

BROEN BOSS

- flow adjustable quick connect 5.0



BROEN

for the Professional user

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All technical specifications and dimensions are nominal and subject to alterations without prior notice.

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- datasheet

Technical Specifications

Media*: Non corrosive media & Vacuum.

Standard media: Air, Vac, O₂, N₂, CO₂, H₂, Ar & He.

Purity:** 5.0.

Media pressure: -1 til 10 Bar.
-14.5 to 145 psi.

Working temperature: 0° til 60°C.
32° to 140°F.

Inlet: Female 1/4" NPT.

Visible metal parts: Stainless steel & Chemical nickel plated brass.

Rubber handle: EPDM.

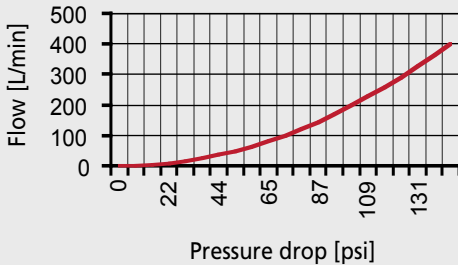
Hidden metal parts: Brass.

Gaskets: Viton.

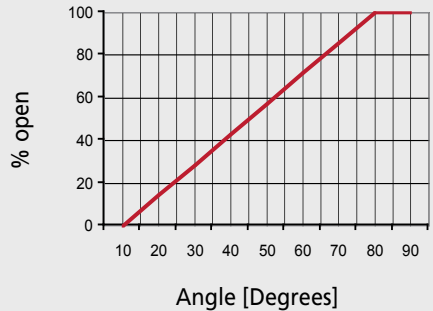
* Other media must first be confirmed by BROEN.

** Purity 5.0 can only be obtained when the system is purged each time a outlet is connected.

Consumption (100% open)



Regulating characteristic

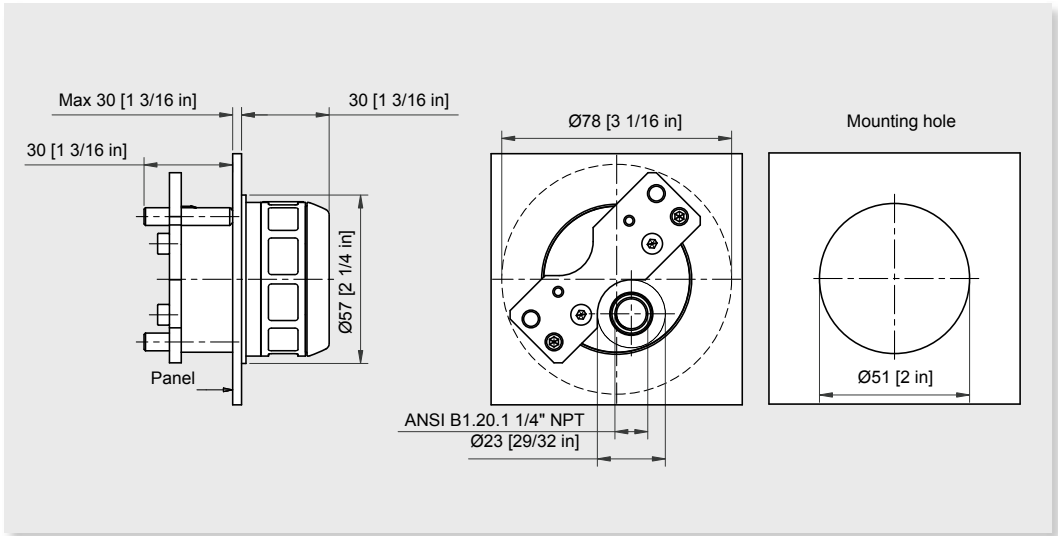


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- datasheet

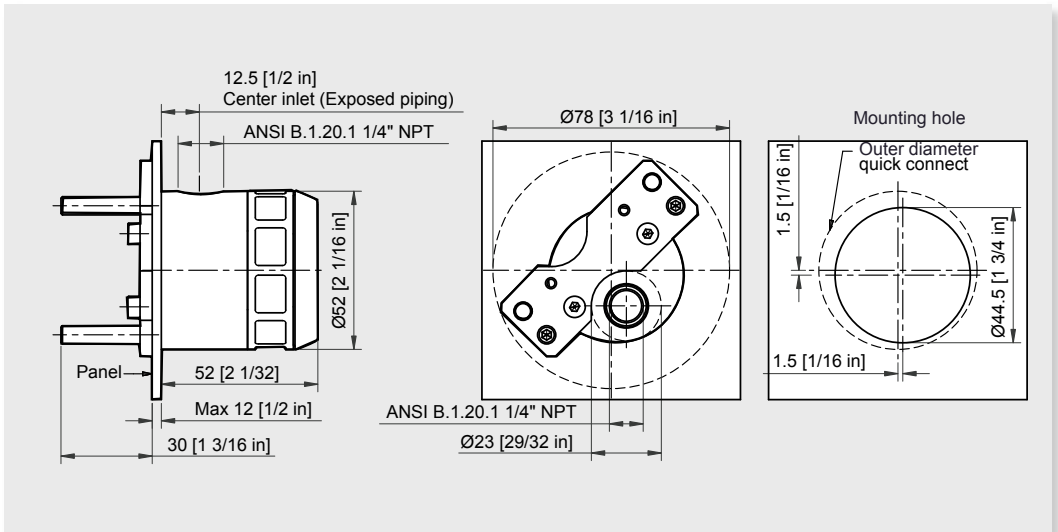
Built in

Built in Dimensions



Panel mounted, mounted from backside

Built in Dimensions

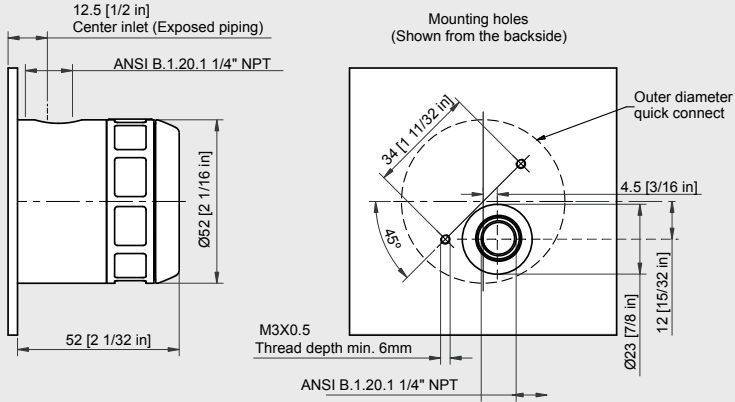


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- datasheet

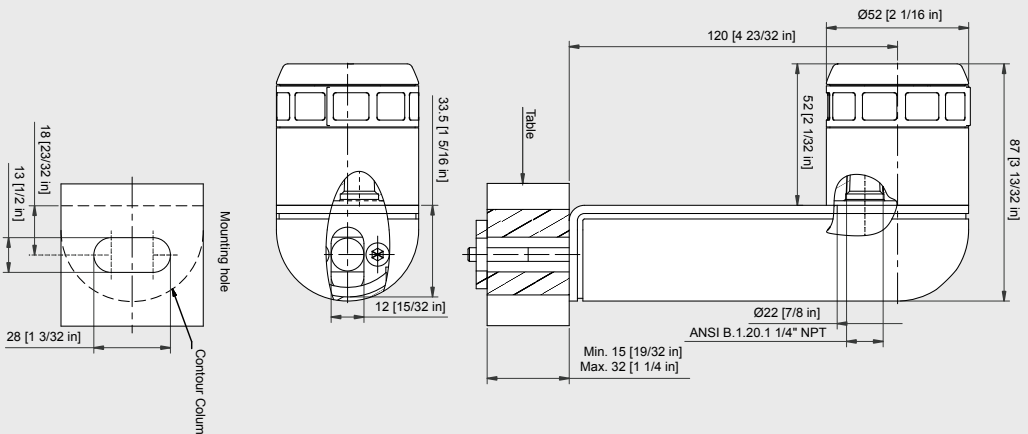
Panel mounted, mounted from frontside

Built in Dimensions



Desk / suspended mounted

Built in Dimensions



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- unwrapping the quick connect

When the ordered parts are received, it must be checked that they comply with ordered article.

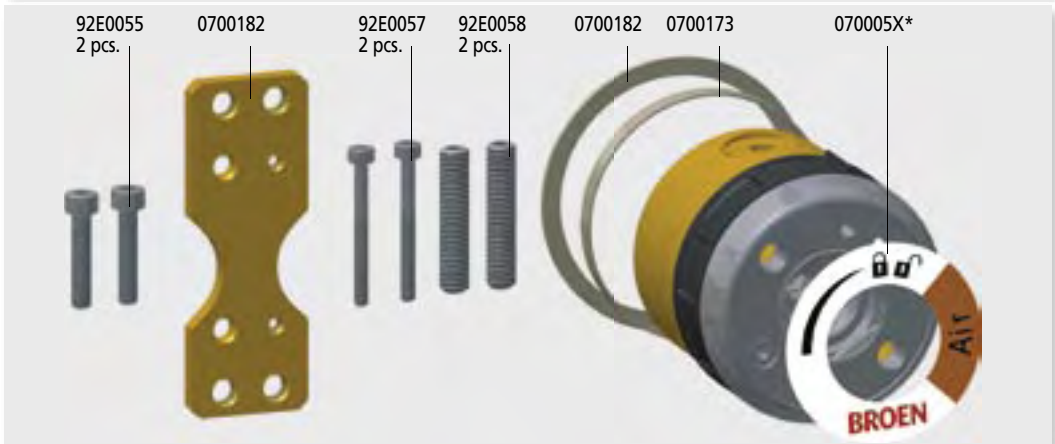
The four pictures below show the contents of the delivered articles:

Label: American recommendation

Media	Air	Vac	O ₂	N ₂	CO ₂	H ₂	Ar	He
Model	0700050	0700051	0700052	0700053	0700054	0700055	0700056	0700057

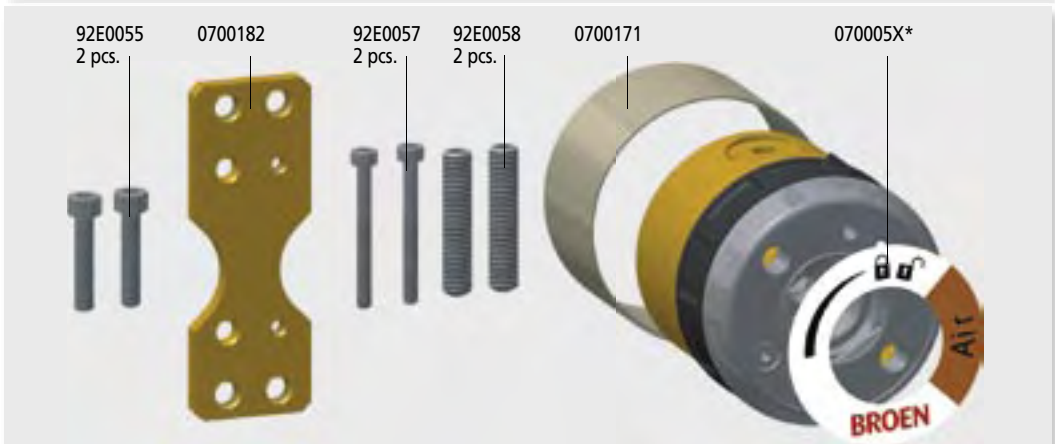
070XX51 (Built in)

Scope of Delivery



070XX52 (Panel mounted, concealed piping)

Scope of Delivery

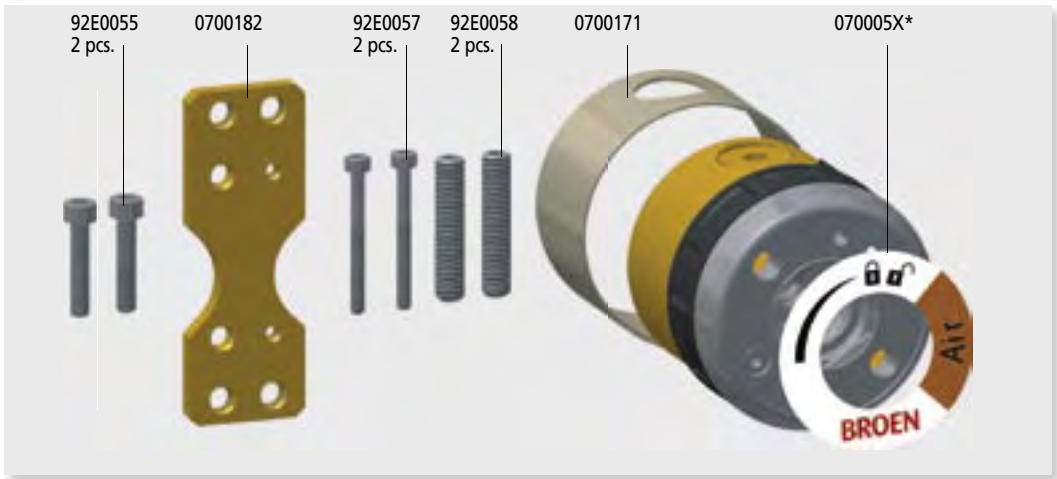


BROEN BOSS

- unwrapping the quick connect

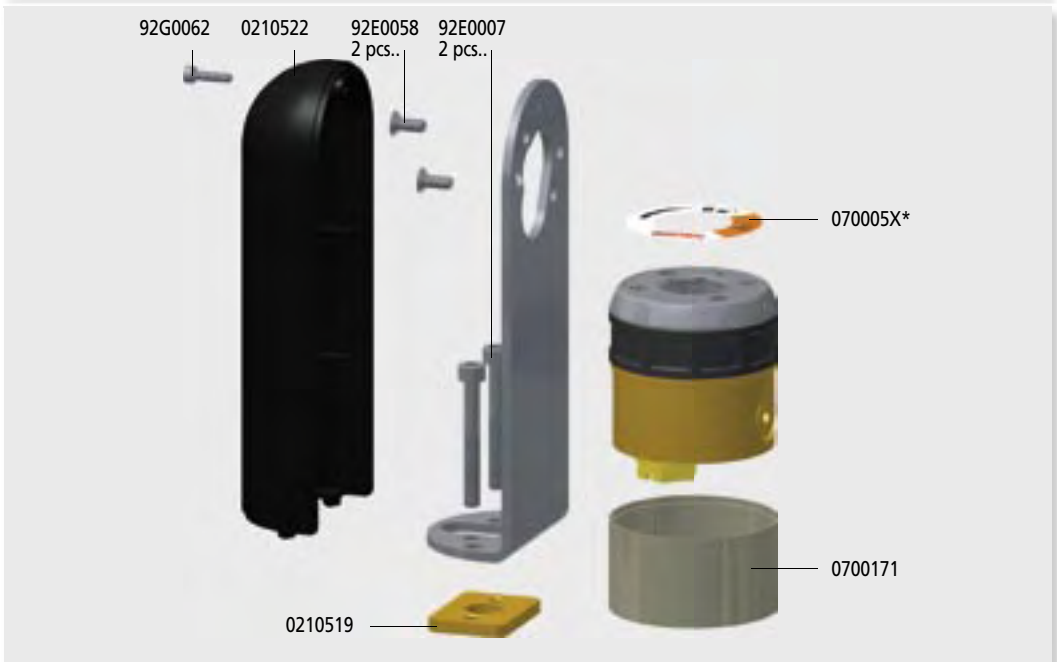
070XX53 (Panel mounted, exposed piping):

Scope of Delivery



070XX54 (Desk / suspended mounted)

Scope of Delivery



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- assembly

Safety Instructions

The handling of technical gases requires knowledge of the subject, operation instructions and special safety measures. Always check national and local laws, regulations and procedures with regard to the installation and use of this type of equipment.

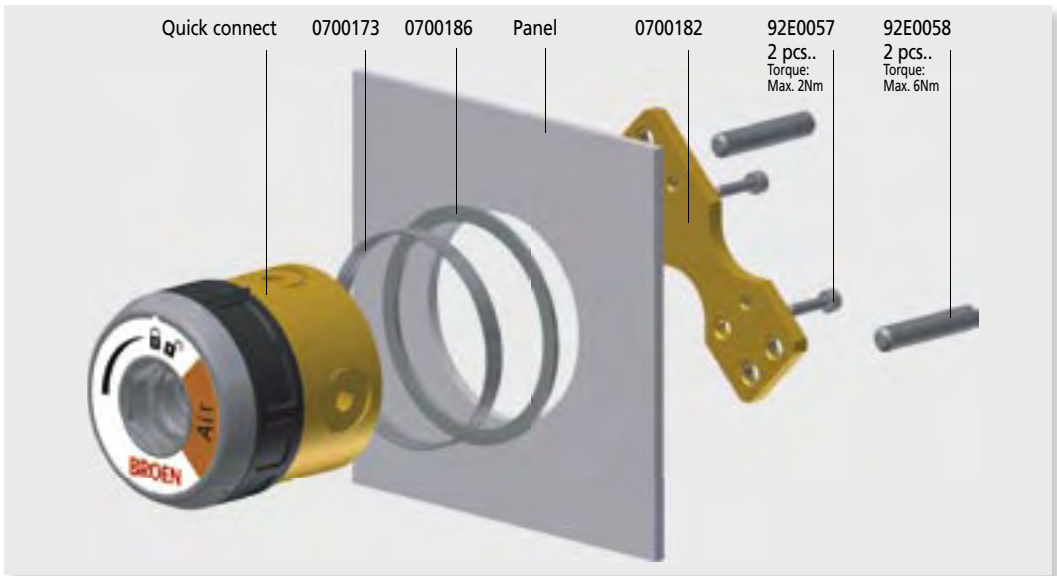
- Changes or modifications are not allowed to be made to the equipment without prior approval from BROEN.
- Improper handling or use can involve risks for the user and other persons as well as damage the equipment.
- The equipment can only be used for the gas type it was manufactured and labelled for. Change can be made prior to start of use, provided that the new media is listed in the data sheet, or BROEN 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 impacts, 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. For example inside fume hoods and close to point exhaustions.
- 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 leaks 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 overpressure.

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- assembly

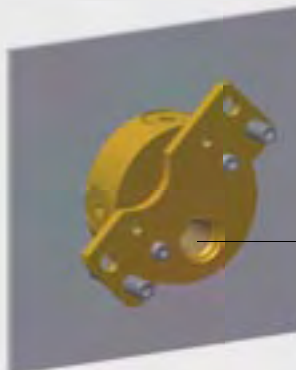
Built in model

Built in dimensions are shown on page 4.



All screws must be secured with Loctite 222 or similar.

Inlet



Female 1/4" NPT

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- assembly

Panel mounted, concealed & exposed piping

Built in dimensions are shown on pages 4 and 5.

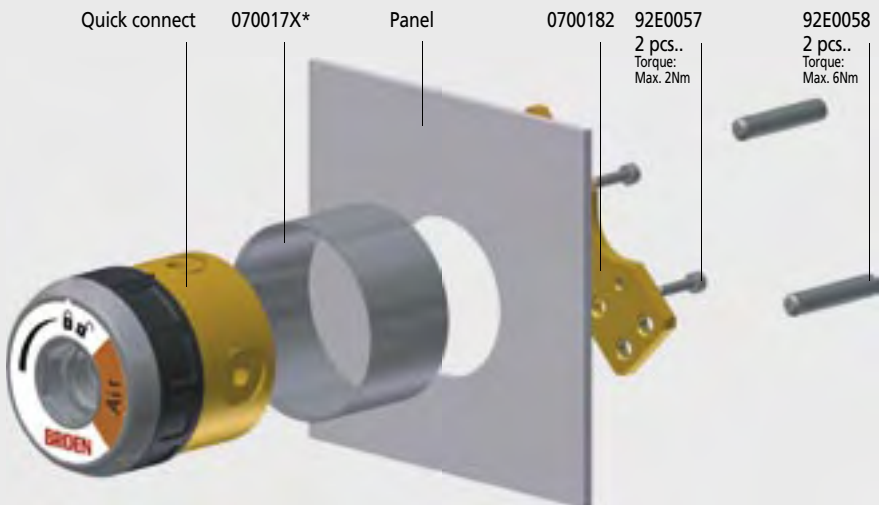
Before the quick connect can be mounted, the blind plug must be moved from the side of the quick connect to the backside:

Exposed piping



All screws must be secured with Loctite 222 or similar.

Mounted from the back

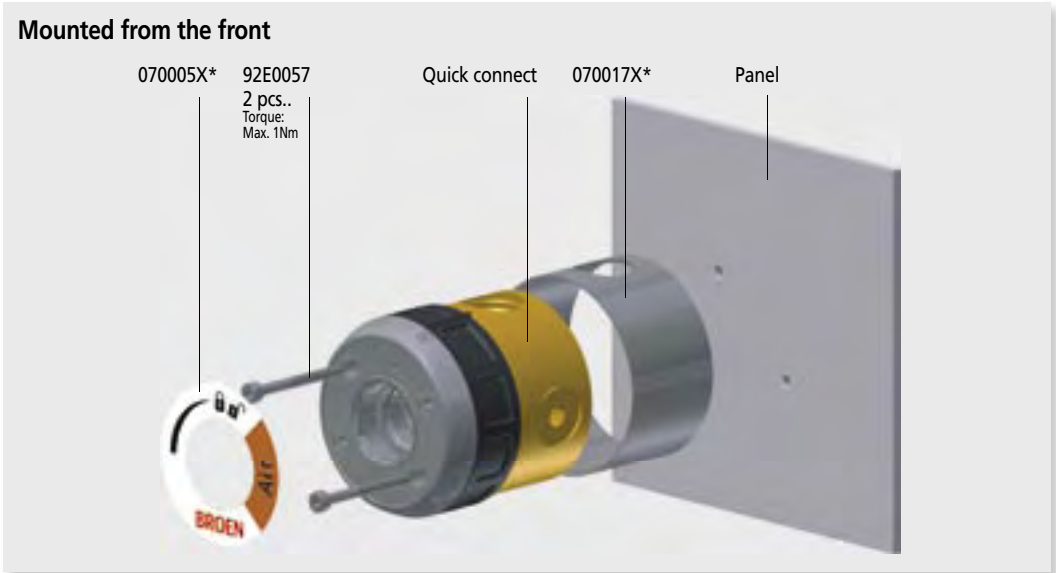


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- assembly

Panel mounted, concealed & exposed piping

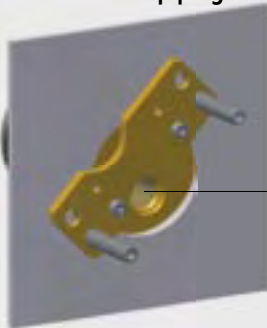
Mounted from the front



All screws must be secured with Loctite 222 or similar.

Inlet

Concealed piping



Female 1/4" NPT

Exposed piping



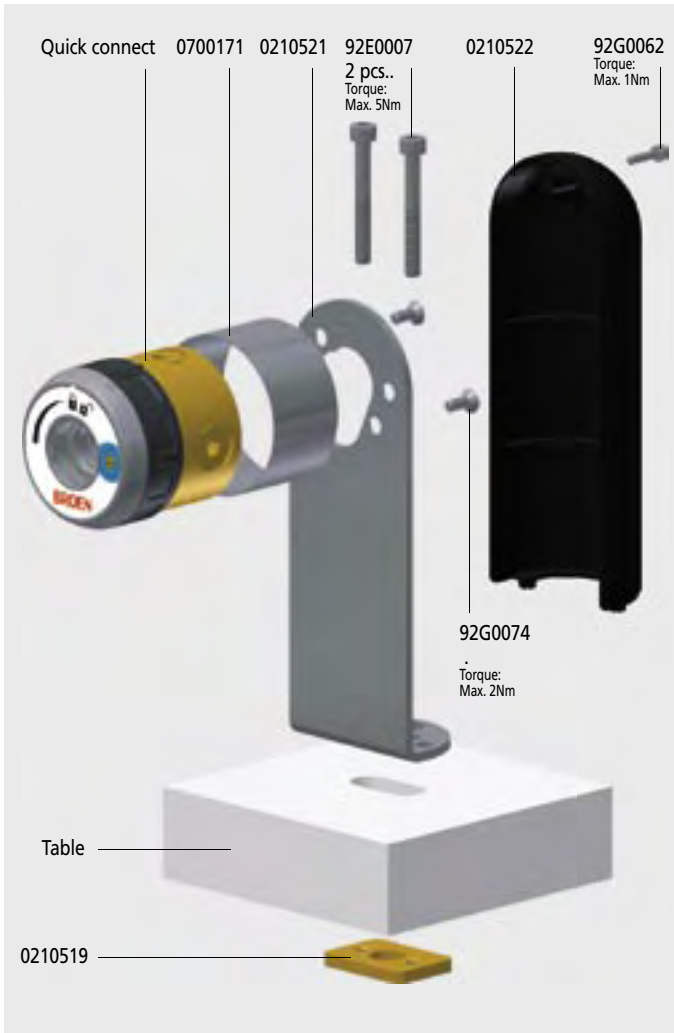
Female 1/4" NPT

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- assembly

Desk / suspended mounted

Built in dimensions are shown on page 5.



All screws must be secured with Loctite 222 or similar.

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- operation

1. Connect outlet and quick connect:

- 1.1. Place the outlet in such way that the first hexagon on the outlet and female hexagon in the quick connect fit together. Press the inlet into the quick connect until the second hexagon on the outlet touches the quick connect.
- 1.2. Turn the outlet until the second hexagon on the outlet and the hexagon in the quick connect are aligned.
- 1.3. Press the outlet into the quick connect.
- 1.4. The outlet is now locked in the quick connect.

2. Open valve:

- 2.1. Turn the handle clockwise until the desired flow is achieved.
- 2.2. The regulating area is from 0° to 90°.

3. Close valve:

- 3.1. Turn the handle counter clockwise until the valve is closed.

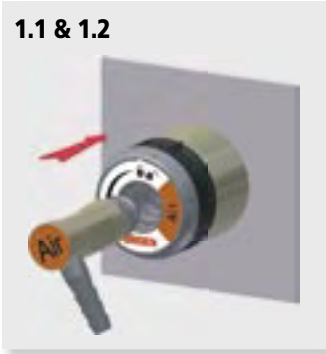
4. Release outlet:

- 4.1. Turn the handle counter clockwise until the outlet is released. The outlet is now parked in the quick connect.
- 4.2. Turn the outlet until the first hexagon on the outlet and the hexagon in the quick connect are aligned.
- 4.3. Remove the outlet.

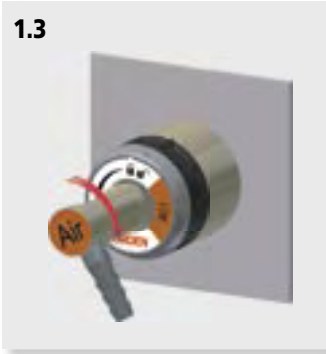
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- operation

1.1 & 1.2



1.3



1.4



2.



3.



4.1



4.2



4.3



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- trouble shooting guide

Error	Cause	Action
Quick connect leaks. (Outlet is not plugged in).	1. The quick connect leaks between the fitting and inlet.	1 & 2. Retighten the fittings. Apply new sealant to the threads.
	2. The piping leading to the quick connect are leaking.	
	3. There is a leak inside the quick connect.	3. Replace the quick connect with a new one.
The connection between the quick connect and the outlet is leaking.	The gasket on the outlet is leaking.	Replace the gasket with a new one.
The outlet is leaking.	There are leaks inside the outlet.	Replace the outlet with a new one.
The handle can be turned without the plug inserted.	The ball lock has been activated by an object other than the outlet.	Turn the handle counter clockwise until the ball lock is released.

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- service

Replacement of O-ring on outlet

1. Remove O-ring as shown.
2. Refit a new O-ring.
(See spare part list on page 19).



Changing the media type

In order to be able to change the media type, it is necessary to replace the key and the label.

If the new media is a different one from the ones stated on the datasheet, it is necessary to consult BROEN for confirmation first.

Change of media on a quick connect after start of use is not allowed. If the media is changed despite this warning, BROEN cannot be held responsible for possible accidents!

1. Remove label and key. Remove O-ring.
2. Refit O-ring on the new key.
Refit the new key. Max. Torque: 5Nm.
3. Place the new label.
4. Replace outlet with new ones suitable for the new media.



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- spare part list

<i>Description</i>	<i>Product No. (Similar for all media)</i>
 Screw for bracket	92E0055
 Set screw for bracket	92E0058
 Mounting screw exposed piping	92E0057
 Mounting bracket	0700182
 Back plate "built in"	0700186
 Cover "built in"	0700173
 Cover "Concealed piping"	0700171
 Cover "Exposed piping"	0700170
 Bracket "Desk mounted"	0210521

<i>Description</i>	<i>Product No. (Similar for all media)</i>
 Cover "Desk mounted"	0210522
 Mounting bracket "Desk mounted"	0210519
 Screw "Desk mounted"	92G0061
 Screw for cover "Desk Mounted"	92G0062
 Screw "Desk mounted"	92E0007
 Quick connect without media key.	0700200B
 O-ring key	92A0183
 Hose, Male 1/4" NPT, Male 1/4" NPT	0709013

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- spare part list

Description	Media / Product No.							
	Air	Vac	O ₂	N ₂	CO ₂	H ₂	Ar	He
 Label	0700050	0700051	0700052	0700053	0700054	0700055	0700056	0700057
 Key for quick connect	0700110	0700111	0700112	0700113	0700114	0700115	07000116	0700117
 90° outlet, serrated hose nozzle	0755100	0755200	0755300	0755400	0755500	0755600	0755700	0755800
 90° outlet, female 1/4" NPT.	0755110	0755210	0755310	0755410	0755510	0755610	0755710	0755810
 90° outlet, female 1/4" NPT.	0707100	0707200	0707300	0707400	0707500	0707600	0707700	0707800
 Hose, Outlet nipple / Male 1/4" NPT	0709111	0709211	0709311	0709411	0709511	0709611	0709711	0709811
 Pressure regulator	075512X ^{*)}	075522X ^{*)}	075532X ^{*)}	075542X ^{*)}	075552X ^{*)}	075562X ^{*)}	075572X ^{*)}	075582X ^{*)}
 Flow-meter	075513X ^{**)}	075523X ^{**)}	075533X ^{**)}	075543X ^{**)}	075553X ^{**)}	075563X ^{**)}	075573X ^{**)}	075583X ^{**)}
 O-ring outlet	92A0183	92A0183	92A0182	92A0182	92A0182	92A0180	92A0180	92A0180

*) Flow meter: X=1: Capacity: 0-6 l/min. X=2, Capacity: 0-15 l/min. X=3: Capacity: 0-30 l/min.

***) Pressure regulator: X=1: 0-75 psi. X=2 0-150 psi. X=3 0-50 kPa. X=4 0-100kPa. X=5 0-5 bar. X=6 0-10 bar.



BROEN LAB GROUP manufacture and market a wide range of quality products for high performance flowregulation. The products primarily apply to the professional user in all types of laboratories, the educational sector, the health sector, the pharmaceutical industry and industry in general.



BROEN LAB DIVISION
ISO 9001 certification
In September 1991 BROEN LAB DIVISION
was certified according to ISO 9001 as
one of the first Danish companies.
The certification was carried out by
Bureau Veritas, Denmark.

The quality management system of BROEN
LAB DIVISION now complies with detailed
specifications laid down by the internation-
ally acknowledged EN ISO9001:2000.
This certification will further contribute to
BROEN LAB GROUP's reputation for quality
and reliability.

LABORATORY ENTERPRISES

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