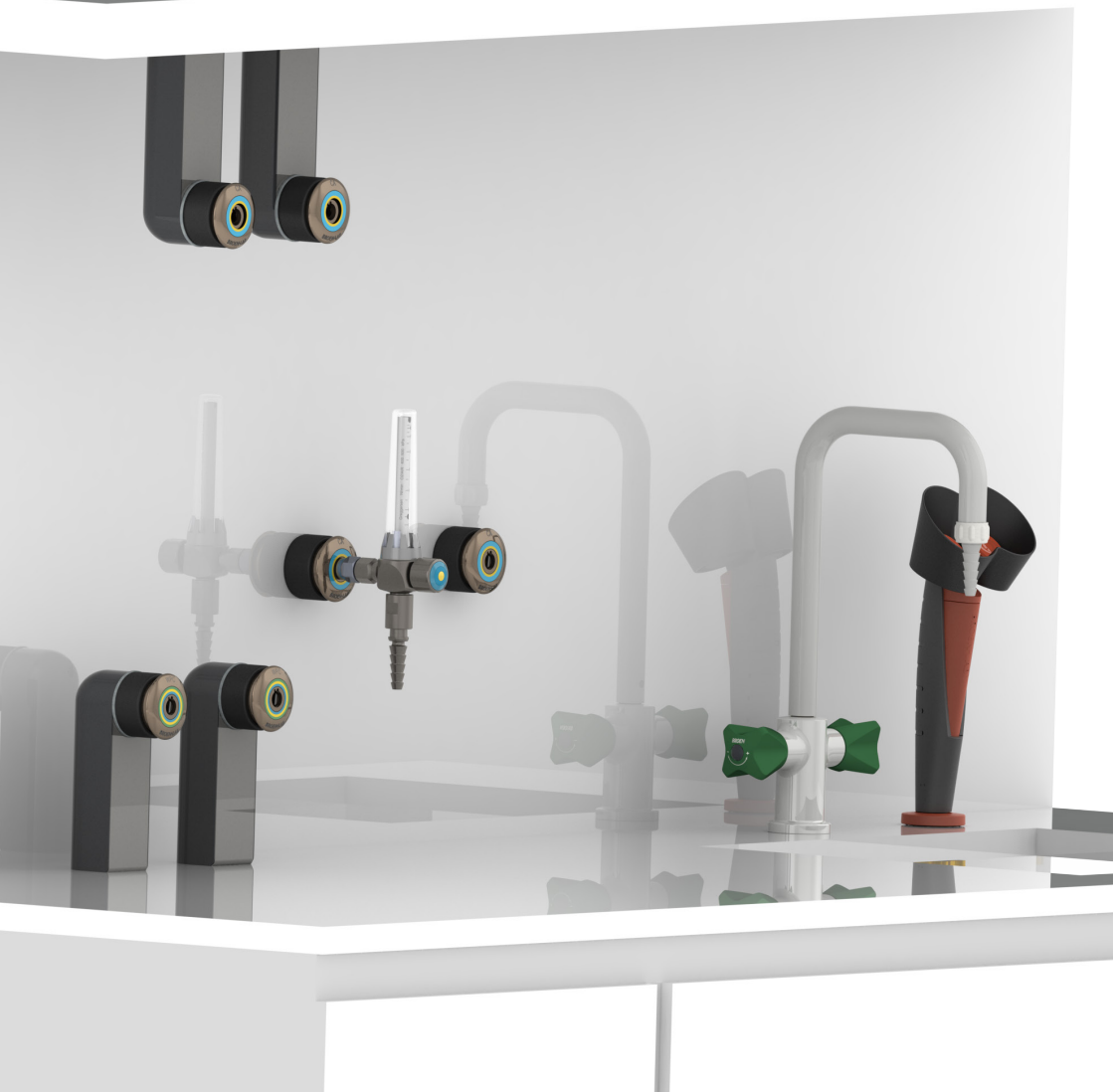


QUICK CONNECT

Installation and user manual



BROEN-LAB

QUICK CONNECT

Introduction

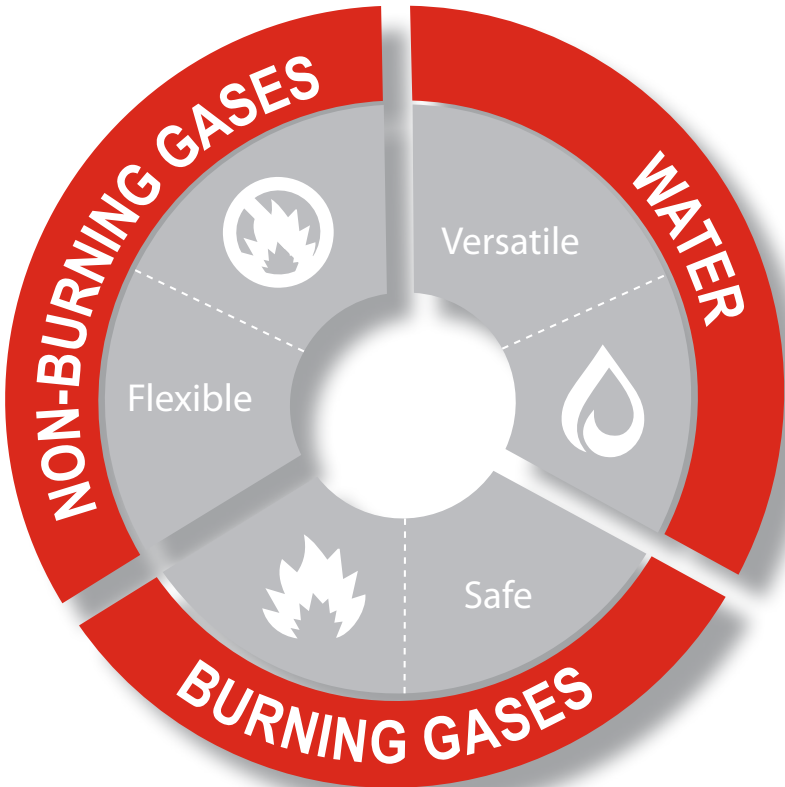
- ✓ **Easy to install**
- ✓ **Several labs in one**
- ✓ **Pre-install and decide later**
- ✓ **100 % safe**

This is an installations guide for Quick Connect Basic.
Quick Connect is the new, innovative and flexible lab solution.

Quick Connect is based on the concept plug and play and easy to install.
BROEN-LAB has furthermore made a drilling template which makes it easier to drill the mounting holes for the installation of Quick Connect.

For further information see page 23.

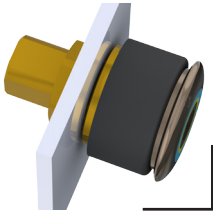
Before installation please read the chapter, **Purity on page 22.**



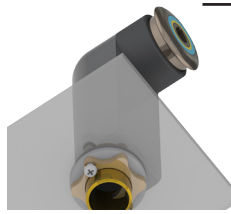
QUICK CONNECT

Table of Contents

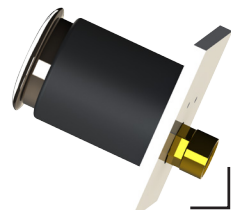
PANEL MOUNTED



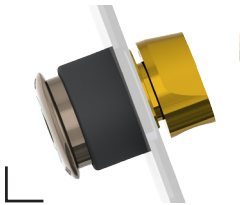
BENCH MOUNTED



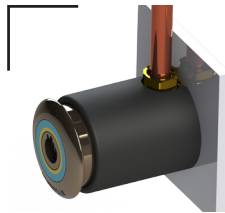
CONCEALED PIPE



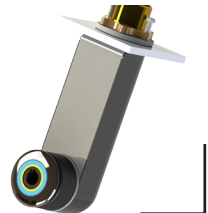
BUILT-IN MOUNTED



EXPOSED PIPE



SUSPENDED MOUNTED



DISC MOUNTED

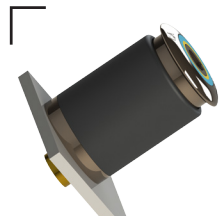


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Quick Connect Basic	
Panel mounted	6-7
Built-in mounted	8-9
Bench mounted	10-11
Exposed pipe mounted	12-13
Concealed pipe mounted	14-15
Suspended mounted	16-17
Disc mounted	18-19
Changing media type	20-21
Purity 2.0, 4.0, 5.0	22
Drilling template	23
Trouble shooting guide	24-25
Accessories and datasheets	26-27

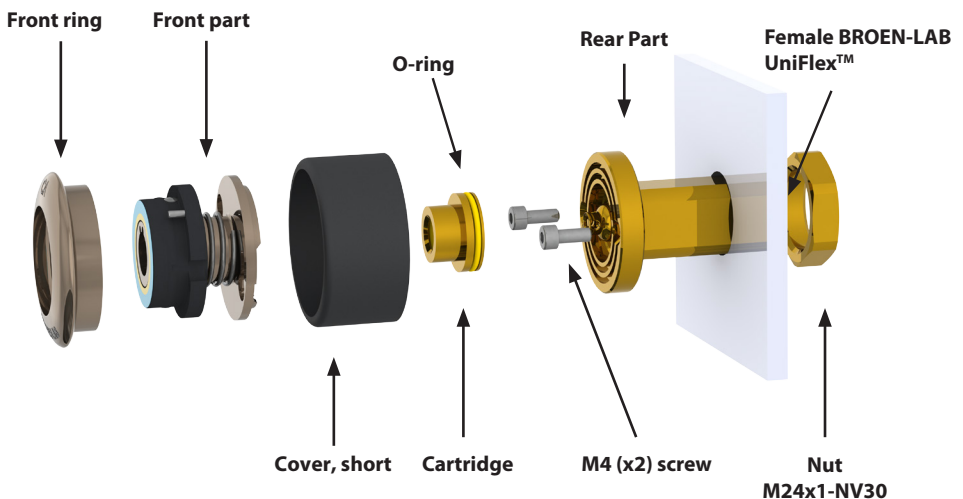
QUICK CONNECT

Panel mounted



- Panel thickness up to 26 mm
- Temperature range: 0-90°C
- Max. working pressure: 16 bar/232 psi
- Inlet: BROEN-LAB UniFlex™
- Materials with media contact
Metals: Brass
Sealing:
 ⚡ Nitrile (NBR) ⚡ VITON (FKM) ⚡ EPDM

Assembly

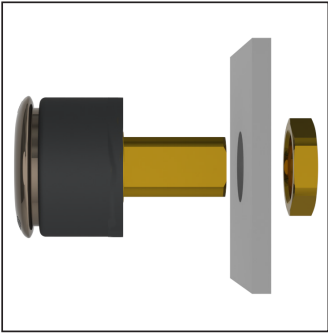


Mounting

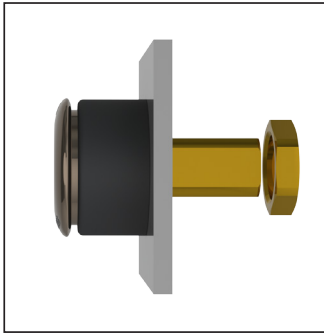
Tool: A wrench key



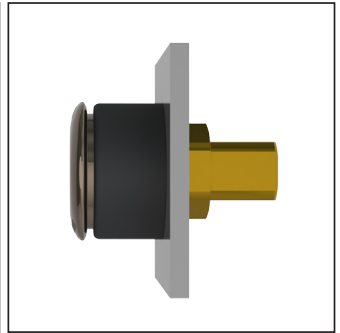
STEP 1



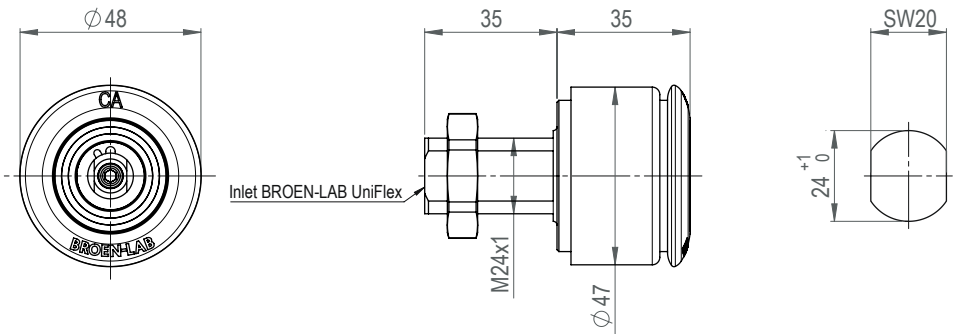
STEP 2



STEP 3



Datasheet



All measurements are in **mm**

BROEN-LAB

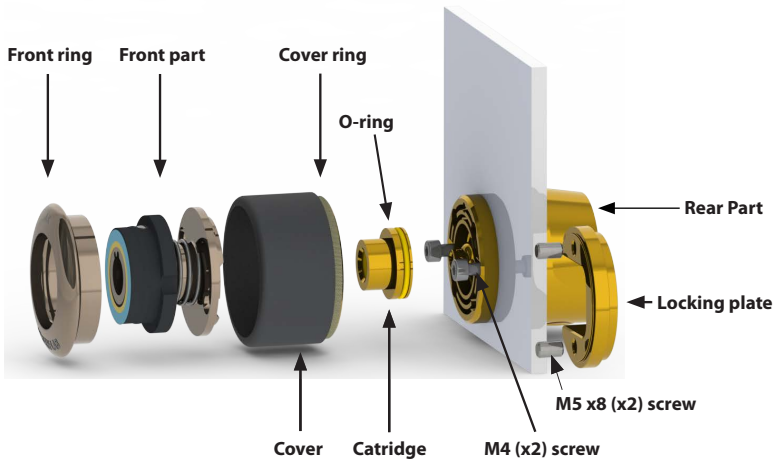
QUICK CONNECT

Built-in



- Panel thickness 1-6 mm
- Temperature range: 0-90°C
- Max. working pressure: 16 bar/232 psi
- Inlet: Female BROEN-LAB UniFlex™
- Materials with media contact
Metals: Brass
Sealing:
🔥 Nitrile (NBR) 🚫 VITON (FKM) 💧 EPDM

Assembly



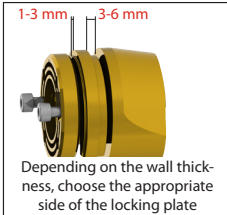
Mounting

Tool: Allen key 3 mm for (2x) M5x8 screws
Allen key 2,5 mm for (2x) M4 screws

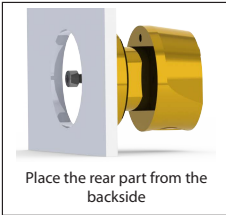


Nice to know!
 Built-in is delivered assembled and has to be disassembled before mounting - Follow the mounting backwards

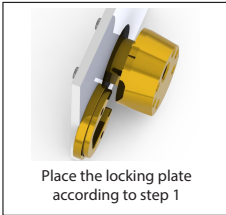
STEP 1



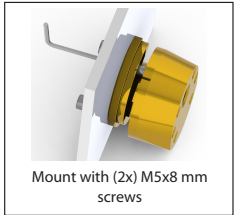
STEP 2



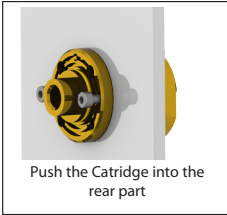
STEP 3



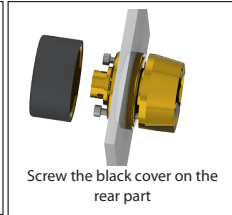
STEP 4



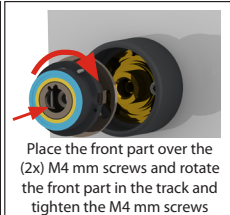
STEP 4



STEP 5



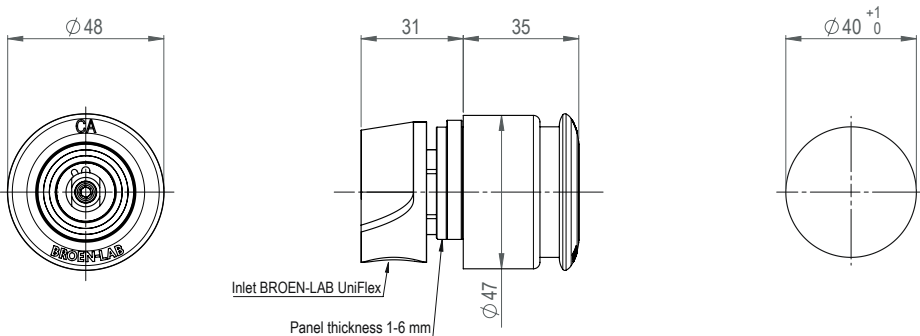
STEP 6



STEP 7



Datasheet

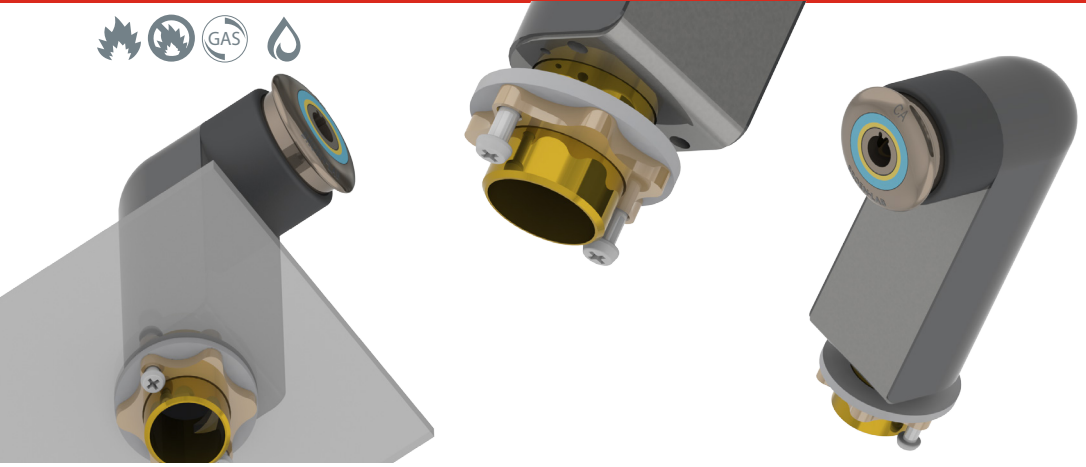


All measurements are in **mm**

BROEN-LAB

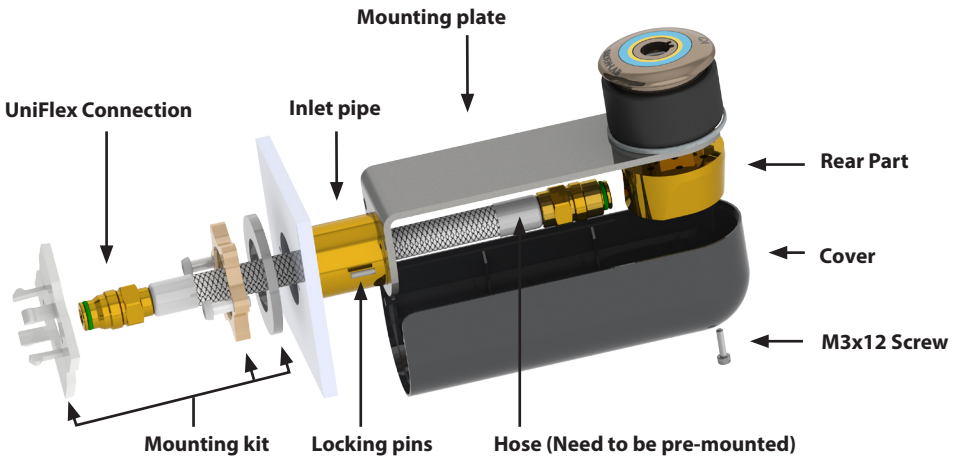
QUICK CONNECT

Bench mounted



- Panel thickness 30-90 mm
- Temperature range: 0-90°C
- Max. working pressure: 16 bar/232 psi
- Inlet: BROEN-LAB UniFlex™
- Materials with media contact
Metals: Brass
Sealing:
🔥 Nitrile (NBR) 🚫 VITON (FKM) 💧 EPDM

Assembly

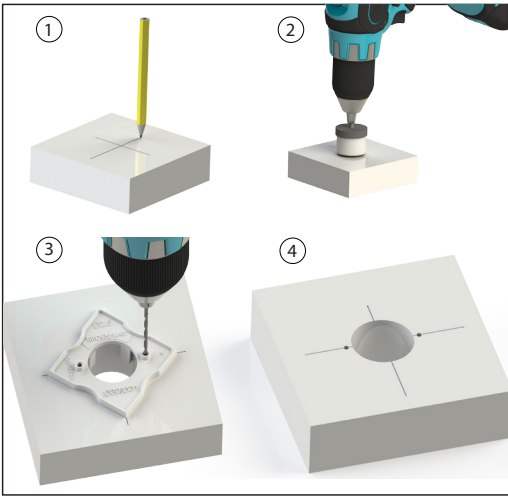


Mounting

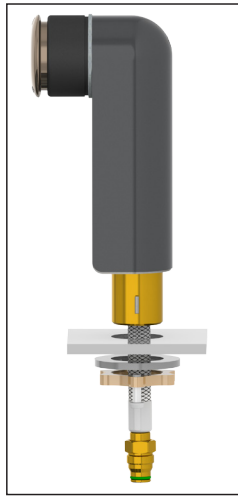
Tool: A Phillips screwdriver, size 2



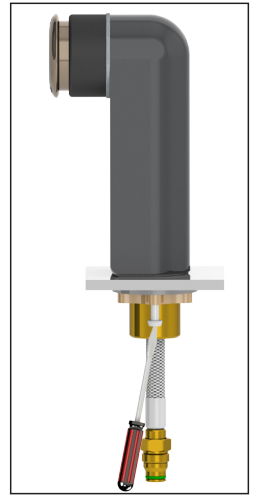
STEP 1



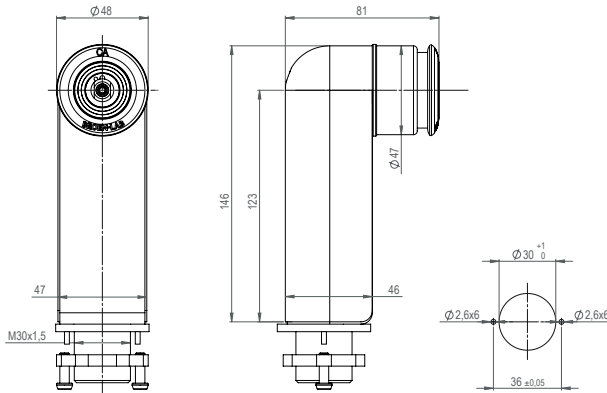
STEP 2



STEP 3



Datasheet



All measurements are in mm

BROEN-LAB

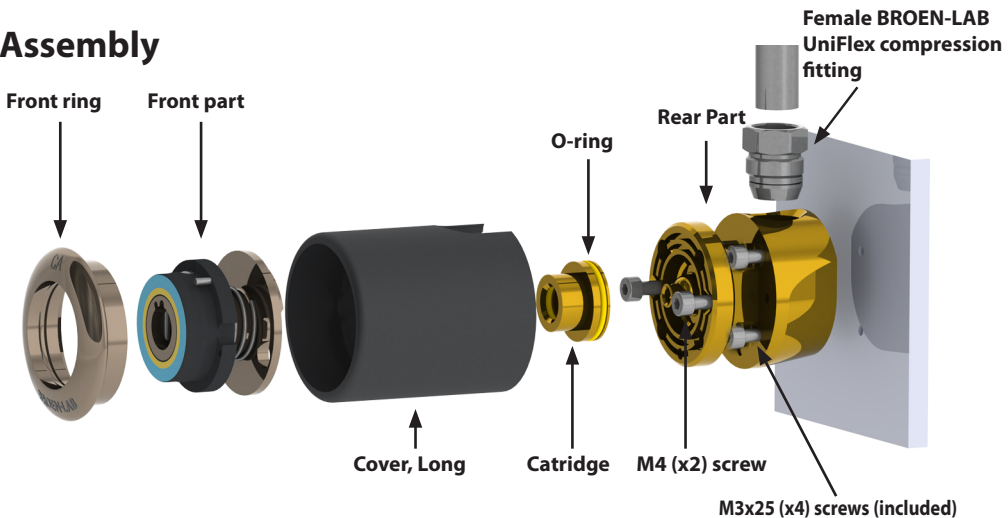
QUICK CONNECT

Exposed pipe



- Temperature range: 0-90°C
- Max. working pressure: 16 bar/232 psi
- Only for plates where threads can be drilled.
- Inlet: BROEN-LAB UniFlex™
- Materials with media contact
Metals: Brass
Sealing:
 ☹️ Nitrile (NBR) ☹️ VITON (FKM) ☹️ EPDM

Assembly



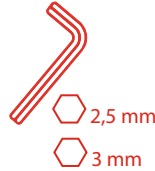
Mounting

Tool: Allen key for M3x25 (x4) screws

Allen key for M4 (x2) screws

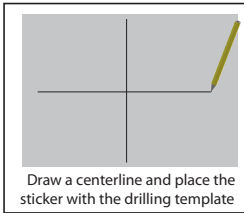
Front: Use (4x) M3x25 mounting screws (included)

Rear: Use (4x) M4x25 screws (included)

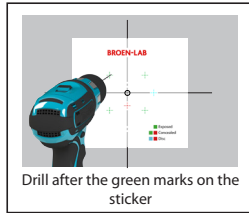


Nice to know!
Exposed is delivered assembled and has to be disassembled before mounting - Follow the mounting backwards

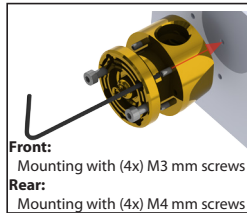
STEP 1



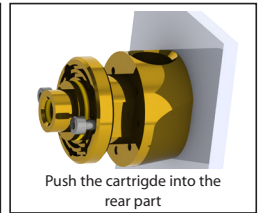
STEP 2



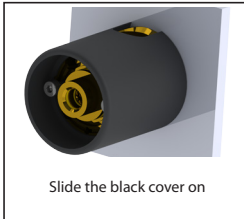
STEP 3



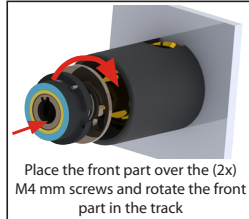
STEP 4



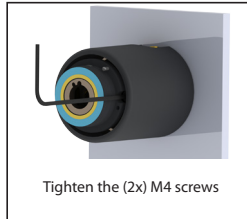
STEP 5



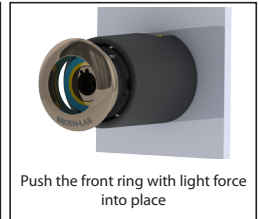
STEP 6



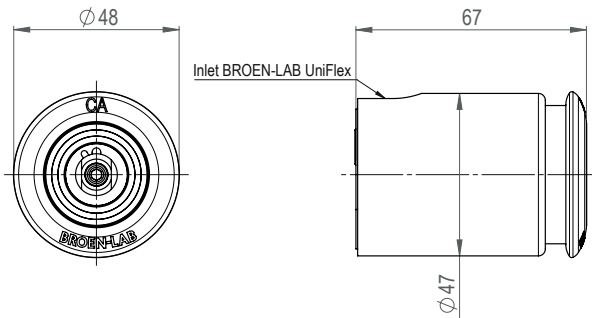
STEP 7



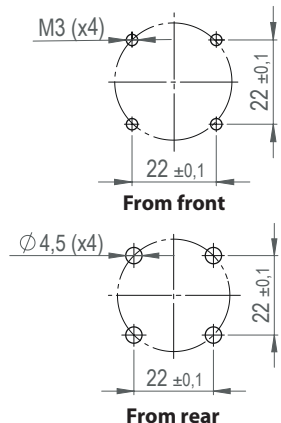
STEP 8



Datasheet



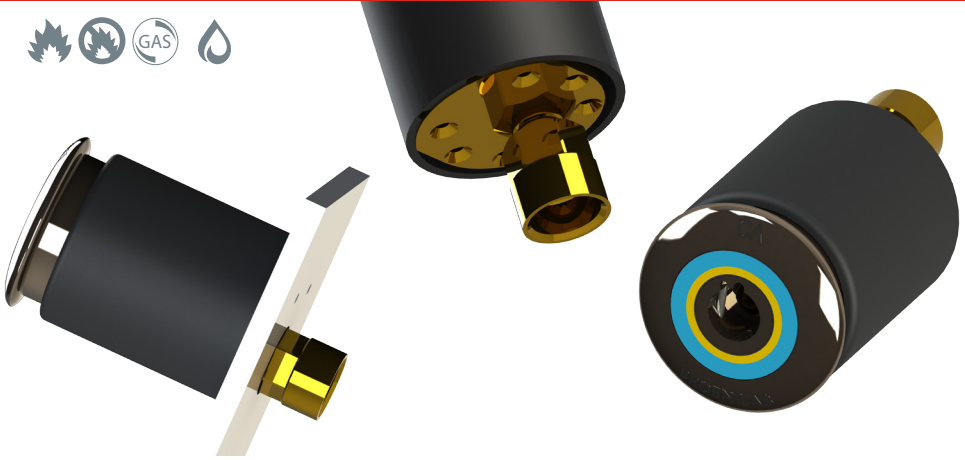
All measurements are in mm



BROEN-LAB

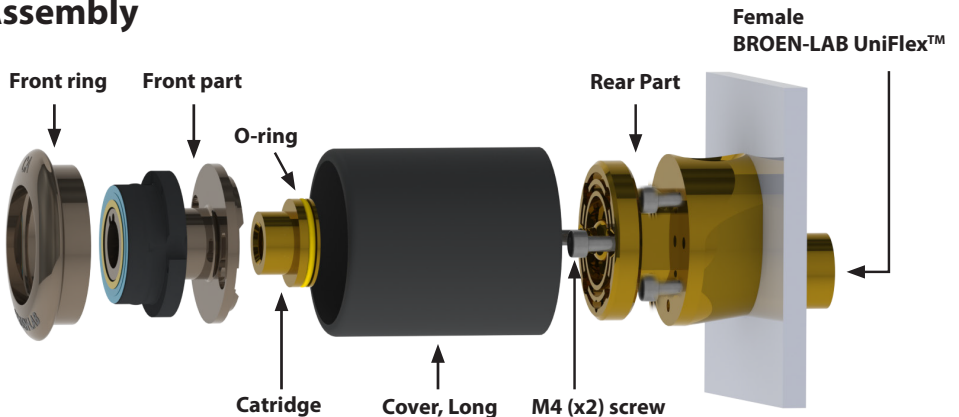
QUICK CONNECT

Concealed pipe



- Temperature range: 0-90°C
- Max. working pressure: 16 bar/232 psi
- For furniture without space for tightening behind the wall
- Inlet: BROEN-LAB UniFlex™
- Materials with media contact
Metals: Brass
Sealing:
 🌿 Nitrile (NBR) 🚫 VITON (FKM) 💧 EPDM

Assembly



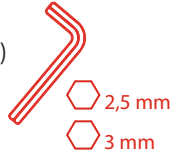
Mounting



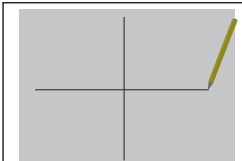
Nice to know!
 Concealed is delivered assembled and has to be disassembled before mounting - Follow the mounting backwards

Tool: Allen key for (4x) M3x25 screws

Allen key for (2x) M4 screws (front mounting and media changing- included)

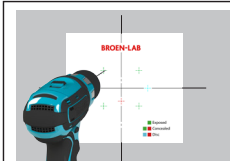


STEP 1



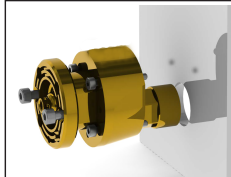
Draw a centerline and place the sticker with the drilling template

STEP 2



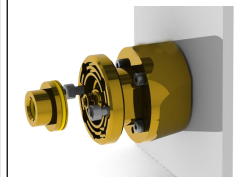
Drill after the green and red marks on the sticker

STEP 3



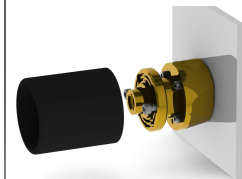
Mounting with (4x) M3x25 mm screws

STEP 4



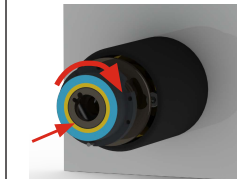
Push the cartridge into the rear part

STEP 5



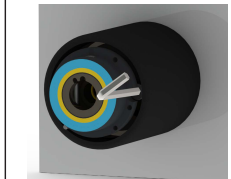
Slide the black cover on

STEP 6



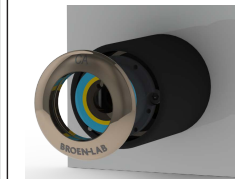
Place the front part over the (2x) M4 mm screws and rotate it in the track

STEP 7



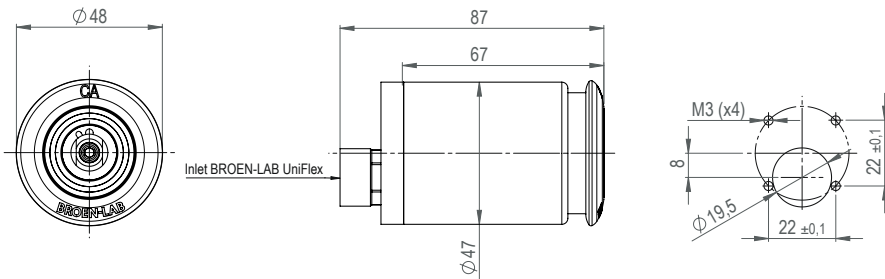
Tighten the (2x) M4 mm screws

STEP 8



Push the front ring with light force into place

Datasheet



All measurements are in **mm**

BROEN-LAB

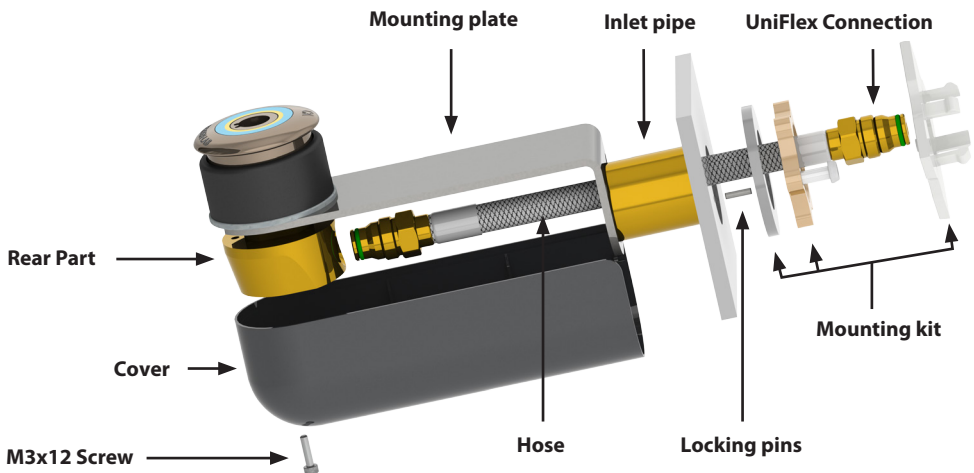
QUICK CONNECT

Suspended mounted



- Panel thickness 30-90 mm
- Temperature range: 0-90°C
- Max. working pressure: 16 bar/232 psi
- Inlet: BROEN-LAB UniFlex™
- Materials with media contact
Metals: Brass
Sealing:
 🌿 Nitrile (NBR) ⚙️ VITON (FKM) 💧 EPDM

Assembly

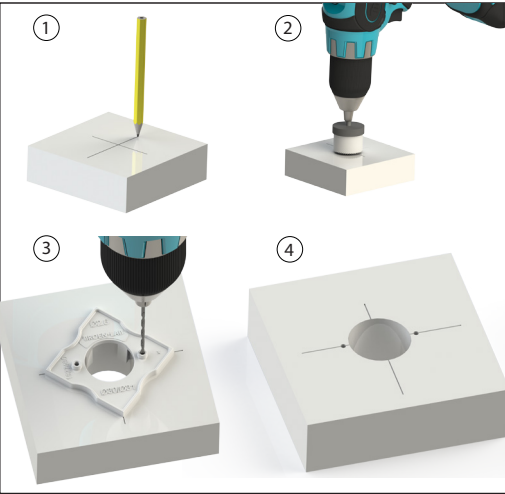


Mounting

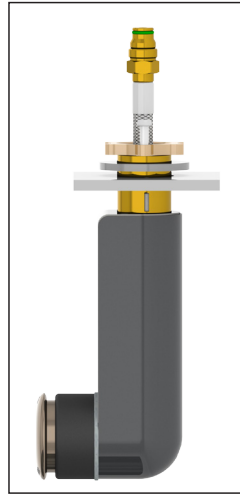
Tool: A Phillips screwdriver, size 2



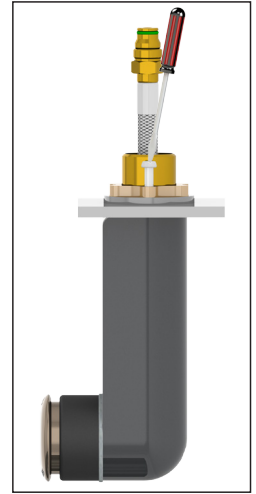
STEP 1



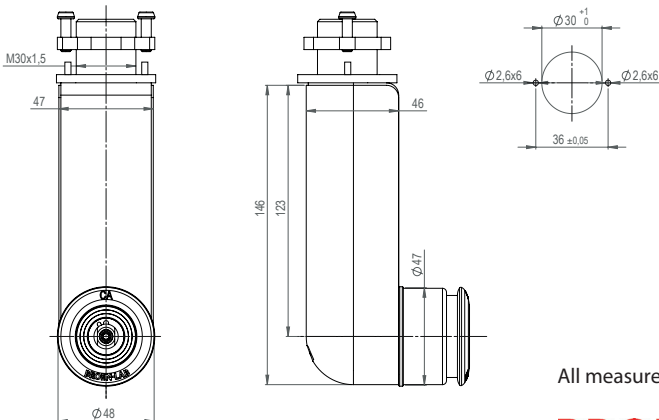
STEP 2



STEP 3



Datasheet

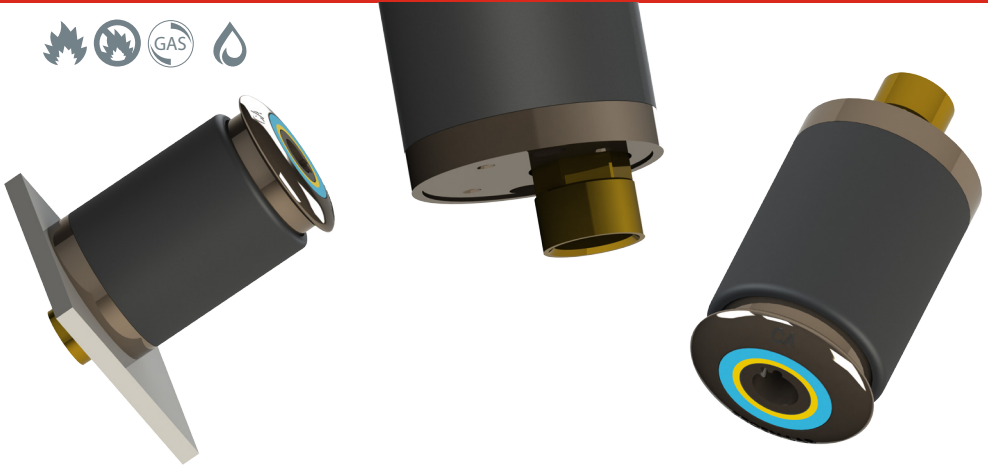


All measurements are in mm

BROEN-LAB

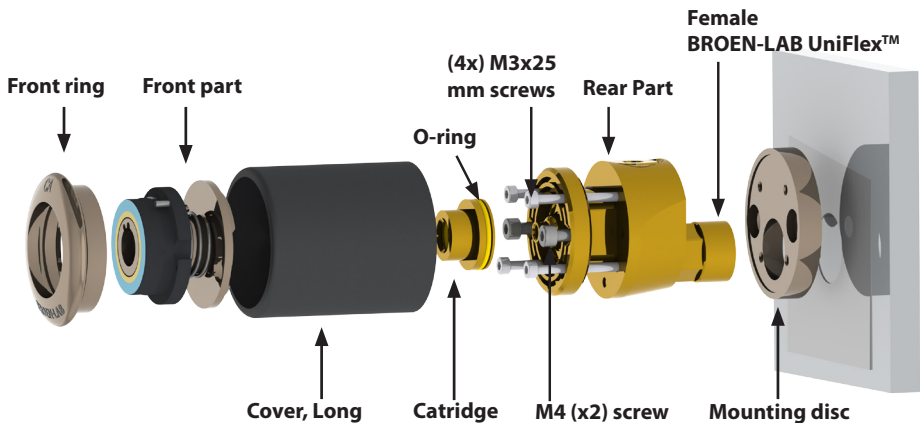
QUICK CONNECT

Disc mounted



- For porous walls
- Temperature range: 0-90°C
- Front mounting in soft material where threads cannot be drilled
- Inlet: BROEN-LAB UniFlex™/
- Materials with media contact
Metals: Brass
Sealing:
🔥 Nitrile (NBR) 🌐 VITON (FKM) 💧 EPDM

Assembly





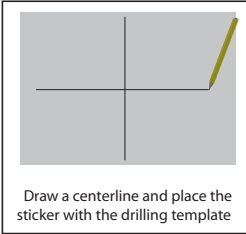
Nice to know!
Disc mounted is delivered assembled and has to be disassembled before mounting - Follow the mounting backwards

Mounting

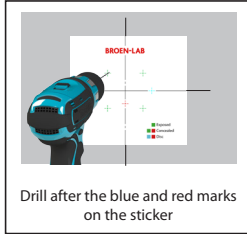
Tool: Tool for screws to mounting of the disc (not included)
An allen key for the (2x) M4 mm and (4x) M3 x25 mm screws (included)



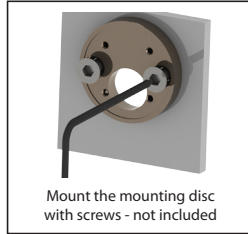
STEP 1



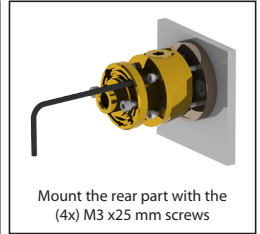
STEP 2



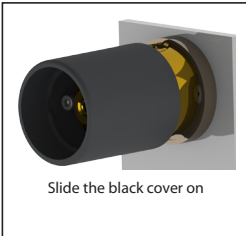
STEP 3



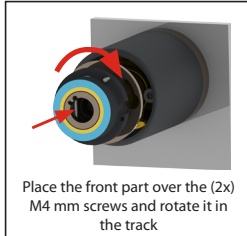
STEP 4



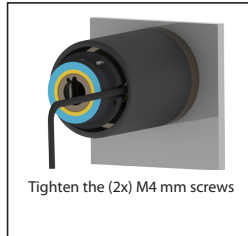
STEP 5



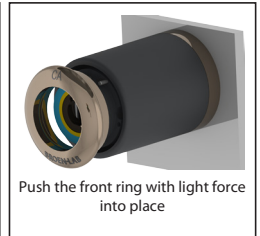
STEP 6



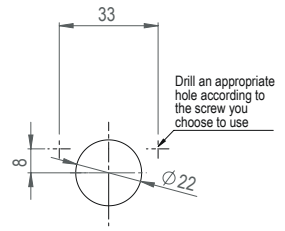
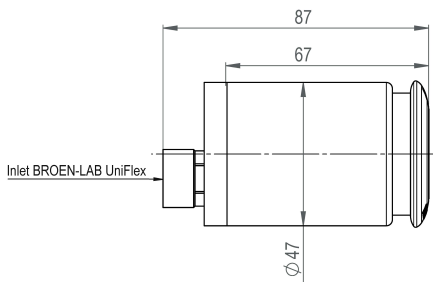
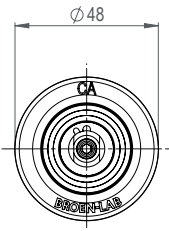
STEP 7



STEP 8



Datasheet



All measurements are in mm

BROEN-LAB

QUICK CONNECT

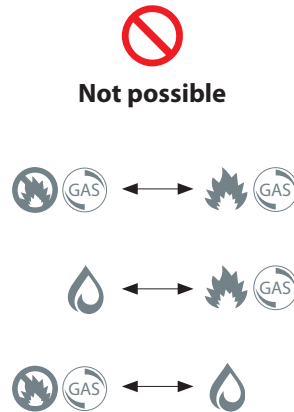
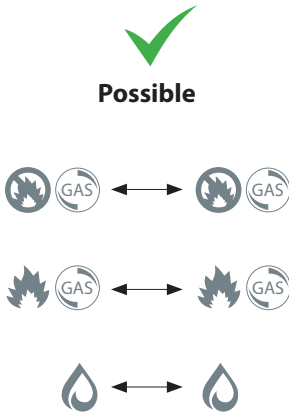
Media changing

With Quick Connect is it possible to make last minute changes.
It is important only to change between the gases within the same category.
There are 3 categories: Non-burning gases, burning gases and water.

Types of media

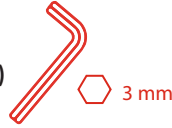


The changeable media

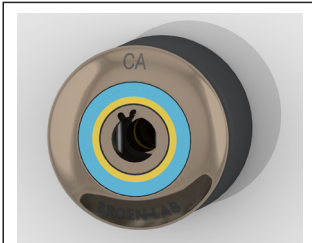


Media changing

Tool: An allen key for (2x) M4 screws (included)

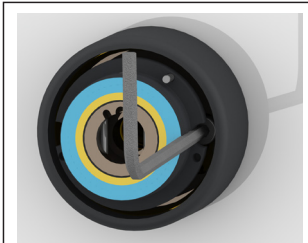


STEP 1



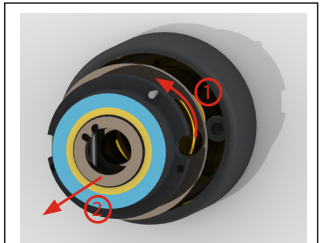
Move the front ring i.e. CA by pulling it out with light force

STEP 2



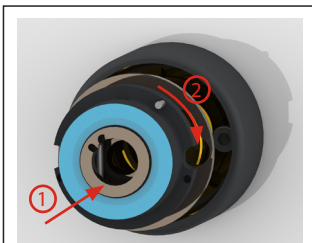
Loosen the (2x) M4 mm screws - only a little bit.

STEP 3



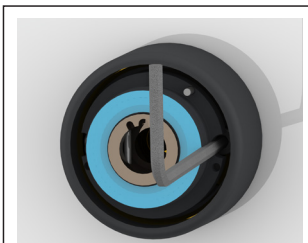
1. Rotate the front part in the slot
2. Pull the front part out

STEP 4



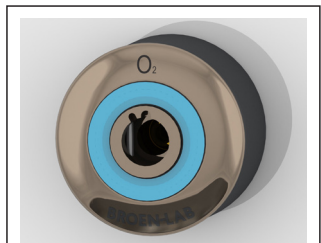
Place the new front part i.e. O₂ by:
1. Place the front over the (2x) M4 mm screws
2. Rotate it in the track

STEP 5



Tighten the (2x) M4 mm screws

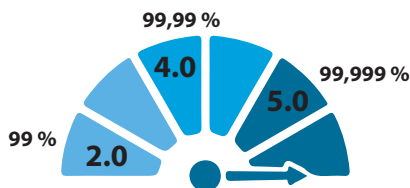
STEP 6



Push the front ring with light force into place

QUICK CONNECT

Purity and safety



2.0, 4.0 and 5.0 indicate the purity of the gases.

Purity 5.0 in use

When changing the outlet

To maintain a purity of 5.0, BROEN-LAB recommends to purge the system in 30 sec. before usage, when you change the outlet.

Safety instructions

Handling of technical gases requires knowledge of the subject, operation instructions and special safety measures. Always check national and local laws, regulations and procedures regarding the installation and use of this type of equipment.

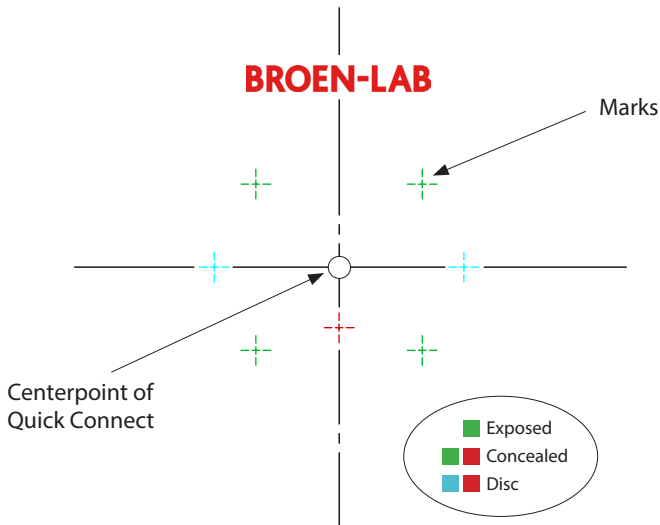
- Changes or modifications are not allowed to be made to the equipment without prior approval from BROEN-LAB.
- Improper handling or use can involve risks for the user and other persons as well as damage of the equipment.
- The equipment can only be used for the gas type it was manufactured and labelled for. Change can be made prior to start of use, provided that the new media is listed in the data sheet, or BROEN-LAB has approved the new media.
- Observe the maximum pressure & temperature ranges.
- The equipment cannot be used for gases in the liquid phase.
- The equipment must not be exposed to impact, vibrations or other mechanical forces that can damage the equipment.
- The equipment is designed for use in laboratories. The equipment is not designed for installing where there is a possibility of exposure to aggressive media.
- By installation avoid oil and grease contamination (Fire or explosion hazard).
- It is recommended to use a proper leak detection fluid or similar to check for leak when installing and using the Quick Connect.
- These valves do not contain a relief valve. In case of failure, the outlet pressure may rise above the adjusted value. Any equipment connected to the equipment outlet has to be protected against over-pressure.

QUICK CONNECT

Drilling template

BROEN-LAB has created a sticker, which makes it easier to drill the holes for mounting of the Quick Connect. This sticker is useful for Exposed pipe mounted, Concealed pipe mounted and Disc mounted Quick Connects.

Each version of the Quick Connect has its own colour on the sticker.



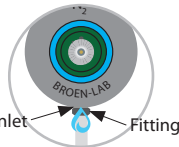
QUICK CONNECT

Trouble shooting guide

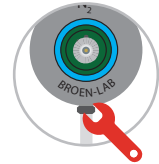
ERROR

CAUSE

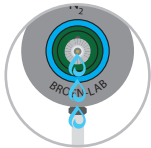
ACTION



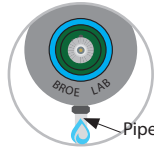
Between the fitting and inlet



Re-tighten the fitting.
Apply new sealant to the threads



Quick Connect leaks
(Outlet is not plugged in)



The pipe inlet is leaking



There is a leak inside
the Quick Connect

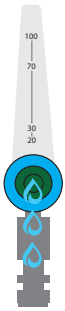


Replace the cartridge,
contact BROEN-LAB

ERROR

CAUSE

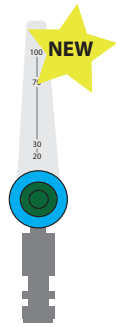
ACTION



The outlet is leaking



**There are leaks
inside the outlet**



**Replace the outlet
with a new one**

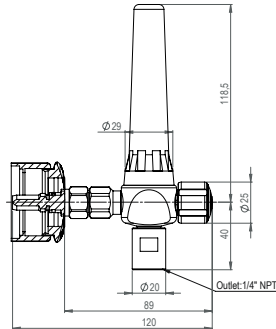
QUICK CONNECT

Accessories and datasheets

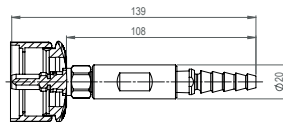
Accessories

Datasheets

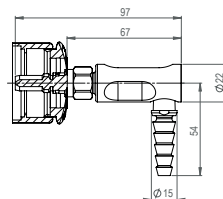
Flowmeter



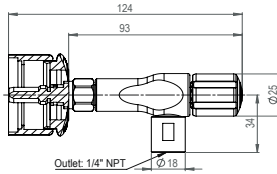
Straight outlet



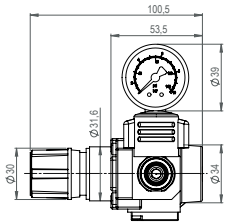
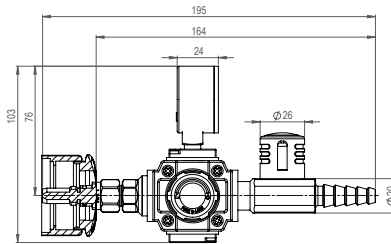
90° outlet with hose nozzle



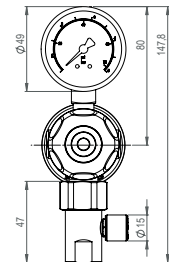
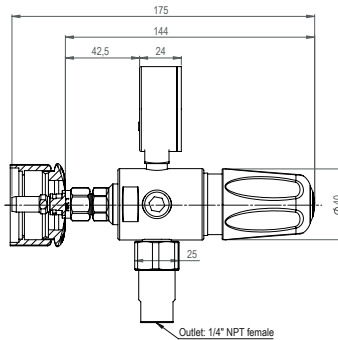
Outlet
with needle valve



Pressure regulator



Pressure regulator
2.0, 4.0 and 5.0



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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 9001:2008. This certification will further contribute to reputation for quality and reliability of BROEN-LAB A/S.

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