


















FITTINGS FOR SPECIAL WATER

BASIC range

99B0058 Rev. 1 - 30.05.2023

TABLE OF CONTENTS

BROEN-LAB UniFlex™					Page 3
Product overview					Page 4
					
Wall mounted fitting - Fully recirculating <i>Page 5</i>	Bench mounted fitting on a column - Fully recirculating <i>Page 6</i>	Wall mounted fitting with plastic inner tube <i>Page 7</i>	Bench mounted fitting on a column with plastic inner tube <i>Page 8</i>	Suspended fitting with plastic inner tube <i>Page 9</i>	
					
Wall mounted fitting in Stainless Steel <i>Page 10</i>	Bench mounted fitting on a column in Stainless Steel <i>Page 11</i>	Bench mounted fitting with swivel spout <i>Page 12</i>	Wall mounted fitting with swivel spout <i>Page 13</i>	Bench mounted fitting on a column with swivel spout <i>Page 14</i>	
					
Wall mounted fitting with swivel spout <i>Page 15</i>	Wall mounted fitting in Stainless Steel <i>Page 16</i>	Wall mounted fitting in Stainless Steel <i>Page 17</i>	Single Valve - Full Flow <i>Page 18</i>	Single Valves - Self-closing <i>Page 18</i>	
BROEN-LAB UniFlex™ hoses for water					Page 19
Headworks					Page 20
Accessories					Page 20
Technical information - Fully recirculating					Page 21
Ordering information					Page 22

THIS IS BROEN-LAB UNIFLEX™

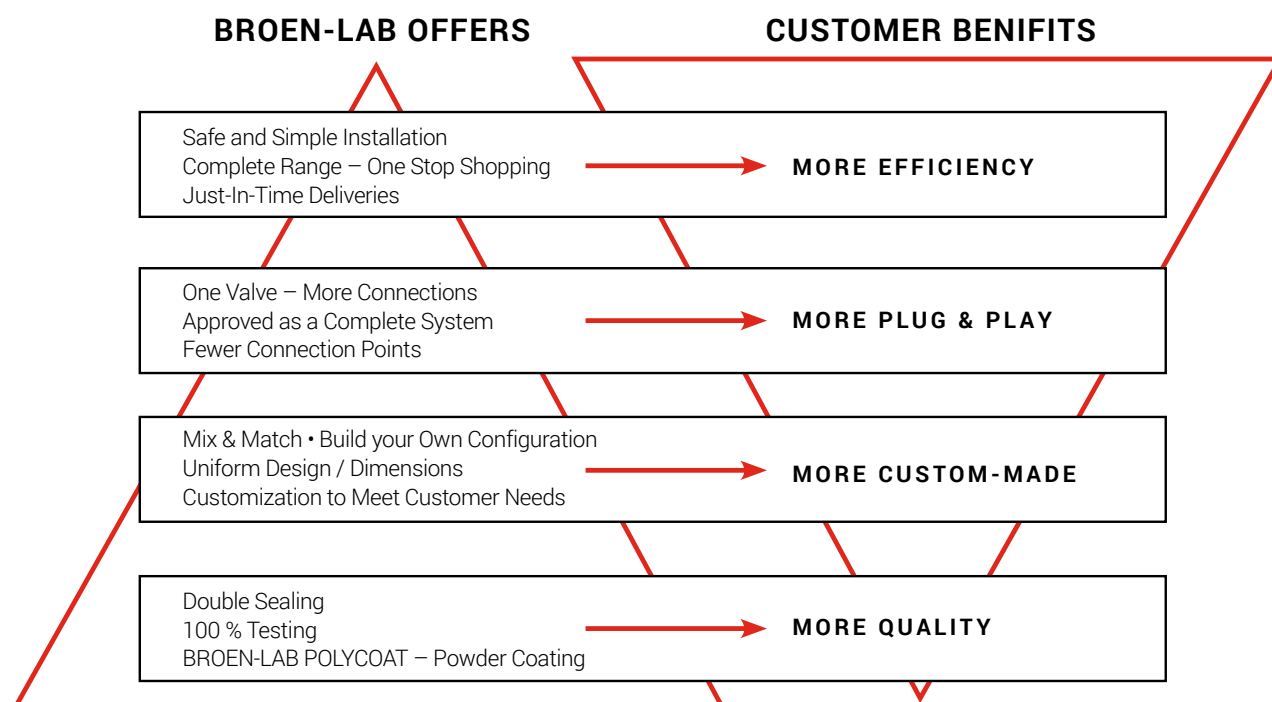
BROEN-LAB UniFlex™ line offers a high quality and durability combined with the complete programme, this adds up to low LCC (Life Cycle Costs).

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 POLYCOAT powder coating, which is highly resistant to most chemicals, UV light and heat – Please refer to the “BROEN-LAB POLYCOAT” 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 are as a standard delivered with a polypropylene handle. BROEN-LAB UniFlex™ plastic lined fittings are delivered with LLDPE (Linear Low-Density Polyethylene) inner pipe.

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 lined fittings
- Recirculating fittings
- Designed to secure maximum purity of the water
- Uniform design with the rest of the BROEN-LAB UniFlex™ programme



PRODUCT OVERVIEW

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

Stainless Steel fittings



Fittings with plastic inner tube



Recirculating fittings



WALL MOUNTED FITTING - FULLY RECIRCULATING

SPECIFICATIONS

- Handle: Polypropylene
- Media indication: according to EN13792
- Hose nozzle: Removable polypropylene
- 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

For more technical information and jointing methods please refer to page 22.

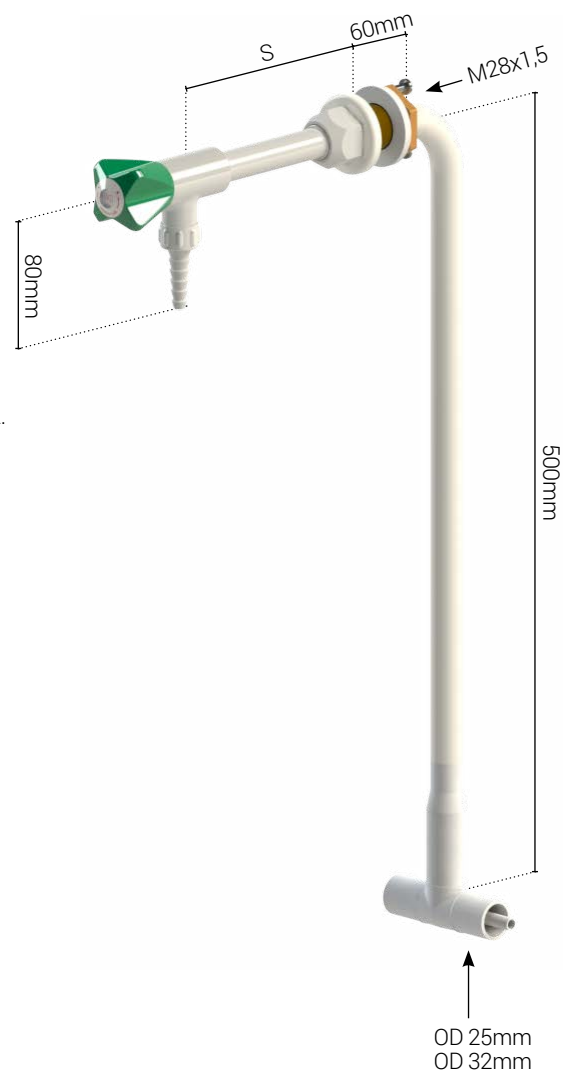
MATERIALS WITH MEDIA CONTACT

- Diaphragm: PTFE
- Rubber: EPDM
- Plastics: PP, PP-n, PVDF

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

- also available in PVDF OD 20mm



Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm
OD 25 mm	2533 022 10XX	2533 118 10XX
OD 32 mm	2533 119 10XX	2533 120 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: Polypropylene
Media indication: according to EN13792
Hose nozzle: Removable polypropylene
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

For more technical information and jointing methods please refer to page 22.

MATERIALS WITH MEDIA CONTACT

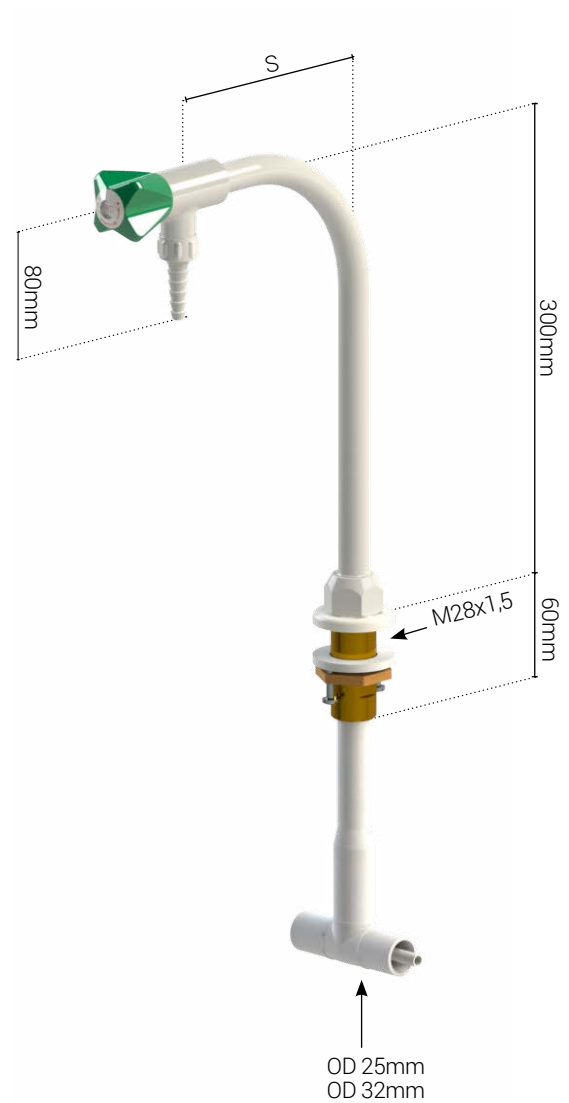
Diaphragm: PTFE
Rubber: EPDM
Plastics: PP, PP-n, PVDF

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 121 10XX	2533 021 10XX
OD 32 mm	2533 122 10XX	2533 123 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: Polypropylene
Media indication: according to EN13792
Hose nozzle: Removable polypropylene
Headwork: Diaphragm type
Opening/closing function: 1 1/2 x 360°
Max. working pressure:
10 bar / 147 psi at 20°C
6 bar / 87 psi at 65°C
Test pressure: 1 x working pressure
Weight: 0.7 kg

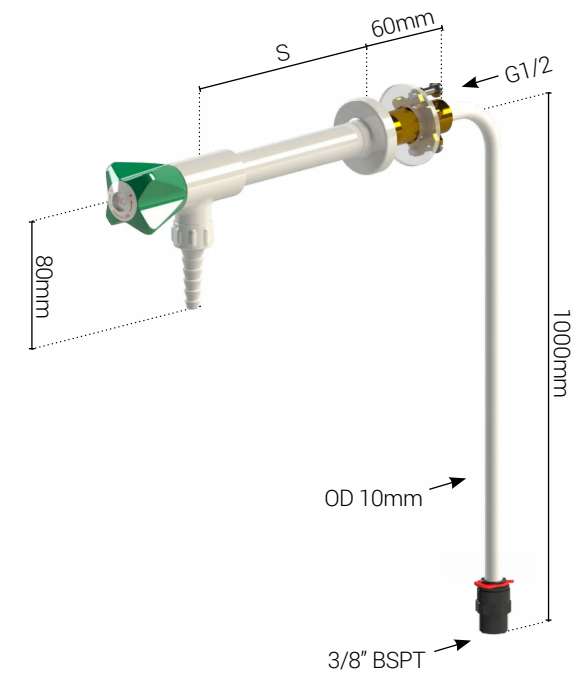
MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE
Rubber: EPDM
Plastics: LLDPE, POM, PP, PVDF

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

- Other options:
- different sizes of push-in fittings
 - different inlet lengths



Can be delivered with and without 3/8" BSPT push fitting

Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm
With 3/8" BSPT fitting	2533 184 10XX-YY	2533 181 10XX-YY
OD10 hose	2533 018 10XX-YY	2533 020 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 PLASTIC INNER TUBE

SPECIFICATIONS

Handle: Polypropylene
Media indication: according to EN13792
Hose nozzle: Removable polypropylene
Headwork: Diaphragm type
Opening/closing function: 1 1/2 x 360°
Max. working pressure:
10 bar / 147 psi at 20°C
6 bar / 87 psi at 65°C
Test pressure: 1 x working pressure
Weight: 0.7 kg

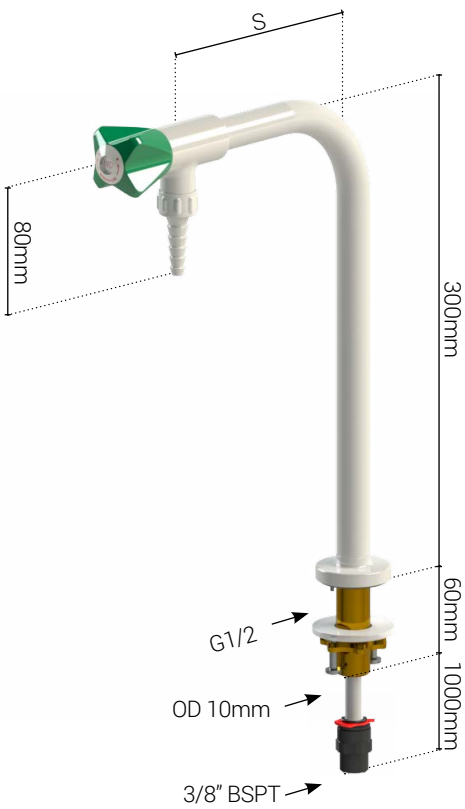
MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE
Rubber: EPDM
Plastics: LLDPE, POM, PP, PVDF

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

- Other options:
- different sizes of push-in fittings
 - different inlet lengths



Can be delivered with and without 3/8" BSPT push fitting

Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm
With 3/8" BSPT fitting	2533 170 10XX-YY	2533 159 10XX-YY
OD10 hose	2533 009 10XX-YY	2533 011 10XX-YY

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



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

SUSPENDED FITTING WITH PLASTIC INNER TUBE

SPECIFICATIONS

Handle: Polypropylene
Media indication: according to EN13792
Hose nozzle: Removable polypropylene
Headwork: Diaphragm type
Opening/closing function: 1 1/2 x 360°
Max. working pressure:
10 bar / 147 psi at 20°C
6 bar / 87 psi at 65°C
Test pressure: 1 x working pressure
Weight: 0.7 kg

MATERIALS WITH MEDIA CONTACT

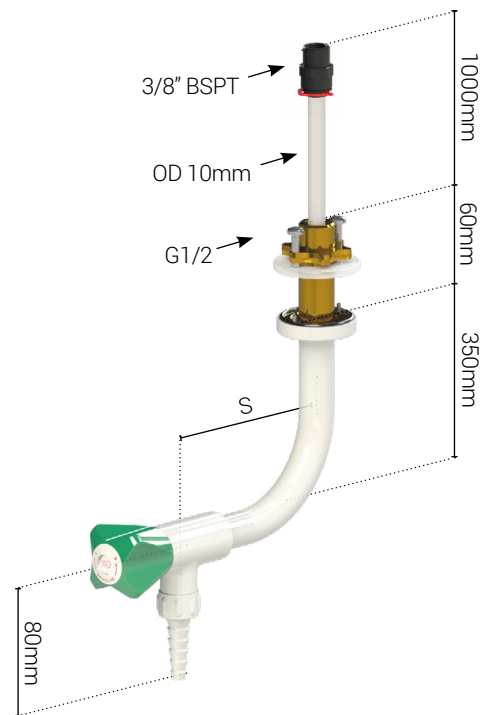
Diaphragm: PTFE
Rubber: EPDM
Plastics: LLDPE, POM, PP, PVD

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

- Other options:
- different sizes of push-in fittings
 - different inlet lengths
 - straight valve

Can be delivered with and without 3/8" BSPT push fitting



Configuration options

Choose standout length and connection OD

With 3/8" BSPT fitting	2533 256 10XX-YY
OD10 hose	2533 257 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 IN STAINLESS STEEL

SPECIFICATIONS

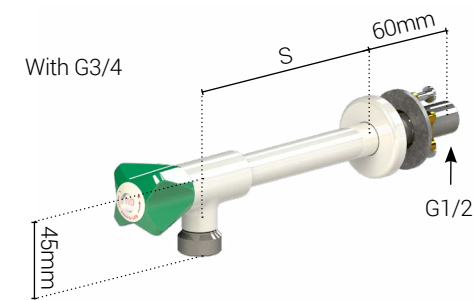
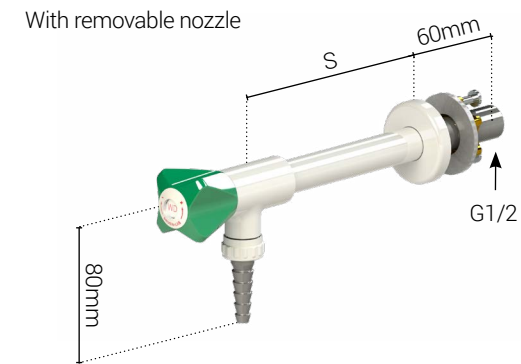
Handle: Polypropylene
Media indication: according to EN13792
Headwork: Diaphragm type
Opening/closing function: 1 1/2 x 360°
Temperature range: 0-90°C
Max. working pressure: 10 bar / 147 psi
Test pressure: 1 x working pressure
Weight: 0.9 kg

MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE
Rubber: EPDM
Metals: Stainless Steel, AISI 316



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 030 10XX-09	2533 124 10XX-09
With G3/4 	2533 029 10XX-09	2533 125 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

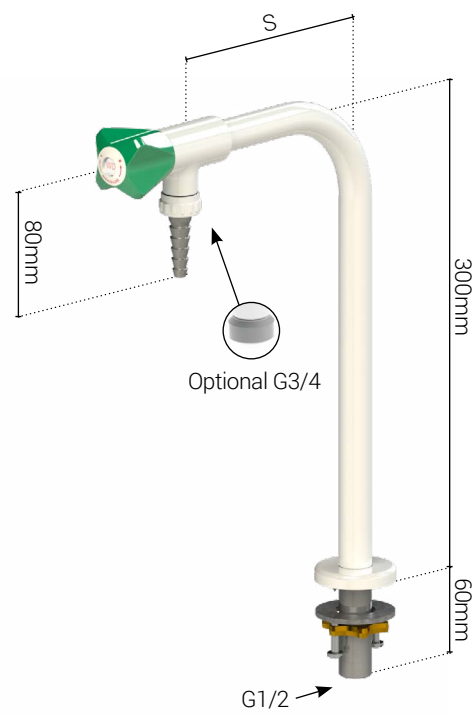
Handle: Polypropylene
Media indication: according to EN13792
Headwork: Diaphragm type
Opening/closing function: 1 1/2 x 360°
Temperature range: 0-90°C
Max. working pressure: 10 bar / 147 psi
Test pressure: 1 x working pressure
Weight: 1.4 kg

MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE
Rubber: EPDM
Metals: Stainless Steel, AISI 316



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 093 10XX	2533 007 10XX-09
With G3/4 	2533 126 10XX	2533 028 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: Polypropylene
Media indication: according to EN13792
Hose nozzle: Removable polypropylene
Spout: Full swivel action
Headwork: Diaphragm type
Opening/closing function: 1 1/2 x 360°
Max. working pressure:
10 bar / 147 psi at 20°C
6 bar / 87 psi at 65°C
Test pressure: 1 x working pressure
Weight: 1.0 kg

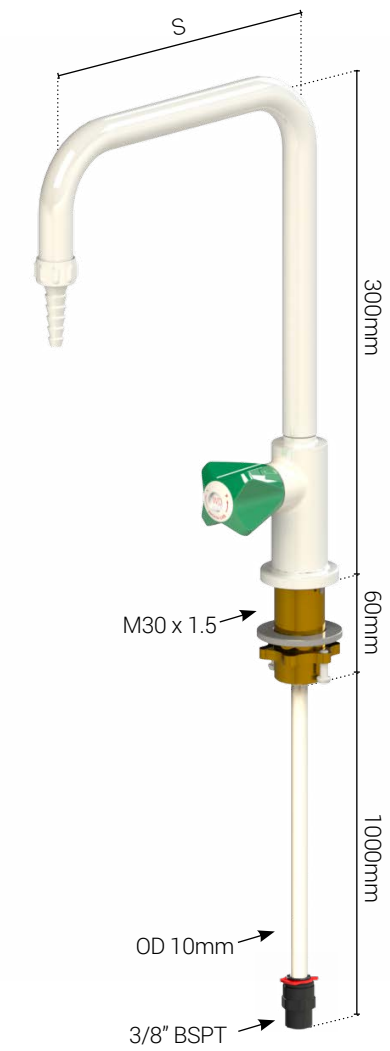
MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE
Rubber: EPDM
Plastics: LLDPE, POM, PP, PVDF

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

- Other options:
- different sizes of push-in fittings
 - other inlet options



Can be delivered with and without 3/8" BSPT push fitting

Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm	S = 150 mm	S = 200 mm
With 3/8" BSPT fitting	2534 100 10XX-YY	2534 101 10XX-YY	2534 102 10XX-YY	2534 103 10XX-YY
OD10 hose	2534 034 10XX-YY	2534 035 10XX-YY	2534 055 10XX-YY	2534 099 10XX-YY

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



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

WALL MOUNTED FITTING WITH SWIVEL SPOUT WITH PLASTIC INNER TUBE

SPECIFICATIONS

Handle: Polypropylene
Media indication: according to EN13792
Hose nozzle: Removable polypropylene
Spout: Full swivel action
Headwork: Diaphragm type
Opening/closing function: 1 1/2 x 360°
Max. working pressure:
10 bar / 147 psi at 20°C
6 bar / 87 psi at 65°C
Test pressure: 1 x working pressure
Weight: 1.2 kg

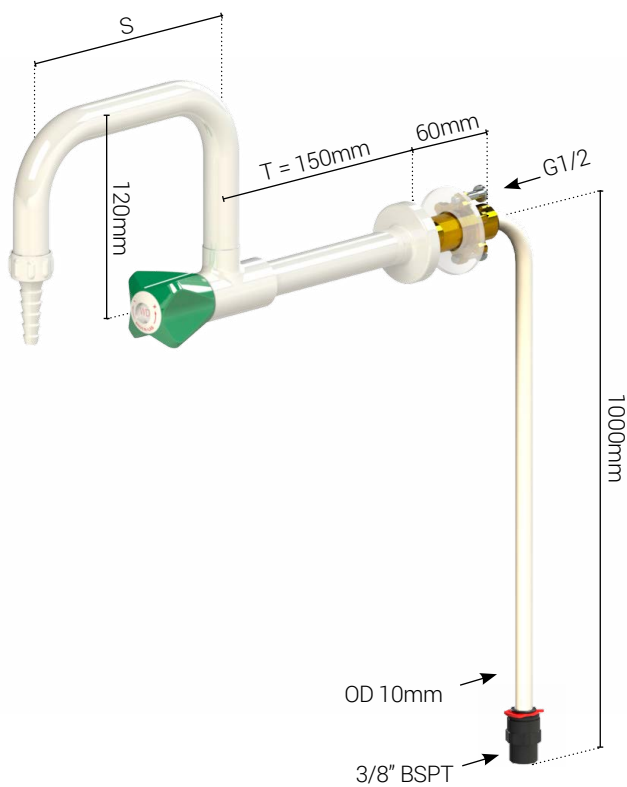
MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE
Rubber: EPDM
Plastics: LLDPE, POM, PP, PVDF

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

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



Can be delivered with and without 3/8" BSPT push fitting

Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm	S = 250 mm	S = 300 mm
With 3/8" BSPT fitting	2533 051 10XX-YY	2533 052 10XX-YY	2533 053 10XX-YY	2533 054 10XX-YY
OD10 hose	2533 050 10XX-YY	2533 012 10XX-YY	2533 013 10XX-YY	2533 014 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: Polypropylene
Media indication: according to EN13792
Hose nozzle: Removable polypropylene
Spout: Full swivel action
Headwork: Diaphragm type
Opening/closing function: 1 1/2 x 360°
Max. working pressure:
10 bar / 147 psi at 20°C
6 bar / 87 psi at 65°C
Test pressure: 1 x working pressure
Weight: 1.4 kg

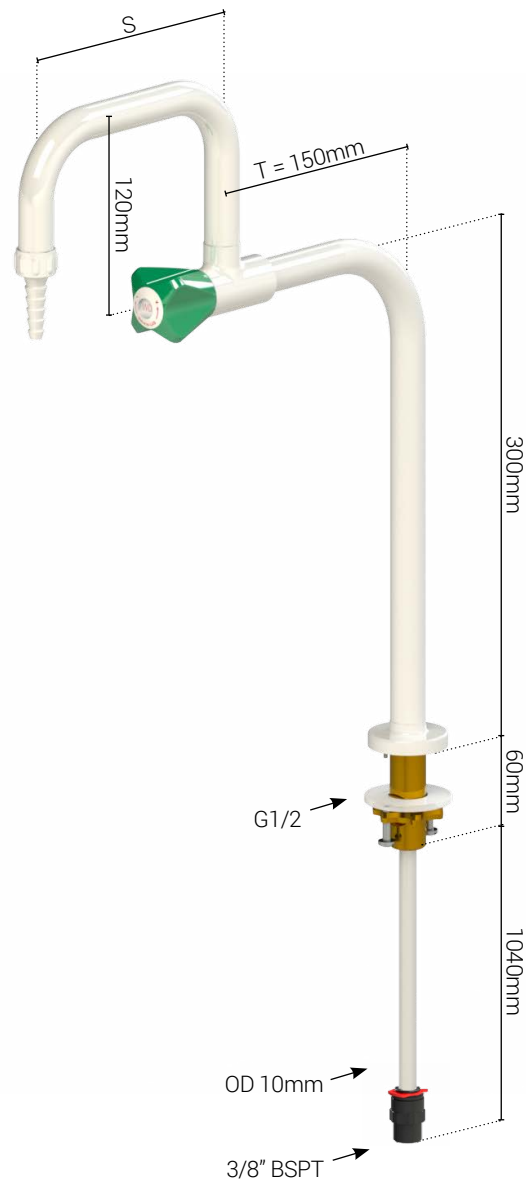
MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE
Rubber: EPDM
Plastics: LLDPE, POM, PP, PVDF

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

- Other options:
- different sizes of push-in fittings
 - different inlet lengths
 - S-shaped spout
 - T = 200mm



Can be delivered with and without 3/8" BSPT push fitting

Configuration options

Choose standout length and connection OD

	S = 150 mm	S = 200 mm	S = 250 mm	S = 300 mm
With 3/8" BSPT fitting	2533 055 10XX-YY	2533 057 10XX-YY	2533 058 10XX-YY	2533 060 10XX-YY
OD10 hose	2533 056 10XX-YY	2533 027 10XX-YY	2533 059 10XX-YY	2533 061 10XX-YY

Replace XX with one of these media types:

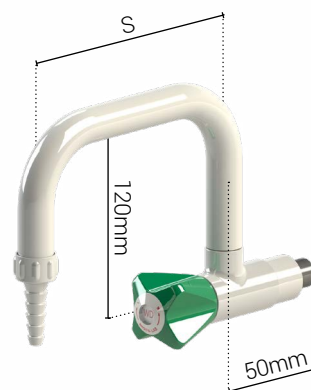


Replace YY with the inlet type you need on page 23

WALL MOUNTED FITTING WITH SWIVEL SPOUT WITH PLASTIC INNER TUBE IN STAINLESS STEEL

SPECIFICATIONS

Handle: Polypropylene
Media indication: according to EN13792
Hose nozzle: Removable polypropylene
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
Rubber: EPDM
Plastics: PVDF
Metals: Stainless Steel , AISI 316

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 048 10XX-09	2530 013 10XX-09	2530 011 10XX-09	2530 012 10XX-09
Inlet: male G1/2	2530 049 10XX-09	2530 004 10XX-09	2530 007 10XX-09	2530 008 10XX-09

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



03 • Distilled water

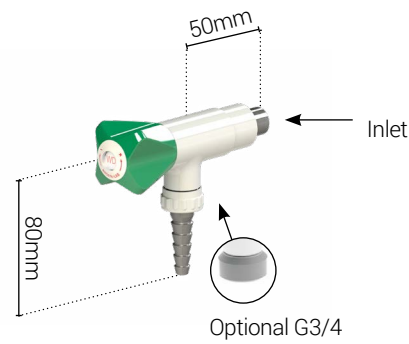


36 • Deionized water, cold

WALL MOUNTED FITTING IN STAINLESS STEEL

SPECIFICATIONS

Handle: Polypropylene
Media indication: according to EN13792
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

Diaphragm: PTFE
Rubber: EPDM
Metals: Stainless Steel , AISI 316

ORDERING INFORMATION



For standard configuration please refer to the item numbers below.

Other options:

- T = 75/90/110mm

Configuration options

Choose standout length and connection OD

	Removable nozzle 	G3/4 
Inlet: male G3/8	2530 001 10XX-09	2530 033 10XX-09
Inlet: male G1/2	2530 002 10XX-09	2530 003 10XX-09

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

 **03** • Distilled water  **36** • Deionized water, cold

WALL MOUNTED FITTING IN STAINLESS STEEL

SPECIFICATIONS

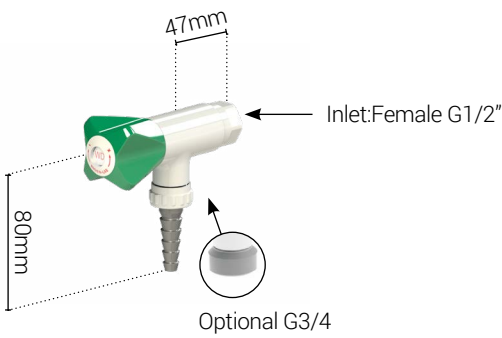
Handle: Polypropylene
Media indication: according to EN13792
Headwork: Diaphragm type
Opening/closing function: 1 1/2 x 360°
Temperature range: 0-90°C
Max. working pressure: 10 bar / 147 psi
Test pressure: 1 x working pressure
Weight: 0.5 kg

MATERIALS WITH MEDIA CONTACT

Diaphragm: PTFE
Rubber: EPDM
Metals: Stainless Steel, AISI 316



ORDERING INFORMATION

For standard configuration please refer to the item numbers below.



Configuration options

Choose standout length and connection OD

With removable nozzle		2530 050 10XX-09
With G3/4		2530 051 10XX-09

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

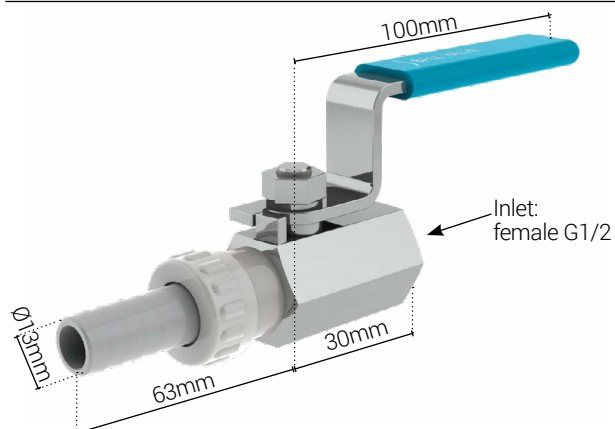


03 • Distilled water



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.

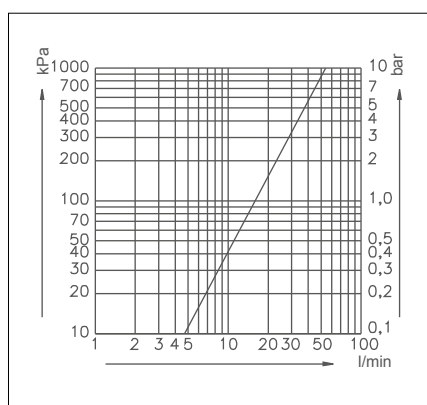
Opening/closing function: 90° turn

Temperature range: Maximum 90°C

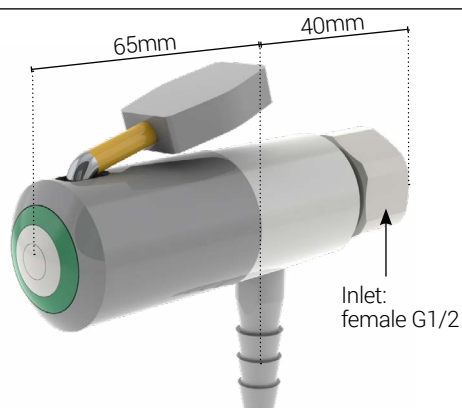
Max. working pressure: 10 bar / 147 psi

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.

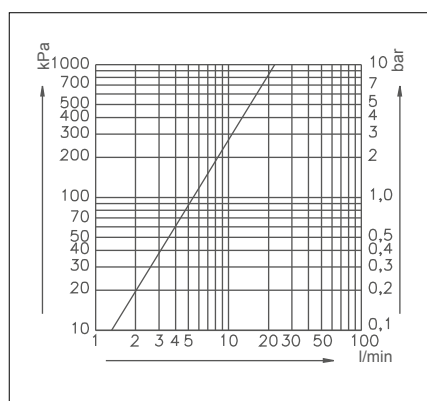
Opening/closing function: Self-closing

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


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

OUTLET CONNECTIONS
93 D XX **XX** XXXX

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

LENGTH
93 D XX XX **XXXX**


SPX hose with braiding in stainless steel



Marking for 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

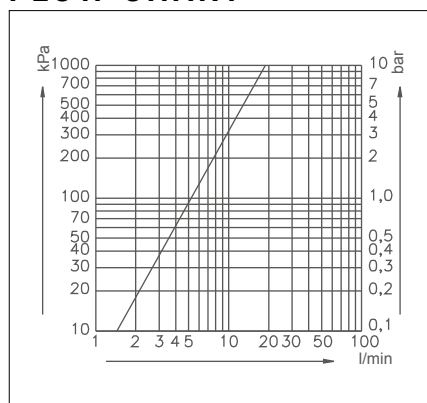
Media: Special water

MATERIALS WITH MEDIA CONTACT

Metals: No metals in media contact, headwork only.

Sealing: EPDM

FLOW CHART



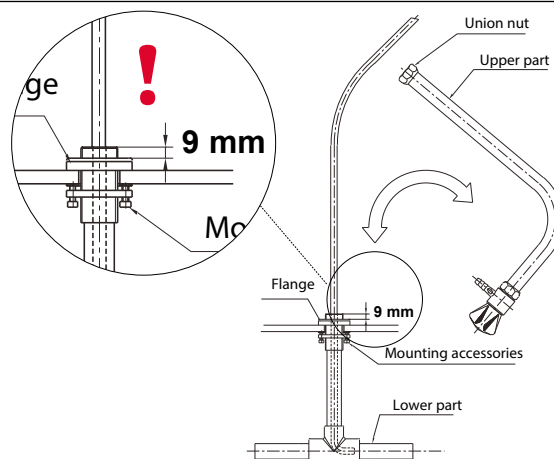
ACCESSORIES

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 G3/8 Ø10 x G1/2	13 710 750 13 710 760
	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 [m³/s]

d = Inside diameter of main tubing [m]

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

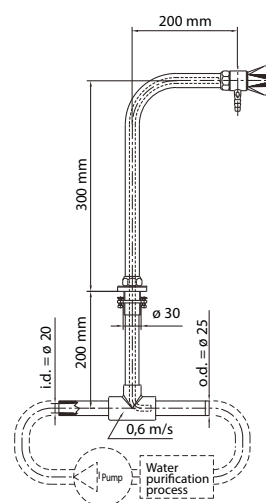
v = Water velocity (> 0.6 m/s) [m/s]

Example:

standard; d = $\varnothing 20.4$ 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.

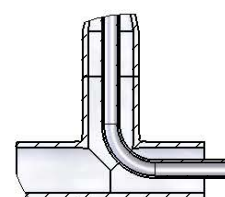
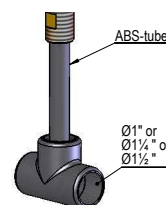
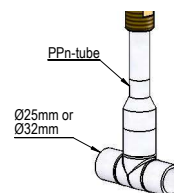
KV - VALUES FOR T-PIECE

PP-n, OD 25 mm:

- flow in same direction as inner tubing: Kv=15,7 m³/hbar
- flow against direction of inner tubing: Kv=14,0 m³/hbar

PP-n, OD 32 mm:

- flow in same direction as inner tubing: Kv=33,6 m³/hbar
- flow against direction of inner tubing: Kv =29,0 m³/hbar

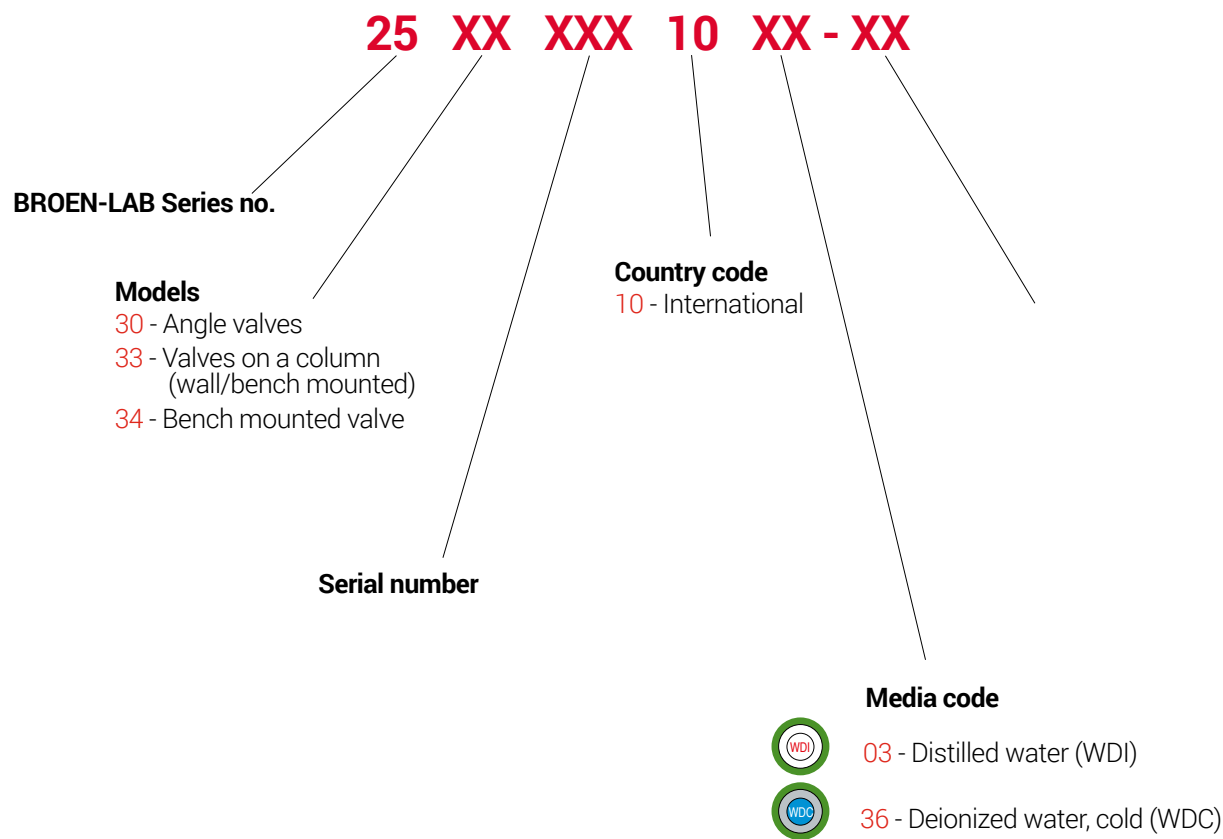


Cross section of the T-piece with inner tubing

ORDERING INFORMATION

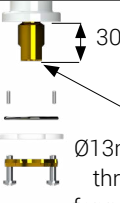
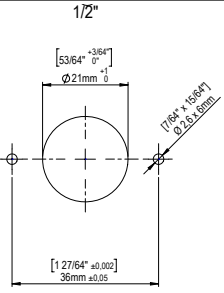
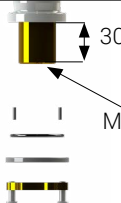
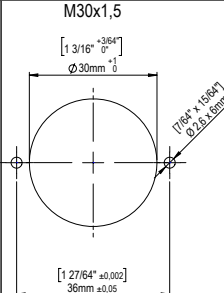
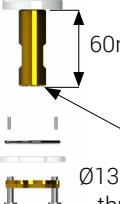
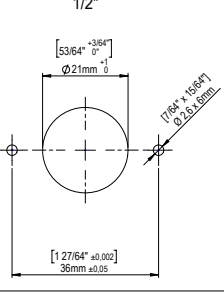
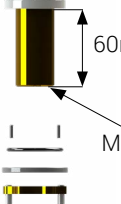
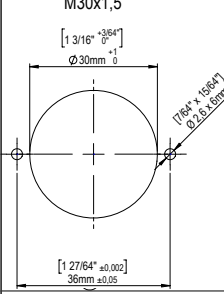
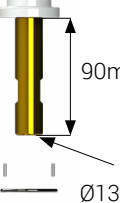
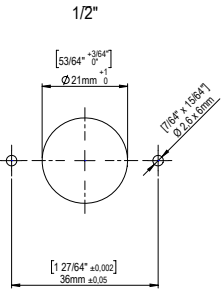
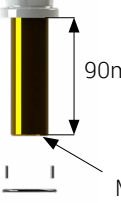
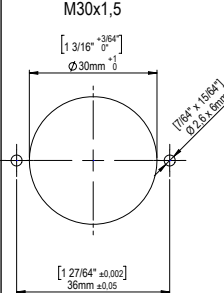
BROEN-LAB UNIFLEX™ FITTINGS

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>[53/64" +0.364" 0"]</p> <p>Ø21mm</p> <p>17/64" x 13/64" Ø 2.5 x 6mm</p> <p>[1 27/64" ±0.002] 36mm ±0.05</p>	-50	 <p>30mm</p> <p>M30x1.5</p>	 <p>M30x1,5</p> <p>[1 3/16" +0.364" 0"]</p> <p>Ø30mm</p> <p>17/64" x 13/64" Ø 2.5 x 6mm</p> <p>[1 27/64" ±0.002] 36mm ±0.05</p>
-09	 <p>60mm</p> <p>G1/2" - Ø13mm straight through hole for max. Ø12mm PEX pipe</p>	 <p>1/2"</p> <p>[53/64" +0.364" 0"]</p> <p>Ø21mm</p> <p>17/64" x 13/64" Ø 2.5 x 6mm</p> <p>[1 27/64" ±0.002] 36mm ±0.05</p>	-52	 <p>60mm</p> <p>M30x1.5</p>	 <p>M30x1,5</p> <p>[1 3/16" +0.364" 0"]</p> <p>Ø30mm</p> <p>17/64" x 13/64" Ø 2.5 x 6mm</p> <p>[1 27/64" ±0.002] 36mm ±0.05</p>
-13	 <p>90mm</p> <p>G1/2" - Ø13mm straight through hole for max. Ø12mm PEX pipe</p>	 <p>1/2"</p> <p>[53/64" +0.364" 0"]</p> <p>Ø21mm</p> <p>17/64" x 13/64" Ø 2.5 x 6mm</p> <p>[1 27/64" ±0.002] 36mm ±0.05</p>	-54	 <p>90mm</p> <p>M30x1.5</p>	 <p>M30x1,5</p> <p>[1 3/16" +0.364" 0"]</p> <p>Ø30mm</p> <p>17/64" x 13/64" Ø 2.5 x 6mm</p> <p>[1 27/64" ±0.002] 36mm ±0.05</p>

HEADQUARTER

BROEN-LAB A/S

Drejervaenget 2
5610 Assens
Denmark

Tel. +45 6376 6376
Fax +45 6471 2476

lab@broen-lab.com
broen-lab.com

INTERNATIONAL OFFICES

BROEN-LAB Ltd.

Tel. +44 121 522 4515
Fax +44 121 522 4535

lab@broen-lab.com
broen-lab.com

BROEN-LAB Singapore Pte. Ltd.

25 International Business Park
#04-60A German Centre
Singapore 609916

Tel. +65 6298 0662
Fax +65 62 98 04 68

lab@broen-lab.com
broen-lab.com

BROEN-LAB GmbH

Tel. +45 6376 6376
Fax +45 6471 2476

lab@broen-lab.com
broen-lab.com

BROEN-LAB Sverige AB

Tel. +45 6376 6376
Fax +45 6471 2476

lab@broen-lab.com
broen-lab.com

BROEN-LAB Inc.

15 Constitution Drive
Suite 122
NH 03110
Bedford
USA

Tel. +1 603 310 5089

lab@broen-lab.com
broen-lab.com

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.