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THIS IS BROEN UNIFLEX™ BASIC

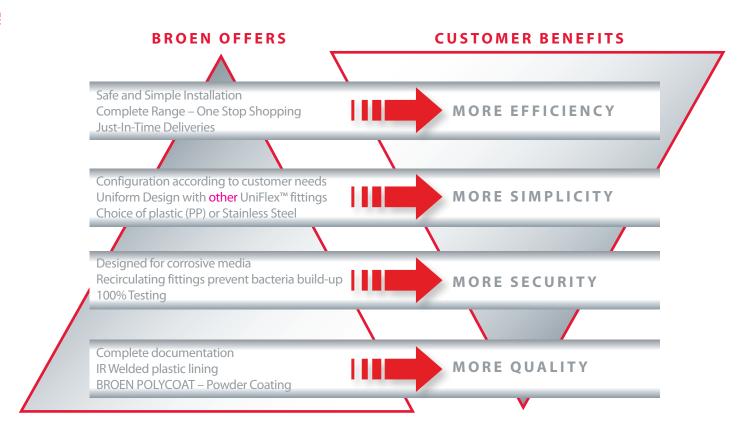
BROEN UniFlex™ BASIC line offers a high quality and durability combined with the complete programme, this adds up to low LCC (Life Cycle Costs).

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

BROEN UniFlex™ BASIC 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 UniFlex™ BASIC programme





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.:

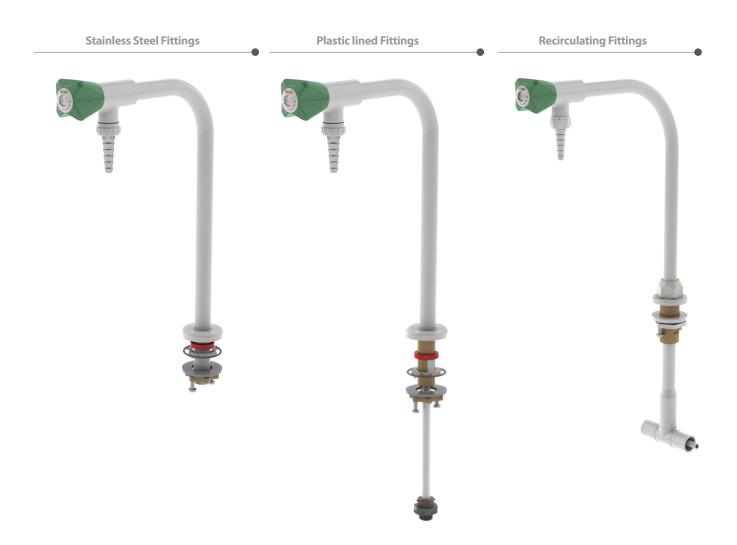
- Demineralisation (Boiling)
- RO Reverse Osmosis
- UV light
- Ultra Filtration
- Desalination

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.

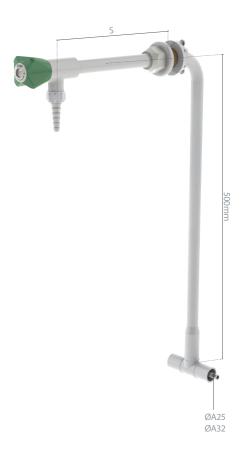
In order to secure maximum purity of water our fittings for special water have been designed with special components and technologies to ensure that test samples are not polluted.

OUR SOLUTIONS



-6-





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: 1.6 kg

MATERIALS WITH MEDIA CONTACT

Rubber: EPDM

Plastics: PP, PP-n, PVDF

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Model: ØA 25 mm

Media		S = 150mm	S = 200mm	•
(WD)	Distilled water	2533 022 1003	2533 118 1003	
WDC	Deionized water, cold	2533 022 1036	2533 118 1036	

Model: ØA 32 mm

Media		S = 150mm	S = 200mm	(
WD	Distilled water	2533 119 1003	2533 120 1003	
(WDC)	Deionized water, cold	2533 119 1036	2533 120 1036	

BENCH MOUNTED FITTING ON A COLUMN - FULLY RECIRCULATING





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: 1.8 kg

MATERIALS WITH MEDIA CONTACT

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", 11/4", 11/2")

Model: ØA 25 mm

Media		S = 150mm	S = 200mm	(
(WD)	Distilled water	2533 121 1003	2533 021 1003	
WDC	Deionized water, cold	2533 121 1036	2533 021 1036	

Model: ØA 32 mm

Media		S = 150mm	S = 200mm	(
WD	Distilled water	2533 122 1003	2533 123 1003	
	Deionized water, cold	2533 122 1036	2533 123 1036	





Handle: Plastic

Media indication: according to EN13792

Hose nozzle: Removable plastic **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

Rubber: EPDM

Plastics: LLDPE, POM, PP

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different sizes of push-in fittings
- different inlet lengths

Model: With G3/8 push-in fitting

Media		S = 150mm	S = 200mm	
	Distilled water	2533 184 1003-09	2533 181 1003-09	
(WDC)	Deionized water, cold	2533 184 1036-09	2533 181 1036-09	

Model: Without push-in fitting

М	ledia		S = 150mm	S = 200mm	•
(WDI	Distilled water	2533 018 1003-09	2533 020 1003-09	
	WDO	Deionized water, cold	2533 018 1036-09	2533 020 1036-09	

BENCH MOUNTED FITTING ON A COLUMN 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°

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

Rubber: EPDM

Plastics: LLDPE, POM, PP

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- different sizes of push-in fittings
- different inlet lengths

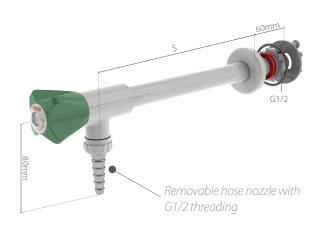
Model: With G3/8 push-in fitting

Media		S = 150mm	S = 200mm	
	Distilled water	2533 170 1003-09	2533 159 1003-09	
WDD	Deionized water, cold	2533 170 1036-09	2533 159 1036-09	

Model: Without push-in fitting

М	ledia		S = 150mm	S = 200mm	•
	WDI	Distilled water	2533 009 1003-09	2533 011 1003-09	
	WDD	Deionized water, cold	2533 009 1036-09	2533 011 1036-09	







Handle: Plastic

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

Rubber: EPDM

Metals: Stainless Steel, AISI 316

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Model: With removable nozzle

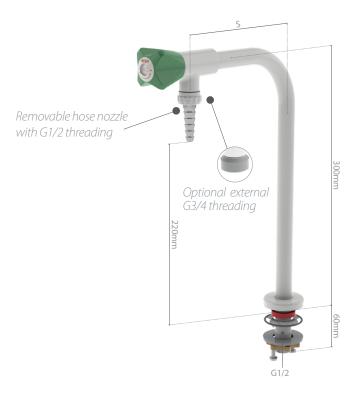
Media		S = 150mm	S = 200mm	
	Distilled water	2533 030 1003	2533 124 1003	
WDO	Deionized water, cold	2533 030 1036	2533 124 1036	

Model: With G3/4

Media		S = 150mm	S = 200mm	,
WD	Distilled water	2533 029 1003	2533 125 1003	
WDD	Deionized water, cold	2533 029 1036	2533 125 1036	

BENCH MOUNTED FITTING ON A COLUMN IN STAINLESS STEEL





SPECIFICATIONS

Handle: Plastic

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

Rubber: EPDM

Metals: Stainless Steel, AISI 316

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.



Media		S = 150mm	S = 200mm	
	Distilled water	2533 093 1003	2533 007 1003	
WDC	Deionized water, cold	2533 093 1036	2533 007 1036	

Model: With G3/4

Media		S = 150mm	S = 200mm		
WD	Distilled water	2533 126 1003	2533 028 1003		
WDO	Deionized water, cold	2533 126 1036	2533 028 1036		

BENCH MOUNTED FITTING WITH SWIVEL SPOUT WITH PLASTIC INNER TUBE





SPECIFICATIONS

Handle: Plastic

Media indication: according to EN13792

Hose nozzle: Removable plastic

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

Rubber: EPDM

Plastics: LLDPE, POM, PP

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- diffferent sizes of push-in fittings
- other inlet options

Model: With G3/8 push-in fitting

Media		S = 150mm	S = 200mm	S = 250mm	S = 300mm
WDI	Distilled water	2534 100 1003-52	2534 101 1003-52	2534 102 1003-52	2534 103 1003-52
WDO	Deionized water, cold	2534 100 1036-52	2534 101 1036-52	2534 102 1036-52	2534 103 1036-52

Model: Without push-in fitting

•	Media		S = 150mm	S = 200mm	S = 250mm	S = 300mm
	(WD)	Distilled water	2534 034 1003-52	2534 035 1003-52	2534 055 1003-52	2534 099 1003-52
	WDD	Deionized water, cold	2534 034 1036-52	2534 035 1036-52	2534 055 1036-52	2534 099 1036-52

WALL MOUNTED FITTING WITH SWIVEL SPOUT WITH PLASTIC INNER TUBE





SPECIFICATIONS

Handle: Plastic

Media indication: according to EN13792

Hose nozzle: Removable plastic

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

Rubber: EPDM

Plastics: LLDPE, POM, PP

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

Model: With G3/8 push-in fitting

Media		S = 150mm	S = 200mm	S = 250mm	S = 300mm
WDI	Distilled water	2533 051 1003-09	2533 052 1003-09	2533 053 1003-09	2533 054 1003-09
WDO	Deionized water, cold	2533 051 1036-09	2533 052 1036-09	2533 053 1036-09	2533 054 1036-09

Model: Without push-in fitting

Media	1	S = 150mm	S = 200mm	S = 250mm	S = 300mm
	Distilled water	2533 050 1003-09	2533 012 1003-09	2533 013 1003-09	2533 014 1003-09
WDD	Deionized water, cold	2533 050 1036-09	2533 012 1036-09	2533 013 1036-09	2533 014 1036-09

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





SPECIFICATIONS

Handle: Plastic

Media indication: according to EN13792

Hose nozzle: Removable plastic

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

Rubber: EPDM

Plastics: LLDPE, POM, PP

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 = 200 mm

Model: With G3/8 push-in fitting

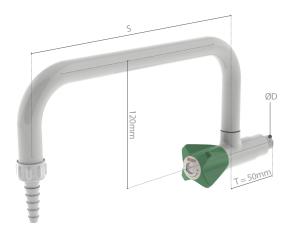
Media		S = 150mm	S = 200mm	S = 250mm	S = 300mm
	Distilled water	2533 055 1003-09	2533 057 1003-09	2533 058 1003-09	2533 060 1003-09
	Deionized water, cold	2533 055 1036-09	2533 057 1036-09	2533 058 1036-09	2533 060 1036-09

Model: Without push-in fitting

M	edia		S = 150mm	S = 200mm	S = 250mm	S = 300mm
	WDI	Distilled water	2533 056 1003-09	2533 027 1003-09	2533 059 1003-09	2533 061 1003-09
	WDC	Deionized water, cold	2533 056 1036-09	2533 027 1036-09	2533 059 1003-09	2533 061 1036-09

WALL MOUNTED SS FITTING WITH SWIVEL SPOUT WITH PLASTIC INNER TUBE





SPECIFICATIONS

Handle: Plastic

Media indication: according to EN13792

Hose nozzle: Removable plastic

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

Rubber: EPDM
Plastics: PP, LLDPE

Metals: Stainless Steel, AISI 316

ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:

- S-shaped spout
- -T = 75/90/110mm

Model: ØD Inlet G3/8

Media		S = 150mm	S = 200mm	S = 250mm	S = 300mm
(WD)	Distilled water	2530 048 1003	2530 013 1003	2530 011 1003	2530 012 1003
WDD	Deionized water, cold	2530 048 1036	2530 013 1036	2530 011 1036	2530 012 1036

Model: ØD Inlet G1/2 external

Media		S = 150mm	S = 200mm	S = 250mm	S = 300mm
WDI	Distilled water	2530 049 1003	2530 004 1003	2530 007 1003	2530 008 1003
	Deionized water, cold	2530 049 1036	2530 004 1036	2530 007 1036	2530 008 1036





Handle: Plastic

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

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

Model: OD Inlet G3/8

Media		Removable nozzle	G3/4	
WD	Distilled water	2530 001 1003	2530 033 1003	
WDC	Deionized water, cold	2530 001 1036	2530 033 1036	

Model: OD Inlet G1/2

Media		Removable nozzle	G3/4		
(WD)	Distilled water	2530 002 1003	2530 003 1003		
(WDC)	Deionized water, cold	2530 002 1036	2530 003 1036		





Handle: Plastic

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

Rubber: EPDM

Metals: Stainless Steel, AISI 316

ORDERING INFORMATION

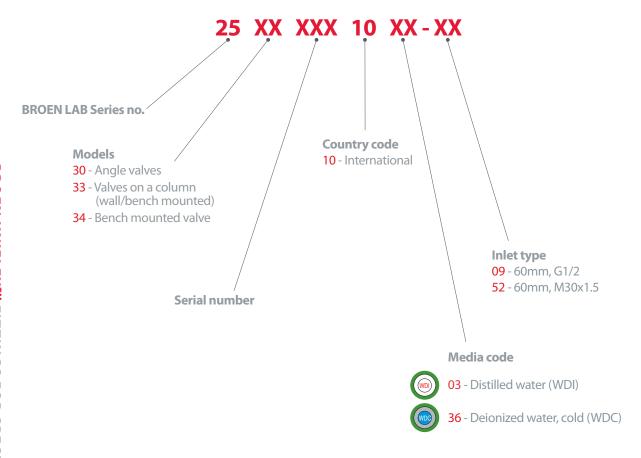
For standard configuration please refer to the item numbers below.

Model: With removable nozzle

Media		Removable nozzle	G3/4	G3/4	
WDI	Distilled water	2530 050 1003	2530 051 1003		
WDO	Deionized water, cold	2530 050 1036	2530 051 1036		



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



BROEN UNIFLEXTM HOSES FOR SPECIAL WATER



93 D XX XX XXXX

1/2" union connection (Code 50)



OUTLET CONNECTIONS

93 D XX XX XXXX

1/2" union connection (Code **50**)



EPDM rubber

EXAMPLE OF HOSE CONFIGURATION

1200mm hose with G1/2 union inlet connection and G1/2 union outlet connection



HOSE 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)



Standard lengths of hoses (L):

0500 = 500mm

0700 = 700mm

1000 = 1000mm

1200 = 1200mm

1500 = 1500mm

2000 = 2000mm

2500 = 2500mm

3000 = 3000mm

Length tolerance of hoses: $L = \le 400 \text{mm} (-0, +10 \text{mm})$ L = 401 mm to 1000 mm (-0, +20 mm)L = >1000 mm (-0, +30 mm)

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ORDERING INFORMATION



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

No. 19152469

Complete set with plastic handle and media indication

No. 191540101003 (WDI) No. 191540101036 (WDC)

1. Media button

No. 1915712 (WDI) No. 1915759 (WDC)

2. Screw

No. 97G0033

3. Plastic ring

No. 1915704-1000 (white) WDI No. 1915704-7001 (grey) WDC

4. Plastic handle

No. 1915701-5168 (green)

5. Diaphragm headwork

No. 1915240V

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

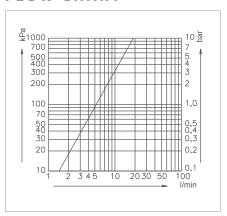
Media: Special water

MATERIALS WITH MEDIA CONTACT

Metals: No metals in media contact, headwork only.

Sealing: EPDM

FLOW CHART





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 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

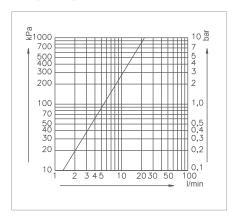
MATERIALS WITH MEDIA CONTACT

Valve house: Stainless Steel, AISI 316

Sealing: EPDM **Plastics:** POM, PA

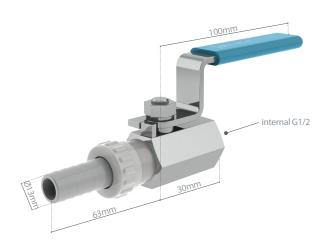
Lubricant: Silicone based

FLOW CHART





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 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

MATERIALS WITH MEDIA CONTACT

Body: Stainless Steel, AISI 316

Sealing: PTFE

FLOW CHART

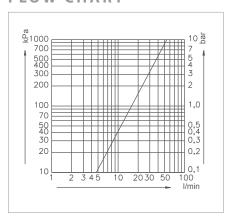




Illustration	Description	BROEN item No.
	Removable nozzle in the following materials: Stainless Steel Plastic	2539 020 1003 2539 004 1001
	Push-in fitting Ø10 x G3/8	13710750
	Push-in fitting for welding Ø10 x OD20	13710770
	Push-in fitting Ø10 x G1/2	13710760
	Push-in coupling support bush for LLDPE tube Ø10/Ø7	91J0057

BROEN LAB develops, manufactures and delivers complete range of fittings for professional laboratories. Our know-how and our quality products ensure the precise flow of water, gases and air, from source to user.

BROEN LAB solutions are used by professional users in many kinds of laboratories, from the education and health sectors to industry in general. Our products are already an integrated part of many workplaces. From fittings for purified water, nitrogen, vacuum and compressed air, to the control and regulation of pure gases in critical applications such as a gas chromatography and spectrometry.

Our extensive knowledge allows us to continually develop and optimize our products so that they meet customer needs and specifications. Safety, functionality and quality are an integral part of product design and flexibility. Our insight and understanding of working environments and safety in laboratories allow us to develop custom solutions for projects around the world. Use us to plan your project so we can advise you on laboratory layout and design.

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