from aluminum and featured with non-skid feet.

➤ The silicone pad holds the petri dishes firmly and keeps the dish allways in center position during inoculation steps.

➤ The non-skid pad can easily be removed for fast and efficient cleaning.

catalogue number	pack quantity
081.10.001	1 piece

Turntable can rotate 360 degree around it's axis enabling smooth and easy inoculation.





INOCULATION LOOP - "stainless steel"

- These durable loops are manufactured from nickel-chrome metal wire with twisted wire strands.
- Highly flexible body form enables comfortable and efficient planting and avoids streaking of cultures.
- Ultra smooth loop surfaces allows easy streaking and offers problem-free planting without the risk of cutting or gauging the agar surface.
- Can be heated up to 1200°C and can be cooled rapidly after heat sterilization.

catalogue number	length	pack quantity
082.02.001	50 mm	10 pieces



INOCULATION LOOP HANDLE

- The loop shaft is manufactured from nickel plated brass.
- The shaft of the loop handle is insulated by PVC for further protection of user against heat.
- Featured with a screw fastening end for tight fastening of the loops used.
- Handle guarantees easy holding option and fatigue-free application.

catalogue number	length	pack quantity
082.02.003	200 mm	1 piece



INFRARED STERILIZER

- Most suitable and efficient tool for sterilization of inoculation loops, needles etc.
- Ideal for laboratories, clean rooms and safety cabinets where the use of gases and open flames is not permitted or restricted.
- The small footprint and ergonomic design makes the sterilizer an ideal instrument for anaerobic and aerobic chambers.
- The heating element is made from wear resistant ceramic core element which quickly reaches its optimal temperature of 850°C.
- After reaching the maximum temperature the sterilization chamber cools down and stabilise at optimal sterilization temperature of 816°C.
- Complete sterilization ends within maximum 5 to 7 seconds.



A stainless steel holder provides a stable hold of the objects that will be sterilized.
Catalogue No: 081.15.101

catalogue number	dimensions	sterilizer length	max. diameter of sterilized object	power	weight	pack quantity
081.15.001	185 x 100 x 190 mm	150 mm	14 mm	170 W	1,30 kg	1 piece



CELL SPREADER - "HIPS" - "sterile"

- Manufactured from HIPS in germ-free, class 10.000 sterile production areas and then re-sterilized by gamma irradiation.
- Supplied with a certificate as a guarantee of "DNase, RNase & pyrogen free" product.
- Ultra smooth, edgeless designed, triangular spreading head allows easy and problem-free spreading without the risk of cutting or gauging the agar surface.
- Highly flexible body form enables comfortable and efficient spreading and avoids streaking of cultures.
- Rippled designed ergonomic handle improves gripping efficiency and assists easy orientation of the spreader head.
- Handle flexes slightly under pressure allowing the triangular head for perfect, evenly distributed and uniform pressure on the agar surface.



Flexible spreading bars prevent any cutting or gouging of agar during inoculation of plates.

Handle flexes slightly under pressure and is rippled for easy manipulation. Delta-shaped head distributes pressure evenly for smooth spreading.

- Individually single packed with lot number, production date and expiry date printed on the package.

catalogue number	pack quantity	box quantity
082.03.001	1 piece	100 pieces



CELL SPREADER - "st steel"

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Robust and seamless construction guarantees long life cycle. Smooth polished surfaces provides fast and easy cleaning.
- Smooth, rounded surfaces prevents any cutting or gouging of agar surface during application.
- Triangular formed spreader head enables even spreading of liquid samples all over the surface.
- Suitable for sterilization by autoclaving or by direct flame.

catalogue number	triangular bar width	handle length	pack quantity
082.03.003	33 mm	200 mm	1 piece



CELL SCRAPERS - "for cell culture" - "sterile"

- Specially designed to facilitate collection of attached cells on culture dishes.
- Manufactured in germ-free, class 10.000 sterile production areas and then re-sterilized by gamma irradiation.
- Supplied with a certificate as a guarantee of "DNase, RNase & pyrogen free" product.
- Scraper blade rotates around the its axis enabling easy and flexible applications.
- Ultra smooth blade surfaces offers problem-free collection without the risk of cutting or gauging the agar surface.
- Hexagonal shaft improves grip, assists orientation and makes diluting and streaking easy.
- Individually single packed with lot number, production date and expiry date printed on the package.

For other technical specifications and details place visit our catalogue page no 295.

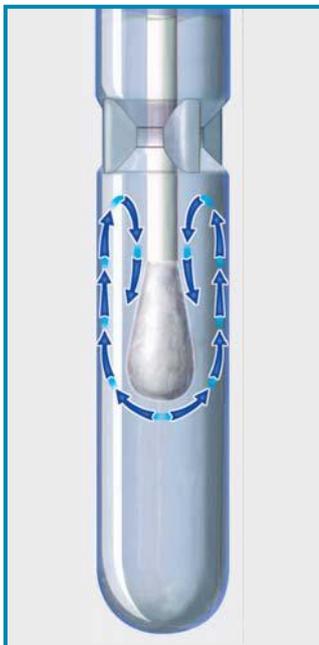
catalogue number	total length	blade width	pack quantity
121.01.013	225 mm	13 mm	100 pieces
121.02.020	290 mm	20 mm	100 pieces

SWABS - "sterile"

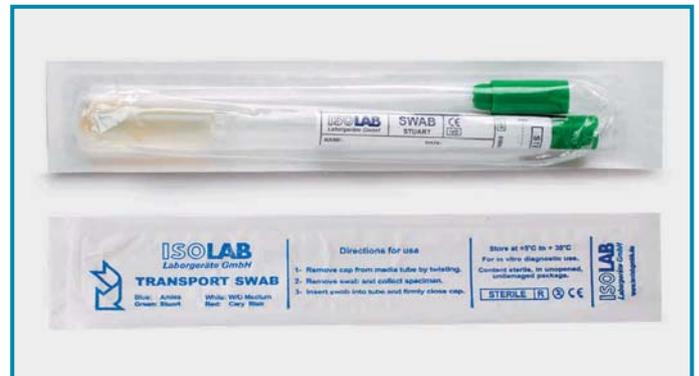
- Manufactured in germ-free, class 100.000 sterile production areas and then plain swabs are re-sterilized by E.O. and swabs with medium are re-sterilized by gamma irradiation.
- Swab tube made from polypropylene with 5 ml deep gel column guarantees maximum protection and significantly improves sample viability.
- Tube has a unique "venturi hour" design which prevents disintegration or breakdown of gel column during specimen transport.
- Once the swab is inserted undesirable bubbles and breaks in gel automatically squeeze out and eliminates air pockets which are harmful to some bacteria.
- Unique "venturi hour" tube design centralizes the swab and optimizes the moisture control.
- Tubes conveniently fit regular test tube racks for safe transport and easy storage.
- 133 mm long swab shafts guarantees access to difficult sampling locations without contaminating the swab handle or the user.
- Soft swab tips are inert and non-toxic to micro-organisms and patients.
- Double action cap slides over the neck of swab tube and tightly grips the inside and outside of the tube.
- Individually single packed with lot number, production date and expiry date printed on the sticker.
- The label seals the swab tube including the cap of the swab acting like a tamper evident system. Tube seal maintains product integrity and ensures first time use.



catalogue number	swab descriptions	pack quantity
086.02.001	without medium	100 pieces
086.02.003	with amies medium	100 pieces
086.02.002	with stuart medium	100 pieces
086.02.004	with carry blair medium	100 pieces



Unique venturi hour glass tube design prevents disintegration or breakdown of gel column during specimen transport. Undesirable bubbles and break in gel automatically squeezed out as swap is inserted. Also eliminates air pockets and centralizes swab.





STAINING JARS "Schifferdecker"

- Manufactured either from heavy walled soda glass for holding microscope slides horizontally.
- Supplied complied with a glass lid.
- Offers space for 10 individual microscope slides or 10 pairs of slides adjacently back-to- back.

catalogue number	dimensions	pack quantity
073.03.001	85x70x40 mm	1 piece



STAINING JARS "Hellendahl"

- Manufactured either from heavy walled soda glass for holding microscope slides vertically.
- Supplied complied with a glass lid.
- Offers space for 8 individual microscope slides or 8 pairs of slides adjacently back-to- back.

catalogue number	dimensions	pack quantity
073.01.001	60x60x95 mm	1 piece



STAINING JAR "macro"

- Manufactured from heavy walled soda glass for using with a stainless steel slide holding rack.
- Supplied with a lid that provides safe closure of the jar content during non-use.
- Stainless steel staining rack is not supplied together with the jar.

catalogue number	dimensions	pack quantity
073.05.001	105x90x75 mm	1 piece



TISSUE BASE MOULDS

- Manufactured from stainless steel for easy removal of paraffin inclusions.
- They enable easy and precise positioning of the specimens during application.

tissue base mold	external dimensions	internal dimensions	specifications	pack quantity
074.07.001	55 x 38 x 10 mm	7 x 7 x 6 mm	biopsy & hystology	5 pieces
074.07.002	55 x 38 x 10 mm	15 x 15 x 6 mm	biopsy & hystology	5 pieces
074.07.003	55 x 38 x 10 mm	37 x 24 x 6 mm	standard	5 pieces



STAINING JAR RACK

- Manufactured from stainless steel to hold and carry microscope slides.
- Fetured with inserts that can hold 20 single slides in horizontal position.
- Long handle offers easy and safe hold.

catalogue number	dimensions	pack quantity
073.06.001	85x70x20 mm	1 piece

EMBEDDING CASSETTES - "without lid"

- Manufactured from POM which is fully resistant to histological solvents.
- The unique design allows perfect fit to all microtome chuck adapters.
- Slanted marking area on front side enables easy marking and labelling.

cassette without lid	color	pack quantity	box quantity
074.01.001	white	500 pieces	5000 pieces
074.01.002	yellow	500 pieces	5000 pieces
074.01.003	green	500 pieces	5000 pieces
074.01.004	pink	500 pieces	5000 pieces
074.01.005	blue	500 pieces	5000 pieces



CASSETTE LID

- Manufactured from high quality, chemical and corrosion resistant AISI 304 grade stainless steel.
- Perforated surface offers the optimal liquid diffusion
- The body form fits perfectly to the cassettes and guarantees tight closure.

catalogue number	pack quantity
074.02.001	5 pieces



EMBEDDING CASSETTES - "with lid"

- Manufactured from POM which is fully resistant to histological solvents.
 - Histology cassettes with rectangular openings
- Alternative 2 products:
 - Biopsy cassettes with square openings
- The unique design allows perfect fit to all microtome chuck adapters.
- The efficient flow-through slots maximize the liquid exchange and also ensures proper drainage.
- The unique design of the lids can be opened and closed as often as necessary without getting loose.
- Lids always relock securely without any risk of specimen loss.
- Slanted marking area with 45° angled on front side enables easy marking and labelling.
- Histology cassettes with rectangular openings provide maximum liquid exchange and does not require use of a pad.
- Biopsy cassettes with square openings provide maximum liquid exchange and does not require use of a pad.

cassette histology	cassette biopsy	color	pack quantity	box quantity
074.03.001	074.04.001	white	500 pieces	5000 pieces
074.03.002	074.04.002	yellow	500 pieces	5000 pieces
074.03.003	074.04.003	green	500 pieces	5000 pieces
074.03.004	074.04.004	pink	500 pieces	5000 pieces
074.03.005	074.04.005	blue	500 pieces	5000 pieces



Histology cassettes

Rectangular openings allows maximum fluid exchange without having the use of histology pads.

Biopsy cassettes

Square openings allows maximum fluid exchange without having the use of biopsy pads.

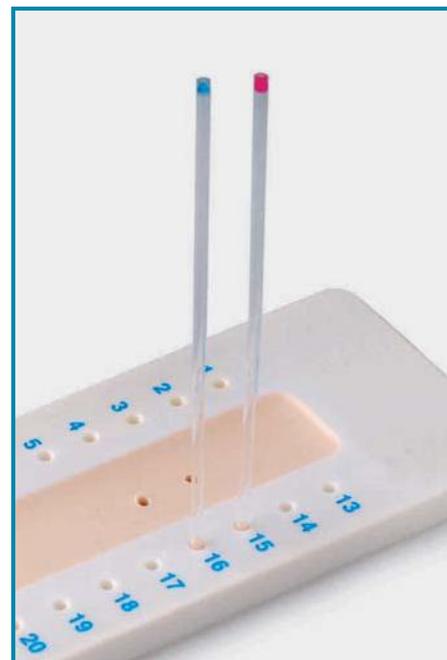




MICRO - HAEMATOCRIT TUBES

- Manufactured by fully automatic machines according to ISO 12772 and BS 4316-68 standards with 75 mm length and 0,2 mm wall thickness.
- Available 2 types:
 - **Non-heparinised tubes** with blue color tip.
 - **Heparinised tubes** with red color tip.
- Interior surface of heparinised tubes are covered with sodium heparinite.

catalogue number	tube type	vial quantity	box quantity
088.02.001	heparinised	100 pcs	10 vials
088.02.002	non-heparinised	100 pcs	10 vials



MICRO - HAEMATOCRIT TUBE WAX

- Offers fast and safe solutions for sealing of the micro haematocrit tube ends.
- Can carry 48 tubes with 2 x 24 array.
- Numerical index on the tray provides easy identification of tube positions
- This non drying sealing compound has a life time of 3 years at room conditions.

catalogue number	tube capacity	pack quantity
088.03.001	48 tubes	10 pieces



Lancets are very incisive and have very sharp edges which penetrates into the skin very easily.

BLOOD LANCETS "manual"

- Manufactured from medical grade stainless steel.
- Featured with very sharp blade end that penetrates into the skin easily without pain.
- Single use and gamma sterilized and individually packed.

catalogue number	pack quantity	box quantity
088.01.001	200 pieces	50 pack

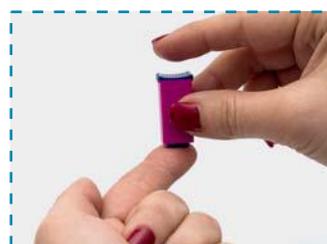
BLOOD LANCETS - "automatic"

- Offers perfect protection since the needle is always been fully shielded "before" and "after" use.
- Featured with ultra sharp needle with high speed penetration of 1,8 mm depth.
- Single use and gamma sterilized and individually packed.

catalogue number	pack quantity	box quantity
088.02.003	100 pieces	5 packs



Twist off the protective safety cap first.



Hold the lancet firmly on the finger site



Press the release button to activate the lancet



Gently press the finger to let the blood drop out

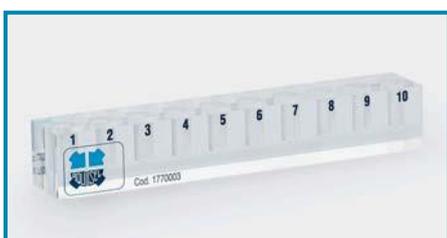


SEDI-RATE SET

- Sedi-Rate tubes offers an easy performance of erythrocyte sedimentation rate test according to Westergreen method.
- Totally closed cycle sterile production of the tubes guarantees maximum hygiene safety.
- The set consists of below parts;
 - A unique designed tube with 0,25 ml sodium citrate which is for testing 1 ml blood.
 - A graduated pipette featured with a rubber cap. The cap allows the rise of the liquid by pressing the pipette into the tube.
 - A fibre cap at the top of the pipette which allows the blood mixture to reach "0" level.

➤ Procedure is very simple: First fill the tube with blood and guarantee homogenous mixing by shaking the tube. Then insert the pipette and follow the remaining steps.

catalogue number	pack quantity
085.01.001	box of 600 tube + 600 pipettes



K3 EDTA - "tubes"

- K3EDTA tubes are manufactured from polypropylene and featured with a cap which ensures comfortable and reliable closure.
- The already pulverised anticoagulant inside the tube guarantees perfect mixture of the blood without the need of any further additions.
- Since the anticoagulant is pulverised all over the tube interior wall there is no risk of any loss.
- Tubes are designed to be used with 2,5 ml blood volume.

catalogue number	pack quantity
085.03.001	1500 pieces



CYTOLOGY BRUSH

- This totally sterile brush is used for cervical specimen collection.
- Unique design allows sampling without the risk of any loss of cells.
- Soft silicone tip at the further end provides comfort to the patients.
- Supplied as single packed units in box of 100 pieces.

catalogue number	total length	pack quantity
086.05.001	200 mm	1 box

SEDI-RATE RACK

- Manufactured from acrylate to hold 10 sedi-rate tubes vertically.
- Alphanumerical index on tube rows enables easy identification of tube positions.

catalogue number	pack quantity
085.02.001	1 piece

ADAPTERS		Blood lancets	320	BURETTES	
2 neck	120	Blowlamp	99	automatic	14
3 neck	120			digital	26
bend	119	BOSSHEADS		schilling	15
connectors	123	heavy duty - fix position	78	straight	12 & 13
delivery	121 & 124	standard - fix position	78	Burner hose	99
distilling heads	121	standard - swivel head	78		
expansion	118	stirrers	162 & 163 & 234	BURNERS	
receiving	124	Bottle basket	64	blowlamp	99
reduction	118	Bottle heads	125	bunsen burner	98 & 99
screw thread	118			Büchner funnels	146
splash heads	121	BOTTLES		Cabinet	69
straight	119	aluminium	50		
Aluminium discs	109	aspirator	59	CAPS	
Aluminium foils	109	density bottles	204	bottle	106
		dropping	62 & 63	inserts	284
APPARATUS		eye wash	192 & 193	vial	263 to 270
arsenic	126	filter bottle	149	Caps (clothing)	185
water	126	gas washing	125	Cell scrapers	295
Aquadur Test Strips	217	glass	49		
Arsenic estimator	126	iso - glass	48 & 49	CELL SPREADERS	
Autoclave test paper	181	iso - P.P	52 & 53	for cell culture	316
		narrow neck	50	HIPS	316
AUTOCLAVES	180 & 181	reservoir	31	stainless steel	316
horizontal	180	spray	62		
vertical	181	square	51	CENTRIFUGE TUBES	
Automatic Burettes	14	water sampling	54 & 55	conical bottom	272 & 273
Bag latches	116	wash	60 & 61 & 62	disposable	71
Bag locks	116	weighing	224	glass	71
Bag selaer	116			micro	280
Bag stands	173	BOXES		self standing	274
Bag ties	116	click lock	66		
		cryo tube	287	CENTRIFUGES	
BAGS		cuvettes	255	clinical	158
autoclavable	114	dispenser	68	hematocrit	159
homogenization	165	dispenser - gloves	197	micro	155 - 156
with document wallet	114	dispenser - large	69	mini	154
with wire closure	115	double opening	66	mini - high speed	155
with zip-lock	115	freezing	288	multi purpose	160
Balance printer	218	foldable	67	Centrifuge adapters	161
Balances	218 & 219 & 220 & 221	pipette	21	Centrifuge rotors	156 & 159 & 161
		safety	182	Ceramic Triangles	75
BASKETS		transport	64	Chemical pads	187
general purpose	64	tube	277 & 287	Chemical sorbent granules	187
petri dish	312	with compartments	67	Chemistry set	126
ultrasonic bath	178			Chromatography columns	130
wash bottle	64	BRUSHES			
		burette	169	CLAMPS	
BATHS		cleanware organiser	171	2 jaws	76
ultrasonic	178 & 179 & 190	cytology brush	321	3 jaws	76
water	243	dish washing	170	burette	77
Beaker tongs	79	hygenical cleaning	170	frame work	77
		intensive cleaning	170	thermometer	78
BEAKERS		laboratory brush	168 & 169 & 170	tubing	102
glass	44	tubes	169	vacuum filter set	149
polypropylene	44	weighing brush	224	vacuum manifolds	149
PTFE	44			Clips	127
stainless steel	45	BUCKETS		Colony counter	313
with handle	45	ice	289	Combustion boat	97
		stainless steel	65		
BLENDERS		with lid	65		
laboratory set	166	with spoud	65		
paddle	164	Buffer solutions	215		
		Burette bellow	16		
BLOOD COUNTING CHAMBERS		Burette bottles	16		
blood counting chamber	304	Burette brushes	169		
cover glasses	304	Burette clamps	77		

CONDENSERS		Digital burettes	26	FORCEPS	
allihn	128	Dispenser bottles	31	cover glass	307
dimroth	129	Dispenser boxes	68 & 69	dissecting	84
liebig	128	Dispenser tips	27	filter paper	147
soxhlet	130 & 131	Distilling heads	121	general use	84 & 85
spiral	129			Freezing boxes	288 & 292
Connectors	103 & 123	DRAINING RACK			
		draining rack	176		
CONTAINERS		draining pegs	176	FUNNELS	
press-on cap	57	Dropping bottles	63	analytical	142
screw cap	57	Dropping funnels	153	büchner	146
Cover glasses	304 & 305	Drying tubes	125	dropping	153
Creams	202	Drying ovens	244	gooch	150
Crimper	270	Drying ovens	244	industrial	143
		Ear plug & muff	191	powder	143
		Embedding cassettes	319	separating	152
CRUCIBLES		Engraving pen	110	stainless steel	143
alsint	97	Erlenmeyer stabilizing ring	46	standard	142
porcelain	96			Gas wash bottles	125
quartz	97	ERLENMEYERS		Gaskets	145
st. steel	97	glass	46 & 132	GHS pictograms	183
Crucible lids	96	polypropylene	46	Glass beads	123
Crucible tongs	96			Glove dispenser box	197
Cryo tube box	287	EVAPORATING DISHES			
Cryo tube canes	285	porcelain	94	GLOVES	
Cryo tube cap inserts	284	quartz	95	cold protection	200
Cryo tube work station	285	stainless steel	94	cut resistance	199
Cryo tubes	284	Evaporating dish tong	94	finger protectors	201
Crystallization dishes	95	Extractor thimbles	131	heat protection	200
Cutters	87	Extractors	131	mechanical protection	199
Cuvette box	255			nitrile	196 to 198
Cuvette rack	255	EYE WASH BOTTLES		physical protection	200
		bottle stand	193	silicone	201
CUVETTES		compact size	193	thermal resistance	199
glass	254	standard size	192		
polystyrene	254			GOOCH	
		FILMS		crucibles	150
CYLINDERS		cling	109	funnels	150
measuring	10 & 11	sealing	291	Googles	188
mixing	10	parafilm	108	Graduated pipettes	19
P.P	11	PCR	291	Grease	127
Cytology brush	321			Haematocrit tube wax	320
Decapper	270	FILTER		Haematocrit tubes	320
Density bottles	204	bottles	148	heating mantles	247&248
Desiccator lids	91	flasks	145	Homogenizer bags	165
Desiccator plates	91	manifolds	149	Homogenizers	162&163&164
Desiccators	90	Finger protectors	201	Ice buckets	289
Desk cleaner	187	Filter paper forceps	147	Image projector	303
Desk protector	186	Filter papers	147	Imhoff Cones	205
Dessicant beads	91			Incineating dishes	97
		FLASKS		Incubators	245
DISPENSER		1 neck	133	INDICATOR PAPERS	
repetitive	27	2 neck	134	aquadur	217
with re-circulation valve	29	3 neck	134 & 135	autoclave	181
with re-circulation & re-filling functions	30 & 31	cell culture	296	pehanon	217
without re-circulation valve	28	evaporating	137	peroxide	217
		filter	145	pH	216
DISSECTING		flat bottom	47	Infrared Sterilizer	315
forceps	84	kjeldahl	136		
needles	88	nitrogen	136	INOCULATING	
scissors	87	pear shape	135	loops	314
		receiving	137	loop handles	315
DISTILLING LINKS		round bottom	47	turntable	314
distilling links	122	Flow Indicator	102		
with condenser	122	Foils	109	JARS	
with condenser & adapter	122	Foil dispenser	109	glass	50
with socket	122			polypropylene	50
with splash head	122			staining	318

JERRYCANS		MORTARS		pH	
aluminium	58	agate	92	buffer solutions	215
polyethylene	58&59	alsint	93	indicator strips	216
steel	58	porcelain	93	litmus papers	216
Joints	118	Muffle furnace	242	meter accessories	214
Joint clips	127	Multiwell plates	297	meters	212 & 213
Joint grease	127	Nmr stoppers	107	universal pH paper	216
Joint sleeves	127	Nmr tube stand	252	pH test papers	216
Joint tapes	127	Nmr tubes	252		
Jugs	45	Non-return valve	146	PIPETTES	
Kettle	166	Over boats	185	glass	19
Knives	88	Over shoes	185	pasteur	17
Label dispenser	112	Over sleeves	185	serological	18
Label removal	112	Paddle blender	164	Pipette boxes	21
		Paddle blender bags	165	Pipette bulb	17
LABELS				Pipette dispenser box	17
circular form	112	PAPERS		Pipette fillers	22 & 23
GHS pictograms	183	autoclave test	181	Pipette rack	20
rectangular form	111&113	filter	147	Pipette stands	20
tapes	111	general purpose	147	Pipette tray	20
Laboratory blender	166	indicator	216	Pipette ultrasonic cleaner	177
Laboratory jack	75	litmus	216	Pipette washing set	177
Lighter	99	membrane	253	Printer	218
Magnetic bar boxes	67	pehanon	217	Protector collars	145
Magnetic bar retrievers	233	pH paper	216		
Magnetic bars	232	qualitative	147	PROTECTORS	
Magnetic stirrers	226 to 231	quantitative	147	caps	185
Magnifiers	298	steam sterilization	181	desk	186
		weighing	224	over boats	185
MASKS		Parafilm	108	over shoes	185
dust	194	Parafilm Dispenser	108	over sleeves	185
full face	195	Pasteur pipette bulb	17	safety shields	191
half face	195	Pasteur pipettes	17	suit	184
Mechanical stirrers	234 & 235			suit 5/6	184
Membrane filters	253	PCR		suits - 4	184
		plates	291	surface	186
METERS		tubes	290 & 291	visitors gown	184
accessories	214	Pcr freezing box	292		
portable	212	PCR rack	293	PUMPS	
table top	213	PCR sealing film	291	handy	146
		PCR transfer tray	292	vacuum & pressure	141
MICROPIPETTES		PCR workstation	293	water jet	146
8 channel	36	Pehanon test strips	217		
12 channel	37			RACKS	
adjustable volume	32	PENS		cuvette	255
single channel	33 & 34	engraving	110	draining	176
		marker	110	microtube	282 & 283
MIXERS		permenent ink	110	PCR	293
microplate	237	Peroxide strips	217	pipette	20
vortex	236 & 237	Peroxide test strips	217	sed rate	321
Micropipette pipetting reservoirs	42			slide wallet	307
Micropipette stands	40 & 41	PESTLES		staining jar	318
Micropipette tips	38 & 39	micro tube	281	test tube	72 & 73
Micropipette volume control knobs	35	mortars	93	tube	276 to 279
Microscope Image Projector	303			REFRACTOMETERS	
Microscopes	300 to 302	PETRI DISHES		abbe	299
Mortar pestles	93	cell culture	295 & 311	digital	299
		contact - rodac	311	handy type	299
		glass	310		
		polystyrene	310	RESERVOIR	
		Petri dish basket	312	3 in 1	42
		Petri dish sealing tape	312	bottles	31
		Petri dish stand	312	disposable	42
				Rotary evaporator	140

ROTATORS		SPECTACLE		SYRINGES	
circular	239	goggle	188	dosage of gas & liquids	260
horizontal	238 & 239	safety shield	191	dosage of liquids	258 & 259
tube	239	spectacles	188 & 189	glass	261
Rotisserie accesory	238	Spectacle cabinet	190	polypropylene	261
Safety boxes	182	Spectacle cleaning tissue	190		
Safety labels	183	Spectacle led light	190	TAGS	
Safety shield	191	Spectacle ultrasonic bath	190	centrifuge tube bodies	275
		Spoons	83	centrifuge tube caps	275
SCALPEL		Stabilising rings	46	Tally counter	304
blades	89	Staining jars	318		
handle	89			TAPES	
Schilling burettes	15	STANDS		dispenser	111
		ABS	75	labeling	111
SCISSORS		bag stand	173	sealing - for petri dishes	312
dissecting use	87	eye wash bottle	193	sealing - PTFE	127
or hose cutting	101	horseshoe	74	Test indicator	181
general use	86	imhoff cone	205		
heavy use	87	laboratory jacks	75	TEST STRIPS	
		micropipettes	40 & 41	aquadur	217
SCOOPS		petri dish	312	lithmus papers	216
polypropylene	82	pipettes	20	pehanon	217
polystyrene	82	rectangular	74	peroxide	217
st. steel	82	rods	74	pH indicator strips	216
weighing	223	thermometer	206	steam sterilization	181
		triangle	74	universal pH paper	216
SEALING TAPES		tripod	75	Test tube brushes	169
petri dishes	312	Steam sterilization test indicator	181	Test tube tongs	71
PTFE	127				
Security seal & seal cutter	51	STIRRERS		TEST TUBES	
Sedi rate	321	magnetic	226 to 231	centrifuge - conical bottom	272 & 273
Separating funnels	152	mechanical	234 & 235	centrifuge - disposable	71
Shaker 3D accesories	241	Stirring rods	233	centrifuge - glass	71
		Stopcocks	103	centrifuge - micro	280
SHAKERS 3D		Stopper borer set	107	centrifuge - self standing	274
LCD display	240	Stopper borer sharpener	107	cryo	284
w/o display	241			glass	70
Silica gel	91	STOPPERS		k3 EDTA	321
Slides	305	caps	106	micro haematocrit	320
		cellulose	105	nmr	252
SLIDE		cork	104	pcr	290
boxes	309	flange	107	qpcr	291
dispenser	307	hallow glass	106	sedi rate	321
magazine	308	nmr tubes	107	Thermohygometers	207
mailers	308	polypropylene	106	Thermometer clamp -	
rack	307	rubber	104 & 105	with bosshead	206
wallets	306	silicone	104	Thermometer stand	78
Sorbent granules	187	turn-over flange	105		
Soxhlet extractors	131	Stopwatches	210	THERMOMETERS	
				desk top	206
SPATULAS		SUITS		glass	209
chattaway	81	caps	185	maximum & minimum	207 6 209
curved end	81	over boats	185	portable	206
double end	80	over shoes	185		
flat knife	81	over sleeves	185	THIN LAYER	
macro spoon	80	protector suits	184	CHROMATOGRAPHY	
micro spoon	80	visitors gown	184	alugram	256
P.P	80	Surface protector	186	separation chamber	257
poly	81	Swabs	317	sil G	256
round grooved	80			tlc sprayer	257
set in a wallet	81	SYRINGE FILTERS		Thimbles	131
		non-sterile	250		
		sterile	251		

TISSUES & TOWELS

cleaning towel	171
lens	190
tissues - cellulose - paper	171
towel dispenser	171
wipes	171
Timers	210 & 211
Tissue base molds	318
Tissue grinder	281

TONGS

crucibles	96
evaporating dishes	94
flat jaws	79
rod jaws	79
tubes	71

TRAYS

ice cube	289
pipette	65
polypropylene	182
safety	65
stainless steel	182
transfer	292
Tripod	75

TUBE RACKS

4 sides	279
dismantled	72
hedgehog	276
monoblock	72 & 278
push & hold	276
semi-rate	321
snappable	278
stainless steel	73
tube boxes	277
with silicone grips	73
Tube scissor	101
Tube selector	102

TUBINGS

PTFE	101
PVC	101
rubber	100
silicone	100
Tubing clamps	102
Tubing connectors	103
Ultrasonic baths	178 & 179 & 190
Ultrasonic bath basket	178
Ultrasonic bath cleaner	176
Ultrasonic pipette washer	177

VACUUM FILTER SET

clamp	149
filter funnel	149
support base	149
vacuum flasks	149
vacuum filter set	148

VACUUM MANIFOLD

clamp	149
filter funnel	149
manifold	149

VACUUM PUMPS

handy	146
vacuum & pressure	141

VIAL CAPS & SEPTAS

N8	263
N9	264
N10	265
N11	266
N13	267
N15	267
N20	268
N24	269

VIAL INSERTS

N8	263
N9	264
N10	265
N11	265

VIALS

N11	265 & 266
N20	268
N8	263
N9	263 & 264
N10	264 & 265
N13	267
N15	267
N24	269

VISITORS GOWN

	184
--	-----

Vial crimpers & decappers

	270
--	-----

VOLUMETRIC FLASKS

glass	8
P.P	9
trapezoidal	9
Volumetric pipettes	19
Wash Bottles	60 & 61 & 62
Washing set for pipettes	177
Waste bins	173
Watch glasses	224
Water estimator	126
Water jet pump	146
Water stills	138 & 139

WEIGHING

bottles	224
brush	224
dishes	223
boats	222
paper	224
scoops	223
Wipes	171
Wire Gauze	74

WORK STATIONS

cryo tubes	285
pcr tubes	293

code index

| catalogue no // page |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 005.01.001 → 39 | 011.05.010 → 33 | 013.13.002 → 9 | 016.07.250 → 11 | 023.03.100 → 204 | 028.01.050 → 132 |
| 005.01.002 → 39 | 011.05.020 → 33 | 013.13.003 → 9 | 016.07.500 → 11 | 025.01.005 → 44 | 028.01.051 → 132 |
| 005.01.003 → 39 | 011.05.050 → 33 | 013.13.004 → 9 | 016.07.901 → 11 | 025.01.010 → 44 | 028.01.052 → 132 |
| 005.01.004 → 39 | 011.05.100 → 33 | 013.13.005 → 9 | 017.01.010 → 12 | 025.01.025 → 44 | 028.01.053 → 132 |
| 005.01.005 → 39 | 011.05.200 → 33 | 013.13.010 → 9 | 017.01.025 → 12 | 025.01.050 → 44 | 028.01.100 → 132 |
| 006.01.001 → 41 | 011.05.901 → 33 | 013.13.020 → 9 | 017.01.050 → 12 | 025.01.100 → 44 | 028.01.101 → 132 |
| 006.03.030 → 42 | 011.05.905 → 33 | 013.13.025 → 9 | 017.02.010 → 12 | 025.01.150 → 44 | 028.01.102 → 132 |
| 006.03.055 → 42 | 011.05.910 → 33 | 013.13.050 → 9 | 017.02.025 → 12 | 025.01.250 → 44 | 028.01.103 → 132 |
| 006.03.110 → 42 | 011.06.002 → 32 | 013.15.001 → 9 | 017.02.050 → 12 | 025.01.400 → 44 | 028.01.250 → 132 |
| 006.05.001 → 40 | 011.06.010 → 32 | 013.15.002 → 9 | 018.01.010 → 13 | 025.01.600 → 44 | 028.01.251 → 132 |
| 006.08.001 → 42 | 011.06.020 → 32 | 013.15.003 → 9 | 018.01.025 → 13 | 025.01.800 → 44 | 028.01.252 → 132 |
| 006.11.005 → 40 | 011.06.050 → 32 | 013.15.004 → 9 | 018.01.050 → 13 | 025.01.901 → 44 | 028.01.300 → 132 |
| 006.11.006 → 40 | 011.06.100 → 32 | 013.15.005 → 9 | 018.05.001 → 77 | 025.01.902 → 44 | 028.01.500 → 132 |
| 006.12.004 → 40 | 011.06.200 → 32 | 013.15.010 → 9 | 018.05.002 → 77 | 025.01.905 → 44 | 028.01.501 → 132 |
| 006.12.006 → 40 | 011.06.901 → 32 | 013.15.020 → 9 | 018.06.001 → 77 | 025.01.910 → 44 | 028.01.502 → 132 |
| 006.13.030 → 42 | 011.06.905 → 32 | 013.15.025 → 9 | 018.06.002 → 77 | 025.03.050 → 44 | 028.01.901 → 132 |
| 006.13.055 → 42 | 011.06.910 → 32 | 013.15.050 → 9 | 019.01.010 → 14 | 025.03.100 → 44 | 028.01.902 → 132 |
| 006.13.110 → 42 | 011.20.002 → 34 | 014.01.005 → 8 | 019.01.025 → 14 | 025.03.250 → 44 | 028.03.050 → 46 |
| 006.15.001 → 68 | 011.20.010 → 34 | 014.01.010 → 8 | 019.01.050 → 14 | 025.03.500 → 44 | 028.03.100 → 46 |
| 006.15.002 → 68 | 011.20.020 → 34 | 014.01.020 → 8 | 019.05.010 → 14 | 025.03.901 → 44 | 028.03.250 → 46 |
| 006.15.003 → 68 | 011.20.050 → 34 | 014.01.025 → 8 | 019.05.025 → 14 | 025.04.100 → 45 | 028.03.500 → 46 |
| 007.01.001 → 26 | 011.20.100 → 34 | 014.01.026 → 8 | 019.05.050 → 14 | 025.04.250 → 45 | 028.03.901 → 46 |
| 007.01.002 → 26 | 011.20.200 → 34 | 014.01.050 → 8 | 020.03.010 → 15 | 025.04.500 → 45 | 028.11.053 → 132 |
| 007.01.003 → 26 | 011.20.901 → 34 | 014.01.051 → 8 | 020.03.025 → 15 | 025.04.901 → 45 | 028.11.103 → 132 |
| 007.01.004 → 26 | 011.20.905 → 34 | 014.01.100 → 8 | 020.03.050 → 15 | 025.05.500 → 45 | 028.11.252 → 132 |
| 007.02.001 → 31 | 011.21.010 → 36 | 014.01.101 → 8 | 020.05.010 → 15 | 025.05.901 → 45 | 028.11.502 → 132 |
| 007.02.002 → 31 | 011.21.050 → 36 | 014.01.200 → 8 | 020.05.025 → 15 | 025.05.902 → 45 | 028.11.901 → 132 |
| 007.02.003 → 31 | 011.21.200 → 36 | 014.01.250 → 8 | 020.05.050 → 15 | 026.01.025 → 44 | 028.11.902 → 132 |
| 007.02.004 → 31 | 011.21.300 → 36 | 014.01.500 → 8 | 020.07.010 → 16 | 026.01.050 → 44 | 029.01.050 → 47 |
| 007.02.005 → 31 | 011.22.010 → 37 | 014.01.901 → 8 | 020.07.025 → 16 | 026.01.100 → 44 | 029.01.100 → 47 |
| 007.02.006 → 31 | 011.22.050 → 37 | 014.01.902 → 8 | 020.08.001 → 16 | 026.01.250 → 44 | 029.01.250 → 47 |
| 008.02.002 → 28 | 011.22.200 → 37 | 014.03.025 → 9 | 021.01.001 → 19 | 026.01.500 → 44 | 029.01.500 → 47 |
| 008.02.005 → 28 | 011.22.300 → 37 | 014.03.050 → 9 | 021.01.002 → 19 | 026.01.901 → 44 | 029.01.901 → 47 |
| 008.02.010 → 28 | 011.23.001 → 35 | 014.03.100 → 9 | 021.01.005 → 19 | 026.01.902 → 44 | 029.01.902 → 47 |
| 008.02.030 → 28 | 011.23.002 → 35 | 014.03.250 → 9 | 021.01.010 → 19 | 026.02.250 → 45 | 029.01.904 → 47 |
| 008.02.060 → 28 | 011.24.005 → 35 | 014.03.500 → 9 | 021.01.020 → 19 | 026.02.500 → 45 | 029.01.906 → 47 |
| 008.02.100 → 28 | 011.24.010 → 35 | 014.03.901 → 9 | 021.01.025 → 19 | 026.02.901 → 45 | 029.01.910 → 47 |
| 008.05.002 → 29 | 011.25.010 → 35 | 015.01.005 → 10 | 021.01.050 → 19 | 026.02.902 → 45 | 029.02.050 → 47 |
| 008.05.005 → 29 | 011.25.020 → 35 | 015.01.010 → 10 | 021.05.001 → 19 | 026.02.903 → 45 | 029.02.100 → 47 |
| 008.05.010 → 29 | 011.26.020 → 35 | 015.01.025 → 10 | 021.05.002 → 19 | 026.03.001 → 79 | 029.02.250 → 47 |
| 008.05.030 → 29 | 011.26.025 → 35 | 015.01.050 → 10 | 021.05.003 → 19 | 026.03.002 → 79 | 029.02.500 → 47 |
| 008.05.060 → 29 | 011.26.050 → 35 | 015.01.100 → 10 | 021.05.004 → 19 | 026.03.025 → 44 | 029.02.901 → 47 |
| 008.05.100 → 29 | 011.27.030 → 35 | 015.01.250 → 10 | 021.05.005 → 19 | 026.03.050 → 44 | 029.02.902 → 47 |
| 008.06.001 → 27 | 011.27.050 → 35 | 015.01.500 → 10 | 021.05.010 → 19 | 026.03.100 → 44 | 029.02.904 → 47 |
| 008.06.002 → 27 | 011.27.100 → 35 | 015.01.901 → 10 | 021.05.011 → 19 | 026.03.250 → 44 | 029.02.906 → 47 |
| 008.06.005 → 27 | 011.28.100 → 35 | 015.01.902 → 10 | 021.05.015 → 19 | 026.03.500 → 44 | 029.02.910 → 47 |
| 008.06.012 → 27 | 011.28.200 → 35 | 016.01.010 → 10 | 021.05.020 → 19 | 026.03.901 → 44 | 029.03.001 → 79 |
| 008.06.025 → 27 | 011.29.300 → 35 | 016.01.025 → 10 | 021.05.025 → 19 | 026.03.902 → 44 | 029.03.002 → 79 |
| 008.06.050 → 27 | 011.30.500 → 35 | 016.01.050 → 10 | 021.05.050 → 19 | 026.04.250 → 45 | 029.04.001 → 47 |
| 008.06.125 → 27 | 011.30.901 → 35 | 016.01.100 → 10 | 022.01.001 → 20 | 026.04.500 → 45 | 029.04.001 → 136 |
| 008.06.250 → 27 | 011.31.925 → 35 | 016.01.250 → 10 | 022.02.001 → 20 | 026.04.901 → 45 | 029.04.002 → 47 |
| 008.06.500 → 27 | 013.01.005 → 8 | 016.01.500 → 10 | 022.03.001 → 20 | 026.04.902 → 45 | 029.04.002 → 136 |
| 008.07.005 → 30 | 013.01.010 → 8 | 016.01.901 → 10 | 022.03.002 → 21 | 026.04.903 → 45 | 029.04.003 → 47 |
| 008.07.010 → 30 | 013.01.020 → 8 | 016.05.010 → 11 | 022.03.003 → 21 | 027.01.025 → 46 | 029.04.003 → 136 |
| 008.07.030 → 30 | 013.01.025 → 8 | 016.05.025 → 11 | 022.04.001 → 21 | 027.01.050 → 46 | 029.04.004 → 47 |
| 008.07.060 → 30 | 013.01.026 → 8 | 016.05.050 → 11 | 022.04.002 → 21 | 027.01.100 → 46 | 029.04.004 → 136 |
| 008.07.100 → 30 | 013.01.050 → 8 | 016.05.100 → 11 | 022.06.001 → 20 | 027.01.250 → 46 | 029.04.005 → 47 |
| 010.01.005 → 24 | 013.01.051 → 8 | 016.05.250 → 11 | 023.01.005 → 204 | 027.01.300 → 46 | 029.04.005 → 136 |
| 010.01.006 → 25 | 013.01.100 → 8 | 016.05.500 → 11 | 023.01.010 → 204 | 027.01.500 → 46 | 029.14.902 → 47 |
| 011.01.002 → 22 | 013.01.101 → 8 | 016.05.901 → 11 | 023.01.025 → 204 | 027.01.901 → 46 | 029.14.902 → 136 |
| 011.01.010 → 22 | 013.01.150 → 8 | 016.06.010 → 11 | 023.01.050 → 204 | 027.01.902 → 46 | 030.01.050 → 133 |
| 011.01.025 → 22 | 013.01.200 → 8 | 016.06.025 → 11 | 023.01.100 → 204 | 027.01.903 → 46 | 030.01.051 → 133 |
| 011.02.001 → 23 | 013.01.250 → 8 | 016.06.050 → 11 | 023.02.005 → 204 | 027.01.905 → 46 | 030.01.052 → 133 |
| 011.02.002 → 23 | 013.01.300 → 8 | 016.06.100 → 11 | 023.02.010 → 204 | 027.03.100 → 46 | 030.01.053 → 133 |
| 011.02.003 → 22 | 013.01.400 → 8 | 016.06.250 → 11 | 023.02.025 → 204 | 027.03.250 → 46 | 030.01.100 → 133 |
| 011.02.003.3 → 22 | 013.01.500 → 8 | 016.06.500 → 11 | 023.02.050 → 204 | 027.03.500 → 46 | 030.01.101 → 133 |
| 011.04.001 → 23 | 013.01.901 → 8 | 016.06.901 → 11 | 023.02.100 → 204 | 027.03.901 → 46 | 030.01.102 → 133 |
| 011.04.003 → 23 | 013.01.902 → 8 | 016.07.010 → 11 | 023.03.005 → 204 | 027.11.048 → 46 | 030.01.103 → 133 |
| 011.04.005 → 23 | 013.01.905 → 8 | 016.07.025 → 11 | 023.03.010 → 204 | 027.11.056 → 46 | 030.01.250 → 133 |
| 011.04.010 → 23 | 013.01.910 → 8 | 016.07.050 → 11 | 023.03.025 → 204 | 027.11.061 → 46 | 030.01.251 → 133 |
| 011.05.002 → 33 | 013.13.001 → 9 | 016.07.100 → 11 | 023.03.050 → 204 | 027.11.074 → 46 | 030.01.252 → 133 |

| catalogue no // page |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 030.01.500 → 133 | 030.34.250 → 134 | 030.57.901 → 136 | 033.14.400 → 128 | 037.07.002 → 223 | 038.07.125 → 92 |
| 030.01.501 → 133 | 030.34.500 → 134 | 030.58.025 → 136 | 033.14.402 → 128 | 037.07.003 → 223 | 038.07.150 → 92 |
| 030.01.900 → 133 | 030.34.901 → 134 | 030.58.050 → 136 | 033.14.403 → 128 | 037.08.050 → 82 | 038.08.050 → 93 |
| 030.01.901 → 133 | 030.34.902 → 134 | 030.58.100 → 136 | 033.15.160 → 129 | 037.08.075 → 82 | 038.08.075 → 93 |
| 030.01.902 → 133 | 030.35.100 → 134 | 030.58.250 → 136 | 033.15.253 → 129 | 037.08.100 → 82 | 038.08.100 → 93 |
| 030.01.904 → 133 | 030.35.250 → 134 | 030.59.050 → 136 | 033.15.403 → 129 | 037.08.120 → 82 | 038.08.125 → 93 |
| 030.02.050 → 133 | 030.35.500 → 134 | 030.59.100 → 136 | 033.16.160 → 129 | 037.09.007 → 222 | 038.08.150 → 93 |
| 030.02.051 → 133 | 030.35.901 → 134 | 030.59.250 → 136 | 033.16.253 → 129 | 037.09.100 → 222 | 038.09.060 → 92 |
| 030.02.052 → 133 | 030.35.902 → 134 | 030.59.500 → 136 | 033.16.403 → 129 | 037.09.250 → 222 | 038.09.070 → 92 |
| 030.02.053 → 133 | 030.36.250 → 134 | 030.59.901 → 136 | 033.17.160 → 129 | 037.11.007 → 222 | 038.09.080 → 92 |
| 030.02.100 → 133 | 030.37.250 → 134 | 030.60.003 → 123 | 033.17.163 → 129 | 037.11.100 → 222 | 038.09.100 → 92 |
| 030.02.101 → 133 | 030.37.500 → 134 | 030.60.004 → 123 | 033.17.250 → 129 | 037.11.250 → 222 | 038.09.120 → 92 |
| 030.02.102 → 133 | 030.37.901 → 134 | 030.60.005 → 123 | 033.17.253 → 129 | 037.15.005 → 222 | 038.11.060 → 94 |
| 030.02.103 → 133 | 030.38.250 → 134 | 030.60.006 → 123 | 033.17.400 → 129 | 037.15.030 → 222 | 038.11.080 → 94 |
| 030.02.250 → 133 | 030.38.500 → 134 | 031.02.050 → 152 | 033.17.403 → 129 | 037.15.100 → 222 | 038.11.100 → 94 |
| 030.02.251 → 133 | 030.38.901 → 134 | 031.02.100 → 152 | 033.18.160 → 129 | 037.16.005 → 222 | 038.11.125 → 94 |
| 030.02.252 → 133 | 030.38.902 → 134 | 031.02.250 → 152 | 033.18.163 → 129 | 037.16.030 → 222 | 038.11.160 → 94 |
| 030.02.500 → 133 | 030.39.250 → 134 | 031.02.500 → 152 | 033.18.250 → 129 | 037.16.100 → 222 | 038.12.060 → 94 |
| 030.02.501 → 133 | 030.39.500 → 134 | 031.02.901 → 152 | 033.18.253 → 129 | 037.19.007 → 222 | 038.12.080 → 94 |
| 030.02.900 → 133 | 030.39.901 → 134 | 031.02.902 → 152 | 033.18.400 → 129 | 037.19.100 → 222 | 038.12.100 → 94 |
| 030.02.901 → 133 | 030.40.250 → 134 | 031.04.050 → 152 | 033.18.403 → 129 | 037.19.250 → 222 | 038.12.125 → 94 |
| 030.02.902 → 133 | 030.40.500 → 134 | 031.04.100 → 152 | 035.11.030 → 130 | 037.21.007 → 222 | 038.12.160 → 94 |
| 030.02.904 → 133 | 030.40.901 → 134 | 031.04.250 → 152 | 035.11.070 → 130 | 037.21.100 → 222 | 038.13.A30 → 97 |
| 030.12.053 → 133 | 030.41.250 → 134 | 031.04.500 → 152 | 035.11.250 → 130 | 037.21.250 → 222 | 038.13.A41 → 97 |
| 030.12.103 → 133 | 030.41.500 → 134 | 031.04.901 → 152 | 035.11.500 → 130 | 037.23.070 → 223 | 038.13.A48 → 97 |
| 030.12.252 → 133 | 030.41.901 → 134 | 031.04.902 → 152 | 035.12.030 → 130 | 037.23.085 → 223 | 038.13.A54 → 97 |
| 030.12.501 → 133 | 030.41.902 → 134 | 031.06.050 → 152 | 035.12.070 → 130 | 037.23.110 → 223 | 038.13.A60 → 97 |
| 030.12.901 → 133 | 030.42.250 → 135 | 031.06.100 → 152 | 035.12.250 → 130 | 037.24.045 → 223 | 038.13.A66 → 97 |
| 030.24.050 → 134 | 030.43.250 → 135 | 031.06.250 → 152 | 035.12.500 → 130 | 037.24.055 → 223 | 038.13.Q15 → 97 |
| 030.24.100 → 134 | 030.43.500 → 135 | 031.06.500 → 152 | 035.13.030 → 131 | 037.24.065 → 223 | 038.13.Q24 → 97 |
| 030.24.250 → 134 | 030.43.901 → 135 | 031.06.901 → 152 | 035.13.070 → 131 | 037.25.100 → 223 | 038.13.Q40 → 97 |
| 030.25.100 → 134 | 030.44.250 → 135 | 032.01.050 → 153 | 035.13.250 → 131 | 037.26.001 → 82 | 038.13.S35 → 97 |
| 030.25.250 → 134 | 030.44.500 → 135 | 032.01.100 → 153 | 035.13.500 → 131 | 037.27.001 → 82 | 038.13.S45 → 97 |
| 030.25.500 → 134 | 030.44.901 → 135 | 032.01.250 → 153 | 035.14.030 → 131 | 037.27.002 → 82 | 038.13.S50 → 97 |
| 030.25.901 → 134 | 030.44.902 → 135 | 032.01.500 → 153 | 035.14.070 → 131 | 037.27.003 → 82 | 038.14.060 → 94 |
| 030.26.100 → 134 | 030.45.250 → 135 | 032.01.901 → 153 | 035.14.250 → 131 | 037.28.001 → 83 | 038.14.080 → 94 |
| 030.26.250 → 134 | 030.45.500 → 135 | 032.02.050 → 153 | 035.14.500 → 131 | 037.29.001 → 83 | 038.14.100 → 94 |
| 030.26.500 → 134 | 030.45.901 → 135 | 032.02.100 → 153 | 036.01.030 → 131 | 037.30.002 → 82 | 038.14.H30 → 96 |
| 030.26.901 → 134 | 030.46.250 → 135 | 032.02.250 → 153 | 036.01.070 → 131 | 037.30.005 → 82 | 038.14.H35 → 96 |
| 030.27.100 → 134 | 030.46.500 → 135 | 032.02.500 → 153 | 036.01.100 → 131 | 037.30.010 → 82 | 038.14.H40 → 96 |
| 030.27.250 → 134 | 030.46.901 → 135 | 032.02.901 → 153 | 036.01.150 → 131 | 037.30.025 → 82 | 038.14.H46 → 96 |
| 030.27.500 → 134 | 030.47.250 → 135 | 032.03.050 → 153 | 036.01.250 → 131 | 037.30.050 → 82 | 038.14.H51 → 96 |
| 030.27.901 → 134 | 030.47.500 → 135 | 032.03.100 → 153 | 036.01.500 → 131 | 037.30.100 → 82 | 038.14.H60 → 96 |
| 030.27.902 → 134 | 030.47.901 → 135 | 032.03.250 → 153 | 037.01.050 → 224 | 037.30.250 → 82 | 038.14.L30 → 96 |
| 030.28.100 → 134 | 030.47.902 → 135 | 032.03.500 → 153 | 037.01.060 → 224 | 037.30.500 → 82 | 038.14.L35 → 96 |
| 030.28.250 → 134 | 030.49.010 → 135 | 032.03.901 → 153 | 037.01.070 → 224 | 037.30.901 → 82 | 038.14.L40 → 96 |
| 030.28.500 → 134 | 030.49.025 → 135 | 033.11.160 → 128 | 037.01.080 → 224 | 037.32.001 → 224 | 038.14.L45 → 96 |
| 030.28.901 → 134 | 030.49.050 → 135 | 033.11.250 → 128 | 037.01.100 → 224 | 037.33.001 → 224 | 038.14.L50 → 96 |
| 030.28.902 → 134 | 030.49.100 → 135 | 033.11.252 → 128 | 037.01.125 → 224 | 038.02.065 → 93 | 038.14.L60 → 96 |
| 030.29.100 → 134 | 030.49.250 → 135 | 033.11.253 → 128 | 037.01.150 → 224 | 038.02.090 → 93 | 038.14.L70 → 96 |
| 030.29.250 → 134 | 030.52.050 → 135 | 033.11.400 → 128 | 037.01.200 → 224 | 038.02.130 → 93 | 038.14.M35 → 96 |
| 030.29.500 → 134 | 030.52.100 → 135 | 033.11.402 → 128 | 037.02.254 → 224 | 038.02.150 → 93 | 038.14.M40 → 96 |
| 030.29.901 → 134 | 030.52.250 → 135 | 033.11.403 → 128 | 037.02.305 → 224 | 038.02.180 → 93 | 038.14.M45 → 96 |
| 030.29.902 → 134 | 030.53.025 → 135 | 033.12.160 → 128 | 037.02.353 → 224 | 038.03.115 → 93 | 038.14.M50 → 96 |
| 030.30.050 → 134 | 030.53.050 → 135 | 033.12.250 → 128 | 037.02.357 → 224 | 038.03.135 → 93 | 038.14.M60 → 96 |
| 030.30.100 → 134 | 030.53.100 → 135 | 033.12.252 → 128 | 037.02.402 → 224 | 038.03.150 → 93 | 038.14.M70 → 96 |
| 030.30.250 → 134 | 030.54.025 → 135 | 033.12.253 → 128 | 037.02.408 → 224 | 038.03.175 → 93 | 038.14.M82 → 96 |
| 030.31.100 → 134 | 030.54.050 → 135 | 033.12.400 → 128 | 037.02.503 → 224 | 038.03.210 → 93 | 038.16.060 → 95 |
| 030.31.250 → 134 | 030.54.100 → 135 | 033.12.402 → 128 | 037.02.508 → 224 | 038.04.065 → 93 | 038.16.080 → 95 |
| 030.31.500 → 134 | 030.55.100 → 137 | 033.12.403 → 128 | 037.02.603 → 224 | 038.04.075 → 93 | 038.16.100 → 95 |
| 030.31.901 → 134 | 030.55.250 → 137 | 033.13.160 → 128 | 037.02.803 → 224 | 038.04.085 → 93 | 038.17.001 → 97 |
| 030.32.100 → 134 | 030.55.500 → 137 | 033.13.250 → 128 | 037.04.001 → 223 | 038.04.110 → 93 | 038.18.060 → 97 |
| 030.32.250 → 134 | 030.55.901 → 137 | 033.13.252 → 128 | 037.04.002 → 223 | 038.04.125 → 93 | 038.18.065 → 92 |
| 030.32.500 → 134 | 030.56.100 → 137 | 033.13.253 → 128 | 037.04.003 → 223 | 038.04.150 → 93 | 038.18.085 → 92 |
| 030.32.901 → 134 | 030.56.250 → 137 | 033.13.400 → 128 | 037.05.005 → 222 | 038.05.001 → 94 | 038.18.110 → 92 |
| 030.33.100 → 134 | 030.56.500 → 137 | 033.13.402 → 128 | 037.05.030 → 222 | 038.06.250 → 96 | 038.18.125 → 92 |
| 030.33.250 → 134 | 030.56.901 → 137 | 033.13.403 → 128 | 037.05.100 → 222 | 038.06.300 → 96 | 038.18.150 → 92 |
| 030.33.500 → 134 | 030.57.100 → 136 | 033.14.160 → 128 | 037.06.005 → 222 | 038.06.400 → 96 | 038.19.035 → 96 |
| 030.33.901 → 134 | 030.57.250 → 136 | 033.14.250 → 128 | 037.06.030 → 222 | 038.07.050 → 92 | 038.19.040 → 97 |
| 030.33.902 → 134 | 030.57.500 → 136 | 033.14.252 → 128 | 037.06.100 → 222 | 038.07.075 → 92 | 038.19.043 → 96 |
| 030.34.100 → 134 | 030.57.750 → 136 | 033.14.253 → 128 | 037.07.001 → 223 | 038.07.100 → 92 | 038.19.046 → 96 |

| catalogue no // page |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 038.19.050 → 97 | 039.33.160 → 116 | 041.08.100 → 143 | 046.07.001 → 77 | 048.22.160 → 86 | 051.04.003 → 106 |
| 038.19.052 → 96 | 039.33.160 → 175 | 041.08.120 → 143 | 047.01.120 → 80 | 048.23.130 → 86 | 051.04.004 → 106 |
| 038.19.060 → 96 | 039.33.250 → 116 | 042.01.070 → 146 | 047.01.150 → 80 | 048.23.160 → 86 | 051.04.005 → 106 |
| 038.19.068 → 96 | 039.33.250 → 175 | 042.01.090 → 146 | 047.01.180 → 80 | 048.24.130 → 86 | 051.04.006 → 106 |
| 038.20.025 → 97 | 039.33.290 → 116 | 042.01.110 → 146 | 047.01.210 → 80 | 048.24.160 → 86 | 051.04.007 → 106 |
| 038.20.046 → 97 | 039.33.290 → 175 | 042.02.070 → 146 | 047.01.250 → 80 | 048.25.130 → 87 | 051.08.010 → 106 |
| 038.20.055 → 97 | 039.33.300 → 116 | 042.02.090 → 146 | 047.01.300 → 80 | 048.26.130 → 87 | 051.08.012 → 106 |
| 038.21.040 → 97 | 039.33.300 → 175 | 042.02.110 → 146 | 047.02.150 → 80 | 048.30.130 → 86 | 051.08.014 → 106 |
| 038.21.050 → 97 | 039.34.105 → 116 | 042.03.040 → 144 | 047.02.180 → 80 | 048.30.160 → 86 | 051.08.019 → 106 |
| 038.21.060 → 97 | 039.34.105 → 175 | 042.03.060 → 144 | 047.02.210 → 80 | 048.30.200 → 86 | 051.08.024 → 106 |
| 039.01.200 → 90 | 039.34.150 → 116 | 042.03.080 → 144 | 047.03.150 → 81 | 048.31.001 → 87 | 051.08.029 → 106 |
| 039.01.250 → 90 | 039.34.150 → 175 | 042.03.100 → 144 | 047.03.180 → 81 | 048.40.001 → 88 | 051.09.45B → 106 |
| 039.01.300 → 90 | 039.35.075 → 116 | 042.04.040 → 144 | 047.03.210 → 81 | 048.40.002 → 88 | 051.09.45G → 106 |
| 039.02.200 → 90 | 039.35.075 → 175 | 042.04.060 → 144 | 047.05.001 → 81 | 048.50.001 → 89 | 051.09.45R → 106 |
| 039.02.250 → 90 | 039.35.145 → 116 | 042.04.080 → 144 | 047.05.002 → 81 | 048.50.002 → 89 | 051.09.45Y → 106 |
| 039.02.300 → 90 | 039.35.145 → 175 | 042.04.100 → 144 | 047.06.150 → 80 | 048.50.003 → 89 | 051.10.001 → 107 |
| 039.05.200 → 91 | 039.35.200 → 116 | 042.05.001 → 144 | 047.06.180 → 80 | 048.51.010 → 89 | 051.10.002 → 107 |
| 039.05.250 → 91 | 039.35.200 → 165 | 042.06.001 → 144 | 047.06.210 → 80 | 048.51.011 → 89 | 051.10.003 → 107 |
| 039.05.300 → 91 | 039.35.200 → 175 | 042.06.010 → 144 | 047.07.130 → 80 | 048.51.021 → 89 | 051.10.004 → 107 |
| 039.06.200 → 91 | 040.01.100 → 145 | 043.01.051 → 150 | 047.07.150 → 80 | 049.01.130 → 74 | 051.10.005 → 107 |
| 039.06.250 → 91 | 040.01.250 → 145 | 043.01.052 → 150 | 047.07.185 → 80 | 049.01.150 → 74 | 051.11.001 → 107 |
| 039.06.300 → 91 | 040.01.500 → 145 | 043.01.053 → 150 | 047.07.210 → 80 | 049.01.200 → 74 | 051.11.002 → 107 |
| 039.07.200 → 91 | 040.01.901 → 145 | 043.01.054 → 150 | 047.07.250 → 80 | 049.03.115 → 74 | 051.11.003 → 107 |
| 039.07.250 → 91 | 040.01.902 → 145 | 043.01.071 → 150 | 047.07.300 → 80 | 049.03.150 → 74 | 051.11.004 → 107 |
| 039.07.300 → 91 | 040.02.100 → 145 | 043.01.072 → 150 | 047.08.150 → 81 | 049.04.175 → 75 | 051.11.005 → 107 |
| 039.08.100 → 115 | 040.02.250 → 145 | 043.01.073 → 150 | 047.08.180 → 81 | 049.05.060 → 95 | 051.12.001 → 107 |
| 039.08.100 → 174 | 040.02.500 → 145 | 043.01.074 → 150 | 047.08.210 → 81 | 049.05.100 → 95 | 051.13.001 → 107 |
| 039.08.150 → 115 | 040.02.901 → 145 | 043.01.121 → 150 | 047.09.100 → 81 | 049.05.150 → 95 | 051.20.001 → 104 |
| 039.08.150 → 174 | 040.02.902 → 145 | 043.01.122 → 150 | 047.09.130 → 81 | 049.05.300 → 95 | 051.20.002 → 104 |
| 039.08.220 → 115 | 040.05.001 → 145 | 043.01.123 → 150 | 047.09.150 → 81 | 049.05.900 → 95 | 051.20.003 → 104 |
| 039.08.220 → 174 | 040.05.002 → 145 | 043.01.124 → 150 | 047.09.180 → 81 | 049.06.004 → 74 | 051.20.004 → 104 |
| 039.08.300 → 115 | 040.05.003 → 145 | 043.01.501 → 150 | 047.09.210 → 81 | 049.06.005 → 74 | 051.20.005 → 104 |
| 039.08.300 → 174 | 040.05.004 → 145 | 043.01.502 → 150 | 047.10.075 → 81 | 049.06.006 → 74 | 051.20.006 → 104 |
| 039.12.200 → 90 | 040.06.001 → 145 | 043.01.503 → 150 | 047.10.100 → 81 | 049.07.004 → 74 | 051.20.007 → 104 |
| 039.12.250 → 90 | 040.10.001 → 146 | 043.01.504 → 150 | 047.10.150 → 81 | 049.07.005 → 74 | 051.20.008 → 104 |
| 039.12.300 → 90 | 040.10.005 → 146 | 043.02.031 → 150 | 047.10.200 → 81 | 049.07.006 → 74 | 051.20.009 → 104 |
| 039.16.001 → 91 | 040.10.015 → 146 | 043.02.032 → 150 | 047.10.300 → 81 | 049.08.070 → 95 | 051.20.010 → 104 |
| 039.20.001 → 114 | 041.01.040 → 142 | 043.02.033 → 150 | 047.18.001 → 83 | 049.08.085 → 95 | 051.20.011 → 104 |
| 039.20.001 → 174 | 041.01.060 → 142 | 043.02.034 → 150 | 047.18.002 → 83 | 049.08.110 → 95 | 051.20.012 → 104 |
| 039.20.002 → 114 | 041.01.080 → 142 | 043.02.051 → 150 | 047.30.150 → 80 | 049.09.180 → 74 | 051.20.013 → 104 |
| 039.20.002 → 174 | 041.01.100 → 142 | 043.02.052 → 150 | 047.30.180 → 80 | 049.09.180 → 162 | 051.20.014 → 104 |
| 039.20.003 → 114 | 041.01.120 → 142 | 043.02.053 → 150 | 047.30.210 → 80 | 049.09.250 → 74 | 051.20.015 → 104 |
| 039.20.003 → 174 | 041.01.150 → 142 | 043.02.054 → 150 | 048.01.105 → 84 | 049.09.250 → 163 | 051.20.016 → 104 |
| 039.21.001 → 115 | 041.02.040 → 142 | 043.03.001 → 148 | 048.01.115 → 84 | 049.09.250 → 234 | 051.20.017 → 104 |
| 039.21.002 → 115 | 041.02.060 → 142 | 043.03.002 → 149 | 048.01.130 → 84 | 049.09.320 → 74 | 051.20.018 → 104 |
| 039.21.003 → 115 | 041.02.080 → 142 | 043.03.003 → 149 | 048.01.145 → 84 | 050.01.001 → 98 | 051.20.019 → 104 |
| 039.21.004 → 115 | 041.02.100 → 142 | 043.03.004 → 149 | 048.01.160 → 84 | 050.01.002 → 98 | 051.20.020 → 104 |
| 039.21.005 → 115 | 041.02.120 → 142 | 043.03.005 → 149 | 048.01.200 → 84 | 050.01.003 → 98 | 051.20.021 → 104 |
| 039.23.001 → 165 | 041.02.150 → 142 | 043.05.001 → 149 | 048.01.250 → 84 | 050.01.004 → 99 | 051.20.022 → 104 |
| 039.23.002 → 165 | 041.02.200 → 143 | 043.05.003 → 149 | 048.01.300 → 84 | 050.02.001 → 99 | 051.21.001 → 105 |
| 039.23.003 → 165 | 041.02.250 → 143 | 043.05.006 → 149 | 048.02.115 → 84 | 050.03.001 → 99 | 051.21.002 → 105 |
| 039.30.001 → 114 | 041.02.300 → 143 | 043.06.001 → 148 | 048.02.130 → 84 | 050.04.001 → 75 | 051.21.003 → 105 |
| 039.30.001 → 174 | 041.03.080 → 142 | 043.06.002 → 149 | 048.02.145 → 84 | 050.04.002 → 75 | 051.21.004 → 105 |
| 039.30.002 → 114 | 041.04.080 → 142 | 043.06.004 → 149 | 048.02.160 → 84 | 050.05.150 → 75 | 051.21.005 → 105 |
| 039.30.002 → 174 | 041.05.040 → 142 | 043.06.011 → 148 | 048.03.001 → 307 | 050.05.200 → 75 | 051.21.006 → 105 |
| 039.30.003 → 114 | 041.05.060 → 142 | 043.08.015 → 150 | 048.03.002 → 307 | 050.06.001 → 74 | 051.21.007 → 105 |
| 039.30.003 → 174 | 041.05.080 → 142 | 043.08.030 → 150 | 048.04.001 → 147 | 050.07.050 → 75 | 051.21.008 → 105 |
| 039.30.004 → 114 | 041.05.100 → 142 | 043.08.050 → 150 | 048.06.001 → 88 | 050.07.060 → 75 | 051.21.009 → 105 |
| 039.30.004 → 174 | 041.05.120 → 142 | 043.20.001 → 205 | 048.06.002 → 88 | 050.08.075 → 99 | 051.21.010 → 105 |
| 039.30.005 → 114 | 041.05.150 → 142 | 043.20.002 → 205 | 048.07.105 → 84 | 050.08.100 → 99 | 051.22.001 → 104 |
| 039.30.005 → 174 | 041.06.080 → 143 | 043.21.001 → 205 | 048.07.115 → 84 | 050.09.001 → 98 | 051.22.002 → 104 |
| 039.31.001 → 114 | 041.06.100 → 143 | 043.22.001 → 205 | 048.07.130 → 84 | 050.10.001 → 99 | 051.22.003 → 104 |
| 039.31.002 → 114 | 041.06.120 → 143 | 043.22.002 → 205 | 048.07.150 → 84 | 051.03.001 → 106 | 051.22.004 → 104 |
| 039.32.300 → 116 | 041.06.150 → 143 | 045.01.001 → 76 | 048.07.160 → 84 | 051.03.002 → 106 | 051.22.005 → 104 |
| 039.32.300 → 175 | 041.07.065 → 143 | 045.03.001 → 76 | 048.07.200 → 84 | 051.03.003 → 106 | 051.22.006 → 104 |
| 039.32.500 → 116 | 041.07.080 → 143 | 045.04.001 → 76 | 048.08.105 → 84 | 051.03.004 → 106 | 051.22.007 → 104 |
| 039.32.500 → 175 | 041.07.100 → 143 | 045.06.001 → 76 | 048.08.115 → 84 | 051.03.005 → 106 | 051.22.008 → 104 |
| 039.33.098 → 116 | 041.07.120 → 143 | 046.01.001 → 78 | 048.08.130 → 84 | 051.03.006 → 106 | 051.22.009 → 104 |
| 039.33.098 → 175 | 041.07.150 → 143 | 046.01.002 → 78 | 048.10.110 → 85 | 051.03.007 → 106 | 051.22.010 → 104 |
| 039.33.140 → 116 | 041.08.060 → 143 | 046.05.001 → 78 | 048.11.110 → 85 | 051.04.001 → 106 | 051.22.011 → 104 |
| 039.33.140 → 175 | 041.08.080 → 143 | 046.05.002 → 78 | 048.22.130 → 86 | 051.04.002 → 106 | 051.22.012 → 104 |

| catalogue no // page |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 051.22.013 → 104 | 052.13.001 → 101 | 057.05.040 → 232 | 061.13.008 → 50 | 062.04.101 → 63 | 062.51.501 → 61 |
| 051.22.014 → 104 | 052.13.002 → 101 | 057.06.037 → 232 | 061.14.025 → 50 | 062.05.05B → 60 | 062.51.502 → 61 |
| 051.22.015 → 104 | 052.13.003 → 101 | 058.01.001 → 108 | 061.14.060 → 50 | 062.05.05G → 60 | 062.52.500 → 61 |
| 051.22.016 → 104 | 052.13.004 → 101 | 058.01.002 → 108 | 061.14.120 → 50 | 062.05.05R → 60 | 062.53.500 → 61 |
| 051.22.017 → 104 | 052.13.005 → 101 | 058.02.001 → 108 | 061.14.300 → 50 | 062.05.05Y → 60 | 062.54.500 → 61 |
| 051.22.018 → 104 | 052.13.006 → 101 | 058.02.002 → 109 | 061.14.600 → 50 | 062.05.100 → 60 | 062.55.500 → 61 |
| 051.22.019 → 104 | 052.13.007 → 101 | 058.02.101 → 108 | 061.14.901 → 50 | 062.05.250 → 60 | 062.56.500 → 61 |
| 051.22.020 → 104 | 052.13.008 → 101 | 058.03.001 → 109 | 061.14.906 → 58 | 062.05.500 → 60 | 062.57.500 → 61 |
| 051.22.021 → 104 | 052.13.009 → 101 | 058.04.001 → 109 | 061.14.912 → 58 | 062.05.901 → 60 | 062.58.500 → 61 |
| 051.22.022 → 104 | 052.14.001 → 101 | 058.05.080 → 109 | 061.14.931 → 58 | 062.08.250 → 62 | 062.60.901 → 65 |
| 051.23.001 → 104 | 052.14.002 → 101 | 058.05.100 → 109 | 061.15.100 → 52 | 062.08.500 → 62 | 062.60.901 → 172 |
| 051.23.002 → 104 | 052.14.003 → 101 | 058.05.125 → 109 | 061.15.250 → 52 | 062.09.05B → 60 | 062.60.902 → 65 |
| 051.23.003 → 104 | 052.15.010 → 102 | 058.05.150 → 109 | 061.15.500 → 52 | 062.09.05G → 60 | 062.60.902 → 172 |
| 051.23.004 → 104 | 052.15.015 → 102 | 058.06.001 → 127 | 061.15.901 → 52 | 062.09.05R → 60 | 062.60.903 → 65 |
| 051.23.005 → 104 | 052.15.020 → 102 | 058.07.001 → 312 | 061.15.902 → 52 | 062.09.05Y → 60 | 062.60.903 → 172 |
| 051.23.006 → 104 | 052.16.012 → 102 | 059.02.001 → 206 | 061.16.100 → 52 | 062.10.010 → 62 | 062.60.905 → 65 |
| 051.23.007 → 104 | 052.16.016 → 102 | 059.02.002 → 206 | 061.16.250 → 52 | 062.10.015 → 62 | 062.60.905 → 172 |
| 051.23.008 → 104 | 052.16.020 → 102 | 059.02.003 → 206 | 061.16.500 → 52 | 062.10.020 → 62 | 062.60.909 → 65 |
| 051.23.009 → 104 | 052.16.025 → 102 | 059.02.004 → 206 | 061.16.901 → 52 | 062.10.030 → 62 | 062.60.909 → 172 |
| 051.23.010 → 104 | 052.18.001 → 102 | 059.03.001 → 209 | 061.16.902 → 52 | 062.11.250 → 62 | 062.60.918 → 65 |
| 051.23.011 → 104 | 052.20.003 → 103 | 059.03.002 → 209 | 061.17.100 → 53 | 062.11.500 → 62 | 062.60.918 → 172 |
| 051.23.012 → 104 | 052.20.006 → 103 | 059.05.001 → 206 | 061.17.250 → 53 | 062.12.050 → 63 | 062.61.909 → 65 |
| 051.23.013 → 104 | 052.20.009 → 103 | 059.05.001 → 252 | 061.17.500 → 53 | 062.12.100 → 63 | 062.61.909 → 172 |
| 051.23.014 → 104 | 052.21.003 → 103 | 060.01.001 → 207 | 061.17.901 → 53 | 062.13.050 → 63 | 062.61.914 → 65 |
| 051.23.015 → 104 | 052.21.006 → 103 | 060.01.002 → 207 | 061.17.902 → 53 | 062.13.100 → 63 | 062.61.914 → 172 |
| 051.23.016 → 104 | 052.21.009 → 103 | 060.02.001 → 208 | 061.18.100 → 53 | 062.21.902 → 58 | 062.62.910 → 65 |
| 051.23.017 → 104 | 052.22.006 → 103 | 060.03.001 → 208 | 061.18.250 → 53 | 062.21.903 → 58 | 062.62.910 → 172 |
| 051.23.018 → 104 | 052.22.008 → 103 | 060.03.002 → 207 | 061.18.500 → 53 | 062.21.905 → 58 | 062.62.915 → 65 |
| 051.23.019 → 104 | 052.22.010 → 103 | 060.04.001 → 206 | 061.18.901 → 53 | 062.21.910 → 58 | 062.62.915 → 172 |
| 051.23.020 → 104 | 052.23.006 → 103 | 061.01.100 → 48 | 061.18.902 → 53 | 062.21.920 → 59 | 062.66.001 → 64 |
| 051.23.021 → 104 | 052.23.008 → 103 | 061.01.250 → 48 | 061.20.001 → 51 | 062.21.930 → 59 | 062.66.002 → 64 |
| 051.23.022 → 104 | 052.23.010 → 103 | 061.01.500 → 48 | 061.21.250 → 54 | 062.21.950 → 59 | 062.66.004 → 64 |
| 051.24.001 → 105 | 052.24.006 → 103 | 061.01.901 → 48 | 061.21.500 → 54 | 062.22.905 → 58 | 062.70.905 → 173 |
| 051.24.002 → 105 | 052.24.008 → 103 | 061.01.902 → 48 | 061.21.901 → 54 | 062.22.910 → 58 | 062.70.918 → 173 |
| 051.24.003 → 105 | 052.24.010 → 103 | 061.01.903 → 48 | 061.22.250 → 54 | 062.22.920 → 58 | 062.70.935 → 173 |
| 051.24.004 → 105 | 052.25.006 → 103 | 061.01.905 → 48 | 061.22.500 → 54 | 062.27.905 → 59 | 062.70.950 → 173 |
| 051.24.005 → 105 | 052.25.008 → 103 | 061.01.910 → 48 | 061.22.901 → 54 | 062.27.910 → 59 | 062.71.907 → 173 |
| 051.24.006 → 105 | 052.25.010 → 103 | 061.01.920 → 48 | 061.23.250 → 55 | 062.27.920 → 59 | 062.71.911 → 173 |
| 051.24.007 → 105 | 052.30.001 → 88 | 061.02.100 → 48 | 061.23.500 → 55 | 062.28.905 → 59 | 062.71.918 → 173 |
| 051.24.008 → 105 | 055.01.001 → 210 | 061.02.250 → 48 | 061.23.901 → 55 | 062.28.910 → 59 | 062.71.930 → 173 |
| 051.24.009 → 105 | 055.02.001 → 210 | 061.02.500 → 48 | 061.24.250 → 55 | 062.28.920 → 59 | 062.72.908 → 173 |
| 051.26.001 → 105 | 055.03.001 → 211 | 061.02.901 → 48 | 061.24.500 → 55 | 062.30.002 → 173 | 062.72.912 → 173 |
| 051.26.002 → 105 | 055.32.001 → 103 | 061.02.902 → 48 | 061.24.901 → 55 | 062.36.910 → 66 | 062.72.916 → 173 |
| 051.26.003 → 105 | 055.32.002 → 103 | 061.02.903 → 48 | 061.25.250 → 54 | 062.36.920 → 66 | 062.72.930 → 173 |
| 051.26.004 → 105 | 056.01.001 → 210 | 061.02.905 → 48 | 061.25.500 → 54 | 062.36.930 → 66 | 062.80.001 → 182 |
| 051.26.005 → 105 | 056.02.001 → 211 | 061.02.910 → 48 | 061.25.901 → 54 | 062.38.904 → 67 | 062.80.901 → 182 |
| 051.26.006 → 105 | 056.03.001 → 211 | 061.02.920 → 48 | 061.26.250 → 54 | 062.38.915 → 67 | 062.80.903 → 182 |
| 051.26.007 → 105 | 057.01.010 → 232 | 061.07.050 → 51 | 061.26.500 → 54 | 062.38.945 → 67 | 062.80.905 → 182 |
| 051.26.008 → 105 | 057.01.015 → 232 | 061.07.100 → 51 | 061.26.901 → 54 | 062.39.900 → 66 | 062.80.912 → 182 |
| 052.08.001 → 102 | 057.01.020 → 232 | 061.07.250 → 51 | 061.27.250 → 55 | 062.39.901 → 66 | 062.80.925 → 182 |
| 052.08.002 → 101 | 057.01.025 → 232 | 061.07.500 → 51 | 061.27.500 → 55 | 062.39.902 → 66 | 063.01.010 → 118 |
| 052.10.001 → 100 | 057.01.030 → 232 | 061.07.901 → 51 | 061.27.901 → 55 | 062.39.903 → 66 | 063.01.012 → 118 |
| 052.10.002 → 100 | 057.01.035 → 232 | 061.07.902 → 51 | 061.28.250 → 55 | 062.39.905 → 66 | 063.01.014 → 118 |
| 052.10.003 → 100 | 057.01.040 → 232 | 061.09.0B1 → 51 | 061.28.500 → 55 | 062.39.907 → 66 | 063.01.019 → 118 |
| 052.10.004 → 100 | 057.01.045 → 232 | 061.09.0G1 → 51 | 061.28.901 → 55 | 062.39.908 → 66 | 063.01.024 → 118 |
| 052.10.005 → 100 | 057.01.050 → 232 | 061.09.0R1 → 51 | 061.29.040 → 50 | 062.39.910 → 66 | 063.01.029 → 118 |
| 052.10.006 → 100 | 057.01.060 → 232 | 061.09.0Y1 → 51 | 061.29.105 → 50 | 062.39.913 → 66 | 063.01.034 → 118 |
| 052.10.007 → 100 | 057.01.070 → 232 | 061.10.050 → 49 | 061.29.370 → 50 | 062.40.901 → 65 | 063.01.045 → 118 |
| 052.10.008 → 100 | 057.01.080 → 232 | 061.10.100 → 49 | 061.29.720 → 50 | 062.40.901 → 172 | 063.02.010 → 118 |
| 052.11.001 → 100 | 057.02.001 → 233 | 061.10.250 → 49 | 061.29.901 → 50 | 062.40.902 → 65 | 063.02.012 → 118 |
| 052.11.002 → 100 | 057.02.002 → 233 | 061.10.500 → 49 | 061.31.100 → 49 | 062.40.902 → 172 | 063.02.014 → 118 |
| 052.11.003 → 100 | 057.02.100 → 67 | 061.10.901 → 49 | 061.31.250 → 49 | 062.40.905 → 65 | 063.02.019 → 118 |
| 052.11.004 → 100 | 057.02.101 → 67 | 061.11.050 → 49 | 061.31.500 → 49 | 062.40.905 → 172 | 063.02.024 → 118 |
| 052.12.001 → 100 | 057.03.200 → 233 | 061.11.100 → 49 | 061.31.901 → 49 | 062.42.910 → 65 | 063.02.029 → 118 |
| 052.12.002 → 100 | 057.03.250 → 233 | 061.11.250 → 49 | 061.55.100 → 50 | 062.42.910 → 172 | 063.02.034 → 118 |
| 052.12.003 → 100 | 057.03.300 → 233 | 061.11.500 → 49 | 061.55.250 → 50 | 062.42.915 → 65 | 063.02.045 → 118 |
| 052.12.004 → 100 | 057.04.250 → 233 | 061.11.901 → 49 | 061.55.500 → 50 | 062.42.915 → 172 | 063.04.010 → 127 |
| 052.12.005 → 100 | 057.05.020 → 232 | 061.13.001 → 50 | 061.55.901 → 50 | 062.42.920 → 65 | 063.04.012 → 127 |
| 052.12.006 → 100 | 057.05.025 → 232 | 061.13.002 → 50 | 062.02.100 → 63 | 062.42.920 → 172 | 063.04.014 → 127 |
| 052.12.007 → 100 | 057.05.030 → 232 | 061.13.004 → 50 | 062.03.100 → 63 | 062.50.500 → 61 | 063.04.019 → 127 |
| 052.12.008 → 100 | 057.05.035 → 232 | 061.13.006 → 50 | 062.04.100 → 63 | 062.51.500 → 61 | 063.04.024 → 127 |

code index

| catalogue no // page |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 063.04.029 → 127 | 065.32.014 → 124 | 065.60.100 → 125 | 074.01.005 → 319 | 077.03.001 → 70 | 079.11.016 → 73 |
| 063.04.029 → 137 | 065.32.029 → 124 | 065.60.150 → 125 | 074.02.001 → 319 | 077.03.002 → 70 | 080.01.001 → 279 |
| 063.04.034 → 127 | 065.33.014 → 124 | 065.62.100 → 125 | 074.03.001 → 319 | 077.04.001 → 71 | 080.01.002 → 287 |
| 063.04.045 → 127 | 065.33.029 → 124 | 065.62.130 → 125 | 074.03.002 → 319 | 077.04.002 → 71 | 080.01.003 → 282 |
| 063.05.001 → 137 | 065.34.014 → 121 | 065.62.180 → 125 | 074.03.003 → 319 | 077.04.003 → 71 | 080.01.004 → 283 |
| 063.14.014 → 127 | 065.34.029 → 121 | 065.63.100 → 125 | 074.03.004 → 319 | 077.04.004 → 71 | 080.01.005 → 283 |
| 063.14.019 → 127 | 065.36.014 → 123 | 065.63.130 → 125 | 074.03.005 → 319 | 077.04.005 → 71 | 080.02.001 → 279 |
| 063.14.024 → 127 | 065.36.019 → 123 | 065.63.180 → 125 | 074.04.001 → 319 | 077.04.006 → 71 | 080.04.001 → 71 |
| 063.14.029 → 127 | 065.36.024 → 123 | 065.66.125 → 125 | 074.04.002 → 319 | 078.01.001 → 71 | 080.04.002 → 71 |
| 063.14.034 → 127 | 065.36.029 → 123 | 065.66.250 → 125 | 074.04.003 → 319 | 078.01.002 → 71 | 080.05.001 → 197 |
| 063.14.045 → 127 | 065.37.014 → 120 | 065.66.500 → 125 | 074.04.004 → 319 | 078.02.001 → 272 | 080.05.002 → 197 |
| 063.16.001 → 127 | 065.37.029 → 120 | 065.66.901 → 125 | 074.04.005 → 319 | 078.02.002 → 272 | 080.06.002 → 282 |
| 063.16.002 → 127 | 065.38.014 → 120 | 065.67.001 → 125 | 074.07.001 → 318 | 078.02.003 → 272 | 080.10.001 → 200 |
| 064.11.001 → 118 | 065.38.029 → 120 | 065.67.002 → 125 | 074.07.002 → 318 | 078.02.004 → 272 | 080.11.001 → 200 |
| 064.11.002 → 118 | 065.39.014 → 124 | 065.67.011 → 125 | 074.07.003 → 318 | 078.02.005 → 274 | 080.13.001 → 200 |
| 064.11.003 → 118 | 065.39.029 → 124 | 065.67.022 → 125 | 075.00.001 → 305 | 078.02.006 → 274 | 080.15.001 → 196 |
| 064.11.004 → 118 | 065.40.014 → 124 | 065.70.001 → 126 | 075.00.002 → 305 | 078.02.007 → 272 | 080.15.002 → 196 |
| 064.11.005 → 118 | 065.40.029 → 124 | 065.71.001 → 126 | 075.00.003 → 305 | 078.02.008 → 272 | 080.15.003 → 196 |
| 064.11.006 → 118 | 065.41.014 → 121 | 066.10.001 → 130 | 075.00.004 → 305 | 078.02.009 → 274 | 080.15.004 → 196 |
| 064.11.007 → 118 | 065.41.019 → 121 | 066.10.003 → 130 | 075.00.005 → 305 | 078.03.001 → 280 | 080.16.001 → 197 |
| 064.11.008 → 118 | 065.41.024 → 121 | 066.10.004 → 130 | 075.00.006 → 305 | 078.03.002 → 280 | 080.16.002 → 197 |
| 064.11.009 → 118 | 065.41.029 → 121 | 066.11.001 → 130 | 075.00.007 → 305 | 078.03.003 → 280 | 080.16.003 → 197 |
| 064.11.010 → 118 | 065.42.001 → 120 | 066.11.002 → 130 | 075.01.001 → 305 | 078.03.004 → 280 | 080.16.004 → 197 |
| 064.11.011 → 118 | 065.42.002 → 120 | 066.11.003 → 130 | 075.01.002 → 305 | 078.03.021 → 280 | 080.17.001 → 201 |
| 064.11.012 → 118 | 065.42.003 → 120 | 066.11.004 → 130 | 075.01.003 → 305 | 078.03.022 → 280 | 080.17.002 → 201 |
| 064.12.001 → 118 | 065.42.004 → 120 | 066.11.005 → 130 | 075.01.004 → 305 | 078.03.023 → 280 | 080.18.001 → 201 |
| 064.12.002 → 118 | 065.43.001 → 120 | 067.30.001 → 126 | 075.01.005 → 305 | 078.03.024 → 280 | 080.18.002 → 201 |
| 064.12.003 → 118 | 065.43.002 → 120 | 069.03.005 → 190 | 075.01.006 → 305 | 078.05.002 → 280 | 080.21.007 → 198 |
| 064.12.004 → 118 | 065.43.003 → 120 | 069.03.175 → 193 | 075.01.007 → 305 | 078.05.022 → 280 | 080.21.008 → 198 |
| 064.12.005 → 118 | 065.43.004 → 120 | 069.03.660 → 192 | 075.02.005 → 305 | 078.06.015 → 276 | 080.21.009 → 198 |
| 064.12.006 → 118 | 065.43.005 → 120 | 069.04.001 → 191 | 075.02.006 → 305 | 078.06.050 → 276 | 080.21.010 → 198 |
| 064.12.007 → 118 | 065.43.006 → 120 | 069.04.002 → 191 | 075.02.007 → 305 | 078.07.015 → 277 | 080.22.007 → 198 |
| 064.12.008 → 118 | 065.44.001 → 120 | 069.04.175 → 193 | 075.02.008 → 305 | 078.07.050 → 277 | 080.22.008 → 198 |
| 064.12.009 → 118 | 065.44.002 → 120 | 069.04.660 → 192 | 075.02.009 → 305 | 078.08.120 → 281 | 080.22.009 → 198 |
| 064.12.010 → 118 | 065.44.003 → 120 | 069.05.001 → 193 | 075.03.001 → 304 | 078.12.001 → 273 | 080.22.010 → 198 |
| 064.12.011 → 118 | 065.44.004 → 120 | 071.01.002 → 176 | 075.03.002 → 304 | 078.12.002 → 273 | 080.23.007 → 198 |
| 064.12.012 → 118 | 065.44.005 → 120 | 071.01.003 → 176 | 075.04.001 → 304 | 078.12.003 → 273 | 080.23.008 → 198 |
| 065.10.001 → 298 | 065.44.006 → 120 | 071.01.101 → 176 | 075.05.001 → 305 | 078.12.004 → 273 | 080.23.009 → 198 |
| 065.10.004 → 298 | 065.45.001 → 121 | 071.01.102 → 176 | 075.05.002 → 305 | 078.12.005 → 274 | 080.23.010 → 198 |
| 065.10.006 → 298 | 065.45.002 → 121 | 071.02.001 → 168 | 075.05.003 → 305 | 078.12.006 → 274 | 080.24.007 → 199 |
| 065.18.001 → 120 | 065.45.005 → 121 | 071.02.002 → 168 | 075.05.004 → 305 | 078.12.007 → 273 | 080.24.008 → 199 |
| 065.18.002 → 120 | 065.46.001 → 121 | 071.02.003 → 168 | 076.01.001 → 306 | 078.12.008 → 273 | 080.24.009 → 199 |
| 065.18.003 → 120 | 065.46.002 → 121 | 071.02.004 → 168 | 076.01.002 → 306 | 078.12.009 → 274 | 080.24.010 → 199 |
| 065.18.004 → 120 | 065.46.005 → 121 | 071.02.005 → 168 | 076.01.003 → 307 | 078.17.001 → 281 | 080.25.007 → 199 |
| 065.19.141 → 118 | 065.46.006 → 121 | 071.02.006 → 168 | 076.02.000 → 309 | 078.17.002 → 281 | 080.25.008 → 199 |
| 065.19.142 → 118 | 065.47.001 → 121 | 071.03.001 → 170 | 076.02.001 → 309 | 078.17.003 → 281 | 080.25.009 → 199 |
| 065.19.291 → 118 | 065.47.003 → 121 | 071.05.001 → 169 | 076.02.002 → 309 | 078.18.001 → 281 | 080.25.010 → 199 |
| 065.19.292 → 118 | 065.48.001 → 121 | 071.05.002 → 169 | 076.02.012 → 309 | 078.19.001 → 281 | 080.26.007 → 199 |
| 065.19.293 → 118 | 065.48.005 → 121 | 071.05.003 → 169 | 076.03.001 → 308 | 078.20.015 → 277 | 080.26.008 → 199 |
| 065.21.014 → 118 | 065.52.014 → 122 | 071.05.004 → 169 | 076.04.001 → 307 | 078.20.050 → 277 | 080.26.009 → 199 |
| 065.21.029 → 118 | 065.52.029 → 122 | 071.05.005 → 169 | 076.05.001 → 308 | 078.21.015 → 277 | 080.26.010 → 199 |
| 065.22.014 → 119 | 065.53.014 → 122 | 071.06.001 → 170 | 076.05.002 → 308 | 078.21.050 → 277 | 080.31.001 → 202 |
| 065.22.029 → 119 | 065.53.029 → 122 | 071.06.002 → 170 | 076.05.003 → 308 | 079.01.001 → 72 | 080.31.002 → 202 |
| 065.23.014 → 119 | 065.54.014 → 122 | 071.06.003 → 170 | 076.05.004 → 308 | 079.01.002 → 72 | 080.31.003 → 202 |
| 065.23.029 → 119 | 065.54.029 → 122 | 071.07.002 → 171 | 077.01.000 → 70 | 079.01.003 → 72 | 080.31.004 → 202 |
| 065.24.014 → 119 | 065.55.001 → 122 | 071.07.003 → 171 | 077.01.001 → 70 | 079.01.004 → 72 | 080.31.005 → 202 |
| 065.24.029 → 119 | 065.55.002 → 122 | 071.10.001 → 177 | 077.01.002 → 70 | 079.01.005 → 72 | 080.40.001 → 189 |
| 065.25.014 → 119 | 065.55.003 → 122 | 072.01.001 → 252 | 077.01.003 → 70 | 079.02.001 → 73 | 080.40.003 → 188 |
| 065.25.029 → 119 | 065.55.004 → 122 | 072.01.002 → 252 | 077.01.004 → 70 | 079.02.002 → 73 | 080.40.004 → 188 |
| 065.26.014 → 119 | 065.56.001 → 122 | 072.01.003 → 252 | 077.01.005 → 70 | 079.02.003 → 73 | 080.40.007 → 189 |
| 065.26.029 → 119 | 065.56.002 → 122 | 072.01.004 → 252 | 077.01.006 → 70 | 079.03.001 → 72 | 080.40.010 → 191 |
| 065.27.014 → 119 | 065.56.003 → 122 | 072.01.005 → 252 | 077.01.007 → 70 | 079.03.002 → 72 | 080.40.011 → 189 |
| 065.27.029 → 119 | 065.56.004 → 122 | 072.01.006 → 252 | 077.01.008 → 70 | 079.03.003 → 72 | 080.40.021 → 189 |
| 065.28.014 → 119 | 065.57.001 → 123 | 073.01.001 → 318 | 077.01.021 → 70 | 079.03.003 → 278 | 080.40.101 → 69 |
| 065.28.029 → 119 | 065.57.002 → 123 | 073.03.001 → 318 | 077.01.031 → 70 | 079.03.004 → 72 | 080.40.101 → 190 |
| 065.29.014 → 119 | 065.57.003 → 123 | 073.05.001 → 318 | 077.02.001 → 70 | 079.03.005 → 72 | 080.41.001 → 194 |
| 065.29.029 → 119 | 065.57.004 → 123 | 073.06.001 → 318 | 077.02.002 → 70 | 079.03.005 → 278 | 080.41.002 → 194 |
| 065.30.014 → 124 | 065.58.001 → 123 | 074.01.001 → 319 | 077.02.003 → 70 | 079.03.006 → 278 | 080.41.003 → 194 |
| 065.30.029 → 124 | 065.58.002 → 123 | 074.01.002 → 319 | 077.02.004 → 70 | 079.04.001 → 278 | 080.44.001 → 195 |
| 065.31.014 → 124 | 065.58.003 → 123 | 074.01.003 → 319 | 077.02.005 → 70 | 079.08.015 → 276 | 080.44.101 → 195 |
| 065.31.029 → 124 | 065.58.004 → 123 | 074.01.004 → 319 | 077.02.006 → 70 | 079.08.050 → 276 | 080.45.001 → 195 |

| catalogue no // page |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 080.45.101 → 195 | 083.03.050 → 18 | 094.02.006 → 250 | 094.13.500 → 259 | 094.43.910 → 260 | 095.06.003 → 267 |
| 080.50.001 → 184 | 083.03.050 → 294 | 094.02.007 → 250 | 094.14.005 → 259 | 094.51.005 → 260 | 095.11.001 → 264 |
| 080.50.011 → 184 | 084.01.001 → 17 | 094.02.008 → 250 | 094.14.010 → 259 | 094.51.010 → 260 | 095.11.003 → 264 |
| 080.51.003 → 184 | 084.01.002 → 17 | 094.03.001 → 250 | 094.14.025 → 259 | 094.51.025 → 260 | 095.12.007 → 266 |
| 080.51.004 → 184 | 084.02.001 → 17 | 094.03.002 → 250 | 094.14.050 → 259 | 094.51.050 → 260 | 095.12.008 → 266 |
| 080.51.005 → 184 | 084.02.003 → 17 | 094.03.003 → 250 | 094.14.100 → 259 | 094.51.100 → 260 | 096.00.001 → 263 |
| 080.51.006 → 184 | 084.03.001 → 17 | 094.03.004 → 250 | 094.14.250 → 259 | 094.51.1250 → 260 | 096.00.002 → 263 |
| 080.52.003 → 185 | 084.05.001 → 69 | 094.03.005 → 250 | 094.14.500 → 259 | 094.51.500 → 260 | 096.00.003 → 263 |
| 080.52.004 → 185 | 084.22.001 → 17 | 094.03.006 → 250 | 094.21.005 → 259 | 094.51.901 → 260 | 096.01.001 → 264 |
| 080.52.005 → 185 | 084.22.003 → 17 | 094.03.007 → 250 | 094.21.010 → 259 | 094.51.902 → 260 | 096.01.002 → 264 |
| 080.52.006 → 185 | 085.01.001 → 321 | 094.03.008 → 250 | 094.21.025 → 259 | 094.51.905 → 260 | 096.01.003 → 264 |
| 080.53.001 → 185 | 085.02.001 → 321 | 094.04.001 → 250 | 094.21.050 → 259 | 094.51.910 → 260 | 096.02.001 → 266 |
| 080.53.011 → 185 | 085.03.001 → 321 | 094.04.002 → 250 | 094.21.100 → 259 | 094.52.005 → 260 | 096.02.002 → 266 |
| 080.53.021 → 185 | 086.02.001 → 317 | 094.04.003 → 250 | 094.21.250 → 259 | 094.52.010 → 260 | 096.02.003 → 266 |
| 080.53.031 → 185 | 086.02.002 → 317 | 094.04.004 → 250 | 094.21.500 → 259 | 094.52.025 → 260 | 096.02.004 → 266 |
| 080.65.002 → 171 | 086.02.003 → 317 | 094.04.005 → 250 | 094.22.005 → 259 | 094.52.050 → 260 | 096.03.001 → 269 |
| 080.65.003 → 190 | 086.02.004 → 317 | 094.04.006 → 250 | 094.22.010 → 259 | 094.52.100 → 260 | 096.05.001 → 269 |
| 080.65.004 → 171 | 086.05.001 → 321 | 094.04.007 → 250 | 094.22.025 → 259 | 094.52.250 → 260 | 096.05.003 → 267 |
| 080.66.001 → 186 | 087.01.001 → 57 | 094.04.008 → 250 | 094.22.050 → 259 | 094.52.500 → 260 | 096.05.004 → 267 |
| 080.66.002 → 186 | 087.01.002 → 57 | 094.05.001 → 251 | 094.22.100 → 259 | 094.52.901 → 260 | 096.05.011 → 269 |
| 080.66.003 → 186 | 087.02.001 → 57 | 094.05.002 → 251 | 094.22.250 → 259 | 094.52.902 → 260 | 096.05.012 → 269 |
| 080.66.004 → 186 | 087.02.002 → 57 | 094.05.003 → 251 | 094.22.500 → 259 | 094.52.905 → 260 | 097.01.011 → 270 |
| 080.66.005 → 186 | 087.03.001 → 57 | 094.05.004 → 251 | 094.31.005 → 258 | 094.52.910 → 260 | 097.01.020 → 270 |
| 080.66.006 → 186 | 087.03.002 → 57 | 094.05.005 → 251 | 094.31.010 → 258 | 094.53.005 → 260 | 097.02.011 → 270 |
| 080.67.001 → 171 | 087.05.001 → 57 | 094.05.006 → 251 | 094.31.020 → 258 | 094.53.010 → 260 | 097.02.020 → 270 |
| 080.75.001 → 187 | 087.05.002 → 57 | 094.05.007 → 251 | 094.31.050 → 258 | 094.53.025 → 260 | 097.03.001 → 268 |
| 080.76.001 → 187 | 088.01.001 → 320 | 094.05.008 → 251 | 094.31.100 → 258 | 094.53.050 → 260 | 097.03.002 → 268 |
| 080.77.001 → 187 | 088.02.001 → 320 | 094.06.001 → 251 | 094.31.250 → 258 | 094.53.100 → 260 | 097.03.011 → 270 |
| 081.01.060 → 310 | 088.02.002 → 320 | 094.06.002 → 251 | 094.32.005 → 258 | 094.53.250 → 260 | 097.03.020 → 270 |
| 081.01.080 → 310 | 088.02.003 → 320 | 094.06.003 → 251 | 094.32.010 → 258 | 094.53.500 → 260 | 097.04.001 → 268 |
| 081.01.100 → 310 | 088.03.001 → 320 | 094.06.004 → 251 | 094.32.020 → 258 | 094.53.901 → 260 | 097.04.002 → 268 |
| 081.01.120 → 310 | 089.03.012 → 293 | 094.06.005 → 251 | 094.32.050 → 258 | 094.53.902 → 260 | 097.04.011 → 270 |
| 081.01.150 → 310 | 089.03.013 → 293 | 094.06.006 → 251 | 094.32.100 → 258 | 094.53.905 → 260 | 097.04.020 → 270 |
| 081.02.061 → 310 | 089.08.001 → 292 | 094.06.007 → 251 | 094.32.250 → 258 | 094.91.002 → 261 | 097.05.106 → 263 |
| 081.02.091 → 310 | 091.11.102 → 284 | 094.06.008 → 251 | 094.33.010 → 258 | 094.91.005 → 261 | 097.05.106 → 266 |
| 081.02.092 → 310 | 091.11.105 → 284 | 094.07.001 → 251 | 094.33.020 → 258 | 094.91.010 → 261 | 097.05.107 → 263 |
| 081.02.093 → 310 | 091.15.001 → 284 | 094.07.002 → 251 | 094.33.050 → 258 | 094.91.020 → 261 | 097.05.107 → 266 |
| 081.02.094 → 310 | 091.15.002 → 284 | 094.07.003 → 251 | 094.33.100 → 258 | 094.92.001 → 261 | 097.05.108 → 263 |
| 081.02.121 → 310 | 091.15.003 → 284 | 094.07.004 → 251 | 094.33.250 → 258 | 094.92.005 → 261 | 097.05.108 → 266 |
| 081.02.161 → 310 | 091.15.004 → 284 | 094.07.005 → 251 | 094.41.005 → 260 | 094.92.010 → 261 | 097.05.109 → 264 |
| 081.02.191 → 310 | 091.15.005 → 284 | 094.07.006 → 251 | 094.41.010 → 260 | 094.92.020 → 261 | 097.05.109 → 265 |
| 081.02.192 → 310 | 092.01.001 → 285 | 094.07.007 → 251 | 094.41.025 → 260 | 094.92.050 → 261 | 097.05.109 → 266 |
| 081.02.193 → 310 | 092.16.001 → 289 | 094.07.008 → 251 | 094.41.050 → 260 | 095.00.001 → 263 | 097.05.110 → 264 |
| 081.02.194 → 310 | 092.16.002 → 289 | 094.08.001 → 251 | 094.41.100 → 260 | 095.00.002 → 263 | 097.05.110 → 265 |
| 081.02.221 → 310 | 092.18.001 → 288 | 094.08.002 → 251 | 094.41.250 → 260 | 095.00.003 → 263 | 097.05.110 → 266 |
| 081.04.060 → 311 | 092.18.003 → 288 | 094.08.003 → 251 | 094.41.500 → 260 | 095.00.004 → 263 | 097.05.111 → 264 |
| 081.04.160 → 311 | 092.18.008 → 292 | 094.08.004 → 251 | 094.41.901 → 260 | 095.01.001 → 263 | 097.05.111 → 265 |
| 081.10.001 → 314 | 092.19.001 → 289 | 094.08.005 → 251 | 094.41.902 → 260 | 095.01.002 → 263 | 097.05.111 → 266 |
| 081.13.060 → 312 | 092.19.004 → 289 | 094.08.006 → 251 | 094.41.905 → 260 | 095.01.003 → 264 | 098.01.001 → 254 |
| 081.13.090 → 312 | 092.19.009 → 289 | 094.08.007 → 251 | 094.41.910 → 260 | 095.01.004 → 264 | 098.01.002 → 254 |
| 081.14.001 → 304 | 092.22.101 → 287 | 094.08.008 → 251 | 094.42.005 → 260 | 095.01.005 → 263 | 098.01.003 → 254 |
| 081.15.001 → 315 | 092.22.102 → 287 | 094.11.005 → 259 | 094.42.010 → 260 | 095.01.006 → 263 | 098.01.004 → 254 |
| 081.15.101 → 315 | 092.23.101 → 287 | 094.11.010 → 259 | 094.42.025 → 260 | 095.02.001 → 265 | 098.01.005 → 254 |
| 081.20.001 → 312 | 092.23.102 → 287 | 094.11.025 → 259 | 094.42.050 → 260 | 095.02.002 → 265 | 098.01.006 → 254 |
| 082.01.001 → 314 | 092.35.001 → 285 | 094.11.050 → 259 | 094.42.100 → 260 | 095.02.003 → 266 | 098.01.007 → 255 |
| 082.01.002 → 314 | 092.35.002 → 285 | 094.11.100 → 259 | 094.42.250 → 260 | 095.02.004 → 266 | 098.01.008 → 255 |
| 082.01.003 → 314 | 093.01.001 → 286 | 094.11.250 → 259 | 094.42.500 → 260 | 095.03.001 → 268 | 098.01.009 → 255 |
| 082.02.001 → 315 | 093.01.002 → 286 | 094.11.500 → 259 | 094.42.901 → 260 | 095.03.002 → 268 | 098.01.010 → 255 |
| 082.02.003 → 315 | 094.01.001 → 250 | 094.12.005 → 259 | 094.42.902 → 260 | 095.03.003 → 268 | 098.01.011 → 255 |
| 082.03.001 → 316 | 094.01.002 → 250 | 094.12.010 → 259 | 094.42.905 → 260 | 095.03.004 → 268 | 098.01.012 → 255 |
| 082.03.003 → 316 | 094.01.003 → 250 | 094.12.025 → 259 | 094.42.910 → 260 | 095.03.011 → 269 | 098.02.001 → 254 |
| 083.03.001 → 18 | 094.01.004 → 250 | 094.12.050 → 259 | 094.43.005 → 260 | 095.03.012 → 269 | 098.02.002 → 254 |
| 083.03.001 → 294 | 094.01.005 → 250 | 094.12.100 → 259 | 094.43.010 → 260 | 095.04.001 → 265 | 098.03.001 → 255 |
| 083.03.002 → 18 | 094.01.006 → 250 | 094.12.250 → 259 | 094.43.025 → 260 | 095.04.002 → 265 | 098.03.002 → 255 |
| 083.03.002 → 294 | 094.01.007 → 250 | 094.12.500 → 259 | 094.43.050 → 260 | 095.04.003 → 265 | 099.01.001 → 110 |
| 083.03.005 → 18 | 094.01.008 → 250 | 094.13.005 → 259 | 094.43.100 → 260 | 095.04.004 → 265 | 099.01.002 → 110 |
| 083.03.005 → 294 | 094.02.001 → 250 | 094.13.010 → 259 | 094.43.250 → 260 | 095.04.005 → 265 | 099.01.003 → 110 |
| 083.03.010 → 18 | 094.02.002 → 250 | 094.13.025 → 259 | 094.43.500 → 260 | 095.05.001 → 267 | 099.01.006 → 110 |
| 083.03.010 → 294 | 094.02.003 → 250 | 094.13.050 → 259 | 094.43.901 → 260 | 095.05.002 → 267 | 099.02.001 → 111 |
| 083.03.025 → 18 | 094.02.004 → 250 | 094.13.100 → 259 | 094.43.902 → 260 | 095.06.001 → 267 | 099.02.002 → 111 |
| 083.03.025 → 294 | 094.02.005 → 250 | 094.13.250 → 259 | 094.43.905 → 260 | 095.06.002 → 267 | 099.02.011 → 111 |

code index

| catalogue no // page |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 099.03.050 → 111 | 104.01.009 → 253 | 123.01.002 → 290 | 608.13.250 → 248 | 618.23.001 → 299 | 623.11.110 → 139 |
| 099.03.072 → 111 | 104.01.010 → 253 | 123.01.028 → 290 | 608.13.500 → 248 | 618.24.001 → 299 | T-B-010 → 38 |
| 099.03.090 → 111 | 104.01.011 → 253 | 123.01.096 → 291 | 608.13.901 → 248 | 618.25.001 → 299 | T-B-011 → 38 |
| 099.05.009 → 112 | 104.01.012 → 253 | 123.02.028 → 291 | 608.13.902 → 248 | 618.32.001 → 299 | T-B-020 → 38 |
| 099.05.013 → 112 | 105.01.110 → 147 | 123.02.096 → 291 | 608.14.101 → 248 | 618.41.001 → 299 | T-B-1000 → 38 |
| 099.05.019 → 112 | 105.01.125 → 147 | 123.03.028 → 290 | 608.14.250 → 248 | 619.01.001 → 240 | T-B-1250 → 38 |
| 099.05.019 → 275 | 105.02.110 → 147 | 123.03.096 → 291 | 608.14.500 → 248 | 619.01.050 → 240 | T-B-200 → 38 |
| 099.05.025 → 112 | 105.02.110 → 147 | 124.01.001 → 291 | 608.14.901 → 248 | 619.01.100 → 240 | T-B-5000 → 38 |
| 099.05.025 → 275 | 105.02.125 → 147 | 502.04.250 → 215 | 608.16.102 → 248 | 619.01.101 → 241 | TF-010 → 38 |
| 099.05.109 → 112 | 105.03.110 → 147 | 502.04.500 → 215 | 608.16.250 → 248 | 619.01.103 → 241 | TF-011 → 38 |
| 099.05.113 → 112 | 105.03.125 → 147 | 502.04.901 → 215 | 608.16.500 → 248 | 619.01.104 → 240 | TF-020 → 38 |
| 099.06.024 → 113 | 105.11.110 → 147 | 502.07.250 → 215 | 608.16.901 → 248 | 619.01.250 → 240 | TF-100 → 38 |
| 099.06.033 → 113 | 105.11.125 → 147 | 502.07.500 → 215 | 609.01.056 → 245 | 619.01.500 → 240 | TF-1000 → 38 |
| 099.06.038 → 113 | 105.12.110 → 147 | 502.07.901 → 215 | 609.01.100 → 245 | 619.02.001 → 241 | TF-1250 → 38 |
| 099.06.038 → 275 | 105.12.125 → 147 | 502.10.250 → 215 | 611.01.001 → 166 | 620.01.001 → 239 | TF-200 → 38 |
| 099.06.124 → 113 | 105.13.110 → 147 | 502.10.500 → 215 | 613.01.001 → 228 | 620.01.001 → 275 | TF-R-S-010 → 38 |
| 099.06.133 → 113 | 105.13.125 → 147 | 502.10.901 → 215 | 613.02.001 → 227 | 621.01.101 → 176 | TF-R-S-011 → 38 |
| 099.07.033 → 113 | 106.01.110 → 147 | 601.01.023 → 180 | 613.02.002 → 227 | 621.05.001 → 178 | TF-R-S-020 → 38 |
| 099.07.038 → 113 | 106.01.125 → 147 | 601.02.024 → 181 | 613.02.050 → 227 | 621.05.003 → 178 | TF-R-S-100 → 38 |
| 099.11.001 → 183 | 106.02.110 → 147 | 602.01.001 → 243 | 613.02.100 → 227 | 621.05.006 → 178 | TF-R-S-1000 → 38 |
| 099.11.002 → 183 | 106.02.125 → 147 | 602.01.101 → 243 | 613.02.250 → 227 | 621.05.010 → 178 | TF-R-S-1250 → 38 |
| 099.11.003 → 183 | 106.03.110 → 147 | 602.02.001 → 243 | 613.02.500 → 227 | 621.05.015 → 178 | TF-R-S-200 → 38 |
| 099.11.004 → 183 | 106.03.125 → 147 | 602.21.001 → 166 | 613.03.001 → 229 | 621.05.022 → 178 | T-R-010 → 38 |
| 099.12.001 → 183 | 106.11.110 → 147 | 602.31.001 → 218 | 613.04.001 → 230 | 621.05.028 → 178 | T-R-011 → 38 |
| 099.12.002 → 183 | 106.11.125 → 147 | 602.31.002 → 219 | 613.05.001 → 230 | 621.05.101 → 178 | T-R-020 → 38 |
| 099.12.003 → 183 | 106.12.110 → 147 | 602.31.003 → 220 | 613.06.001 → 226 | 621.05.103 → 178 | T-R-1000 → 38 |
| 099.12.004 → 183 | 106.12.125 → 147 | 602.31.004 → 220 | 613.07.001 → 229 | 621.05.106 → 178 | T-R-1250 → 38 |
| 099.13.001 → 183 | 106.13.110 → 147 | 602.31.005 → 220 | 613.08.001 → 231 | 621.05.110 → 178 | T-R-200 → 38 |
| 099.13.002 → 183 | 106.13.125 → 147 | 602.31.006 → 220 | 613.11.001 → 237 | 621.05.115 → 178 | T-R-S-010 → 38 |
| 099.13.003 → 183 | 107.40.040 → 147 | 602.31.007 → 221 | 613.21.001 → 300 | 621.05.122 → 178 | T-R-S-011 → 38 |
| 099.13.004 → 183 | 107.40.140 → 147 | 602.31.101 → 218 | 613.22.001 → 302 | 621.06.003 → 179 | T-R-S-020 → 38 |
| 099.14.001 → 183 | 107.40.158 → 147 | 602.32.001 → 221 | 613.23.001 → 301 | 621.06.006 → 179 | T-R-S-1000 → 38 |
| 099.14.003 → 183 | 107.58.058 → 147 | 603.01.001 → 154 | 613.31.001 → 303 | 621.06.010 → 179 | T-R-S-1250 → 38 |
| 099.15.001 → 183 | 107.58.158 → 147 | 603.02.001 → 155 | 613.32.001 → 231 | 621.08.001 → 190 | T-R-S-200 → 38 |
| 099.15.002 → 183 | 108.01.001 → 256 | 603.03.001 → 157 | 615.01.001 → 234 | 621.11.001 → 162 | T-R-S-5000 → 38 |
| 099.15.003 → 183 | 108.01.002 → 256 | 603.03.101 → 156 | 615.01.012 → 162 | 621.11.050 → 162 | |
| 099.15.004 → 183 | 108.01.003 → 256 | 603.03.102 → 156 | 615.01.012 → 163 | 621.11.103 → 162 | |
| 099.16.002 → 183 | 108.01.004 → 256 | 603.04.001 → 157 | 615.01.012 → 234 | 621.11.250 → 162 | |
| 099.16.004 → 183 | 108.01.005 → 256 | 603.05.001 → 158 | 615.01.101 → 235 | 621.12.001 → 163 | |
| 099.17.001 → 183 | 108.01.006 → 256 | 603.06.001 → 159 | 615.01.102 → 235 | 621.12.103 → 163 | |
| 099.17.003 → 183 | 108.01.007 → 256 | 603.06.101 → 159 | 615.01.103 → 235 | 621.12.905 → 163 | |
| 099.18.001 → 183 | 108.01.008 → 256 | 603.06.102 → 159 | 615.01.104 → 235 | 621.12.908 → 163 | |
| 099.18.002 → 183 | 108.01.009 → 256 | 603.07.001 → 160 | 615.02.001 → 235 | 621.21.001 → 177 | |
| 099.18.003 → 183 | 108.01.010 → 256 | 603.07.101 → 161 | 615.11.056 → 244 | 622.01.001 → 236 | |
| 099.18.004 → 183 | 108.01.011 → 256 | 603.07.102 → 161 | 615.11.100 → 244 | 622.01.101 → 237 | |
| 099.19.001 → 183 | 108.01.012 → 256 | 603.07.103 → 161 | 616.01.001 → 212 | 622.01.102 → 237 | |
| 099.19.003 → 183 | 108.01.013 → 256 | 603.07.104 → 161 | 616.01.101 → 214 | 622.01.103 → 237 | |
| 099.50.001 → 112 | 108.01.014 → 256 | 603.07.105 → 161 | 616.01.102 → 214 | 622.01.104 → 237 | |
| 099.60.001 → 112 | 108.01.015 → 256 | 603.07.106 → 161 | 616.01.103 → 214 | 622.01.105 → 237 | |
| 101.01.001 → 216 | 108.01.016 → 257 | 603.11.001 → 313 | 616.01.104 → 214 | 622.01.106 → 237 | |
| 101.01.002 → 216 | 108.02.001 → 257 | 605.01.001 → 140 | 616.02.001 → 212 | 622.01.107 → 237 | |
| 101.02.001 → 216 | 120.01.025 → 296 | 606.01.005 → 242 | 616.02.002 → 212 | 622.01.108 → 237 | |
| 101.02.002 → 216 | 120.01.075 → 296 | 606.01.007 → 242 | 616.02.101 → 214 | 622.02.001 → 237 | |
| 101.02.003 → 216 | 120.01.175 → 296 | 606.01.010 → 242 | 616.02.102 → 214 | 622.02.101 → 237 | |
| 101.03.001 → 181 | 120.02.025 → 296 | 608.01.001 → 164 | 616.11.001 → 213 | 622.03.001 → 236 | |
| 101.03.002 → 217 | 120.02.075 → 296 | 608.01.101 → 165 | 616.11.101 → 214 | 622.03.101 → 237 | |
| 101.03.003 → 217 | 120.02.175 → 296 | 608.11.100 → 246 | 616.11.102 → 214 | 622.03.102 → 237 | |
| 101.03.004 → 217 | 120.03.035 → 295 | 608.11.250 → 246 | 616.11.103 → 214 | 622.03.103 → 237 | |
| 102.28.080 → 131 | 120.03.035 → 311 | 608.11.500 → 246 | 616.11.104 → 214 | 622.03.104 → 237 | |
| 102.30.080 → 131 | 120.03.060 → 295 | 608.11.901 → 246 | 616.11.105 → 214 | 622.03.105 → 237 | |
| 102.33.080 → 131 | 120.03.060 → 311 | 608.11.902 → 246 | 616.11.107 → 214 | 622.03.106 → 237 | |
| 102.33.094 → 131 | 120.03.090 → 295 | 608.11.904 → 246 | 616.11.108 → 214 | 622.03.107 → 237 | |
| 102.34.120 → 131 | 120.03.090 → 311 | 608.11.906 → 246 | 616.12.001 → 213 | 622.03.108 → 237 | |
| 104.01.001 → 253 | 121.01.013 → 295 | 608.11.910 → 246 | 618.01.001 → 238 | 622.03.109 → 237 | |
| 104.01.002 → 253 | 121.01.013 → 316 | 608.12.100 → 247 | 618.01.101 → 238 | 622.03.110 → 237 | |
| 104.01.003 → 253 | 121.02.020 → 295 | 608.12.250 → 247 | 618.01.102 → 238 | 622.11.001 → 141 | |
| 104.01.004 → 253 | 121.02.020 → 316 | 608.12.500 → 247 | 618.01.103 → 238 | 622.12.001 → 141 | |
| 104.01.005 → 253 | 122.01.006 → 297 | 608.12.901 → 247 | 618.11.001 → 239 | 623.01.004 → 138 | |
| 104.01.006 → 253 | 122.01.012 → 297 | 608.12.902 → 247 | 618.12.001 → 239 | 623.01.008 → 138 | |
| 104.01.007 → 253 | 122.01.024 → 297 | 608.12.904 → 247 | 618.21.001 → 299 | 623.02.004 → 139 | |
| 104.01.008 → 253 | 122.01.096 → 297 | 608.13.100 → 248 | 618.22.001 → 299 | 623.02.008 → 139 | |

ISOLAB

Laborgeräte GmbH

ISOLAB
Laborgeräte GmbH

Bahnhofstrasse 10, D97877 Wertheim - Germany
Tel: +49 9342 912355 / Fax: +49 9342 912357
info@isolab.de

www.isolab.de