

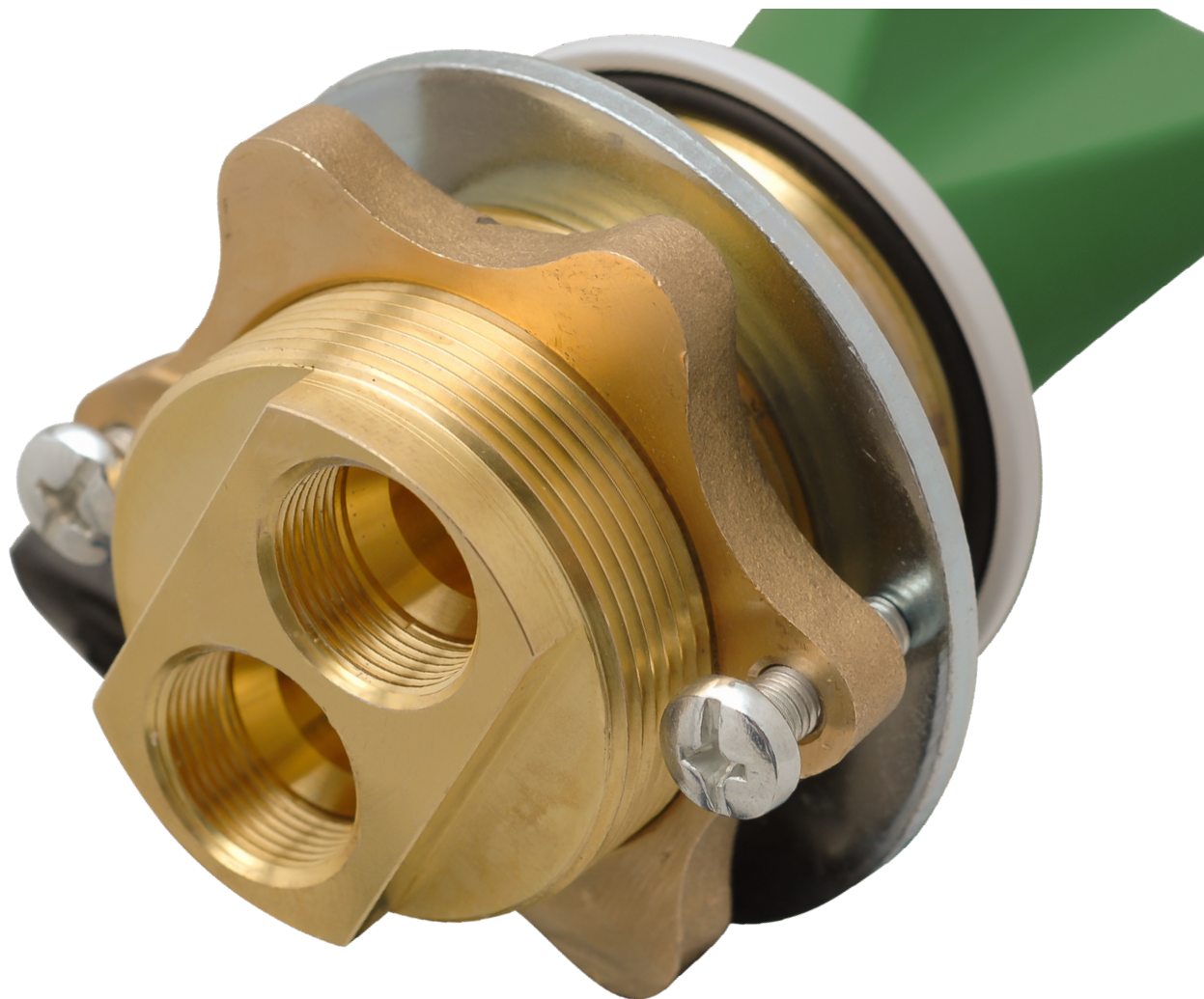
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# FITTINGS FOR FRONT CONTROL VALVES

**BASIC range**

99B0056 - 03.04.2025

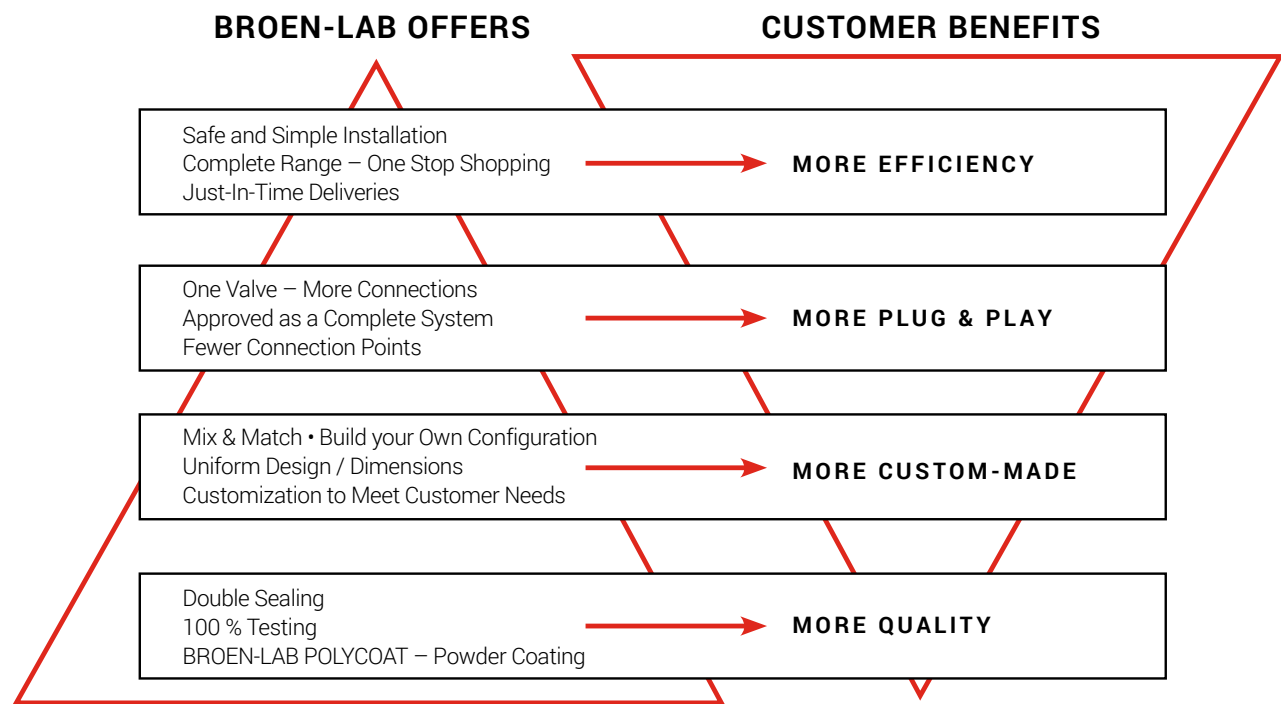
## TABLE OF CONTENTS

BROEN-LAB UniFlex™				Page 3		
Configuration overview				Page 4		
Water		Valve Page 5		Valve Page 6		Outlet Page 7
Special water		Valve Page 10				Outlet Page 11
Coolant water		Valve Page 13				Outlet Page 14
Burning gas		Valve Page 15				Outlet Page 16
Technical 2.0 gases / vacuum / high flow		Valve Page 17		Valve Page 18		Outlet Page 19
Technical 4.0 gases / Oxygen		Valve Page 20				Outlet Page 21
Pure 5.0 gases		Valve Page 22				Outlet Page 23
Accessories				Page 24		
Mounting instructions - Front Control Valves				Page 26		
Mounting instructions - Outlets				Page 26		
Mounting instructions - Mounting of outlets into fume hoods with a double wall construction				Page 27		
Pipe installation - Water, Special water (SS), Burning gases, Technical gases 2.0, 4.0 and 5.0				Page 28		

# BROEN-LAB UNIFLEX™ PREMIUM

## THIS IS BROEN-LAB UNIFLEX™ PREMIUM

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

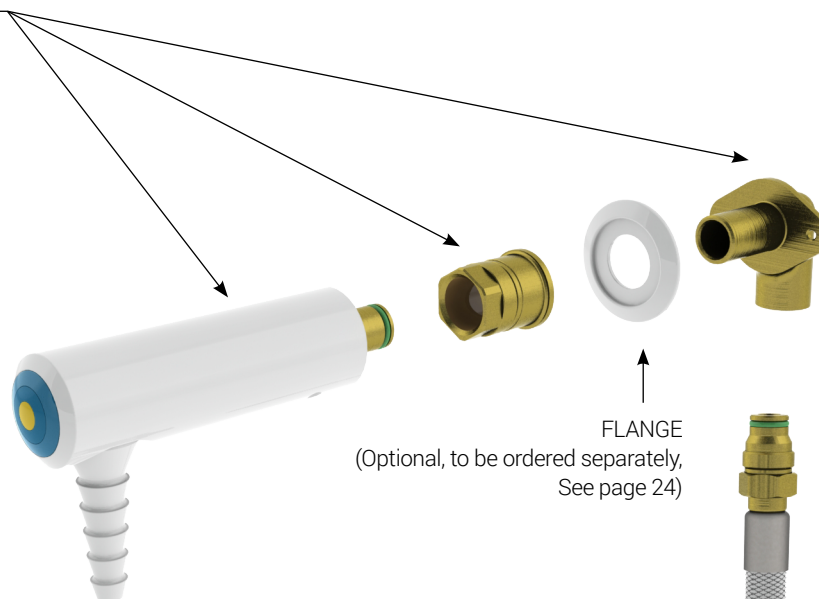


## THIS IS BROEN-LAB UNIFLEX™

BROEN-LAB UniFlex™ is a unique and patented connection, which allows customers to choose from various connection methods, such as hoses, CU-, PEX or stainless steel pipes, without changing the valve itself. It provides unique flexibility, not only for the installer, but also for the end-user. Due to the flexibility of the system, the quick installation and savings on fittings, this system offers lower TIC (Total Installed Costs).

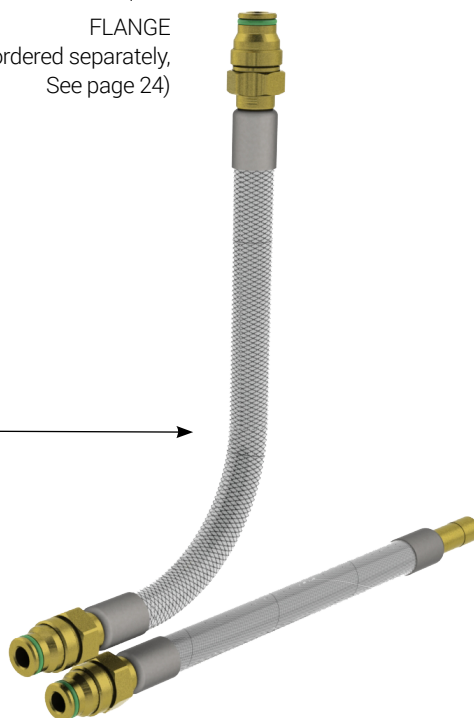
## PRODUCT OVERVIEW

### OUTLETS

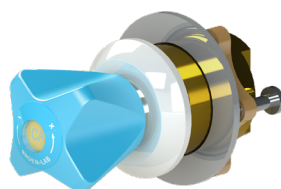


FLANGE  
(Optional, to be ordered separately,  
See page 24)

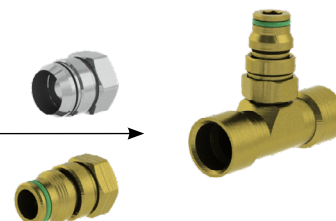
BROEN-LAB UniFlex™ flexible hoses  
[See 99G0005](#)



### FRONT CONTROL VALVES



BROEN-LAB UniFlex™ connection fittings and adaptors  
for CU, SS, PEX and PA pipes



For more information about BROEN-LAB UniFlex™ hoses, connection fittings and adaptors, please contact your BROEN-LAB representative or refer to [www.BROEN-LAB.com](http://www.BROEN-LAB.com)



FRONT CONTROL VALVE

WATER

Specifications

Handle: Polypropylene with media indication according to EN13792.  
Headwork: Rubber  
Opening/closing function: 2 x 360°  
Temperature range: 0-90°C  
Max. working pressure: 10 bar / 147 psi  
Test pressure: 1 x working pressure  
Inlet/outlet: BROEN-LAB UniFlex™  
Weight: 0.7 kg

Materials with media contact

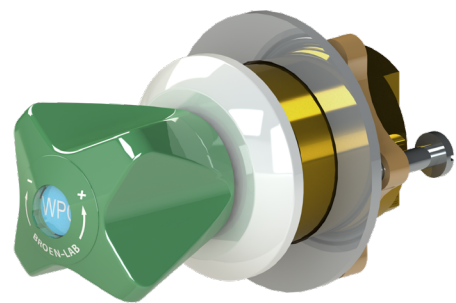
Metals: Brass  
Rubber: EPDM  
Lubricant: Silicone based

Ordering information

For standard configuration please refer to the item numbers below.

- Other options:
- a valve for different medium
  - a valve for front side mounting
  - a valve without mounting kit
  - national approvals

For further information, please contact your BROEN-LAB representative.



Configuration options



	without service valve
	2511 501 10XX

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



**01** • Potable water, cold



**02** • Potable water, hot



**07** • Non-potable water, cold



**08** • Non-potable water, hot

Delivered with mounting accessories

# FRONT CONTROL VALVE

## WATER

### Specifications

Handle: Metal, BROEN-LAB POLYCOAT powder coated with media indication according to EN13792.  
Cartridge: Ceramic (with flow and temperature limitation or two step opening)  
Temperature range: 0-90°C  
Max.working pressure: 10 bar / 147 psi  
Test pressure: 1 x working pressure  
Inlet/outlet: BROEN-LAB UniFlex™  
Weight: 0.6 kg

### Materials with media contact

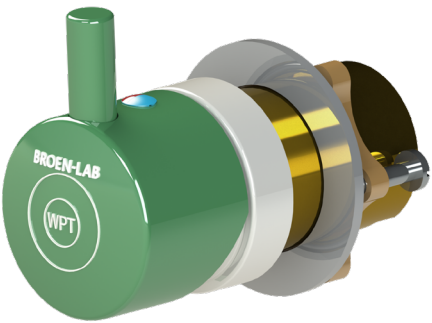
Metals: Brass  
Rubber: EPDM  
Plastics: POM  
Lubricant: Silicone based  
Ceramics: Al-oxyd 96%

### ORDERING INFORMATION

For standard configuration please refer to the item numbers below.

Other options:  
- a valve without mounting kit

For further information, please contact your BROEN-LAB representative.



### Configuration options



	with flow and temperature regulation cartridge	with two step opening
	2511 529 10XX	2511 531 10XX

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



**35**

• Potable water, tempered



**37**

• Non-potable water, tempered

Delivered with mounting accessories

OUTLET  
WATER

Specifications

BROEN-LAB UniFlex™ outlets have an integrated media indication according to EN 13792.  
Inlet: BROEN-LAB UniFlex™  
Hose nozzle: Polypropylene, fixed (can be unscrewed by hand, thread: male G3/8)  
Temperature range: 0-65°C  
Max. wall thickness: 20mm  
Weight: 0.5 kg (swivel spout: 0.7 kg)

Materials with media contact

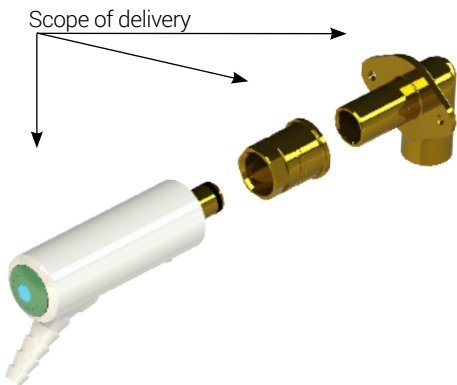
Metals: Brass  
Rubber: EPDM  
Plastics: PP  
Lubricant: Silicone based

Ordering information

For standard configuration please refer to the item numbers below.

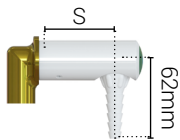
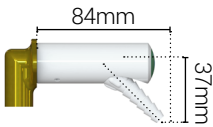
- other media
- flange
- non-return valve
- removable nozzle
- other standout
- straight rear wall connection
- wall thickness 20-40mm
- double wall mounting
- additional support in case of a thin panel
- national approvals

For further information, please contact your BROEN-LAB representative.



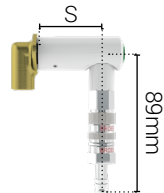
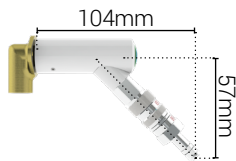
Additional mounting information see page 26-28

With fixed nozzle



	45°	90° S = 53 mm	90° S = 75 mm	90° S = 90 mm
	2511 100 81XX-40	2511 110 81XX-40	2511 120 81XX-40	2511 130 81XX-40

With quick release coupling



	45°	90° S = 53 mm	90° S = 75 mm	90° S = 90 mm
	2511 102 10XX-40	2511 112 10XX-40	2511 122 10XX-40	2511 132 10XX-40

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



**01** • Potable water, cold



**07** • Non-potable water, cold



**35** • Potable water, tempered



**02** • Potable water, hot



**08** • Non-potable water, hot

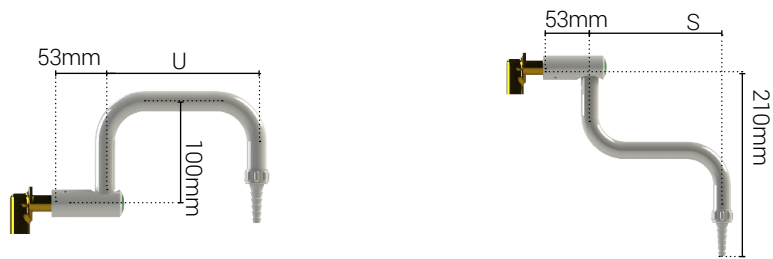


**37** • Non-potable water, tempered

Delivered with 90° Rear Wall Connection (max wall thickness: 20mm)

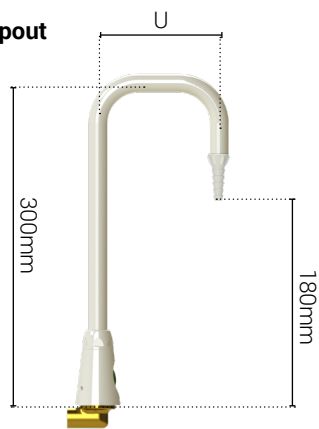
OUTLET  
WATER

With swivel spout









	U = 150 mm	U = 200 mm	S = 150 mm	S = 200 mm
	2511 212 81XX-40	2511 213 81XX-40	2511 214 81XX-40	2511 215 81XX-40

Bench mounted outlet with swivel spout



	U = 150 mm	U = 200 mm
	2511 311 10XX-40	2511 312 10XX-40

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

-  **01** • Potable water, cold
-  **07** • Non-potable water, cold
-  **35** • Potable water, tempered
-  **02** • Potable water, hot
-  **08** • Non-potable water, hot
-  **37** • Non-potable water, tempered

Delivered with 90° Rear Wall Connection (max wall thickness: 20mm)

# OUTLET SPOUT

## WATER

### Specifications

Inlet: BROEN-LAB UniFlex™  
Hose nozzle: Polypropylene, fixed (can be unscrewed by hand, thread: male G3/8)  
Temperature range: 0-65°C  
Weight: 0.7 kg

### Materials with media contact

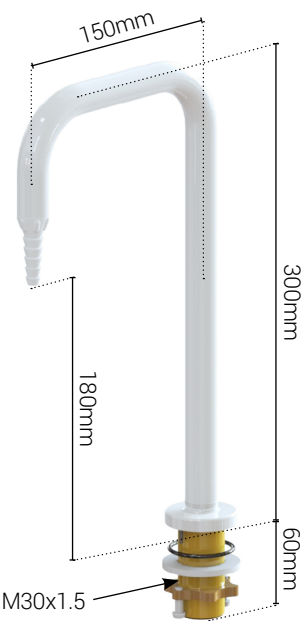
Metals: Brass  
Rubber: EPDM  
Plastics: PP  
Lubricant: Silicone based

### Ordering information

For standard configuration please refer to the item numbers below.

- Other options:
- non-return valve
  - removable nozzle
  - other inlet connections (length, type)

For further information, please contact your BROEN-LAB representative.



### Ordering information

	2539 038 10XX-52

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



**01** • Potable water, cold



**07** • Non-potable water, cold



**35** • Potable water, tempered



**02** • Potable water, hot



**08** • Non-potable water, hot



**37** • Non-potable water, tempered

Delivered with mounting accessories

# FRONT CONTROL VALVE

## SPECIAL WATER

### Specifications

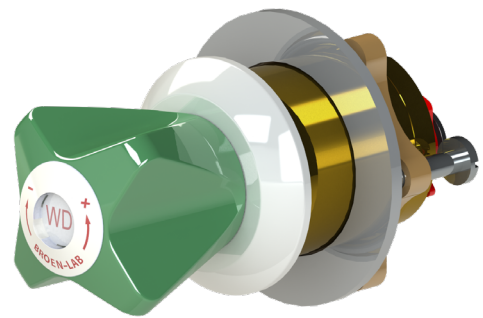
Handle: Polypropylene, with media indication according to EN13792.  
Headwork: Diaphragm type  
Opening/closing function: 1 1/2 x 360°  
Max. working pressure: 10 bar / 147 psi  
Test pressure: 1 x working pressure  
Weight: 0.7 kg

### PP valve

Temperature range: 0-65°C  
Inlet/outlet: Push couplings for OD10mm pipes

### SS Valve

Temperature range: 0-90°C  
Inlet/outlet: BROEN-LAB UniFlex™



Available in PP or Stainless Steel according to product numbers listed below

### Materials with media contact

### PP valve

Diaphragm: PTFE  
Plastics: PP

### SS Valve

Diaphragm: PTFE  
Metals: SS (AISI 316)

### Ordering information

For standard configuration please refer to the item numbers below.

Other options:

- a valve without mounting kit
- a valve for front side mounting

For further information, please contact your BROEN-LAB representative.

### Configuration options



	PP valve	SS valve
	2511 532 10XX	2511 534 10XX

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



**03** • Distilled water



**36** • Deionized water, cold

Delivered with mounting accessories

OUTLET  
SPECIAL WATER

Specifications

BROEN-LAB UniFlex™ outlets have an integrated media indication according to EN 13792.  
Inlet: Push couplings for OD10mm pipes  
Outlet: Removable nozzle, PP  
Temperature range: 0-65°C  
Max. wall thickness: 20mm  
Weight: 0.5 kg

Materials with media contact

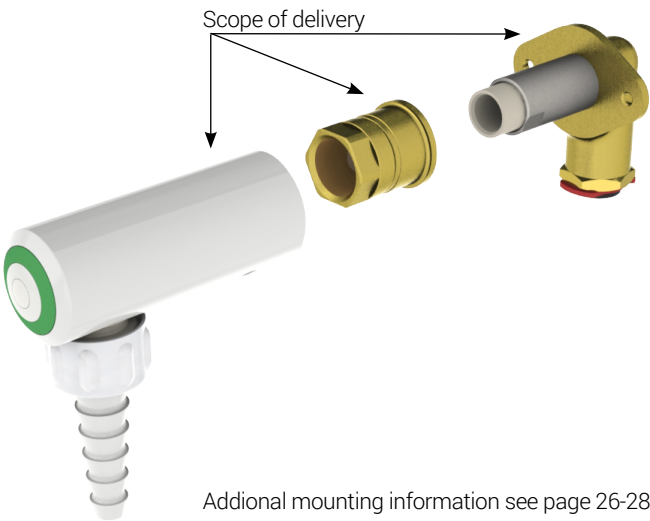
Rubber: EPDM  
Plastics: PP

Ordering information

For standard configuration please refer to the item numbers below.

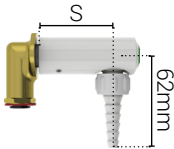
- Other options:
- flange
  - wall thickness 20-40mm
  - swivel spout (U- or S-shape)
  - additional support in case of a thin panel

For further information, please contact your BROEN-LAB representative.



Additional mounting information see page 26-28

Configuration options



	S = 53 mm	S = 75 mm	S = 90 mm
	2511 116 10XX-40	2511 126 10XX-40	2511 136 10XX-40

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



**03** • Distilled water



**36** • Deionized water, cold

Delivered with 90° Rear Wall Connection (max wall thickness: 20mm)



# FRONT CONTROL VALVE

## SPECIAL WATER

### Specifications

BROEN-LAB UniFlex™ outlets have an integrated media indication according to EN 13792.  
Inlet: BROEN-LAB UniFlex™  
Max. wall thickness: 20mm  
Weight: 0.5 kg

### Materials with media contact

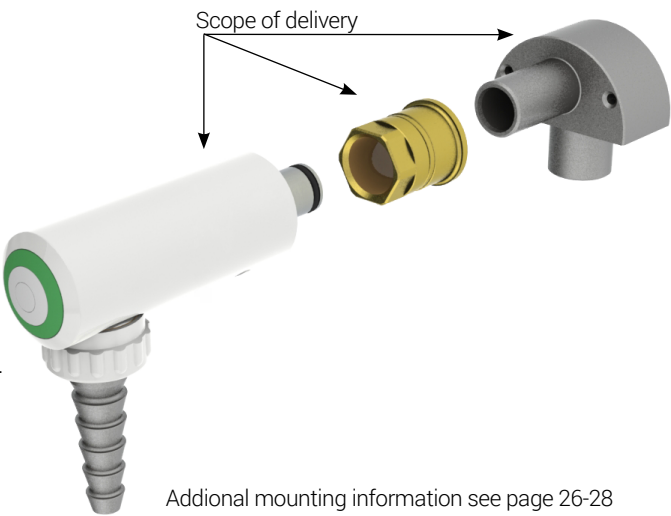
Rubber: EPDM  
Metals: Stainless Steel (AISI 316)

### Ordering information

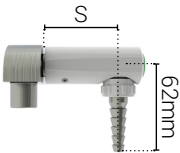
For standard configuration please refer to the item numbers below.

- Other options:
- flange
  - straight rear wall connection
  - fixed nozzle with external G3/4" thread
  - wall thickness 20-40mm
  - additional support in case of a thin panel

For further information, please contact your BROEN-LAB representative.



### Configuration options



	S = 53 mm	S = 90 mm
	2511 117 10XX-40	2511 137 10XX-40

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



**03** • Distilled water



**36** • Deionized water, cold

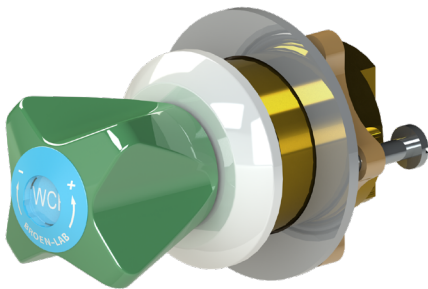
Delivered with 90° Rear Wall Connection (max wall thickness: 20mm)

FRONT CONTROL VALVE

COOLANT WATER

Specifications

Handle: Polypropylene with media indication according to EN13792.  
Headwork: Rubber  
Opening/closing function: 2 x 360°  
Temperature range: 0-90°C  
Max. working pressure: 10 bar / 147 psi  
Test pressure: 1 x working pressure  
Inlet/outlet: BROEN-LAB UniFlex™  
Weight: 0.7 kg



Materials with media contact

Metals: Brass  
Rubber: EPDM  
Lubricant: Silicone based

Ordering information

For standard configuration please refer to the item numbers below.

- Other options:
- a valve for front side mounting
  - a valve without mounting kit
  - a valve with simple hand operation of flow and return of chilled water

For further information, please contact your BROEN-LAB representative.

Configuration options



	without service valve
	2511 501 10XX

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

-  **05** • Coolant water, feed
-  **06** • Coolant water, return

Delivered with mounting accessories

OUTLET  
COOLANT WATER

Specifications

BROEN-LAB UniFlex™ outlets have an integrated media indication according to EN 13792.  
Inlet/outlet: BROEN-LAB UniFlex™  
Max. wall thickness: 20mm  
Weight: 0.5 kg  
Quick release coupling: double shut-off

Materials with media contact

Metals: Brass  
Rubber: EPDM  
Lubricant: Silicone based

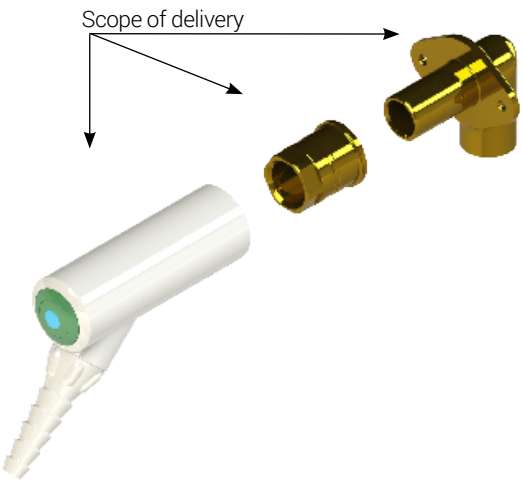
Ordering information

For standard configuration please refer to the item numbers below.

Other options:

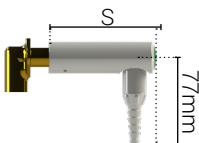
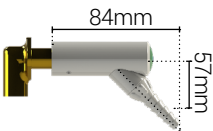
- flange
- other standout
- straight rear wall connection
- wall thickness 20-40mm
- double wall mounting
- additional support in case of a thin panel

For further information, please contact your BROEN-LAB representative.



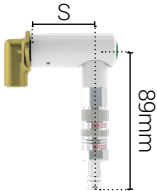
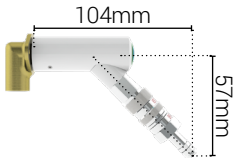
Additional mounting information see page 26-28

With fixed nozzle and integrated non-return valve



	45°	90° S = 53 mm	90° S = 75 mm	90° S = 90 mm
	2511 103 81XX-40	2511 113 81XX-40	2511 123 81XX-40	2511 133 81XX-40

With quick release coupling and non-return valve (return only)



	45°	90° S = 53 mm	90° S = 75 mm	90° S = 90 mm
	2511 102 10XX-40	2511 112 10XX-40	2511 122 10XX-40	2511 132 10XX-40

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



**05** • Coolant water, feed



**06** • Coolant water, return

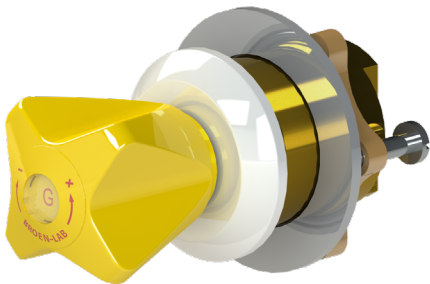
Delivered with 90° Rear Wall Connection (max wall thickness: 20mm)

FRONT CONTROL VALVE

BURNING GAS

Specifications

Handle: Polypropylene with media indication according to EN13792.  
Headwork: ceramic, press/turn  
Opening/closing function: 90°  
Max.working pressure: 7 bar / 101,5 psi  
Test pressure: 1.5 x working pressure  
Inlet/outlet: BROEN-LAB UniFlex™  
Weight: 0.7 kg



Materials with media contact

Metals: Brass  
Rubber: NBR  
Lubricant: Mineral oil based

Ordering information

For standard configuration please refer to the item numbers below.

- Other options:
- a valve for different medium
  - a valve with needle headwork
  - a valve for front side mounting
  - a valve without mounting kit




For further information, please contact your BROEN-LAB representative.

Configuration options



	without service valve
	2511 517 10XX

Replace XX with one of these media types:

-  31 • Natural Gas
-  32 • Liquified Gases
-  34 • Hydrogen

Delivered with mounting accessories

OUTLET  
BURNING GAS

Specifications

BROEN-LAB UniFlex™ outlets have an integrated media indication according to EN 13792.  
Inlet/outlet: BROEN-LAB UniFlex™  
Max. wall thickness: 20mm  
Weight: 0.5 kg

Materials with media contact

Metals: Brass  
Rubber: NBR  
Lubricant: Mineral oil based

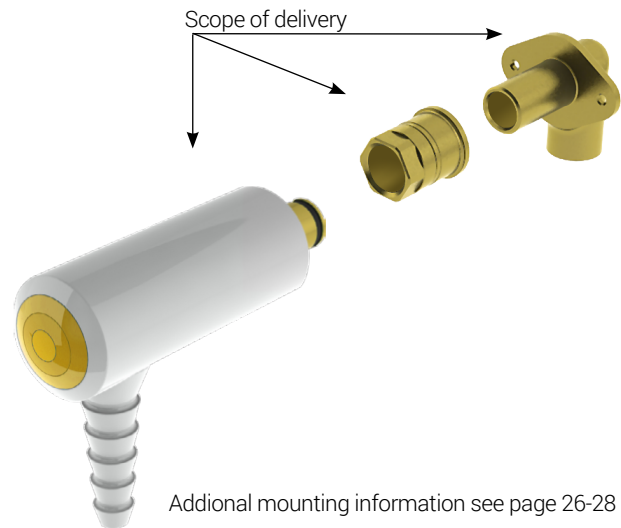
Ordering information

For standard configuration please refer to the item numbers below.

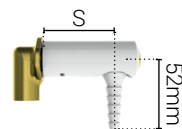
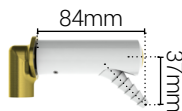
Other options:

- other media
- flange
- other standout
- straight rear wall connection
- wall thickness 20-40mm
- double wall mounting
- table mounting
- additional support in case of a thin panel

For further information, please contact your BROEN-LAB representative.

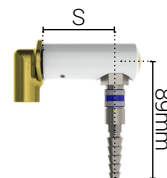
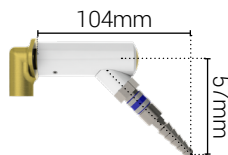


With fixed nozzle



	45°	90° S = 53 mm	90° S = 75 mm	90° S = 90 mm
	2511 100 10XX-40	2511 110 10XX-40	2511 120 10XX-40	2511 130 10XX-40

With quick release coupling



	45°	90° S = 53 mm	90° S = 75 mm	90° S = 90 mm
	2511 102 10XX-40	2511 112 10XX-40	2511 122 10XX-40	2511 132 10XX-40

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



10 • Natural Gas



12 • Liquefied Gases



14 • Butane



16 • Propane



18 • Acetylene



20 • Hydrogen



46 • Methane

Delivered with 90° Rear Wall Connection (max wall thickness: 20mm)

FRONT CONTROL VALVE

TECHNICAL GASES 2.0 & VACUUM/HIGH FLOW

Specifications

Handle: Polypropylene with media indication according to EN13792.  
Inlet/outlet: BROEN-LAB UniFlex™  
Weight: 0.7 kg  
Test pressure: 1.5 x working pressure

Technical 2.0 gases

Headwork: Needle  
Opening/closing function: 3 x 360°  
Max. working pressure: 16 bar / 232 psi

Headwork: Micro flow  
Opening/closing function: 7.5 x 360°  
Max. working pressure: 16 bar / 232 psi

Vacuum / High Flow\*

Headwork: High flow  
Opening/closing function: 1.5 x 360°  
Max. working pressure: -1 bar to 16 bar / -14.5 psi to 232 psi

Materials with media contact

Metals: Brass  
Rubber: FKM  
Plastics: PVDF  
Lubricant: Perfluoropolyether based

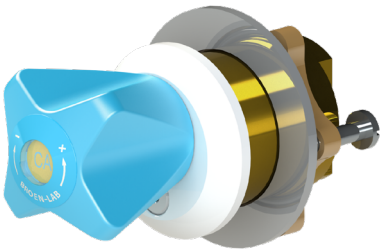
Ordering information

For standard configuration please refer to the item numbers below.

Other options:

- a valve for different medium
- high flow headwork for other media
- a valve for front side mounting
- a valve without mounting kit

For further information, please contact your BROEN-LAB representative.



\*Please note that valves for vacuum as a standard delivered with a high flow headwork. High flow headwork can also be used for other media where there is a requirement for higher flow.

Configuration options




	Without service valve Needle headwork	Without service valve Micro flow headwork
	2511 509 10XX	2511 544 10XX

Replace XX with one of these media types:

 **21** • Compressed air     **23** • Nitrogen     **24** • Carbon dioxide     **25** • Argon     **26** • Helium

	Without service valve High flow headwork
	2511 513 1028

 **28** • Low vacuum (1000 to 1 mbar)

Delivered with mounting accessories

# FRONT CONTROL VALVE

## PRESSURE REGULATOR

### Specifications

BROEN-LAB UniFlex™ pressure regulator for panel mounting with a built-in filter (mesh size 200 µm) on the inlet.  
Type: Non-relieving  
Proof pressure: 15 bar  
Operating pressure: Max. 10 bar  
Regulating pressure range: 0,5-8.5 bar  
Inlet/outlet: BROEN-LAB UniFlex™  
Max. panel thickness: 3,5mm  
Weight: 0.5 kg

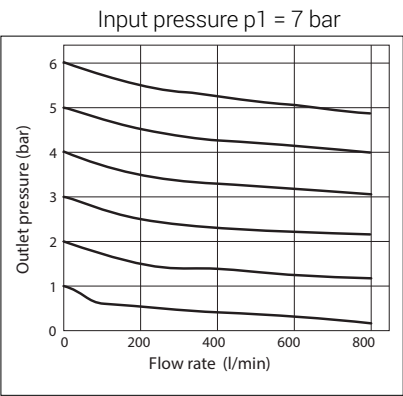
### Materials with media contact

Metals: Brass, zinc die-cast  
Rubber: NBR, FKM  
Plastics: POM  
Lubricant: Perfluoropolyether based

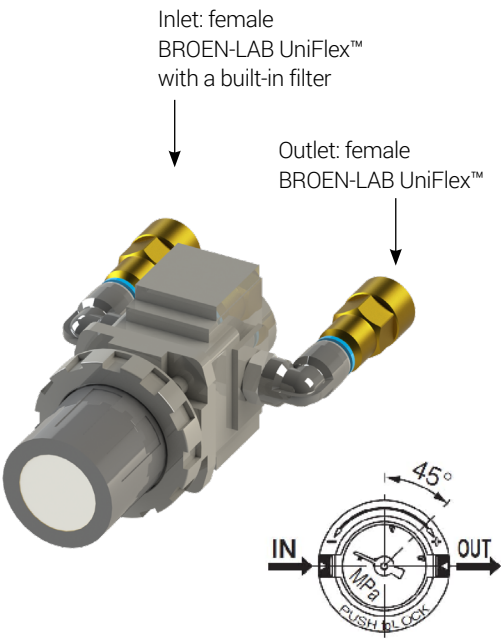
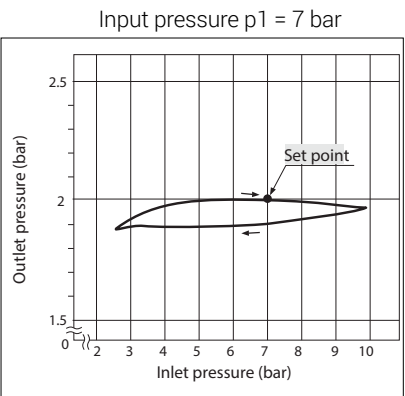
### Ordering information

For standard configuration please refer to the item numbers below.

### Flow rate



### Pressure characteristics



### Ordering information

	2599 366 1099

21 • Compressed air 23 • Nitrogen 24 • Carbon dioxide 25 • Argon

Media should be defined when ordering.  
Can be used for CA, N2, CO2, Ar. Not recommended for Helium (He). Do not use for Oxygen (O2)!



## OUTLET

### TECHNICAL GASES 2.0 & VACUUM/HIGH FLOW

#### Specifications

BROEN-LAB UniFlex™ outlets have an integrated media indication according to EN 13792.  
 Inlet/outlet: BROEN-LAB UniFlex™  
 Max. wall thickness: 20mm  
 Weight: 0.5 kg

#### Materials with media contact

Metals: Brass  
 Rubber: FKM  
 Plastics: PVDF  
 Lubricant: Perfluoropolyether based

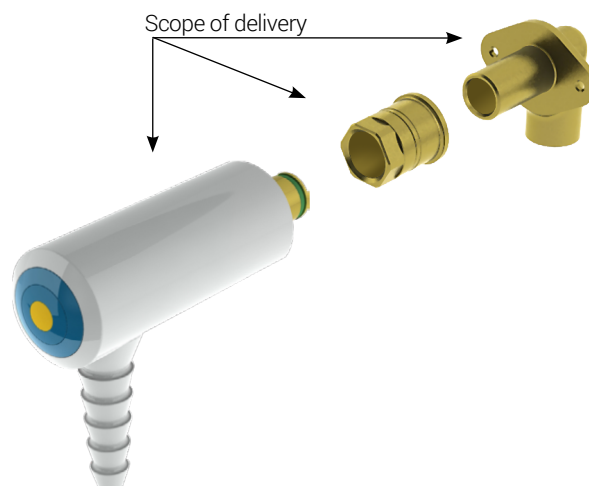
#### Ordering information

For standard configuration please refer to the item numbers below.

Other options:

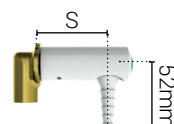
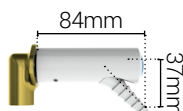
- other media
- flange
- straight rear wall connection
- wall thickness 20-40mm
- double wall mounting
- table mounting
- additional support in case of a thin panel

For further information, please contact your BROEN-LAB representative.



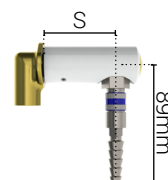
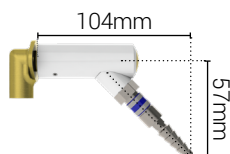
Additional mounting information see page 26-28

#### With fixed nozzle



	45°	90° S = 53 mm	90° S = 75 mm	90° S = 90 mm
2.0 gases	2511 100 81XX-40	2511 110 81XX-40	2511 120 81XX-40	2511 130 81XX-40
Vacuum	2511 100 8128-40	2511 110 8128-40	2511 120 8128-40	2511 130 8128-40

#### With quick release coupling



	45°	90° S = 53 mm	90° S = 75 mm	90° S = 90 mm
2.0 gases	2511 102 10XX-40	2511 112 10XX-40	2511 122 10XX-40	2511 132 10XX-40
Vacuum	2511 102 1028-40	2511 112 1028-40	2511 122 1028-40	2511 132 1028-40

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



**21** • Compressed air



**23** • Nitrogen



**24** • Carbon dioxide



**25** • Argon



**26** • Helium



**28** • Low vacuum (1000 to 1 mbar)

Delivered with 90° Rear Wall Connection (max wall thickness: 20mm)

FRONT CONTROL VALVE

TECHNICAL GASES 4.0 & OXYGEN

Specifications

Handle: Polypropylene with media indication according to EN13792.  
Inlet/outlet: BROEN-LAB UniFlex™  
Weight: 0.7 kg  
Test pressure: 1.5 x working pressure

Headwork: Needle  
Opening/closing function: 3 x 360°  
Max. working pressure: 16 bar / 232 psi

Headwork: Micro flow  
Opening/closing function: 7.5 x 360°  
Max. working pressure: 16 bar / 232 psi

Materials with media contact

Metals: Brass  
Rubber: FKM  
Plastics: PVDF  
Lubricant: Perfluoropolyether based (Oxygen approved)

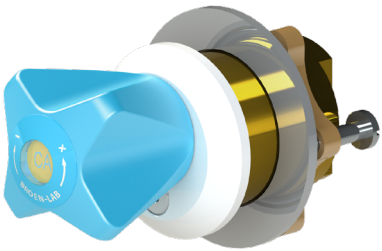
All components are ultrasonically cleaned for 99,99% clean gases

Ordering information

For standard configuration please refer to the item numbers below.

- Other options:
- a valve for front side mounting
  - a valve without mounting kit

For further information, please contact your BROEN-LAB representative.



Available with or without service valve according to product numbers listed below

Configuration options



	Without service valve Needle headwork	Without service valve Micro flow headwork
	2511 525 10XX	2511 548 10XX

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



**21** • Compressed air



**22** • Oxygen



**23** • Nitrogen



**24** • Carbon dioxide



**25** • Argon



**26** • Helium



**27** • Dinitrogen monoxide

Delivered with mounting accessories

OUTLET

TECHNICAL GASES 4.0 & OXYGEN

Specifications

BROEN-LAB UniFlex™ outlets have an integrated media indication according to EN 13792.  
Inlet/outlet: BROEN-LAB UniFlex™  
Max. wall thickness: 20mm  
Weight: 0.5 kg

Materials with media contact

Metals: Brass  
Rubber: FKM  
Plastics: PVDF  
Lubricant: Perfluoropolyether based (Oxygen approved)

All components are ultrasonically cleaned for 99,99% clean gases

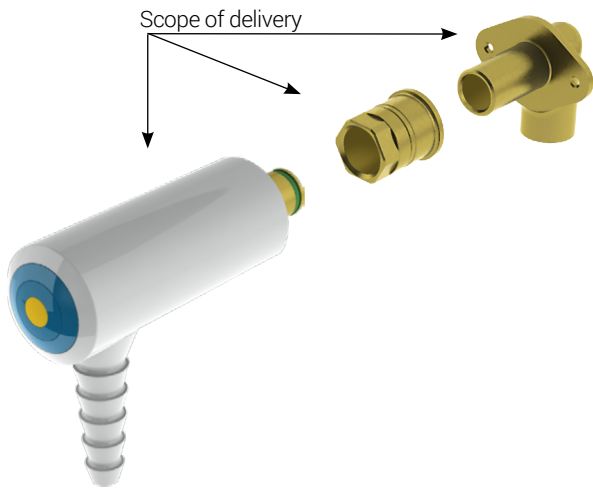
Ordering information

For standard configuration please refer to the item numbers below.

Other options:

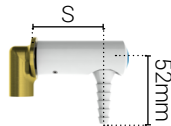
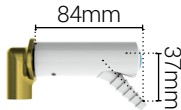
- other media
- flange
- removable nozzle
- other standout
- straight rear wall connection
- wall thickness 20-40mm
- table mounting
- additional support in case of a thin panel

For further information, please contact your BROEN-LAB representative.



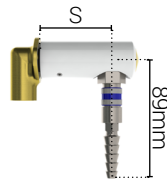
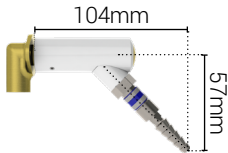
Additional mounting information see page 26-28

With fixed nozzle



	45°	90° S = 53 mm	90° S = 75 mm	90° S = 90 mm
	2511 108 10XX-40	2511 118 10XX-40	2511 128 10XX-40	2511 138 10XX-40

With quick release coupling



	45°	90° S = 53 mm	90° S = 75 mm	90° S = 90 mm
	2511 185 10XX-40	2511 186 10XX-40	2511 187 10XX-40	2511 190 10XX-40

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



**21** • Compressed air



**22** • Oxygen



**23** • Nitrogen



**24** • Carbon dioxide



**25** • Argon



**26** • Helium



**27** • Dinitrogen monoxide

Delivered with 90° Rear Wall Connection (max wall thickness: 20mm)

# FRONT CONTROL VALVE

## PURE 5.0 GASES

### Specifications

Valve can be used for non-corrosive and inactive gases with purity coefficient up to 5.0 (99.999% pure gases).

Handle: Polypropylene with media indication according to EN13792.  
Inlet/outlet: BROEN-LAB UniFlex™  
Leak rate: < 5x10<sup>-5</sup> mbar x l/s [Helium]  
Weight: 0.7 kg  
Test pressure: 1.5 x working pressure

Headwork: Needle  
Opening/closing function: 3 x 360°  
Max. working pressure: 21 bar / 305 psi

Headwork: Micro flow  
Opening/closing function: 7.5 x 360°  
Max. working pressure: 16 bar / 232 psi

Shut-off Valve  
Headwork: Stop  
Opening/closing function: 1.5 x 360°  
Max. working pressure: 21 bar / 305 psi

### Materials with media contact

Metals: Brass  
Rubber: FKM  
Plastics: PVDF  
Lubricant: Perfluoropolyether based (Oxygen approved)

All components are ultrasonically cleaned for 99,999% clean gases

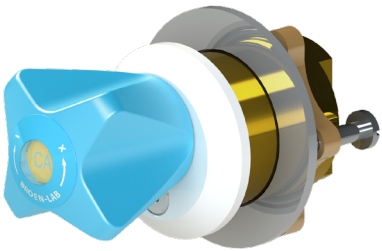
### Ordering information

For standard configuration please refer to the item numbers below.

Other options:

- a valve for front side mounting
- a valve without mounting kit
- inlet/outlet with female 1/4 NPT thread

For further information, please contact your BROEN-LAB representative.



### Configuration options



	Shut-off valve	Needle valve	Micro flow valve
Fixed nozzle	2511 541 10XX	2511 540 10XX	2511 552 10XX

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



**21** • Compressed air



**22** • Oxygen



**23** • Nitrogen



**24** • Carbon dioxide



**25** • Argon



**26** • Helium



**27** • Dinitrogen monoxide

Delivered with mounting accessories

OUTLET  
PURE 5.0 GASES

Specifications

Outlets can be used for non-corrosive and inactive gases with purity coefficient up to 5.0 (99,999% pure gases).

BROEN-LAB UniFlex™ outlets have an integrated media indication according to EN 13792.

Inlet: BROEN-LAB UniFlex™

Outlet: Female 1/4 NPT

Leak rate: < 5x10<sup>-5</sup> mbar x l/s [Helium]

Max. wall thickness: 20mm

Weight: 0.5 kg

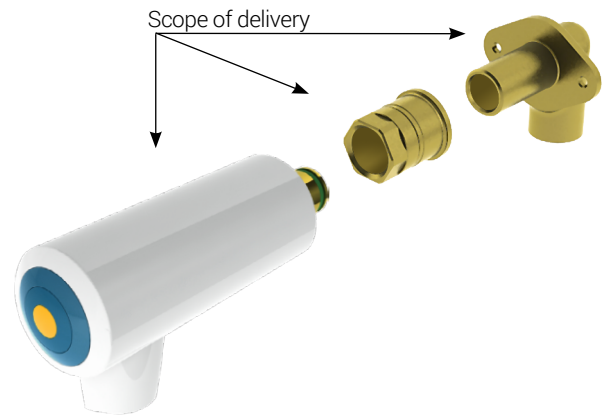
Materials with media contact

Metals: Brass

Rubber: FKM

Plastics: PVDF

Lubricant: Perfluoropolyether based (Oxygen approved)



Additional mounting information see page 26-28

All components are ultrasonically cleaned for 99,999% clean gases.

Ordering information

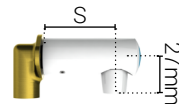
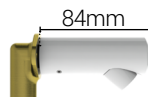
For standard configuration please refer to the item numbers below.

Other options:

- other media
- flange
- straight rear wall connection
- wall thickness 20-40mm
- table mounting
- additional support in case of a thin panel
- Swagelok® tube fittings
- inlet with female 1/4 NPT thread

For further information, please contact your BROEN-LAB representative.

Configuration options



	45°	90° S = 53 mm	90° S = 75 mm	90° S = 90 mm
	2511 109 10XX-40	2511 119 10XX-40	2511 129 10XX-40	2511 139 10XX-40

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



**21** • Compressed air



**22** • Oxygen



**23** • Nitrogen



**24** • Carbon dioxide



**25** • Argon



**26** • Helium



**27** • Dinitrogen monoxide

Delivered with 90° Rear Wall Connection (max wall thickness: 20mm)

## ACCESSORIES

Illustration	Description	Media	BROEN-LAB item no.
	Flange (wall thickness 0-20mm)	All media	1521 0579G
	Flange (wall thickness 20-40mm)	All media	1521 1789G
	Nut (wall thickness 0-20mm)	All media	1521 036
	Nut (wall thickness 20-40mm)	All media	1521 054
	Straight Rear Wall Connection	Water Burning gas Technical gases 2.0	1521 088
	90° Rear Wall Connection	Water Burning gas Technical gases 2.0	1521 052
	90° Rear Wall Connection	Special water	2511 492
	90° Rear Wall Connection	Technical gases 4.0 + 5.0	1521 0520
	Rear Wall support plate	All media	1521 092
	Test equipment for outlets	Technical gases 2.0	1521 177

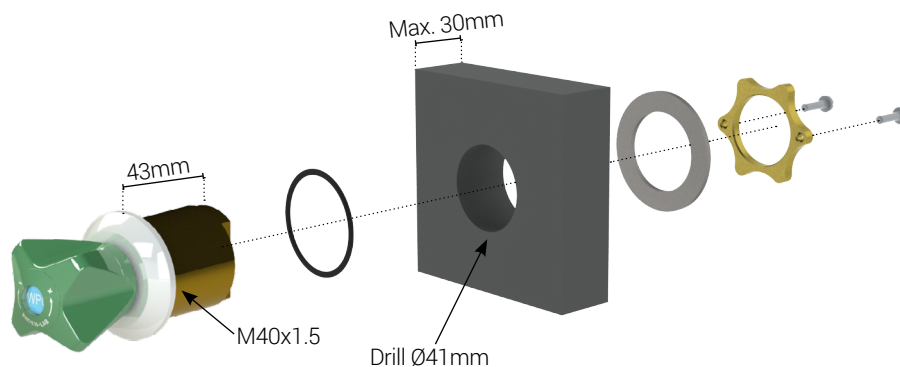
## ACCESSORIES

Illustration	Description	Media	BROEN-LAB item no.
	<p>Rear wall connection for fume hoods with a double wall construction</p> <p>M = 49 to 61 mm M = 61 to 73 mm M = 73 to 85 mm M = 85 to 97 mm M = 97 to 109 mm</p>	<p>Water Burning gases Technical gases 2.0</p>	<p>2511 494 2511 497 2511 496 2511 495 2511 493</p>
	<p>Rear wall connection for fume hoods with a double wall construction</p> <p>M = 61 to 73 mm M = 73 to 85 mm M = 85 to 97 mm M = 97 to 109 mm</p>	<p>Special water</p>	<p>1530 479 1530 515 1530 534 1530 481</p>
	<p>Rear wall connection for fume hoods with a double wall construction</p> <p>M = 49 to 61 mm M = 61 to 73 mm M = 73 to 85 mm M = 85 to 97 mm</p>	<p>Technical gases 4.0 + 5.0</p>	<p>2511 4940 2511 4970 2511 4960 2511 4950</p>
	<p>Water jet filter pump for spouts (inlet: union nut G3/4, adapter to female G1/2 is included)</p>	<p>Water</p>	<p>1919 9009</p>
	<p>Water jet filter pump for straight outlets (inlet: union nut G3/4, adapter to female G3/8 is included)</p>	<p>Water</p>	<p>1530 4769</p>

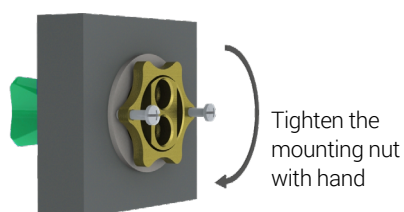


## MOUNTING INSTRUCTIONS

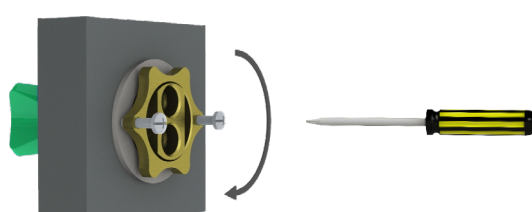
### FRONT CONTROL VALVES



1)



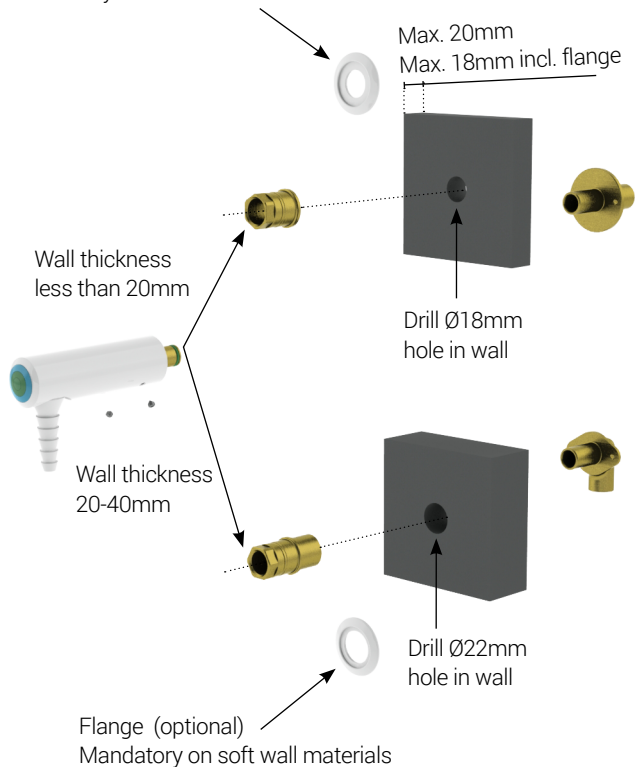
2)



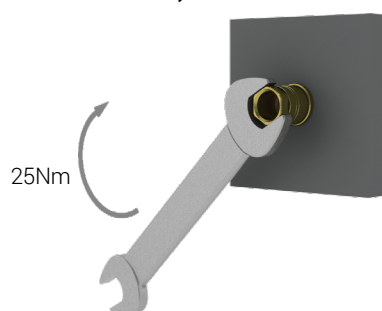
## MOUNTING INSTRUCTIONS

### OUTLETS

Flange (optional)  
Mandatory on soft wall materials



1)



2)



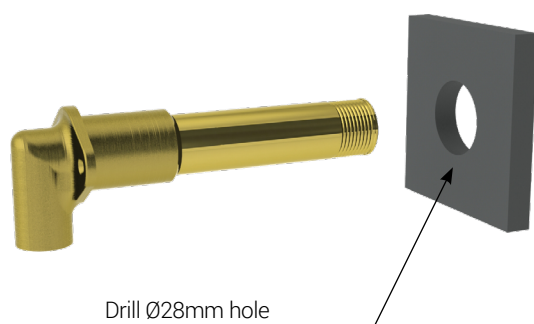
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## MOUNTING INSTRUCTIONS

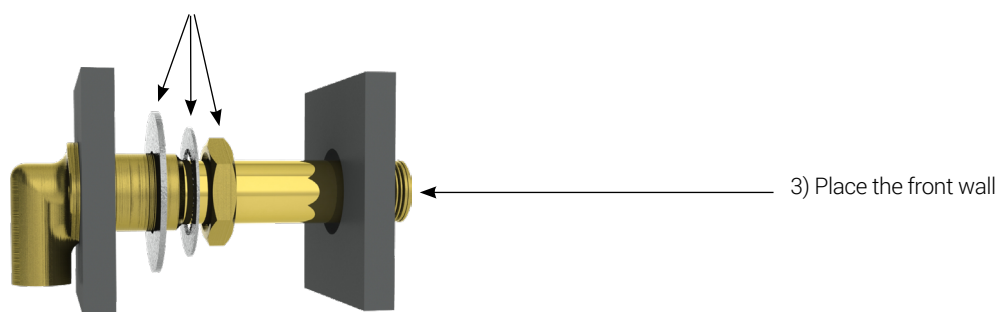
### MOUNTING OF OUTLETS INTO FUME HOODS WITH A DOUBLE WALL CONSTRUCTION

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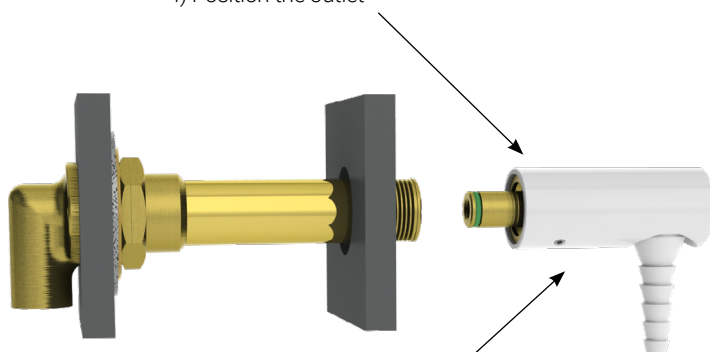
- 1) Insert the rear wall connection through the back wall



- 2) Fix the outlet to the back wall by tightening the nut



- 4) Position the outlet



- 5) Tighten Allen screws with Allen key, max 1Nm

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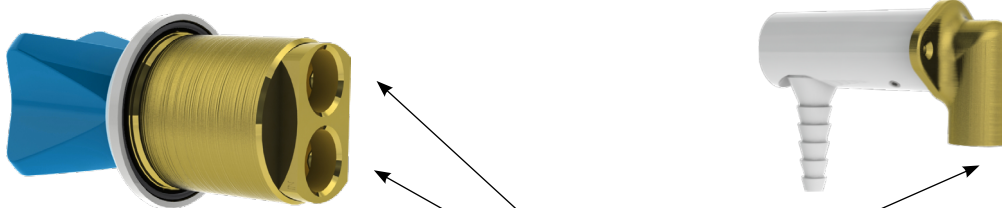
## PIPE INSTALLATION

WATER / SPECIAL WATER (SS MODEL) / BURNING GASES /  
TECHNICAL GASES (2.0, 4.0 AND 5.0)

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**Valve**

**Outlet**



BROEN-LAB UniFlex™ connection

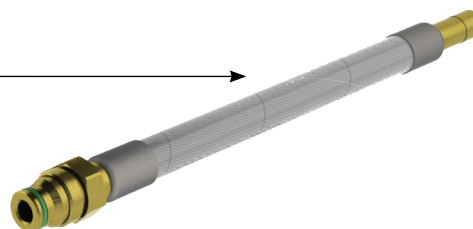
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Pipe installation can be done either with flexible hoses or with standard CU, PEX or SS pipes.

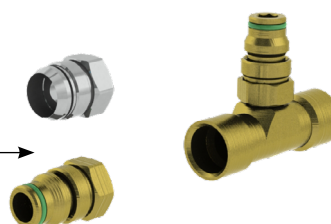
BROEN-LAB has a wide range of flexible pipes and hoses available with BROEN-LAB UniFlex™ connections as well as connection fittings to fit pipes of the following sizes:

- OD 8mm
- OD 10mm
- OD 12mm
- OD 15mm
- 3/8"

BROEN-LAB UniFlex™ flexible pipes and hoses



BROEN-LAB UniFlex™ connection fittings and adaptors  
for CU, SS, PEX and PA pipes



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## PIPE INSTALLATION

SPECIAL WATER (PP MODELS ONLY)

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Please note that PP valves and outlets for special water are delivered with push-in fittings.

BROEN-LAB recommends the following materials for pipe installation:

**Valve**

**Outlet**



Push-in fittings for OD10mm plastic tubing

BROEN-LAB recommends the following materials for pipe installation:

- PVDF (can be purchased at BROEN-LAB), LLDPE, PUR

## NOTES

## NOTES

## NOTES

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## HEADQUARTER

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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.