

B82G - General purpose filter/regulator Excelon® Plus Modular System

- Port size: 1/4" ... 3/8" (ISO G / PTF)
- Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products
- 5 or 40 micron particle and high efficiency water removal (> 95%)
- Double safety lock bowl
- Push to lock adjusting knob with built in tamper resistant feature
- Metal bowl with prismatic liquid level indicator lens
- Light weight Polycarbonate bowl with guard
- Easy to read flush mounted integrated pressure gauge
- Air purity classes in accordance to ISO8573-1:2010: 7:8:4 (40µm) 6:8:4 (5µm)
-  DoC in accordance with 2014/34/EU/ATEX



Technical features

Medium:

Compressed air only

Maximum supply pressure:

Polycarbonate bowl:

10 bar (145 psi)

Metal bowl: 17 bar (246 psi)

Outlet pressure ranges:

0.3 ... 10 bar (4 ... 145 psi),

0.3 ... 4 bar (4 ... 58 psi) optional,

0.7 ... 17 bar (2 ... 246 psi) optional

Filter element:

5 µm & 40 µm

Port size:

G1/4, G3/8, 1/4 PTF, 3/8 PTF

Gauge:

Integrated as standard

Gauge port 1/8 as option

Flow:

37 dm³/s at port size 1/4",

37 dm³/s at port size 3/8",

inlet pressure 10 bar (145 psi) ,

6.3 bar (91 psi) set pressure and a

Δp: 1 bar (14.5 psi) droop from set.

Diaphragm Type:

Relieving

Drain:

Manual or automatic

Automatic drain operating

conditions (float operated):

Bowl pressure required to close

drain: > 0.35 bar (5 psi)

Bowl pressure required to open

drain: ≤ 0.2 bar (2.9 psi)

Minimum air flow required to

close drain: 1 dm³/s.

Ambient/Media temperature:

Polycarbonate bowl:

-10 ... +60°C (+14 ... +140°F)

Metal bowl:

-20 ... +65°C (-4 ... +149°F)

Air supply must be dry enough

to avoid ice formation at

temperatures below +2°C (+35°F).

Atex:

Filter/regulators B82 are in

conformity with

Atex 2014/34/EU

 II 2 GD

Ex h IIC T6 Gb

Ex h IIIC T85°C Db

Materials:

Body: Die cast aluminum

Body covers: ABS

Bonnet: Acetal/ Aluminum

Valve: PP

Transparent Bowl: Polycarbonate

with Polypropylene Guard.

Metal Bowl: Die cast Zinc with PA

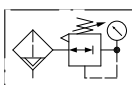
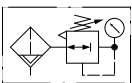
liquid level indicator lens

Filter element: sintered PP

Bowl 'O'- ring: Chloroprene

Elastomers: NBR

Technical data B82G—standard models

Symbol	Port	Drain	Pressure range (bar)	Filter element (µm)	Bowl	Weight (kg)	Model *1)
	G1/4	Auto	0,3 ... 10	40	Guarded polycarbonate	0,30	B82G-2GK-AP3-RMG
	G3/8	Auto	0,3 ... 10	40	Guarded polycarbonate	0,30	B82G-3GK-AP3-RMG
	G1/4	Auto	0,3 ... 10	40	Metal with level indicator	0,50	B82G-2GK-AD3-RMG
	G3/8	Auto	0,3 ... 10	40	Metal with level indicator	0,50	B82G-3GK-AD3-RMG
	G1/4	Manual	0,3 ... 10	40	Guarded polycarbonate	0,30	B82G-2GK-QP3-RMG
	G3/8	Manual	0,3 ... 10	40	Guarded polycarbonate	0,30	B82G-3GK-QP3-RMG
	G1/4	Manual	0,3 ... 10	40	Metal with level indicator	0,50	B82G-2GK-QD3-RMG
	G3/8	Manual	0,3 ... 10	40	Metal with level indicator	0,50	B82G-3GK-QD3-RMG

*1) All models shown here are supplied with integrated gauge applicable for flow direction left to right.

With flow direction right to left please use the online configurator www.norgren.com/air-preparation-configurator or contact Norgren

Option selector *1)

B82G-★★★-★★★-R★★

Port size	Substitute		Gauge	Substitute
1/4"	2		With integrated gauge (standard)	G
3/8"	3		Without integrated gauge but with gauge port 1/8"	N
Thread form	Substitute		Pressure range *3)	Substitute
PTF	A		0.3 to 4 bar	F
ISO G (standard)	G		0.3 to 10 bar (standard)	M
Adjustment	Substitute		0.7 to 17 bar	S*2)
Knob (standard)	K		Element	Substitute
T-bar	T*2)		40 µm (standard)	3
Drain	Substitute		5 µm	1
Manual (standard)	Q		*3) Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.	
Auto drain (standard)	A			
Bowl	Substitute			
Metal with liquid indicator	D			
Transparent with guard (standard)	P			

*1) All models shown here are applicable for flow direction left to right.
With flow direction right to left please use the online configurator www.norgren.com/air-preparation-configurator or contact Norgren

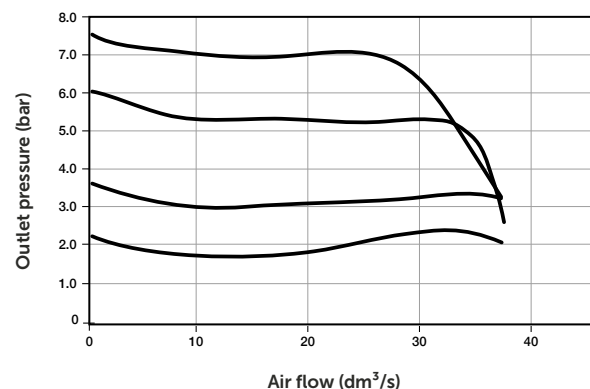
*2) Units with 246 psi (17 bar) outlet pressure range are available only with the T-bar adjustment; therefore substitute T at the 7th position and S at the 9th position. T-bar handle only available with 17 bar option.

Flow characteristics

Inlet pressure: 10 bar (145 psi)

Range: 0.3...10 bar (4...145 psi)

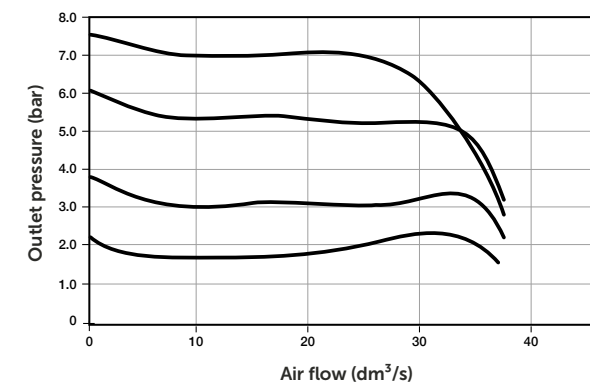
Port size: 1/4", 5 µm element



Inlet pressure: 10 bar (145 psi)

Range: 0.3...10 bar (4...145 psi)

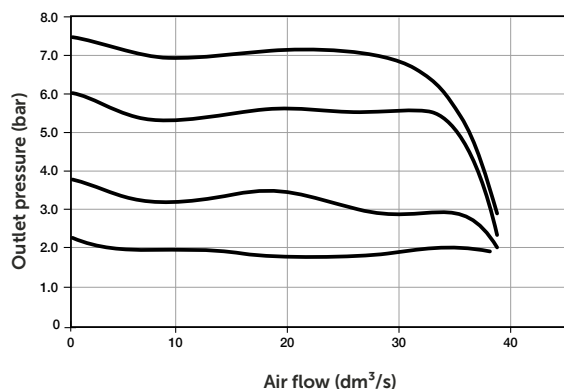
Port size: 1/4", 40 µm element



Inlet pressure: 10 bar (145 psi)

Range: 0.3...10 bar (4...145 psi)

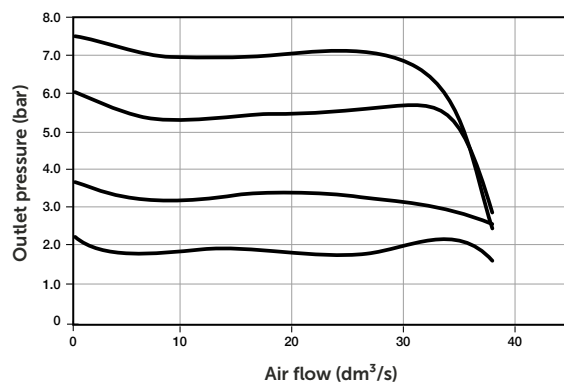
Port size: 3/8", 5 µm element



Inlet pressure: 10 bar (145 psi)

Range: 0.3...10 bar (4...145 psi)

Port size: 3/8", 40 µm element



Accessories

Quickclamp  Page 6 820014-51KIT	Quickclamp with bracket assembled  Page 6 820014-52KIT	Neck mounting bracket and panel nut  Page 7 820068-51KIT	Panel mounting nut  Page 7 820048-89KIT	Mounting bracket  Page 7 820024-50KIT
Integrated gauge 10 bar gauge  820073-01KIT	Integrated gauge 20 bar gauge  820073-02KIT	Integrated gauge 4 bar gauge  820073-03KIT	Gauge adaptor kit 1/8 PTF  820100-01KIT	Gauge adaptor kit R 1/8  820100-02KIT
Pressure sensing block 1/4 PTF  Page 7 820016-50KIT	Pressure sensing block G1/4  Page 7 820016-51KIT	Porting block 3/8" PTF  Page 7 820028-50KIT	Porting block G3/8  Page 7 820028-53KIT	Pressure switch interface block (18D pressure switch) G1/4  Page 8 0523109000000000
Pressure switch 18D (0,5 ... 8bar) *1  Page 8 0881300	Digital pressure switch 51D (-1 ... 10 bar) *2  Page 8 0860810	Padlock  840055-01KIT	Lockout device  840055-02KIT	

*1) Flanged version. For other pressure ranges, please see data sheet 5.11.001

*2) For other pressure ranges, please see data sheet 5.11.385

Gauges (For regulators with gauge port instead of integrated port)

Port Adaptors


Page 8

1/4 PTF820015-02KIT

3/8 PTF820015-03KIT

G1/4820015-08KIT

G3/8820015-09KIT

Center back connection, white face
(for full technical specification see datasheet 8.900.900)


Pressure range (bar)*3)	(psi)	ø	Thread size	Model
0 ... 6	0 ... 0,6	0 ... 84	40 mm	R1/818-015-885
0 ... 10	0 ... 1	0 ... 145	40 mm	R1/818-015-989
0 ... 25	0 ... 2,5	0 ... 362	40 mm	R1/818-015-908

*3) primary scale

Maintenance/Service

Filter cartridge
5 micron



820038-50KIT

Filter cartridge
40 micron



820038-51KIT

Auto drain kit with
metal Nut - Imperial



6000-61KIT

Auto drain kit with
metal Nut - Metric



6000-60KIT

R82 / B82
Elastomer Kit



FRLB82-KIT

Spare parts

Filter Bowl (Guarded Poly bowl
with auto drain 6 mm PIF)



820025-51KIT

Filter Bowl (Guarded Poly bowl
with manual drain)



820025-50KIT

Filter Bowl (Metal with S/Glass &
auto drain, 6 mm PIF)



820003-51KIT

Filter Bowl (Metal with S/Glass &
manual drain)



820003-50KIT

Filter Bowl (Guarded Poly bowl
with auto drain, 1/4 PIF)



820025-53KIT

Filter Bowl (Metal with S/Glass &
auto drain, 1/4 PIF)



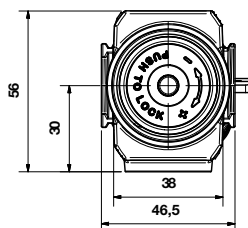
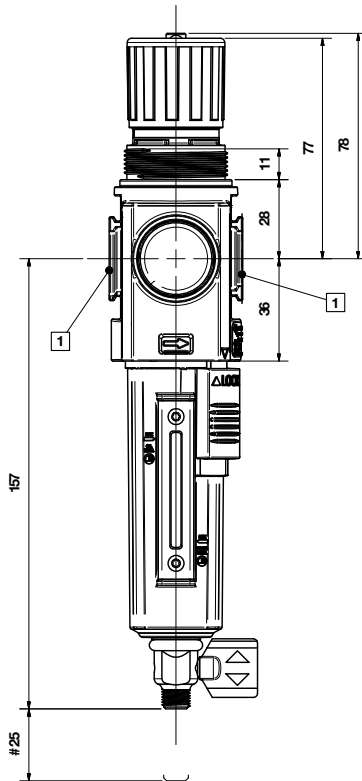
820003-56KIT

Dimensions

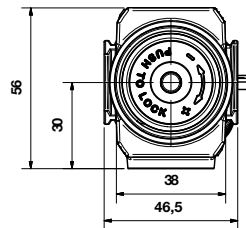
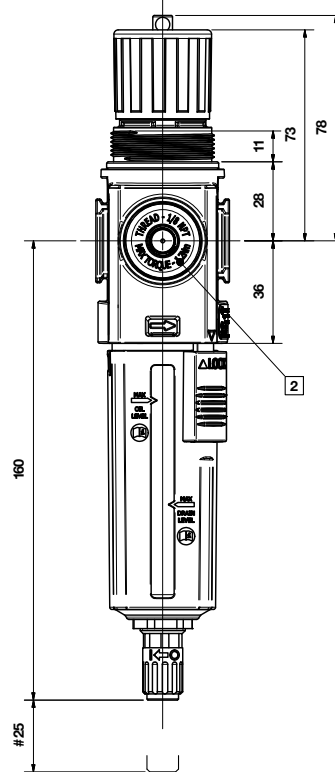
Dimensions in mm
Projection/First angle



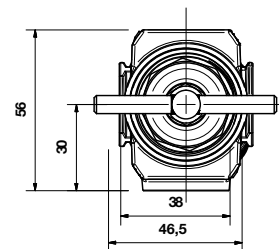
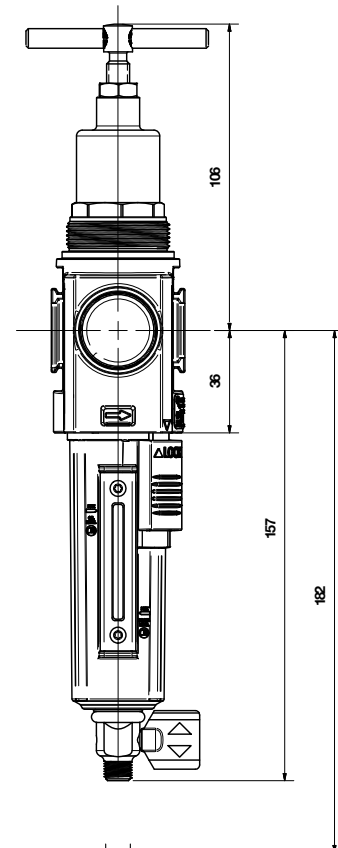
1/4 Turn Manual Drain



Automatic Drain



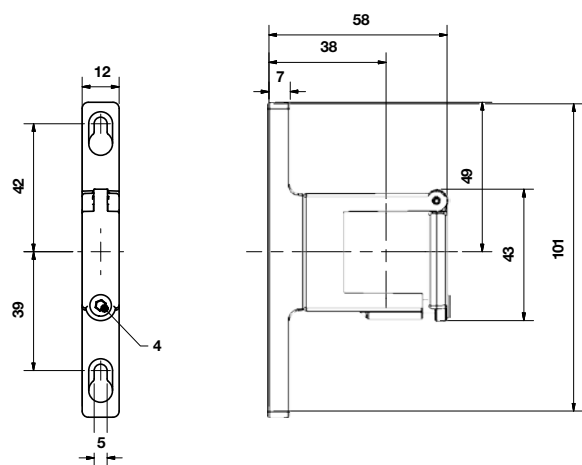
T-bar adjustment



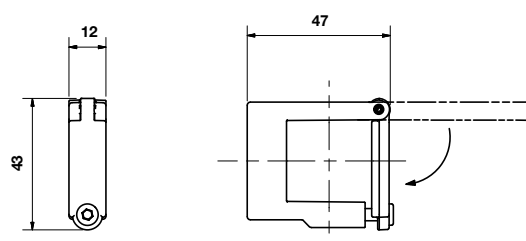
- # Minimum clearance for bowl removal
 1 Main ports 1/4", 3/8" (ISO G/PTF)
 2 Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports

Accessories

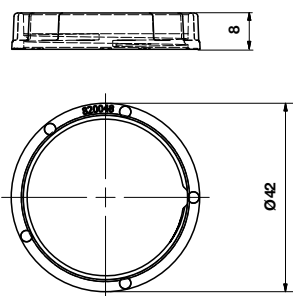
Quikclamp with wall bracket



Quikclamp

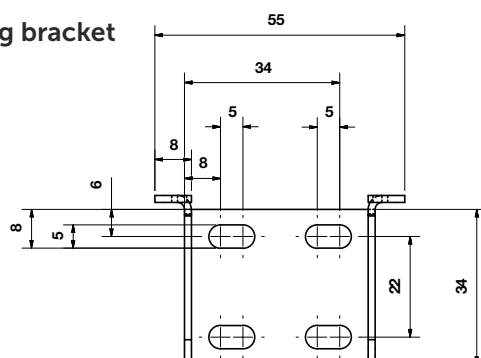


Panel mounting nut



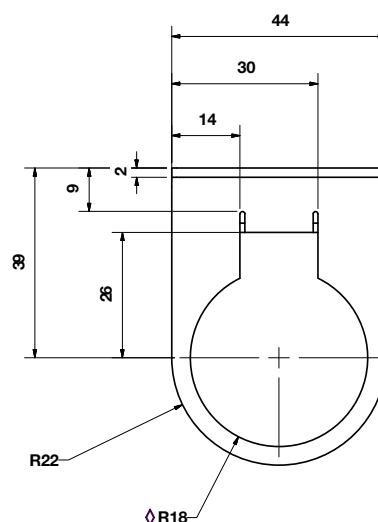
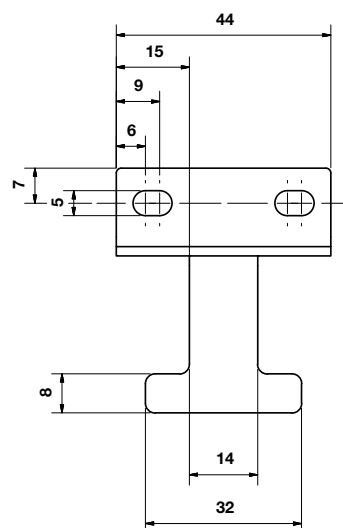
Recommended panel hole size:
 $\varnothing 36.25 \dots 36.75$ mm
 Panel thickness:
 up to 4mm

Universal Mounting bracket

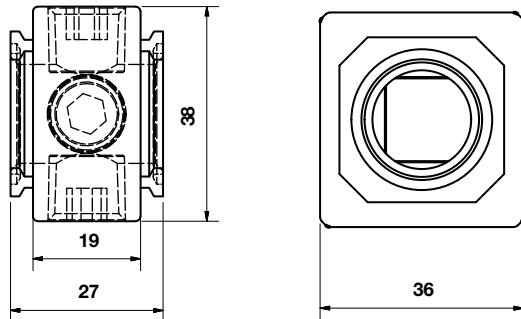


Neck mounting bracket

Dimensions in mm
 Projection/First angle

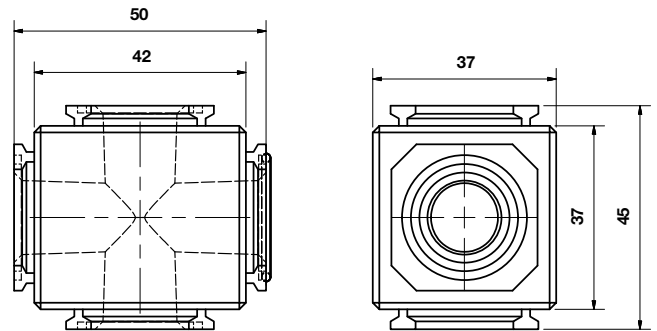


Pressure sensing block

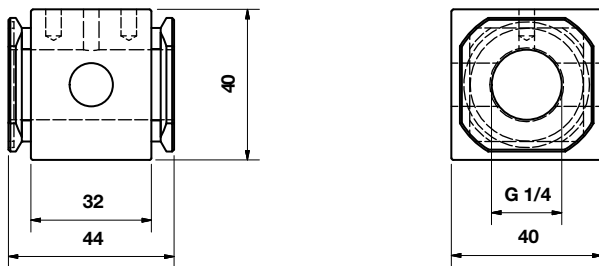


Full flow porting block

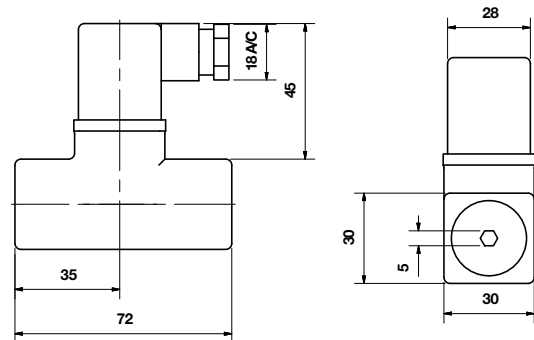
Dimensions in mm
Projection/First angle



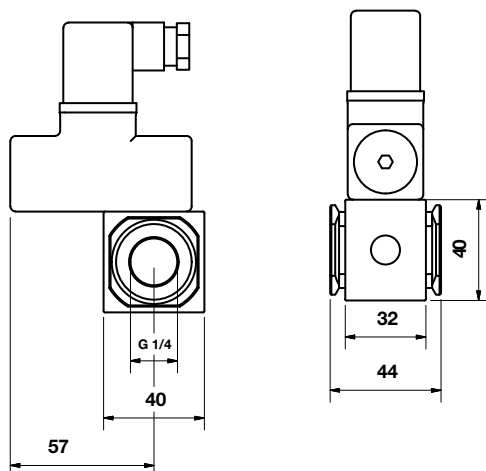
Porting block for 18D pressure switch



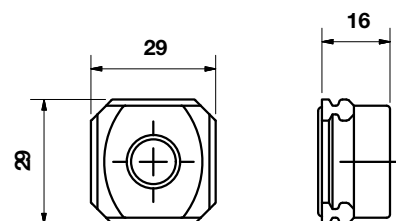
18D Pressure switch



18D Porting block and 18D assembled

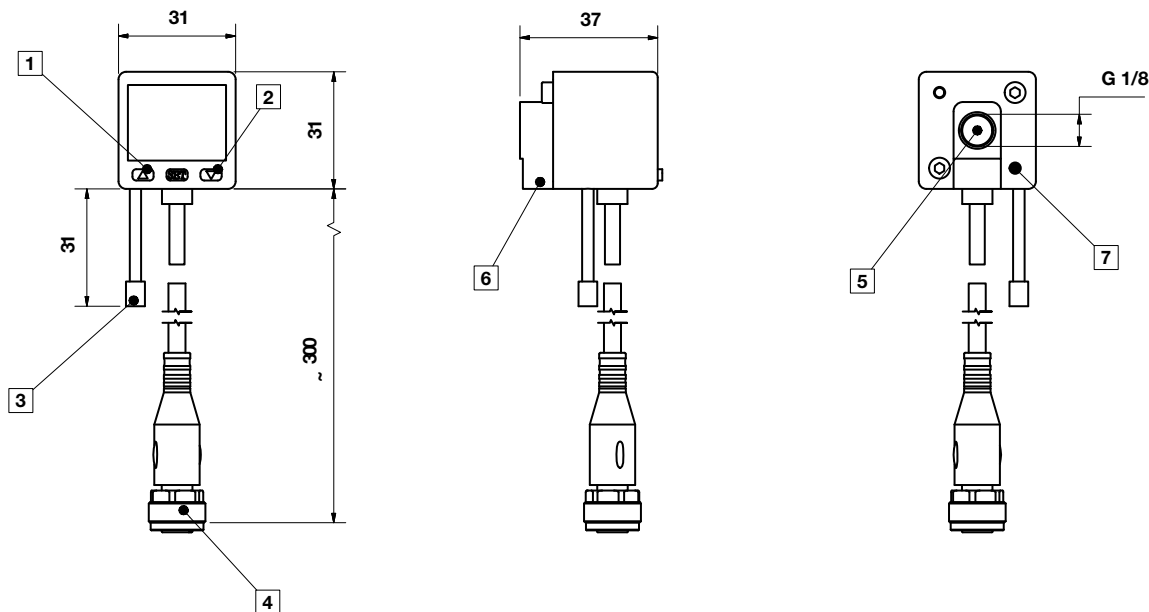


Pipe adaptor



51D Pressure switch - digital

Dimensions in mm
Projection/First angle



- 1 Switch OUT 1, green LED
- 2 Switch OUT 2, red LED
- 3 Dustproof protector
- 4 Connector M12 x 1
- 5 Inlet port
- 6 Alternative inlet port G1/8 plugged
- 7 Thread for mounting screw

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under **»Technical features/data«**.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult Norgren Ltd.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.