

# 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)



### 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 dm<sup>3</sup>/s at port size 1/4",  
 37 dm<sup>3</sup>/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:

#### Drain:

Relieving  
 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 dm<sup>3</sup>/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).

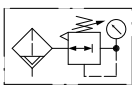
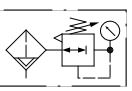
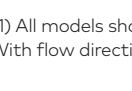

#### Atex:

Filter/regulators B82 are in conformity with Atex 2014/34/EU  
 Ex 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.imi-precision.com/air-preparation-configurator](http://www.imi-precision.com/air-preparation-configurator) or contact IMI Norgren

**Option selector \*1)**
**B82G-\*\*\*-\*\*\*-R\*\***

Port size	Substitute
1/4"	2
3/8"	3
Thread form	Substitute
PTF	A
ISO G (standard)	G
Adjustment	Substitute
Knob (standard)	K
T-bar	T*2)
Drain	Substitute
Manual (standard)	Q
Auto drain (standard)	A
Bowl	Substitute
Metal with liquid indicator	D
Transparent with guard (standard)	P

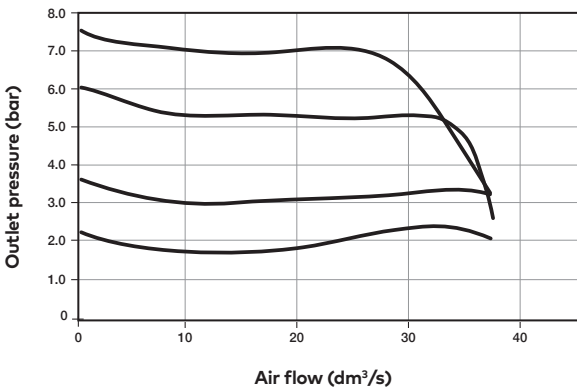
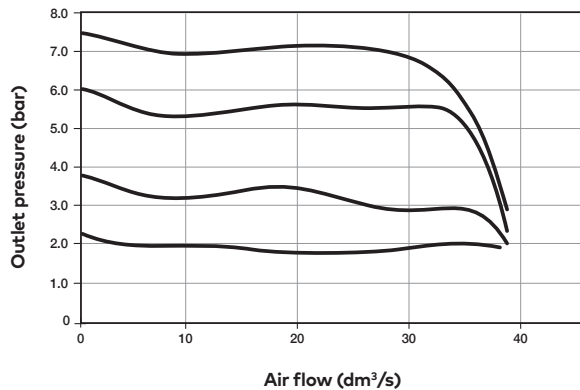
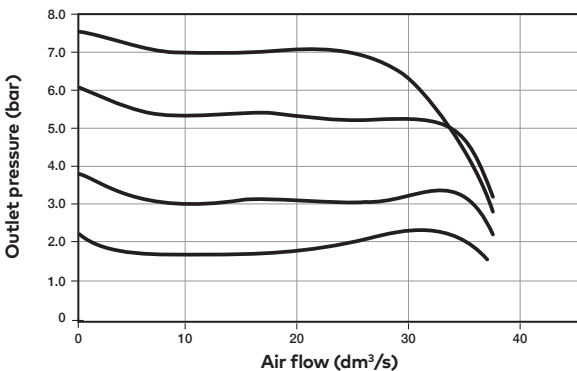
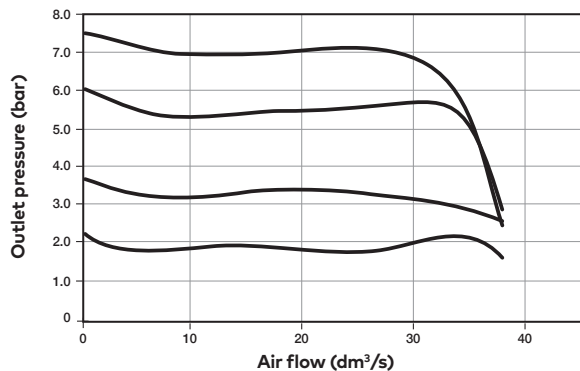
Gauge	Substitute
With integrated gauge (standard)	G
Without integrated gauge but with gauge port 1/8"	N
Pressure range *3)	Substitute
0.3 to 4 bar	F
0.3 to 10 bar (standard)	M
0.7 to 17 bar	S*2)
Element	Substitute
40 µm (standard)	3
5 µm	1

\*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.





















\*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.imi-precision.com/air-preparation-configurator](http://www.imi-precision.com/air-preparation-configurator) or contact IMI 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: 3/8", 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", 40 µm element**


## Accessories

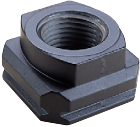

<b>Quikclamp®</b>  <b>Page 6</b> 820014-51KIT	<b>Quikclamp® with bracket assembled</b>  <b>Page 6</b> 820014-52KIT	<b>Neck mounting bracket and panel nut</b>  <b>Page 7</b> 820068-51KIT	<b>Panel mounting nut</b>  <b>Page 7</b> 820048-89KIT	<b>Mounting bracket</b>  <b>Page 7</b> 820024-50KIT
<b>Integrated gauge 10 bar gauge</b>  820073-01KIT	<b>Integrated gauge 20 bar gauge</b>  820073-02KIT	<b>Integrated gauge 4 bar gauge</b>  820073-03KIT	<b>Gauge adaptor kit 1/8 PTF</b>  820100-01KIT	<b>Gauge adaptor kit R 1/8</b>  820100-02KIT
<b>Pressure sensing block 1/4 PTF</b>  <b>Page 7</b> 820016-50KIT	<b>Pressure sensing block G1/4</b>  <b>Page 7</b> 820016-51KIT	<b>Porting block 3/8" PTF</b>  <b>Page 7</b> 820028-50KIT	<b>Porting block G3/8</b>  <b>Page 7</b> 820028-53KIT	<b>Pressure switch interface block (18D pressure switch) G1/4</b>  <b>Page 8</b> 0523109000000000
<b>Pressure switch 18D (0,5 ... 8bar) *1</b>  <b>Page 8</b> 0881300	<b>Digital pressure switch 51D (-1 ... 10 bar) *2</b>  <b>Page 8</b> 0860810	<b>Connector 84-82 Series *3</b>  <b>Page 7</b> 4417-01	<b>Padlock</b>  84a0055-01KIT	<b>Lockout device</b>  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

\*3) For connection please use Quikclamp 82 series and Hybrid-Quikclamp 84 series

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

Port Adaptors		Center back connection, white face (for full technical specification see datasheet 8.900.900)					
 <b>Page 8</b>							
1/4 PTF	820015-02KIT	Pressure range (bar)*3 (MPa)	(psi)	ø	Thread size	Model	
3/8 PTF	820015-03KIT	0 ... 6	0 ... 0,6	0 ... 84	40 mm	R1/8	18-015-885
G1/4	820015-08KIT	0 ... 10	0 ... 1	0 ... 145	40 mm	R1/8	18-015-989
G3/8	820015-09KIT	0 ... 25	0 ... 2,5	0 ... 362	40 mm	R1/8	18-015-908

\*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)**

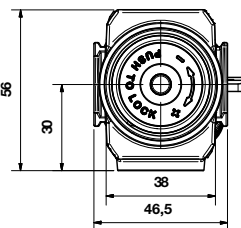
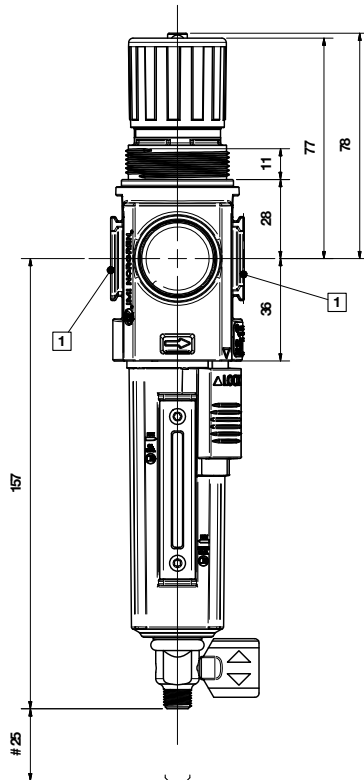


820003-56KIT

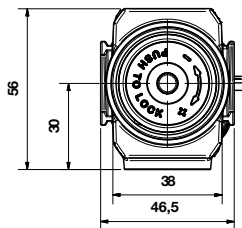
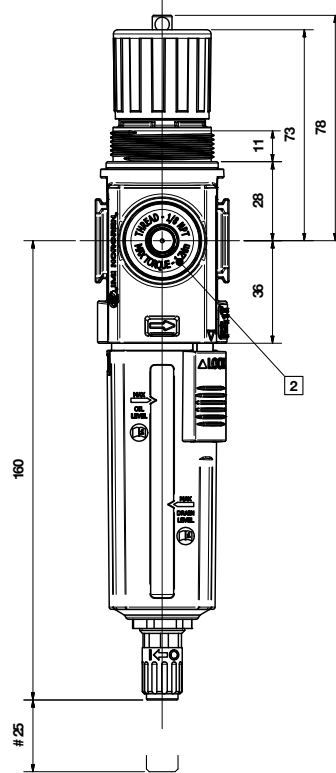
**Dimensions**

 Dimensions in mm  
 Projection/First angle

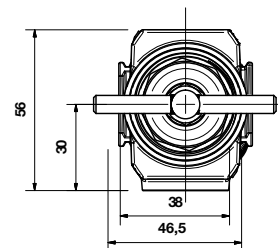
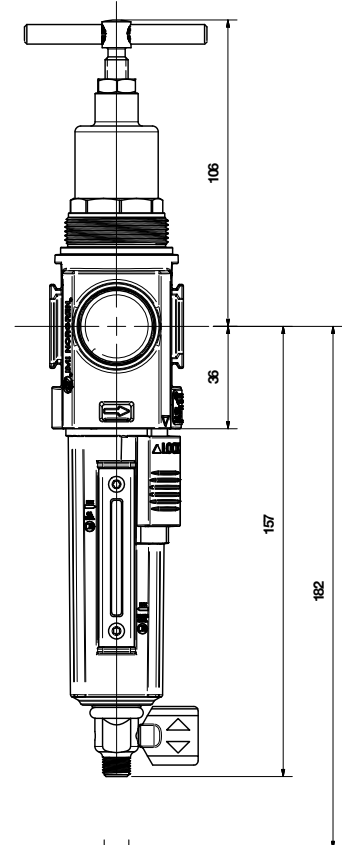

1/4 Turn Manual Drain



Automatic Drain



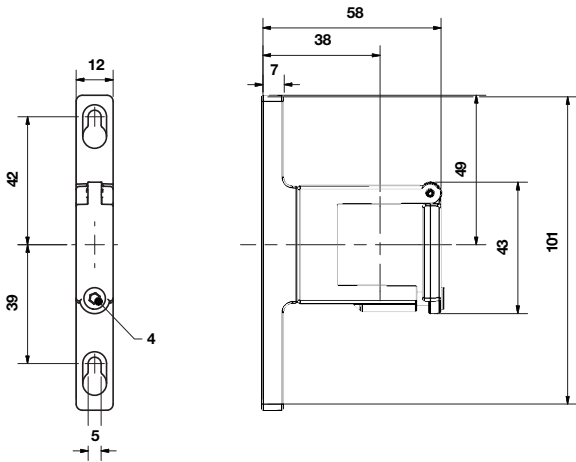
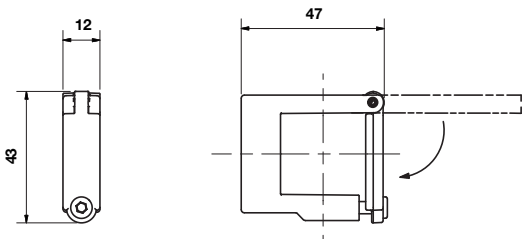
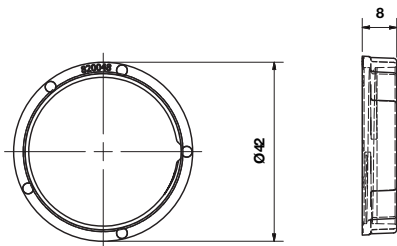
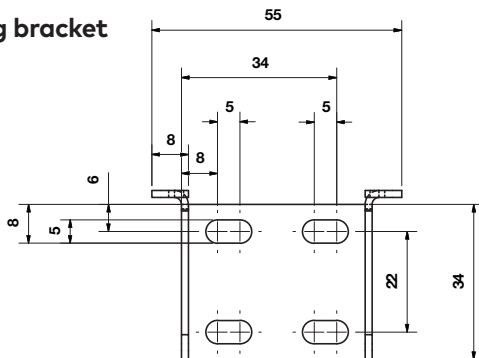
T-bar adjustment

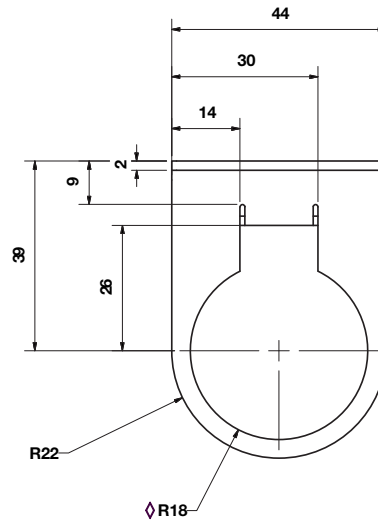
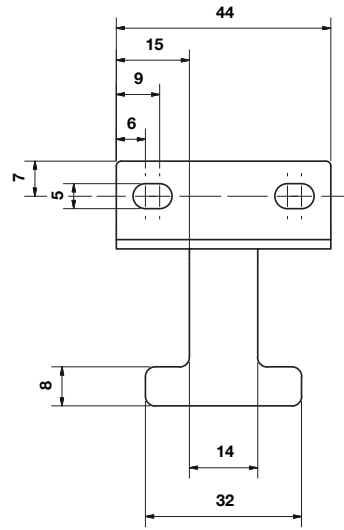


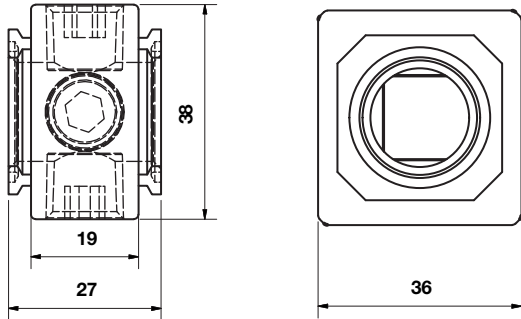
# Minimum clearance for bowl removal

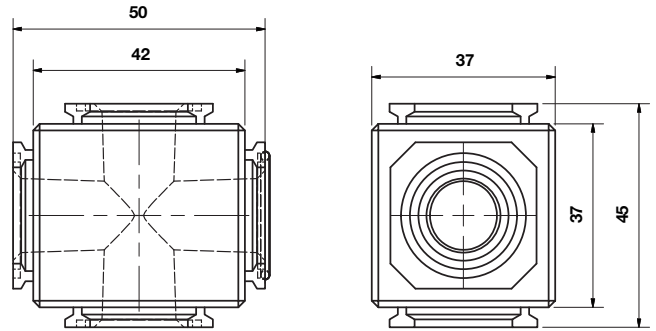
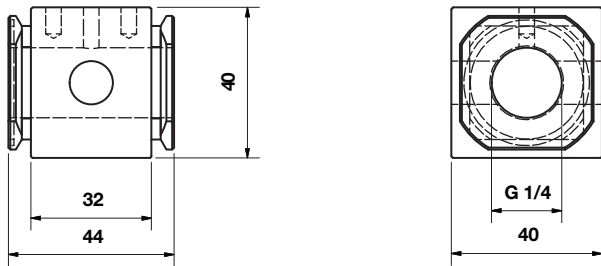
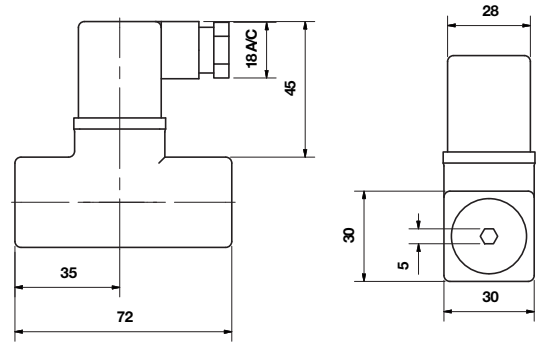
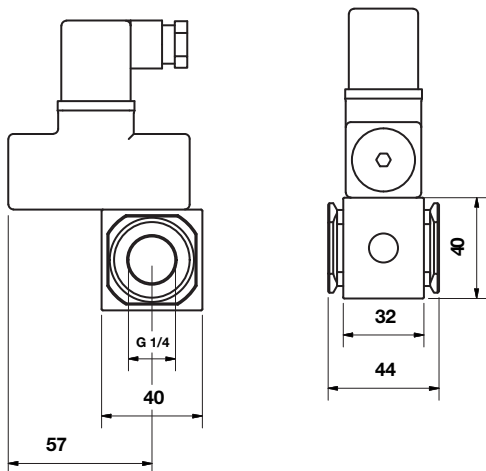
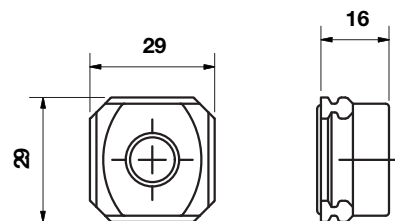
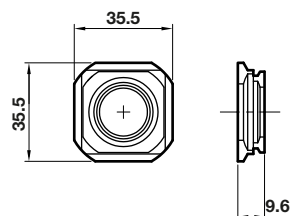
1 Main ports 1/4", 3/8" (ISO G/PTF)

2 Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports

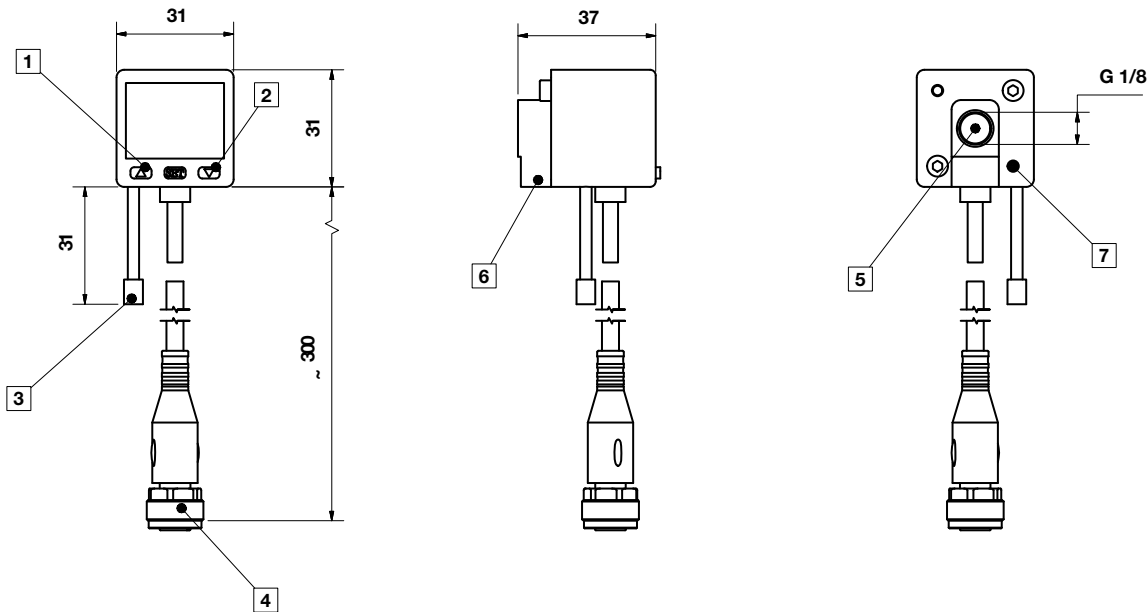
**Accessories**
**Quikclamp® with wall bracket**

**Quikclamp®**

**Panel mounting nut**

**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**

**Connector 84-82 Series**


**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.