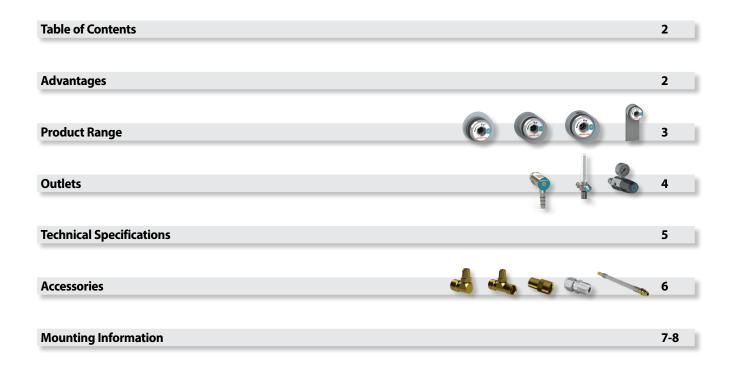
BROEN-LAB
QUICK CONNECT
WITH BUILD-IN
FLOWREGULATION
FOR 5.0 GASES



# **Table of contents**



# **BROEN-LAB QUICK CONNECT**

# **Advantages**

# Advantages for end users:

- Flexible and compact design increases size of "working area".
- · Reduced downtime.
- Innovative and compact design.
- · Combined flow valve and Ouick Connect.
- Key system protects against undesired mix of media, 11 media keys are available.
- · Clear media indication.
- Possibility of attaching additional equipment:
  - flow meters, pressure regulators, etc.
- Non-return valve in outlets protects against contamination of equipment.
- Valve is "locked" with no plug inserted.
- Integrated parking position.
- O-ring which seals outlet and Quick Connect is replaceable without disassembling the Quick Connect.

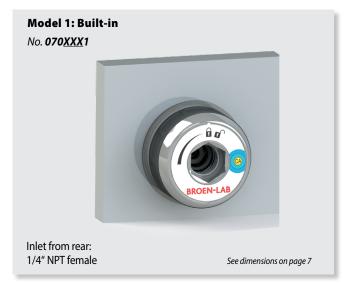
# Advantages for architects & furniture manufacturers:

- · Increased flexibility in laboratory design.
- · Last minute determination of media possible.
- Number of fittings can be reduced due to the flexibility of the Quick Connect.

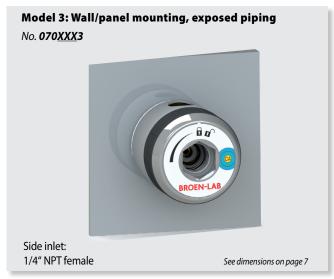
# **Advantages for plumbers:**

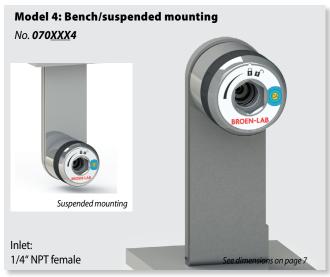
- Simple and rational installation.
- 6 different methods of installation.
- Last minute change of media possible (Prior to start of use).
- Possibility to install additional Quick Connect in the laboratory, using a model for exposed piping.

# **Product range**









	Description	Compressed Air	Low Vacuum	Oxygen	Nitrogen	Carbon Dioxide	Hydrogen	Argon	Helium
	Label: According to standard EN13792:2002	CA		(O <sub>2</sub> )	(N <sub>2</sub> )	(CO <sub>2</sub> )	$H_2$	Ar	He
Model	Label: American recommendation	Air	Vac	O <sub>2</sub>	$N_2$	CO <sub>2</sub>	H <sub>2</sub>	Ar	He
	Standard EN13792:2002	070 <u>020</u> 1	070 <u>030</u> 1	070 <u>040</u> 1	070 <u>050</u> 1	070 <u>060</u> 1	070 <u>070</u> 1	070 <u>080</u> 1	070 <u>090</u> 1
1	American recommendation	070 <u>025</u> 1	070 <u>035</u> 1	070 <u>045</u> 1	070 <u>055</u> 1	070 <u>065</u> 1	070 <u>075</u> 1	070 <u>085</u> 1	070 <u>095</u> 1
2	Standard EN13792:2002	070 <u>020</u> 2	070 <u>030</u> 2	070 <u>040</u> 2	070 <u>050</u> 2	070 <u>060</u> 2	070 <u>070</u> 2	070 <u>080</u> 2	070 <u>090</u> 2
2	American recommendation	070 <u>025</u> 2	070 <u>035</u> 2	070 <u>045</u> 2	070 <u>055</u> 2	070 <u>065</u> 2	070 <u>075</u> 2	070 <u>085</u> 2	070 <u>095</u> 2
,	Standard EN13792:2002	070 <u>020</u> 3	070 <u>030</u> 3	070 <u>040</u> 3	070 <u>050</u> 3	070 <u>060</u> 3	070 <u>070</u> 3	070 <u>080</u> 3	070 <u>090</u> 3
3	American recommendation	070 <u>025</u> 3	070 <u>035</u> 3	070 <u>045</u> 3	070 <u>055</u> 3	070 <u>065</u> 3	070 <u>075</u> 3	070 <u>085</u> 3	070 <u>095</u> 3
4	Standard EN13792:2002	070 <u>020</u> 4	070 <u>030</u> 4	070 <u>040</u> 4	070 <u>050</u> 4	070 <u>060</u> 4	070 <u>070</u> 4	070 <u>080</u> 4	070 <u>090</u> 4
7	American recommendation	070 <u>025</u> 4	070 <u>035</u> 4	070 <u>045</u> 4	070 <u>055</u> 4	070 <u>065</u> 4	070 <u>075</u> 4	070 <u>085</u> 4	070 <u>095</u> 4
	American recommendation	070 <u>025</u> 4	070 <u>035</u> 4	070 <u>045</u> 4	070 <u>055</u> 4	070 <u>065</u> 4	070 <u>075</u> 4	070 <u>085</u> 4	070 <u>095</u>

3 additional media options available on request.

# **Outlets**











Flow meter

Letter Y in part number designates flow range:

Y 3 2

flow range 0-5 l/min 0-15 l/min

Pressure regulator

Letter **Z** in part number designates pressure range: **Z** 3 4

press. range 0-3 bar 0-10 bar

Pressure regulator with a pressure range of 0-1 bar/

0-100kPa (0-14.5psi) is available on request

Description Compressed Carbon Hydrogen Helium Low Oxygen Nitrogen Argon Dioxide Air Vacuum Label: According to standard EN13792:2002 Label: American 02 Air Vac recommendation Model Standard EN13792:2002 0705100 0705200 0705300 0705400 0705500 0705600 0705700 0705800 American recommendation 0755100 0755200 0755300 0755400 0755500 0755600 0755700 0755800 Standard EN13792:2002 0705110 0705410 0705510 0705610 07<u>057</u>10 0705210 0705310 0705810 American recommendation 0755110 0755210 0755310 0755410 0755510 0755610 0755710 0755810 0707100 0707200 070<u>73</u>00 0707400 0707500 070<u>76</u>00 0707700 0707800 Standard EN13792:2002 070513Y 070533Y 070543Y 070553Y 070563Y 070573Y 070583Y **American recommendation** 075513Y 075533Y 075543Y 075553Y 075563Y 075573Y 075583Y Standard EN13792:2002 07<u>053</u>2<u>ZSP</u> 07<u>054</u>2ZSP 07<u>055</u>2<u>ZSP</u> 07<u>057</u>2ZSP 07<u>058</u>2ZSP 07<u>051</u>2ZSP 07<u>056</u>2<u>ZSP</u> American recommendation 07<u>551</u>2<u>ZSP</u> 07<u>553</u>2<u>ZSP</u> 07<u>554</u>2<u>ZSP</u> 07<u>555</u>2<u>ZSP</u> 07<u>556</u>2<u>ZSP</u> 07<u>557</u>2<u>ZSP</u> 07<u>558</u>2<u>ZSP</u>

3 additional media options available on request.

# **Technical specifications**

### **Quick Connect**

Operating -1 bar to 10 bar pressure: -14.5 psi to 145 psi

Purity: 5.0 (Only obtainable if system is purged

when reconnected)

Test pressure: 1.5 x operating pressure

Operating  $0^{\circ}\text{C}$  to  $60^{\circ}\text{C}$ . temperature:  $23^{\circ}\text{F}$  to  $140^{\circ}\text{F}$ Standard media : Inactive gases

(Air, Vac, O<sub>2</sub>, N<sub>2</sub>, CO<sub>2</sub>, H<sub>2</sub>, Ar & He)

Non-standard media must be confirmed

by BROEN-LAB.

Inlet: 1/4" NPT female

Materials in

media contact: Stainless Steel, brass & PVDF

Gaskets: FKM

External parts: Stainless Steel, chemical nickel plated

brass & EPDM rubber

### **Outlets**

Materials: Stainless Steel and chemical nickel

plated brass

Gaskets: FKM

### **Pressure regulator**

Recommended P1=2xP2+1 (lower pressure [P1] is possible but will result in

minimum inlet lower achievable flowrate)

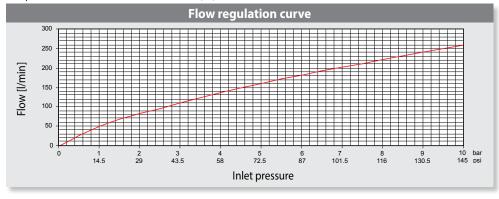
pressuere [P1]:

# **BROEN-LAB QUICK CONNECT**

# **Flow charts**

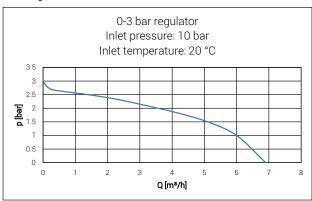
# QC + 90° outlet - No. 07XXX00

Example flow chart for Quick Connect and 90° outlet (CA)

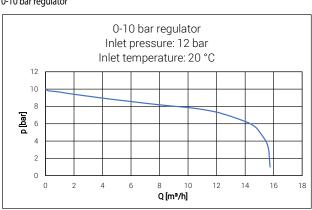


# Pressure regulator

## 0-3 bar regulator



### 0-10 bar regulator



# **Accessories**

Description	Characte	Product No.	
BROEN-LAB UniFlex™ elbow fitting	<b>Material:</b> Brass	Connections: Male 1/4"NPT - Female BROEN-LAB UniFlex™	02101270
BROEN-LAB UniFlex™T-fitting	<b>Material:</b> Brass	Connections: Male 1/4"NPT - 2 x Female BROEN-LAB UniFlex™	02101220
BROEN-LAB UniFlex™ straight fitting	<b>Material:</b> Brass	Connections: Male 1/4"NPT - Female BROEN-LAB UniFlex™	02550220
BROEN-LAB UniFlex™ hose	Material: Braiding: Stainless Steel Plastic: Teflon (PTFE)**** Rubber: FKM**** Metal: Brass	Connections:  OD10mm-UniFlex™  OD12mm-UniFlex™  OD15mm-UniFlex™  Union nut G1/2-UniFlex™  UniFlex™-UniFlex™	93R1020xxxx**** 93R1220xxxx 93R1520xxxx 93R4020xxxx 93R2020xxxx
BROEN-LAB Flexible Stainless Steel pipe	<b>Material:</b> Braiding: Stainless Steel Metal: Stainless Steel	Connections: Male 1/4"NPT-OD10mm OD10mm-OD10mm	9357080xxxx*** 9358080xxxx

For more information about hoses and their technical specifications please require document 99G0005: BROEN-LAB Uniflex - Flexible Pipes & Hoses

Description	Cha	Product No.		
Swagelok**				
straight tube	Material: Stainless Steel Connections: Male 1/4"NPT	3 mm:	96101000	
fitting		4 mm:	96101020	
-		6 mm:		
		8mm:		
	Male 1/4 NP1	1/4":	96101030	
		1/8":	96l01040	
Swagelok**				
elbow tube	Material:	3 mm:	96101060	
fitting	Stainless Steel	4 mm:	96101070	
	Stanness Steel	6 mm:	96101080	
	Connections:	8 mm:	96100430	
	Male 1/4"NPT	1/4":	96101090	
		1/8":		
Swagelok**				
connector	Material:	Hose ID:		
connector	Stainless Steel	1/4":	96100450	
	Connections: Male 1/4"NPT			

<sup>\*</sup> Swagelok – TM Swagelok Company.

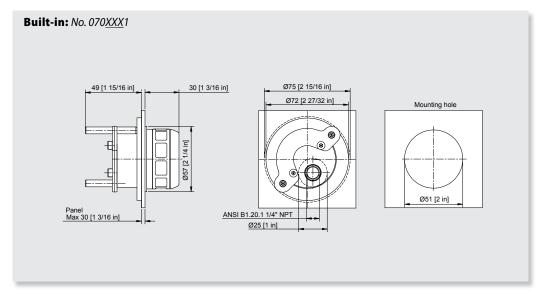
0500 = 500mm, 0700 = 700mm, 1000 = 1000mm, 1200 = 1200mm, 1500 = 1500mm, 2000 = 2000mm, 2500 = 2500mm, 3000 = 3000mm

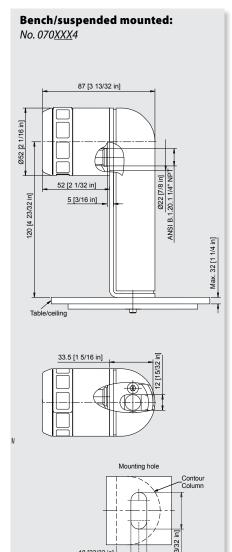
<sup>\*\*</sup> Other dimensions available on request.

<sup>\*\*\*</sup> Standard lengths of hoses (xxxx):

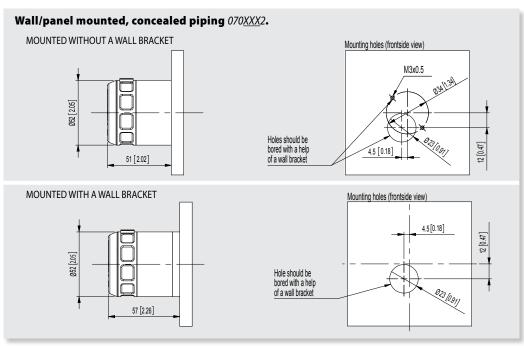
<sup>\*\*\*\*</sup> PTFE and rubber are penetrable materials meaning that gases, vapors, and liquids may diffuse through them. Always check compatibility with gases in application!

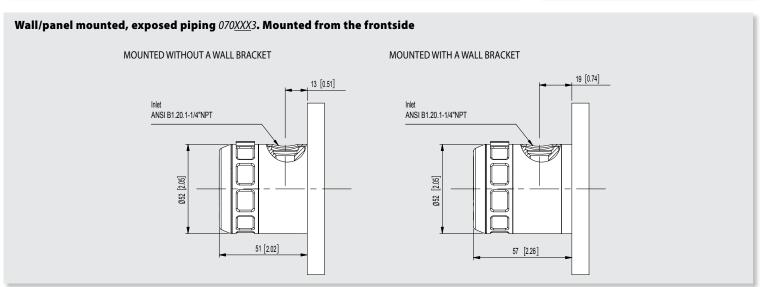
# **Mounting information**





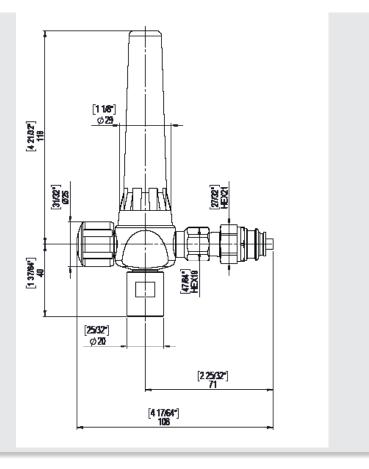
13 [1/2 in]





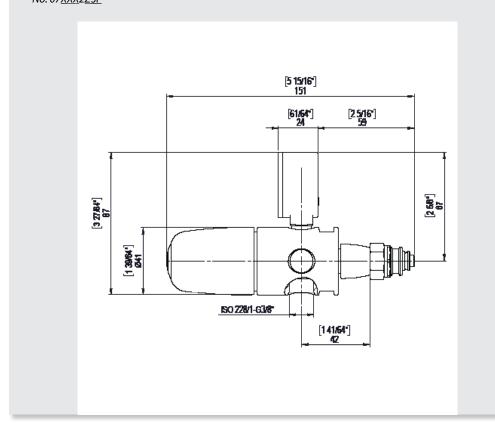
# **Mounting information**

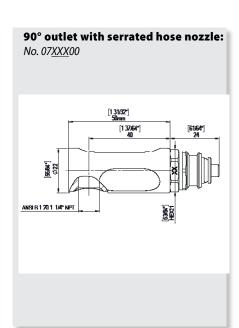
Flow meter: No. 07XXX3Y



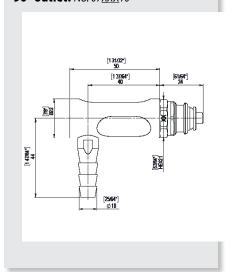
# **Pressure regulator:**

No. 07<u>XXX</u>2<u>ZSP</u>



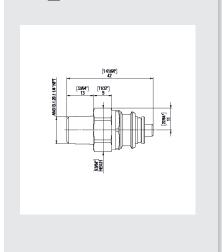






# Straight outlet:

No. 070<u>XX</u>00



# **BROEN QUICK CONNECT** Notes

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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 offer solutions that ensure the functionality, compliance, hygiene, durability and safety are of the highest priority. For over 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 solutions

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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 9001:2015. This certification will further contribute to reputation for quality and reliability of BROEN-LAB A/S.

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