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# FITTINGS FOR SPECIAL WATER

**PREMIUM range**

99B0049 Rev. 2 - 04.03.2024

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## BROEN-LAB UNIFLEX™

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### THIS IS BROEN-LAB UNIFLEX™

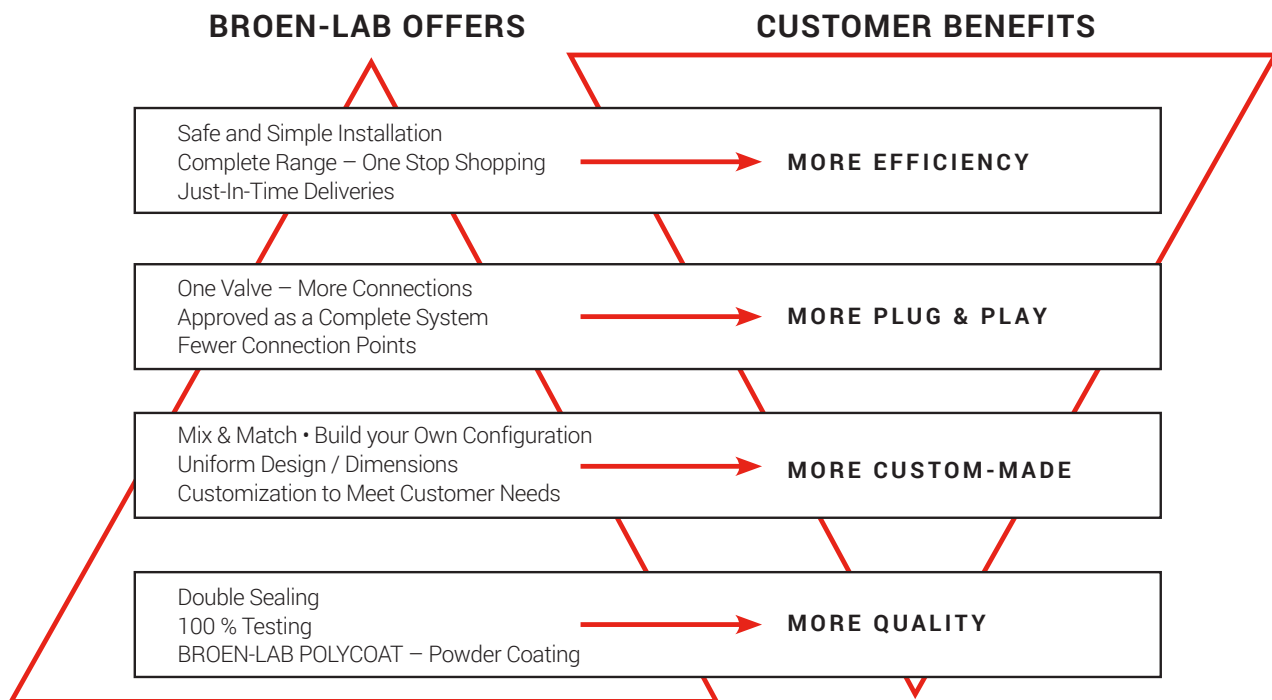
BROEN-LAB UniFlex™ line offers a very high quality and durability combined with the complete programme, this adds up to low LCC (Life Cycle Costs). Our line takes the standards in the market to a higher level.

BROEN-LAB UniFlex™ fittings for special water are designed for laboratory use. The operation and configuration of the fittings are highly adapted to the requirements of a modern laboratory. The fittings are surface treated with BROEN-LAB POLY-COAT powder coating, which is highly resistant to most chemicals, UV light and heat – Please refer to the “BROEN-LAB POLY-COAT” brochure for further information.

All special water fittings are as a standard delivered with a detachable hose nozzle with a loose union nut which offers quick and easy assembly and disassembly even when a hose is attached to the fitting.

BROEN-LAB UniFlex™ fittings for special water are designed especially to eliminate corrosion problems in connection with use of purified water. Our fittings offer a number of advantages – A.O.:

- Complete line of Stainless Steel fittings
- Complete line of plastic (PVDF) lined fittings
- Recirculating fittings
- Designed to secure maximum purity of the water
- PTFE diaphragm
- Uniform design with the rest of the BROEN-LAB UniFlex™ programme



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## PRODUCT OVERVIEW

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### WHAT IS SPECIAL WATER?

Special water is water that has been treated to ensure maximum purity of the water. This is important for certain tests in order to avoid contamination of the samples. The water can be cleaned in many different ways – A.O.:

- Demineralisation (Boiling)
- RO – Reverse Osmosis
- UV light
- Ultra Filtration
- Desalination

### WHY DO I NEED SPECIAL FITTINGS?

Special water or purified water becomes very aggressive when treated, as a consequence of this normal brass fittings will corrode very quickly if used in connection with these media. Our fittings for special water offer materials that are suitable and tested for use with treated water and all components are selected to ensure maximum corrosion resistance.

In order to secure maximum purity of water our fittings for special water have been designed with special components and technologies to ensure that test samples are not polluted.

### OUR SOLUTIONS

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Stainless Steel fittings



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Fittings with plastic inner tube



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Recirculating fittings



## WALL MOUNTED FITTING - FULLY RECIRCULATING

### SPECIFICATIONS

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Removable plastic

Headwork: Diaphragm type

Opening/closing function: 1 1/2 x 360°

Temperature range: 0-65°C

Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

Weight: 1.6 kg

### MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE

Plastics: PP, PP-n, PVDF

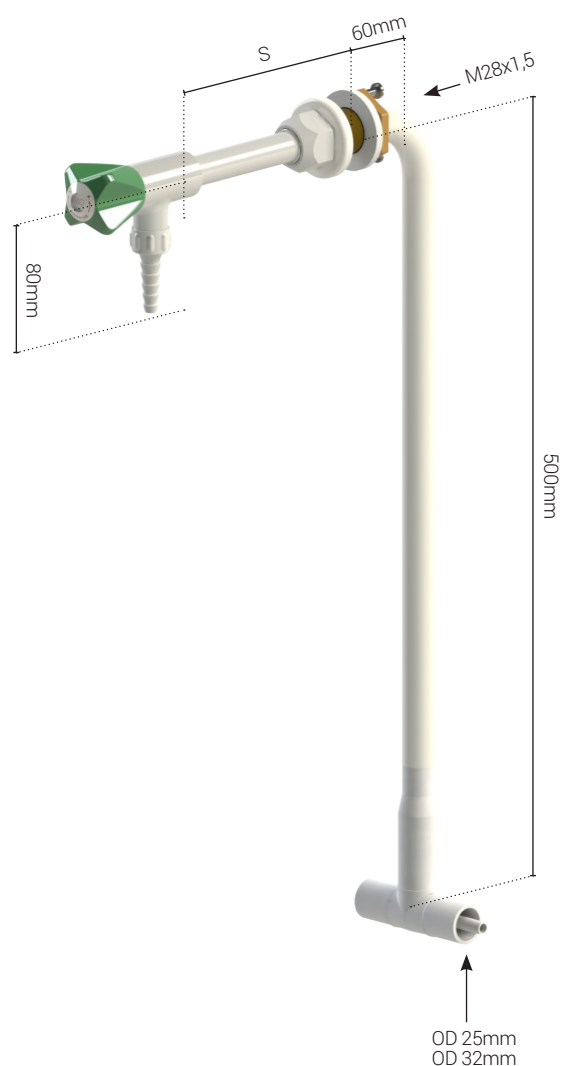
Rubber: EPDM

### ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- also available in PVDF OD 20mm



### Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm
OD 25 mm	2533 039 10XX	2533 041 10XX
OD 32 mm	2533 040 10XX	2533 042 10XX

Replace **XX** with one of these media types:



**03** • Distilled water



**36** • Deionized water, cold

## BENCH MOUNTED FITTING ON A COLUMN - FULLY RECIRCULATING

### SPECIFICATIONS

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Removable plastic

Headwork: Diaphragm type

Opening/closing function: 1 1/2 x 360°

Temperature range: 0-65°C

Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

Weight: 1.8 kg

### MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE

Plastics: PP, PP-n, PVDF

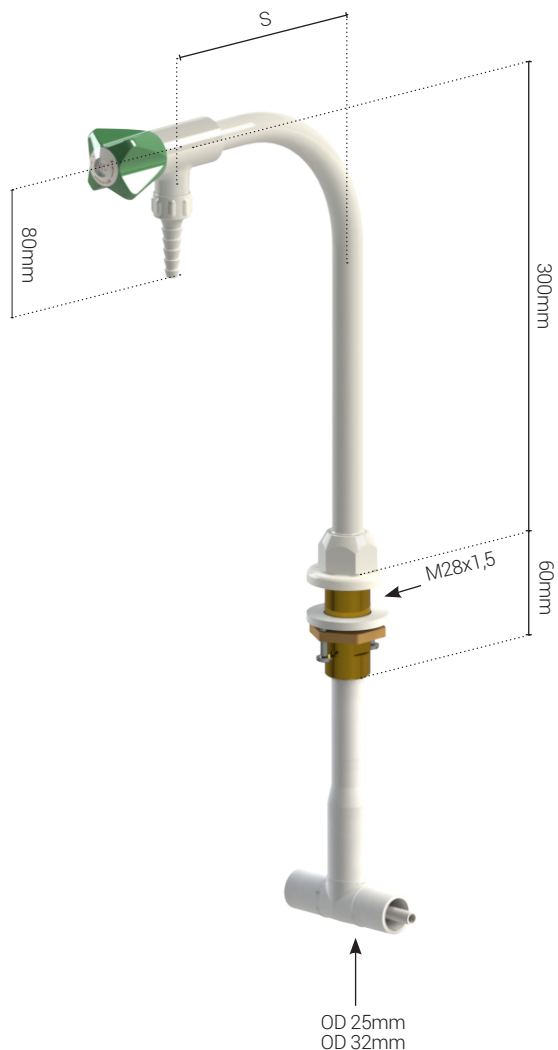
Rubber: EPDM

### ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- also available in ABS (1, 1 1/4, 1 1/2) and PVDF OD 20mm



### Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm
OD 25 mm	2533 043 10XX	2533 031 10XX
OD 32 mm	2533 044 10XX	2533 045 10XX

Replace **XX** with one of these media types:



**03** • Distilled water



**36** • Deionized water, cold

## WALL MOUNTED FITTING WITH PLASTIC INNER TUBE

### SPECIFICATIONS

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Removable plastic

Headwork: Diaphragm type

Opening/closing function: 1 1/2 x 360°

Temperature range: 0-65°C

Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

Weight: 0.7 kg

### MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE

Plastics: PVDF, PP

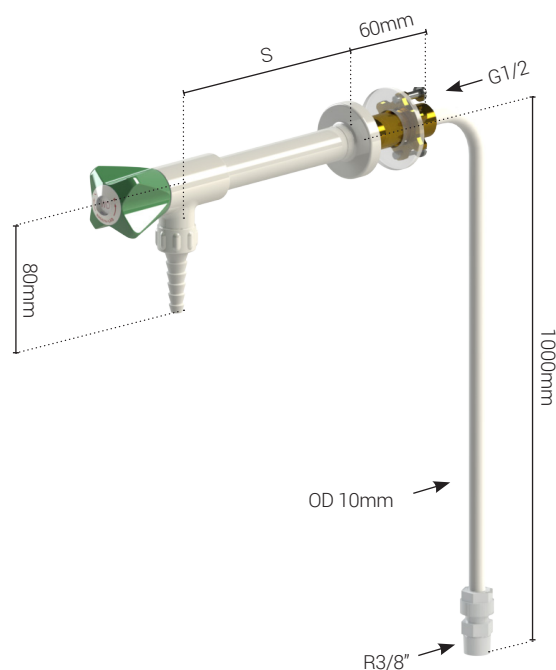
Rubber: EPDM

### ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different sizes of push fittings
- different inlet lengths



Can be delivered without R3/8" push fitting

### Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm
With R3/8" fitting	2533 034 10 <b>XX-YY</b>	2533 035 10 <b>XX-YY</b>
OD10 hose	2533 017 10 <b>XX-YY</b>	2533 019 10 <b>XX-YY</b>

Replace **XX** with one of these media types:



**03** • Distilled water



**36** • Deionized water, cold

Replace **YY** with the inlet type you need on page 23

## BENCH MOUNTED FITTING ON A COLUMN WITH PLASTIC INNER TUBE

### SPECIFICATIONS

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Removable plastic

Headwork: Diaphragm type

Opening/closing function: 1 1/2 x 360°

Temperature range: 0-65°C

Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

Weight: 0.7 kg

### MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE

Plastics: PVDF, PP

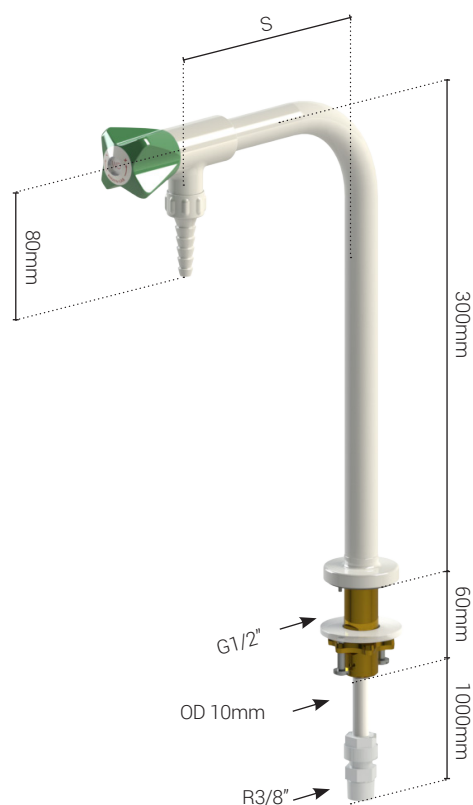
Rubber: EPDM

### ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different sizes of push fittings
- different inlet lengths



Can be delivered without R3/8" push fitting

### Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm
With R3/8" fitting	2533 046 10XX-YY	2533 033 10XX-YY
OD10 hose	2533 008 10XX-YY	2533 010 10XX-YY

Replace **XX** with one of these media types:



03 • Distilled water



36 • Deionized water, cold

Replace **YY** with the inlet type you need on page 23



## SUSPENDED FITTING WITH PLASTIC INNER TUBE

### SPECIFICATIONS

Handle: Plastic  
 Media indication: according to EN13792  
 Hose nozzle: Removable plastic  
 Headwork: Diaphragm type  
 Opening/closing function: 1 1/2 x 360°  
 Temperature range: 0-65°C  
 Max. working pressure: 10 bar / 147 psi  
 Test pressure: 1 x working pressure  
 Weight: 0.7 kg

### MATERIALS WITH MEDIA CONTACT

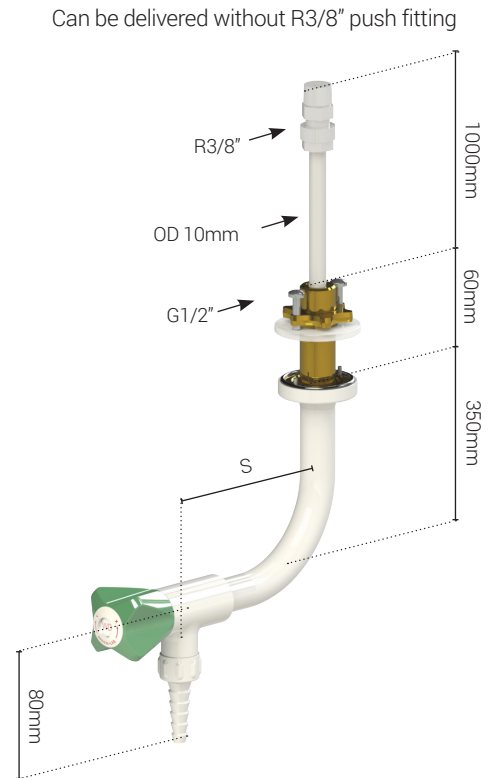
Diaphragm: PTFE  
 Plastics: PVDF, PP  
 Rubber: EPDM

### ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different sizes of push fittings
- different inlet lengths
- straight valve



### Configuration options

Choose connection OD

With R3/8" fitting	2533 254 10 <b>XX-YY</b>
OD10 hose	2533 255 10 <b>XX-YY</b>

Replace **XX** with one of these media types:



03 • Distilled water



36 • Deionized water, cold

Replace **YY** with the inlet type you need on page 23

## WALL MOUNTED FITTING IN STAINLESS STEEL

### SPECIFICATIONS

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Removable/external G3/4 thread, metal

Headwork: Diaphragm type

Opening/closing function: 1 1/2 x 360°

Temperature range: 0-90°C

Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

Weight: 0.9 kg

### MATERIALS WITH MEDIA CONTACT

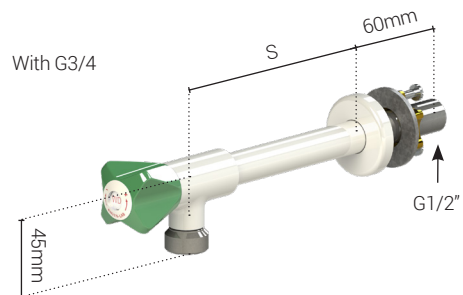
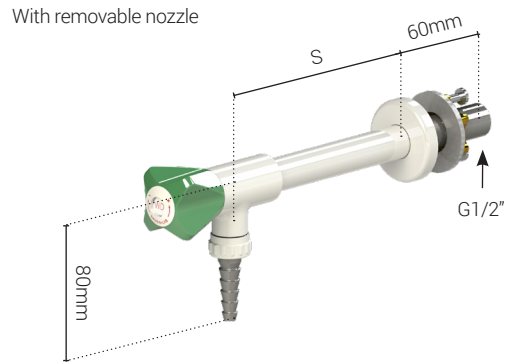
Metals: Stainless Steel, AISI 316

Diaphragm: PTFE

Rubber: EPDM



### ORDERING INFORMATION

For standard configuration please refer to the item numbers below.



### Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm
With removable nozzle 	2533 001 10XX-09	2533 002 10XX-09
With G3/4 	2533 032 10XX-09	2533 047 10XX-09

Replace **XX** with one of these media types:



**03** • Distilled water



**36** • Deionized water, cold

## BENCH MOUNTED FITTING ON A COLUMN IN STAINLESS STEEL

### SPECIFICATIONS

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Removable/external G3/4 thread, metal

Headwork: Diaphragm type

Opening/closing function: 1 1/2 x 360°

Temperature range: 0-90°C

Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

Weight: 1.4 kg

### MATERIALS WITH MEDIA CONTACT

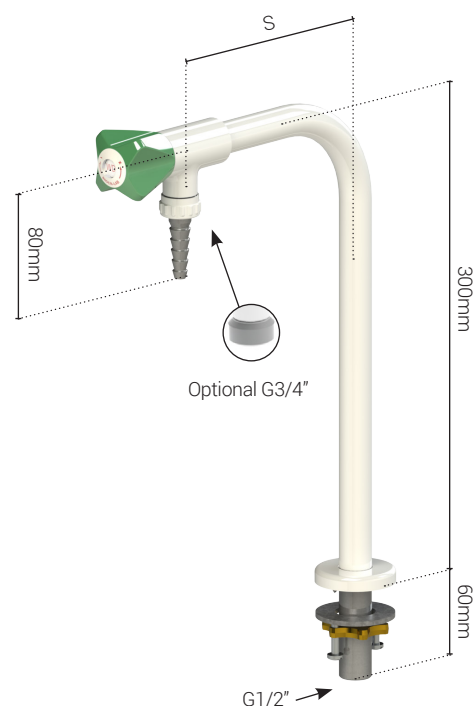
Metals: Stainless Steel, AISI 316

Diaphragm: PTFE

Rubber: EPDM



### ORDERING INFORMATION

For standard configuration please refer to the item numbers below.



### Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm
With removable nozzle 	2533 003 10XX-09	2533 004 10XX-09
With G3/4" 	2533 048 10XX-09	2533 049 10XX-09

Replace **XX** with one of these media types:



**03** • Distilled water



**36** • Deionized water, cold

# BENCH MOUNTED FITTING WITH SWIVEL SPOUT WITH PLASTIC INNER TUBE

## SPECIFICATIONS

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792  
 Hose nozzle: Removable plastic  
 Spout: Full swivel action  
 Headwork: Diaphragm type  
 Opening/closing function: 1 1/2 x 360°  
 Temperature range: 0-65°C  
 Max. working pressure: 10 bar / 147 psi  
 Test pressure: 1 x working pressure  
 Weight: 1.0 kg

## MATERIALS WITH MEDIA CONTACT

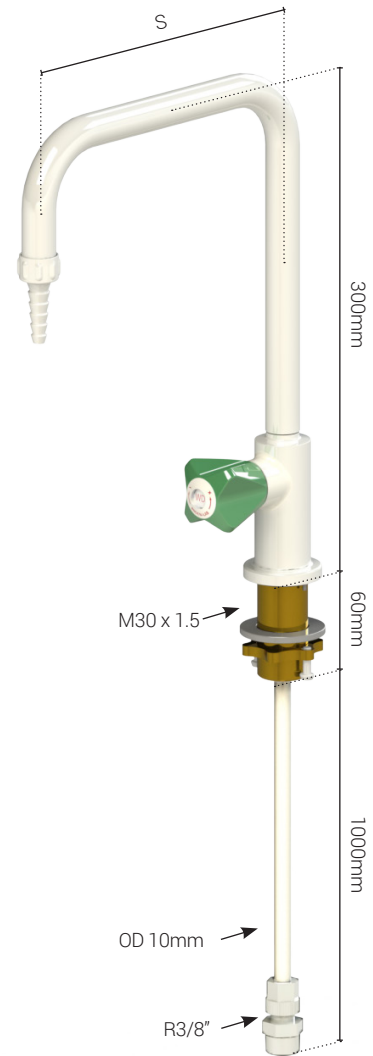
Diaphragm: PTFE  
 Plastics: PVDF, PP  
 Rubber: EPDM

## ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:



- different sizes of push fittings
- other inlet options



Can be delivered without R3/8" push fitting

## Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm	S = 250 mm	S = 300 mm
With removable nozzle 	2534 045 10XX-YY	2534 041 10XX-YY	2534 046 10XX-YY	2534 048 10XX-YY
With G3/4" 	2534 036 10XX-YY	2534 037 10XX-YY	2534 047 10XX-YY	2534 049 10XX-YY

Replace **XX** with one of these media types:



03 • Distilled water



36 • Deionized water, cold

Replace **YY** with the inlet type you need on page 23

## WALL MOUNTED FITTING WITH SWIVEL SPOUT WITH PLASTIC INNER TUBE

### SPECIFICATIONS

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Removable plastic

Spout: Full swivel action

Headwork: Diaphragm type

Opening/closing function: 1 1/2 x 360°

Temperature range: 0-65°C

Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

Weight: 1.2 kg

### MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE

Plastics: PVDF, PP

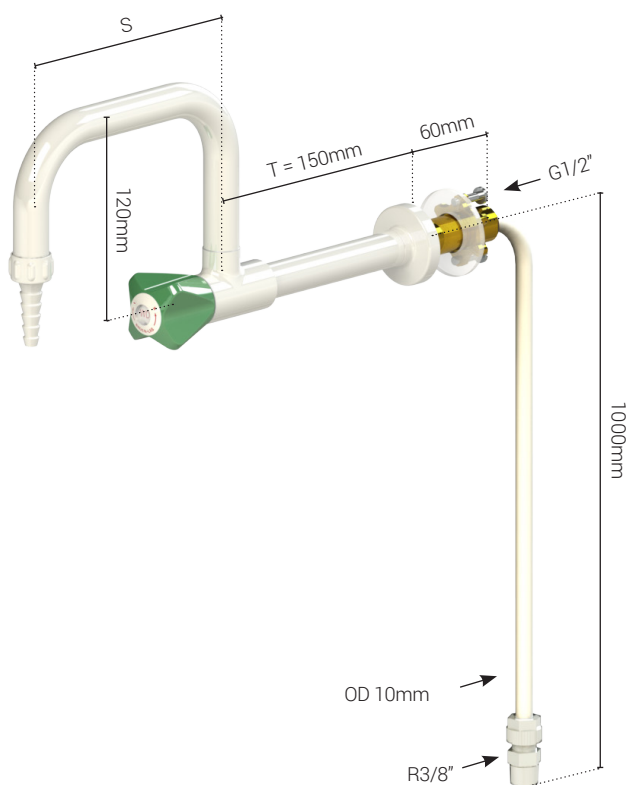
Rubber: EPDM

### ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different sizes of push fittings
- different inlet lengths
- S-shaped spout
- T = 50/75/200mm



Can be delivered without R3/8" push fitting

### Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm	S = 250 mm	S = 300 mm
With R3/8" fitting	2533 185 10XX-YY	2533 186 10XX-YY	2533 187 10XX-YY	2533 188 10XX-YY
OD10 hose	2533 189 10XX-YY	2533 190 10XX-YY	2533 191 10XX-YY	2533 192 10XX-YY

Replace **XX** with one of these media types:



**03** • Distilled water



**36** • Deionized water, cold

Replace **YY** with the inlet type you need on page 23

## BENCH MOUNTED FITTING ON A COLUMN WITH SWIVEL SPOUT WITH PLASTIC INNER TUBE

### SPECIFICATIONS

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Removable plastic

Spout: Full swivel action

Headwork: Diaphragm type

Opening/closing function: 1 1/2 x 360°

Temperature range: 0-65°C

Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

Weight: 1.4 kg

### MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE

Plastics: PVDF, PP

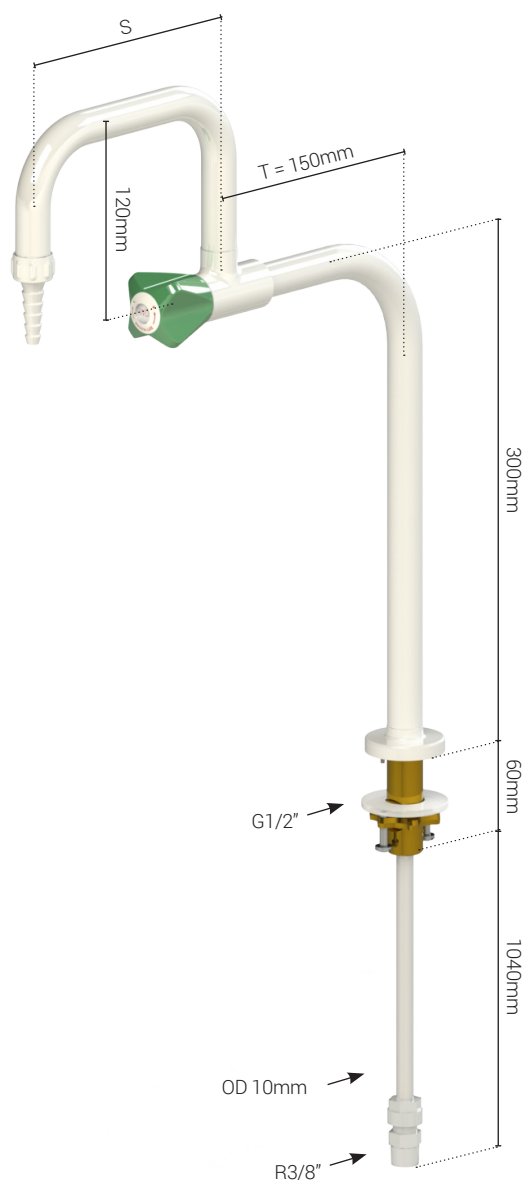
Rubber: EPDM

### ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different sizes of push fittings
- different inlet lengths
- S-shaped spout
- T = 200mm



Can be delivered without R3/8" push fitting

### Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm	S = 250 mm	S = 300 mm
With R3/8" fitting	2533 036 10XX-YY	2533 064 10XX-YY	2533 193 10XX-YY	2533 194 10XX-YY
OD10 hose	2533 195 10XX-YY	2533 196 10XX-YY	2533 197 10XX-YY	2533 198 10XX-YY

Replace **XX** with one of these media types:



03 • Distilled water



36 • Deionized water, cold

Replace **YY** with the inlet type you need on page 23

## WALL MOUNTED FITTING WITH SWIVEL SPOUT IN STAINLESS STEEL

### SPECIFICATIONS

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Removable plastic

Spout: Full swivel action

Headwork: Diaphragm type

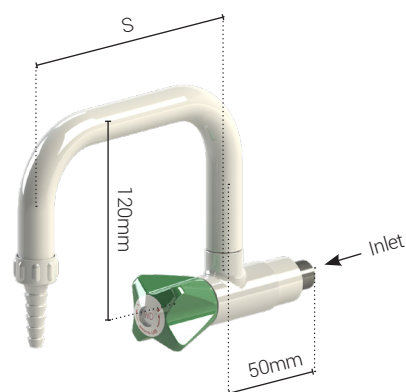
Opening/closing function: 1 1/2 x 360°

Temperature range: 0-65°C

Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

Weight: 1.2 kg



### MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE

Plastics: PVDF, PP

Metals: Stainless Steel, AISI 316

Rubber: EPDM

### ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- S-shaped spout

- T = 75/90/110/150/200mm

- Inlet: female G1/2

### Configuration options

Choose stand-out length and connection OD

	S = 150 mm	S = 200 mm	S = 250 mm	S = 300 mm
Inlet: male G3/8"	2530 022 10XX	2530 023 10XX	2530 016 10XX	2530 024 10XX
Inlet: male G1/2"	2530 025 10XX	2530 026 10XX	2530 017 10XX	2530 027 10XX

Replace **XX** with one of these media types:



03 • Distilled water



36 • Deionized water, cold

## WALL MOUNTED FITTING IN STAINLESS STEEL

### SPECIFICATIONS

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Removable metal

Headwork: Diaphragm type

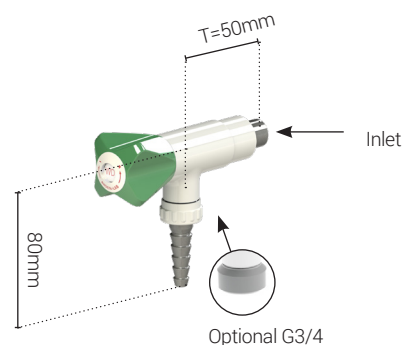
Opening/closing function: 1 1/2 x 360°

Temperature range: 0-90°C

Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

Weight: 0.5 kg



### MATERIALS WITH MEDIA CONTACT

Metals: Stainless Steel , AISI 316

Diaphragm: PTFE

Rubber: EPDM

### ORDERING INFORMATION



For standard configuration please refer to the item numbers below.

Other options:

- T = 75/90/110mm

### Configuration options

Choose inlet and connection OD

	Removable nozzle 	G3/4" 
Inlet: male G3/8"	2530 029 10XX	2530 030 10XX
Inlet: male G1/2"	2530 019 10XX	2530 028 10XX

Replace **XX** with one of these media types:



03 • Distilled water



36 • Deionized water, cold



## WALL MOUNTED FITTING IN STAINLESS STEEL

### SPECIFICATIONS

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792

Hose nozzle: Removable metal

Headwork: Diaphragm type

Opening/closing function: 1 1/2 x 360°

Temperature range: 0-90°C

Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

Weight: 0.5 kg

### MATERIALS WITH MEDIA CONTACT

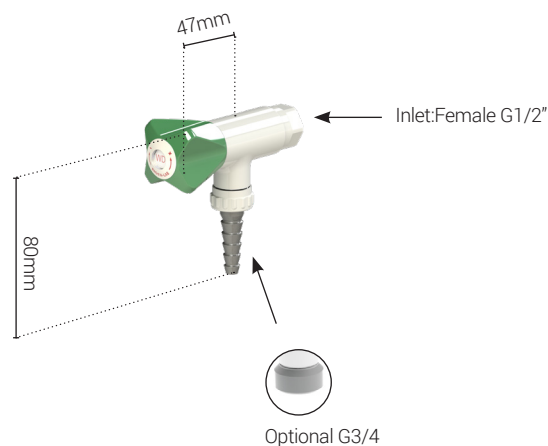
Metals: Stainless Steel , AISI 316

Diaphragm: PTFE

Rubber: EPDM



### ORDERING INFORMATION

For standard configuration please refer to the item numbers below.



### Configuration options

Choose connection OD

With removable nozzle 	2530 031 10 <b>XX</b>
With G3/4" 	2530 056 10 <b>XX</b>

Replace **XX** with one of these media types:

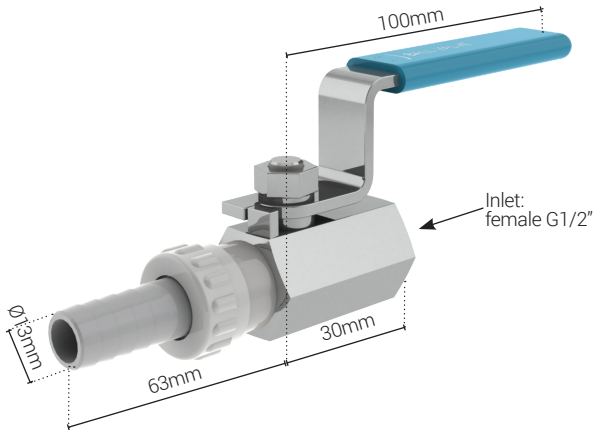


03 • Distilled water



36 • Deionized water, cold

## FULL FLOW VALVE



### MATERIALS WITH MEDIA CONTACT

Body: Stainless Steel, AISI 316

Sealing: PTFE

### ORDERING INFORMATION

Full flow valve in stainless steel based on a ball valve.

No. 15382509

### SPECIFICATIONS

A full flow valve is an alternative to the models showed in this catalogue. Please contact your BROEN-LAB representative for further information.

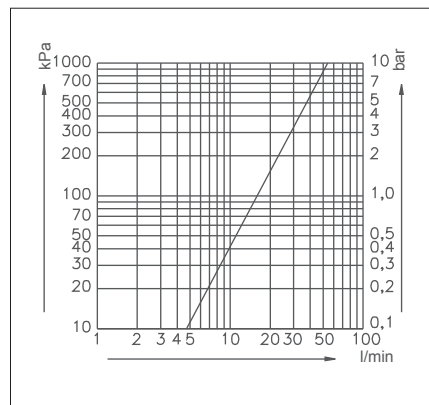
Opening/closing function: 90° turn

Temperature range: Maximum 90°C

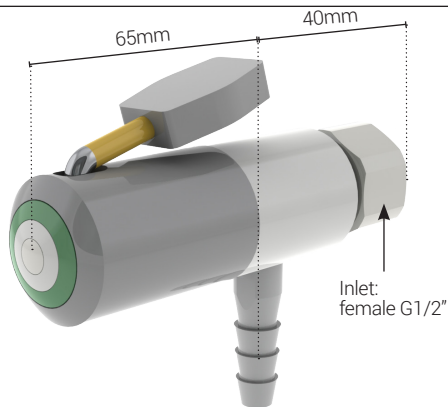
Max. working pressure: 10 bar / 147 psi

Test pressure: 1 x working pressure

### FLOW CHART



## SELF-CLOSING VALVE



### MATERIALS WITH MEDIA CONTACT

Valve house: Stainless Steel, AISI 316

Sealing: EPDM

Plastics: POM, PA

Lubricant: Silicone based

### ORDERING INFORMATION

Valve based on self-closing principle with a stainless steel valve house. Filter on inlet side.

No. 15389009

### SPECIFICATIONS

A self-closing valve is an alternative to the models shown in this catalogue. Please contact your BROEN-LAB representative for further information.

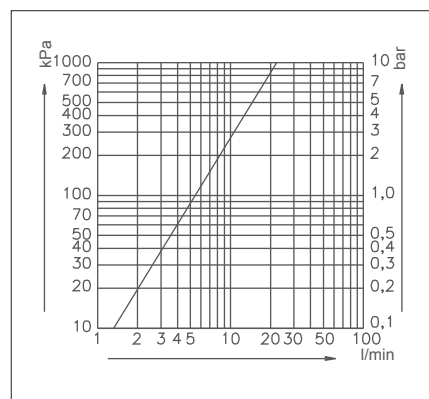
Opening/closing function: Self-closing

Temperature range: 0-65°C

Max. working pressure: 10 bar / 147 psi

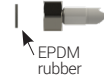
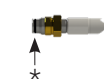
Test pressure: 1 x working pressure

### FLOW CHART


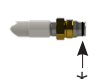


## 93D - BROEN-LAB UNIFLEX™ SPX HOSES FOR SPECIAL WATER

### INLET CONNECTIONS 93 D **XX XX XXXX**


<b>50</b>	Female G1/2" union nut connection	
<b>20</b>	Straight BROEN-LAB UniFlex™ connection with EPDM O-ring	

### OUTLET CONNECTIONS 93 D **XX XX XXXX**

<b>50</b>	Female G1/2" union nut connection	
<b>20</b>	Straight BROEN-LAB UniFlex™ connection with EPDM O-ring	

### LENGTH 93 D **XX XX XXXX**

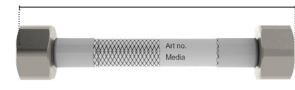
SPX hose with braiding in Stainless Steel



Marking for special water with Part no. and Media indication

**HOSE LENGTHS**

Definition of length (L)



If 45° and 90° elbows occur on the same hose, it will as default be mounted in U-form

\*\*Standard lengths of hoses (L):

- 0500** = 500 mm
- 0700** = 700 mm
- 1000** = 1000 mm
- 1200** = 1200 mm
- 1500** = 1500 mm
- 2000** = 2000 mm
- 2500** = 2500 mm
- 3000** = 3000 mm

Length tolerance of hoses:  
 L = ≤400 mm (-0, +10 mm)  
 L = 401 mm to 1000 mm (-0, +20 mm)  
 L = >1000 mm (-0, +30 mm)

\*\* Other lengths are available on request

### SPECIFICATIONS

Inner hose material: SPX (soft pex)  
 Braiding: Stainless steel with one green stripe  
 Materials with media contact: SPX, Stainless Steel AISI 316, EPDM  
 Inside diameter: 8.2 mm  
 Outside diameter: 12 mm  
 Max. working pressure: 10 bar  
 Max. working temperature: 90°C  
 Bending radius (inner): ≥ 40 mm  
 Min. length with connections: 160 mm

### EXAMPLE OF HOSE CONFIGURATION

1200 mm hose with 1/2" union inlet connection and 1/2" union outlet connection



**93D50501200**

## HEADWORK FOR SPECIAL WATER FITTINGS

### ORDERING INFORMATION



Headwork sparepart kit:  
No. 19 152 480

Complete set with G1/2" diaphragm headwork, plastic handle and media indication:

No. 2575 021 10XX (replace XX with media code on page 23)

Complete set with plastic handle and media indication

No. 19 150 140 10XX (replace XX with media code on page 23)

### SPECIFICATIONS

Manual valve based on diaphragm headwork.

The diaphragm is the only part of the headwork that has media contact (no lubrication or other materials have media contact).

Opening/closing function: 1 1/2 x 360° turn

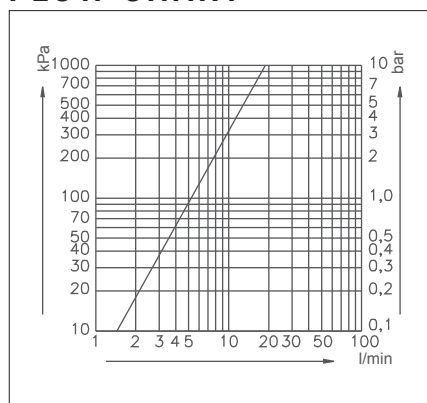
Media: Special water

### MATERIALS WITH MEDIA CONTACT

Metals: No metals with media contact

Diaphragm: PTFE

### FLOW CHART



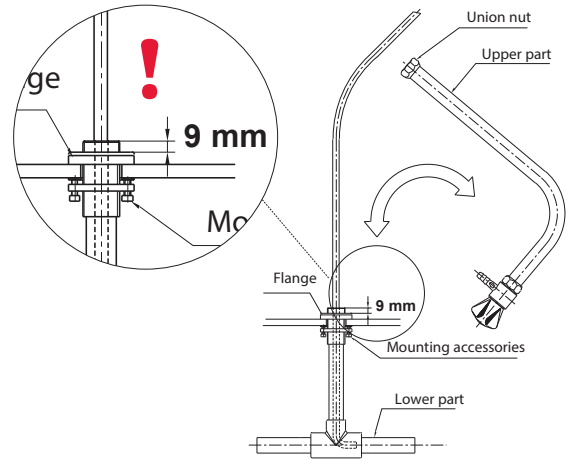
## ACCESSORIES

Illustration	Description	BROEN-LAB item no.
	Removable Stainless Steel nozzle (G1/2")	2539 020 1003
	Removable Stainless Steel nozzle (G3/4")	2539 047 1003
	Removable polypropylene nozzle (G1/2")	2539 004 1001
	Push-in fittings: Ø10 x R3/8" Ø10 x R1/2"	15 384 38 15 384 36
	Support bush for LLDPE tube Ø10/Ø7	91J0057

## TECHNICAL INFORMATION - FULLY RECIRCULATING FITTINGS

### INSTALLATION

Unscrew the union nut and lift off the upper part of the valve. Unscrew the flange and mount the lower part from under the table and up into a  $\varnothing 30$  mm hole. Remount the flange leaving **9 mm** free thread above the flange for the union nut. Use the mounting accessories to fix the lower part. Remount the upper part by sticking the inner tube into the upper part. Place the upper part in the correct position and mount the union nut to the 9 mm M28x1.5 thread with a torque of 20-30 Nm. Connect the valve to the recirculating special water system.



### WORKING TEMPERATURE AND PRESSURES

Circulating flow rate:

The flow rate in the main water flow has to be so high, that the water velocity passing the bent inner tube in the main stream is more than 0,6 m/s.

$$Q = (\pi/4) \times d^2 \times v$$

Q = Flow rate [m<sup>3</sup>/s]

d = Inside diameter of main tubing [m]

(standard: d =  $\varnothing 20.4\text{mm}$  =  $\varnothing 0.024\text{m}$ )

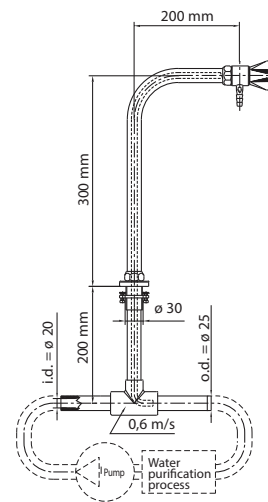
v = Water velocity (> 0.6 m/s) [m/s]

Example:

standard; d =  $\varnothing 20.4\text{mm}$

$$Q = (\pi/4) \times 0.024^2 \times 0.6 = 2.71 \times 10^{-4} \text{ m}^3/\text{s} = 16.3 \text{ l/min}$$

Please note that Q = 16.3 l/min should be obtained even with open point of use valves in other parts of the system.



### JOINTING METHODS

PP-n:

- The wetted components below the table top are made of PP-n-parts from G+F, Progef Natural.
- The BCF-welding (Bead and Crevice Free Fusion) is applied during the manufacturing process in order to achieve the highest possible quality of the connection. We recommend also that the material used on site is PP-n and furthermore that BCF-welding is used as well.

If the PP-n material is welded to other types of PP on site, then the following precautions are important to follow:

- The welding of PP-n to PP-h is possible only with conventional butt fusion (DVS 2207-11) or socket fusion.
- IR-welding (Infra Red) is officially not allowed because of the different melting range temperatures and BCF-welding is not allowed for the same reason.

ABS (bench mounted fittings only):

- The wetted components below the table top are made of ABS parts.
- ABS parts are glued together and if ABS material is also used on site, then the same jointing method should be applied

For other possible jointing methods please contact your BROEN-LAB sales representative.

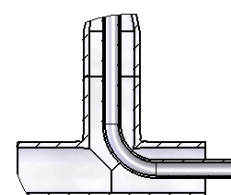
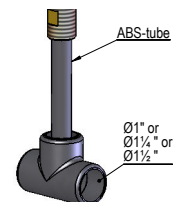
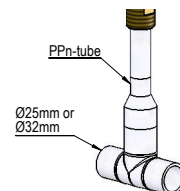
### KV - VALUES FOR T-PIECE

PP-n, OD 25 mm:

- flow in same direction as inner tubing: Kv=15,7 m<sup>3</sup>/hbar
- flow against direction of inner tubing: Kv=14,0 m<sup>3</sup>/hbar

PP-n, OD 32 mm:

- flow in same direction as inner tubing: Kv=33,6 m<sup>3</sup>/hbar
- flow against direction of inner tubing: Kv =29,0 m<sup>3</sup>/hbar



Cross section of the T-piece with inner tubing

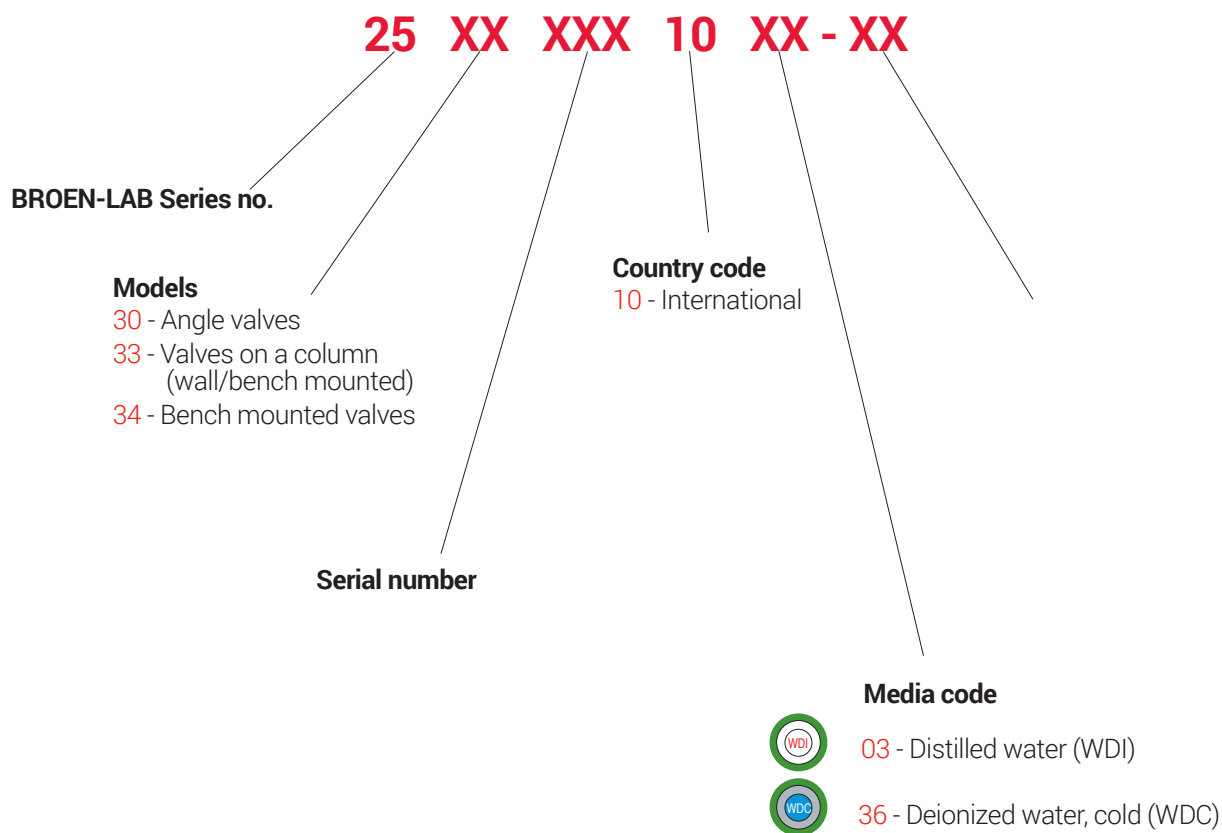
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## ORDERING INFORMATION

### BROEN-LAB UNIFLEX™ FITTINGS

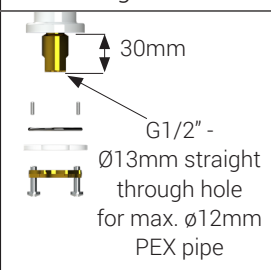
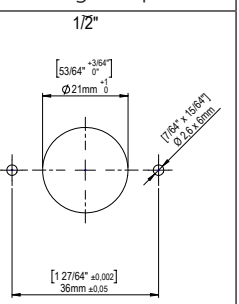
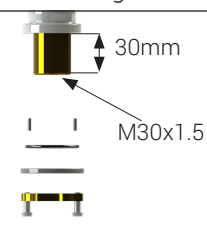
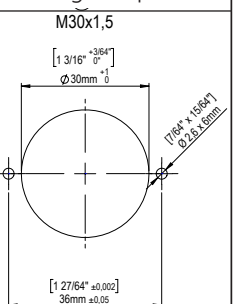
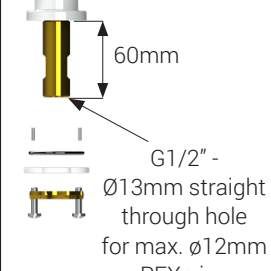
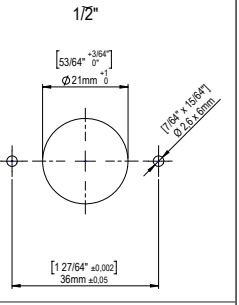
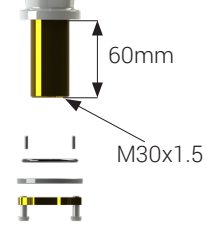
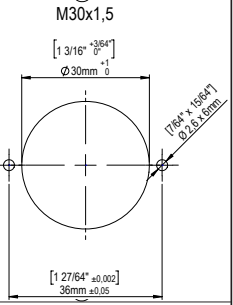
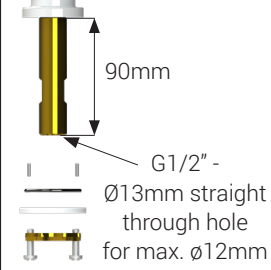
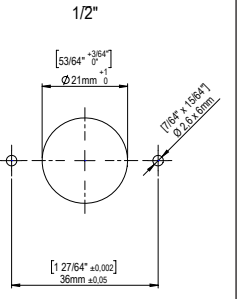
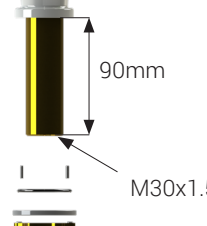
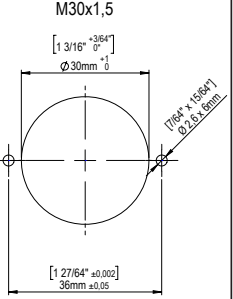
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Generally, item number for BROEN-LAB UniFlex™ fittings has the following structure:



For other configuration options please contact your local BROEN-LAB representative.

# ORDERING INFORMATION BROEN-LAB UNIFLEX™ FITTINGS

Number	Inlet design	Drilling template	Number	Inlet design	Drilling template
-01	 <p>30mm</p> <p>G1/2" - Ø13mm straight through hole for max. Ø12mm PEX pipe</p>	 <p>1/2"</p> <p><math>[.53164^{+0.001} \text{ } ^{-0.001} \text{ } ]</math> Ø21mm</p> <p><math>[1.27164^{+0.002} \text{ } ^{-0.002} \text{ } ]</math> 36mm ±0.05</p> <p><math>[1.7164^{+0.004} \text{ } ^{-0.004} \text{ } ]</math> Ø2.5 x 15mm</p>	-50	 <p>30mm</p> <p>M30x1.5</p>	 <p>M30x1,5</p> <p><math>[1.3116^{+0.001} \text{ } ^{-0.001} \text{ } ]</math> Ø30mm</p> <p><math>[1.27164^{+0.002} \text{ } ^{-0.002} \text{ } ]</math> 36mm ±0.05</p> <p><math>[1.7164^{+0.004} \text{ } ^{-0.004} \text{ } ]</math> Ø2.5 x 15mm</p>
-09	 <p>60mm</p> <p>G1/2" - Ø13mm straight through hole for max. Ø12mm PEX pipe</p>	 <p>1/2"</p> <p><math>[.53164^{+0.001} \text{ } ^{-0.001} \text{ } ]</math> Ø21mm</p> <p><math>[1.27164^{+0.002} \text{ } ^{-0.002} \text{ } ]</math> 36mm ±0.05</p> <p><math>[1.7164^{+0.004} \text{ } ^{-0.004} \text{ } ]</math> Ø2.5 x 15mm</p>	-52	 <p>60mm</p> <p>M30x1.5</p>	 <p>M30x1,5</p> <p><math>[1.3116^{+0.001} \text{ } ^{-0.001} \text{ } ]</math> Ø30mm</p> <p><math>[1.27164^{+0.002} \text{ } ^{-0.002} \text{ } ]</math> 36mm ±0.05</p> <p><math>[1.7164^{+0.004} \text{ } ^{-0.004} \text{ } ]</math> Ø2.5 x 15mm</p>
-13	 <p>90mm</p> <p>G1/2" - Ø13mm straight through hole for max. Ø12mm PEX pipe</p>	 <p>1/2"</p> <p><math>[.53164^{+0.001} \text{ } ^{-0.001} \text{ } ]</math> Ø21mm</p> <p><math>[1.27164^{+0.002} \text{ } ^{-0.002} \text{ } ]</math> 36mm ±0.05</p> <p><math>[1.7164^{+0.004} \text{ } ^{-0.004} \text{ } ]</math> Ø2.5 x 15mm</p>	-54	 <p>90mm</p> <p>M30x1.5</p>	 <p>M30x1,5</p> <p><math>[1.3116^{+0.001} \text{ } ^{-0.001} \text{ } ]</math> Ø30mm</p> <p><math>[1.27164^{+0.002} \text{ } ^{-0.002} \text{ } ]</math> 36mm ±0.05</p> <p><math>[1.7164^{+0.004} \text{ } ^{-0.004} \text{ } ]</math> Ø2.5 x 15mm</p>

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BROEN-LAB develops, manufactures and sells Laboratory Fittings, Emergency Shower Systems and Eye Wash Systems into a broad spectrum of laboratories and industrial locations; sectors include Pharmaceutical, Food&Beverage and Academia. Our expertise and product quality ensure optimal solutions compliant to all relevant international norms setting new standards in risk mitigation in modern research and development facilities.

BROEN-LAB offers solutions that ensure the functionality, compliance, hygiene, durability and safety are of the highest priority. For more than 50 years our products have been integrated into a wide variety of workplaces, laboratories, hospitals and industrial locations, with features that are assessed and designed to be flexible, durable and compliant offering a broad range of options tailored to each location. This inherent design integrity provides confidence in the solution adopted wherever in the world these are applied.

BROEN-LAB is a collaboration partner in the design and layout of your next laboratory and it's integrated safety



### **BROEN-LAB A/S ISO 9001 certification**

In September 1991 BROEN-LAB A/S was certified according to ISO 9001 as one of the first Danish companies. The certification was carried out by Bureau Veritas, Denmark, for our Danish site in Assens. The quality management system of BROEN-LAB A/S now complies with detailed specifications laid down by the internationally acknowledged EN ISO 9001:2015. This certification will further contribute to reputation for quality and reliability of BROEN-LAB A/S.

### **BROEN-LAB A/S ISO 14001:2015 certification**

In December 2022 we got certified according to ISO 14001 in Environmental certification. The new certification was carried out by Bureau Veritas, Denmark, for Danish site in Assens. The Environment ISO14001 management system of BROEN-LAB A/S is included in internationally acknowledged EN ISO 9001:2015. Both certifications furthermore contribute to reputation for quality and reliability of BROEN-LAB A/S.