

- > **Port size: 1/4" to 3/8"**  
**(PTF/ISO G)**
- > **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**



## Technical features

### Medium:

Compressed air only

### Maximum supply pressure:

Polycarbonate bowl:

145 psi (10 bar)

Metal bowl: 246 psi (17 bar)

### Outlet pressure ranges:

4 to 145 psi (0.3 to 10 bar),

4 to 58 psi (0.3 to 4 bar),

2 to 246 psi (0.7 to 17 bar)

### 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

### Diaphragm Type:

Relieving

### Flow:

79 scfm (37 dm³/s) at port size 1/4",

79 scfm (37 dm³/s) at port size 3/8",

inlet pressure 145 psi (10 bar),

operating pressure 91 psi (6.3 bar)

and a Δp: 7.25 psi (0.5 bar) drop

from set. Filter element: 40 µm

### Drain:

Manual or automatic

### Automatic drain operating conditions (float operated):

Bowl pressure required to

close drain: > 5 psi (0.35 bar)

Bowl pressure required to

open drain: ≤ 2.9 psi (0.2 bar)

Minimum air flow required to

close drain: 2 scfm (1 dm³/s)

### Ambient/Media temperature:

Polycarbonate bowl:

+14 to +140°F (-10 to +60°C)

Metal bowl:

-4 to +149°F (-20 to +65°C)

Air supply must be dry enough

to avoid ice formation at

temperatures below +35°F (+2°C).

### Materials:

Body: Die cast aluminum

Body covers: ABS

Bonnet: Acetal/ Aluminum

Valve: PP

Bowl: Transparent PC with

PP guard or die cast zinc

Liquid level indicator lens

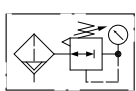
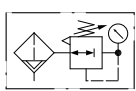
(metal bowl): PA

Filter element: sintered PP

Bowl 'o' - ring: Chloroprene

Elastomers: NBR

## Technical data B82G

Symbol	Port Size (PTF)	Drain	Pressure range psi (bar)	Filter element (µm)	Bowl	Weight lb (kg)	Model *1
	1/4	Auto	4 to 145 (0.3 to 10)	40	Guarded polycarbonate	0.6 (0.3)	B82G-2AK-AP3-RMG
	3/8	Auto	4 to 145 (0.3 to 10)	40	Guarded polycarbonate	0.6 (0.3)	B82G-3AK-AP3-RMG
	1/4	Auto	4 to 145 (0.3 to 10)	40	Metal with level indicator	1.1 (0.5)	B82G-2AK-AD3-RMG
	3/8	Auto	4 to 145 (0.3 to 10)	40	Metal with level indicator	1.1 (0.5)	B82G-3AK-AD3-RMG
	1/4	Manual	4 to 145 (0.3 to 10)	40	Guarded polycarbonate	0.6 (0.3)	B82G-2AK-QP3-RMG
	3/8	Manual	4 to 145 (0.3 to 10)	40	Guarded polycarbonate	0.6 (0.3)	B82G-3AK-QP3-RMG
	1/4	Manual	4 to 145 (0.3 to 10)	40	Metal with level indicator	1.1 (0.5)	B82G-2AK-QD3-RMG
	3/8	Manual	4 to 145 (0.3 to 10)	40	Metal with level indicator	1.1 (0.5)	B82G-3AK-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 parallel	G
Adjustment	Substitute
Knob	K
T-bar	T*2)
Drain	Substitute
Manual	Q
Auto drain	A
Bowl	Substitute
Metal with liquid indicator	D*2)
Transparent with guard	P

Gauge	Substitute
With integrated gauge	G
Without integrated gauge but with gauge port 1/8"	N
Pressure range *3)	Substitute
4 to 58 psi (0.3 to 4 bar)	F
4 to 145 psi (0.3 to 10 bar)	M
10 to 246 psi (0.7 to 17 bar)	S*2)
Element	Substitute
40 µm	3
5 µm	1

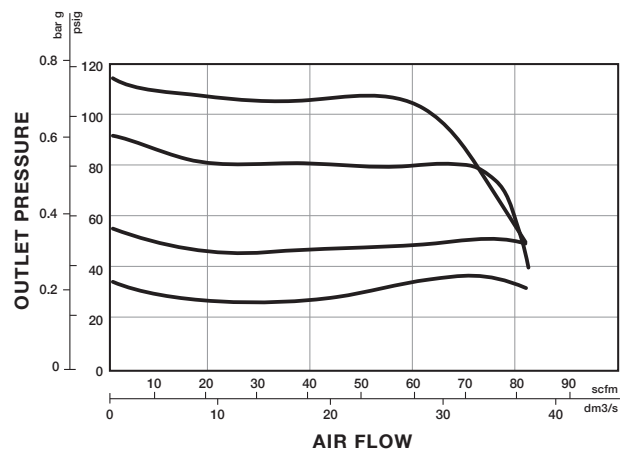
\*1) All models shown here are applicable for flow direction left to right. With flow direction right to left please use the online configurator [www.imi-precision.com/air-preparation-configurator](http://www.imi-precision.com/air-preparation-configurator) or contact IMI Norgren

\*2) Units with 246 psi (17 bar) outlet pressure range are available only with the T-bar adjustment and metal bowl; therefore substitute T at the 7th position, D at the 9th position, and S at the 12th position. T-bar handle only available with 17 bar option.

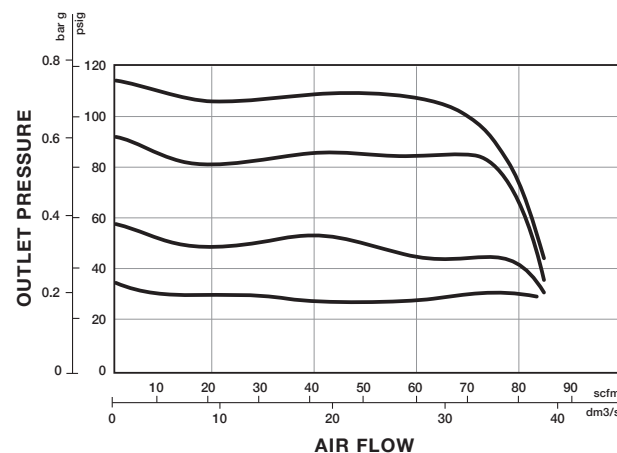
\*3) Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

## Flow characteristics

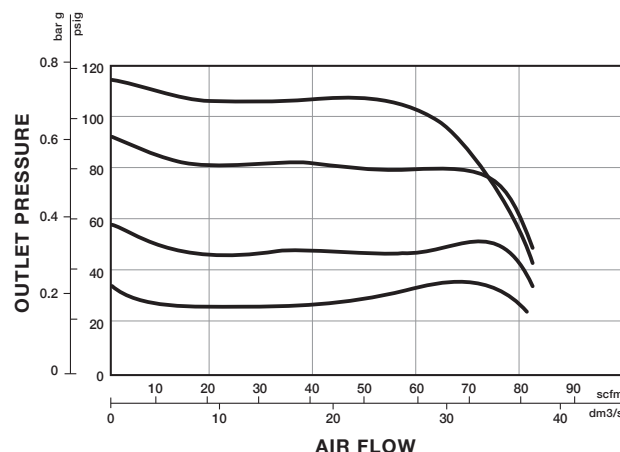
Inlet pressure: 145 psi (10 bar)  
Range: 4 to 145 psi (0.3 to 10 bar)  
Port size: 1/4", 5 µm element



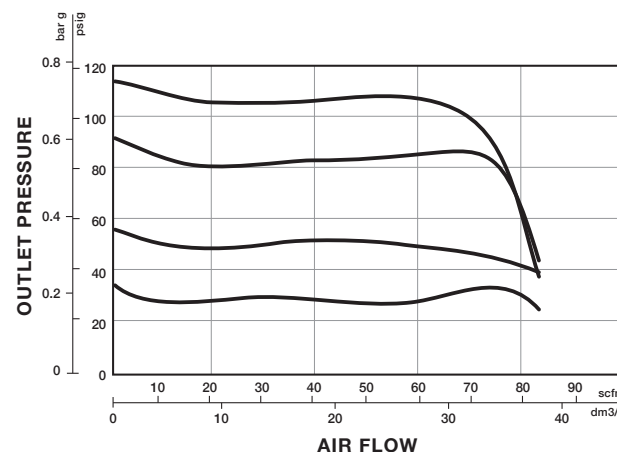
Inlet pressure: 145 psi (10 bar)  
Range: 4 to 145 psi (0.3 to 10 bar)  
Port size: 3/8", 5 µm element











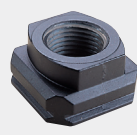
Inlet pressure: 145 psi (10 bar)  
Range: 4 to 145 psi (0.3 to 10 bar)  
Port size: 1/4", 40 µm element



Inlet pressure: 145 psi (10 bar)  
Range: 4 to 145 psi (0.3 to 10 bar)  
Port size: 3/8", 40 µm element



## Accessories

<b>Quickclamp®</b>  <b>page 3</b> 820014-51KIT	<b>Quickclamp® with bracket assembled</b>  <b>page 3</b> 820014-52KIT	<b>Neck mounting bracket and panel nut</b>  <b>page 4</b> 820068-51KIT	<b>Panel mounting nut</b>  <b>page 4</b> 820048-89KIT	<b>Mounting bracket</b>  <b>page 4</b> 820024-50KIT
<b>Integrated gauge 10 bar gauge</b>  820073-01KIT	<b>Integrated gauge 20 bar gauge</b>  820073-02KIT	<b>Integrated gauge 6 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 4</b> 820016-50KIT	<b>Pressure sensing block G1/4</b>  <b>page 4</b> 820016-51KIT	<b>Padlock</b>  840055-01KIT	<b>Lockout device</b>  840055-02KIT	<b>Digital pressure switch 51D (-14 to 145 psi)</b>  <b>page 5</b> 0860811000000000
<b>Full flow porting block 3/8 PTF</b>  <b>page 4</b> 820028-50KIT	<b>Full flow porting block G3/8</b>  <b>page 4</b> 820028-53KIT	<b>Pressure switch interface block (18D pressure switch) G1/4</b>  <b>page 5</b> 0523109000000000	<b>Pneumatic pressure switch 18D (7 to 120 psi)</b>  <b>page 5</b> 0881300000000000	<b>Service Kit</b>  R82 / B82 Elastomer kit FRLB82-Kit
<b>Port Adaptors 1/4 PTF</b>  <b>page 5</b> 820015-02KIT	<b>Port Adaptors 3/8 PTF</b>  <b>page 5</b> 820015-03KIT	<b>Port Adaptors G1/4</b>  <b>page 5</b> 820015-08KIT	<b>Port Adaptors G3/8</b>  <b>page 5</b> 820015-09KIT	

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

Center back connection, white face					
Pressure range					
(psi)	(bar)*3)	(MPa)	Ø	Thread size	Model
0 to 84	0 to 6	0 to 0.6	2"	R1/8	18-015-012
0 to 145	0 to 10	0 to 1	2"	R1/8	18-015-013
0 to 362	0 to 25	0 to 2.5	2"	R1/8	18-015-014

\*3) primary scale

## Gauges

Center back connection, black face					
Pressure range					
(psi) *3)	(bar)	(MPa)	Ø	Thread size	Model
0 to 60	0 to 4	0 to 0.4	2"	1/8" NPT	18-015-202
0 to 160	0 to 11	0 to 1.1	2"	1/8" NPT	18-015-204
0 to 300	0 to 20	0 to 2.1	2"	1/8" NPT	18-015-205

\*3) primary scale

## Maintenance/Service

**Auto drain kit with  
metal Nut - Inch**



6000-61KIT

**Auto drain kit with  
metal Nut - Metric**



6000-60KIT

**R82 / B82  
Elastomer Kit**



FRLB82-KIT

**Filter cartridges  
5 micron**



820038-50KIT

**Filter cartridges  
40 micron**



820038-51KIT

**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

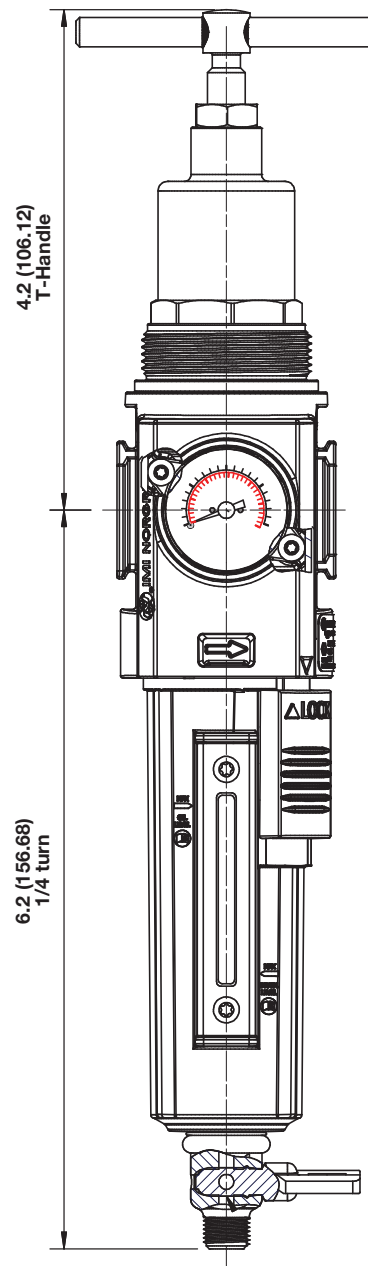
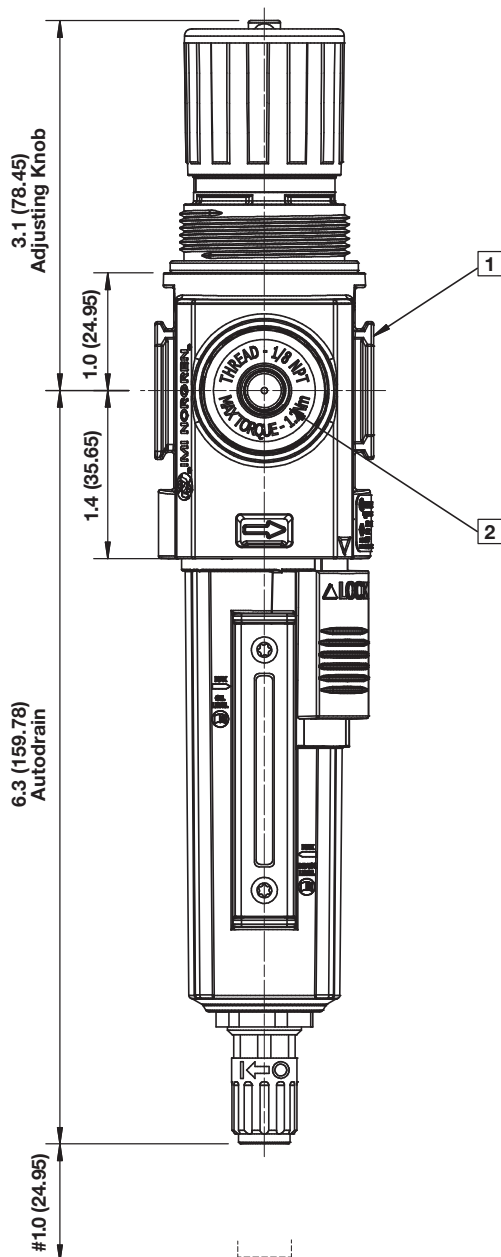
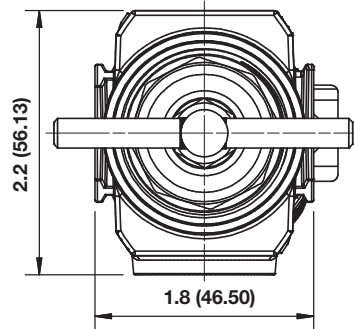
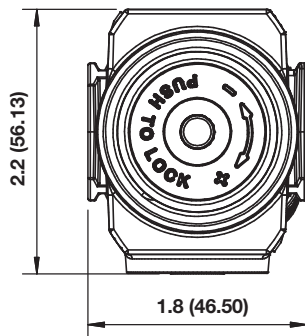
**Filter Bowl  
(Metal with S/Glass  
& auto drain, 1/4 PIF)**



820003-56KIT

## Dimensions

Dimensions in inches (mm)  
 Projection/Third angle



# Minimum clearance for bowl removal

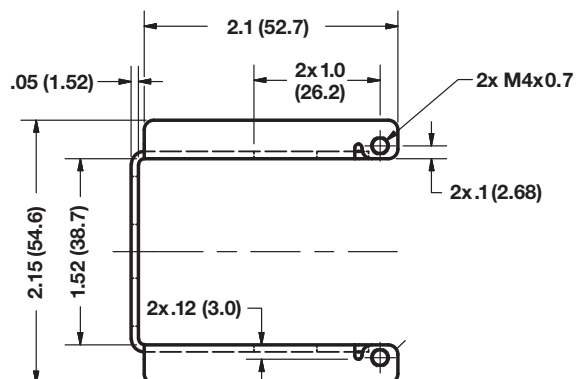
- 1 Main ports 1/4", 3/8" (ISO G/PTF)
- 2 Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports



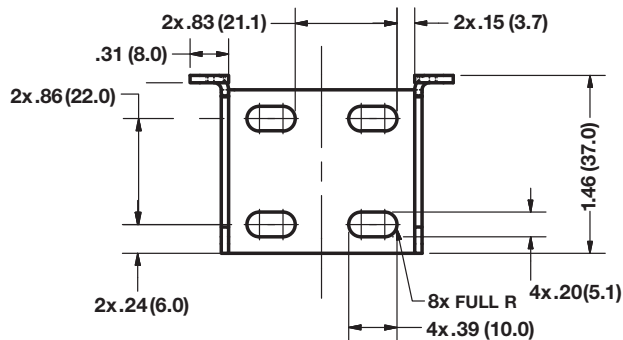
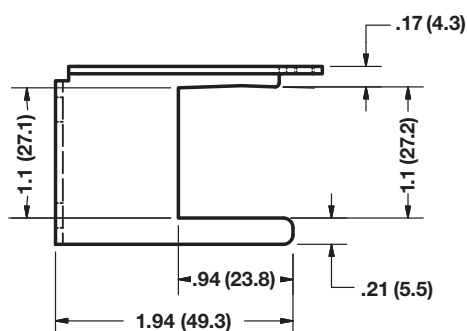
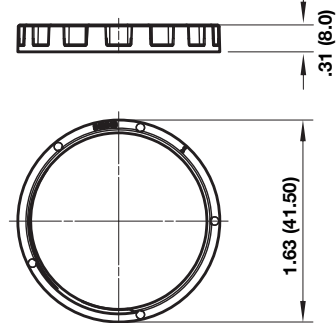
Dimensions in inches (mm)  
Projection/Third angle

## Accessories

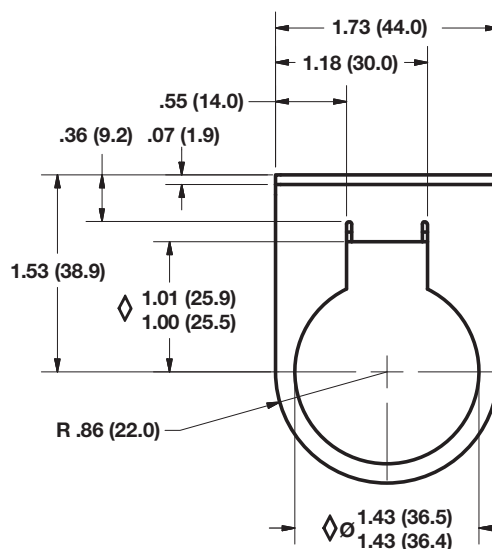
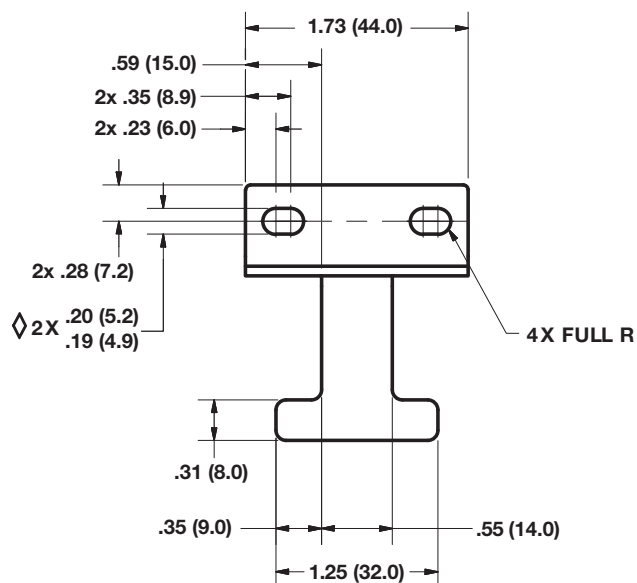
### Mounting bracket

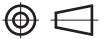
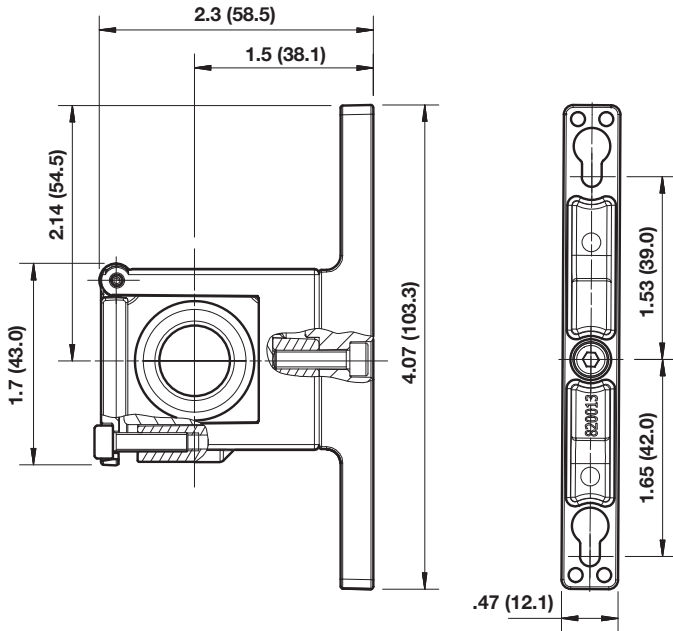
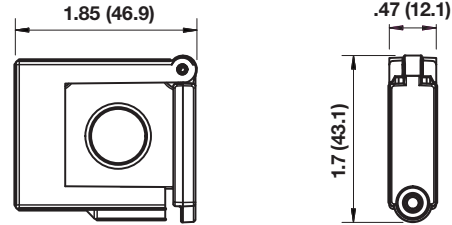
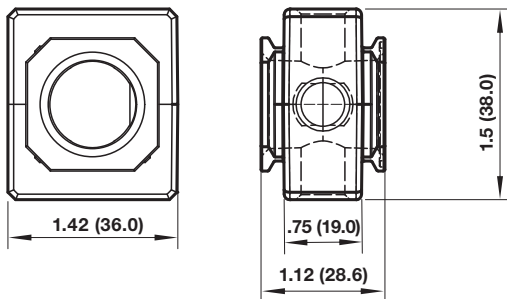
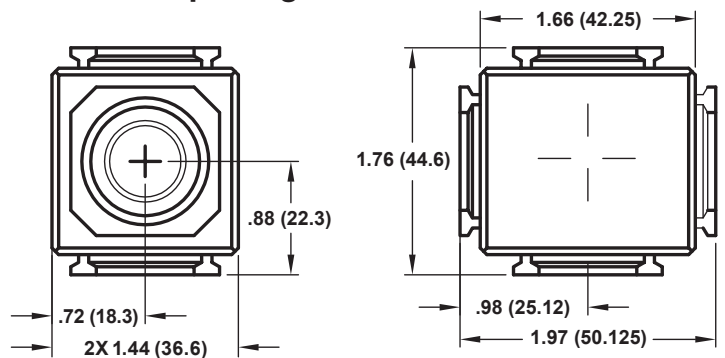
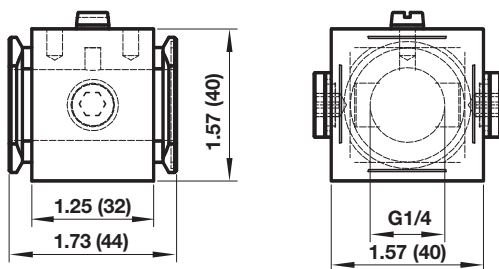
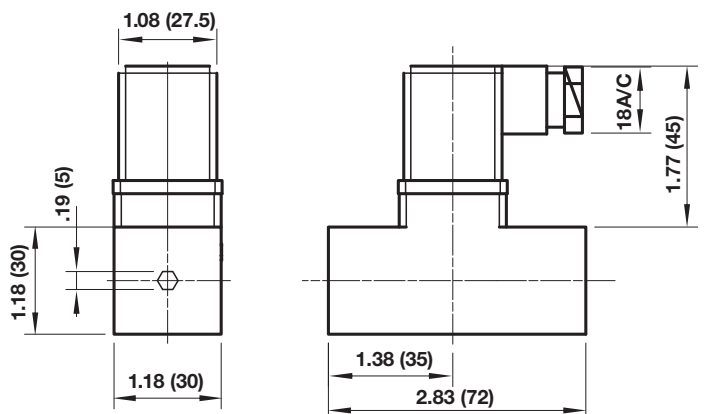


### Panel mounting nut



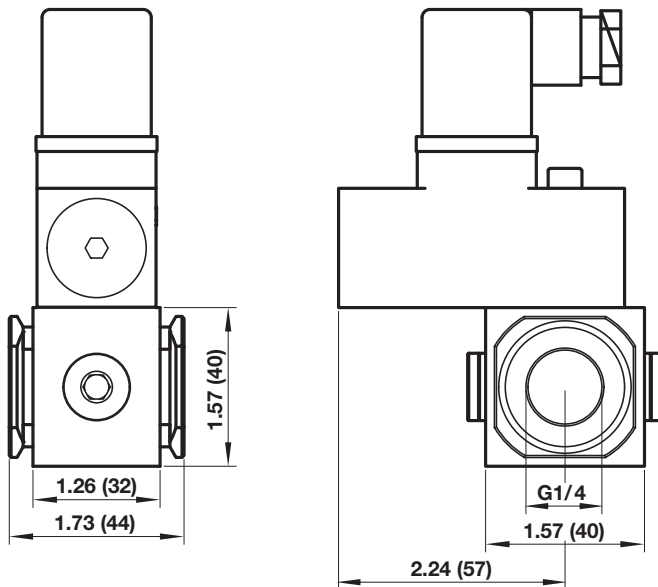
### Neck mounting bracket



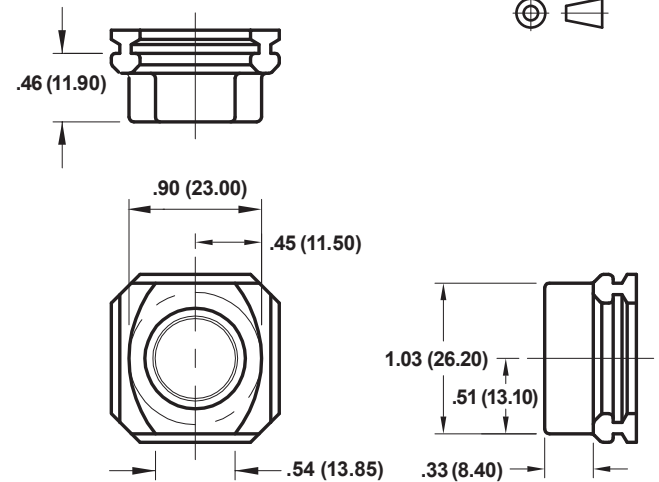
Dimensions in inches (mm)  
 Projection/Third angle

**Quikclamp® with wall bracket**

**Quikclamp®**

**Pressure sensing block**

**Full flow porting block**

**Porting block for 18D pressure switch**

**18D Pressure switch**


Dimensions in inches (mm)  
Projection/Third angle

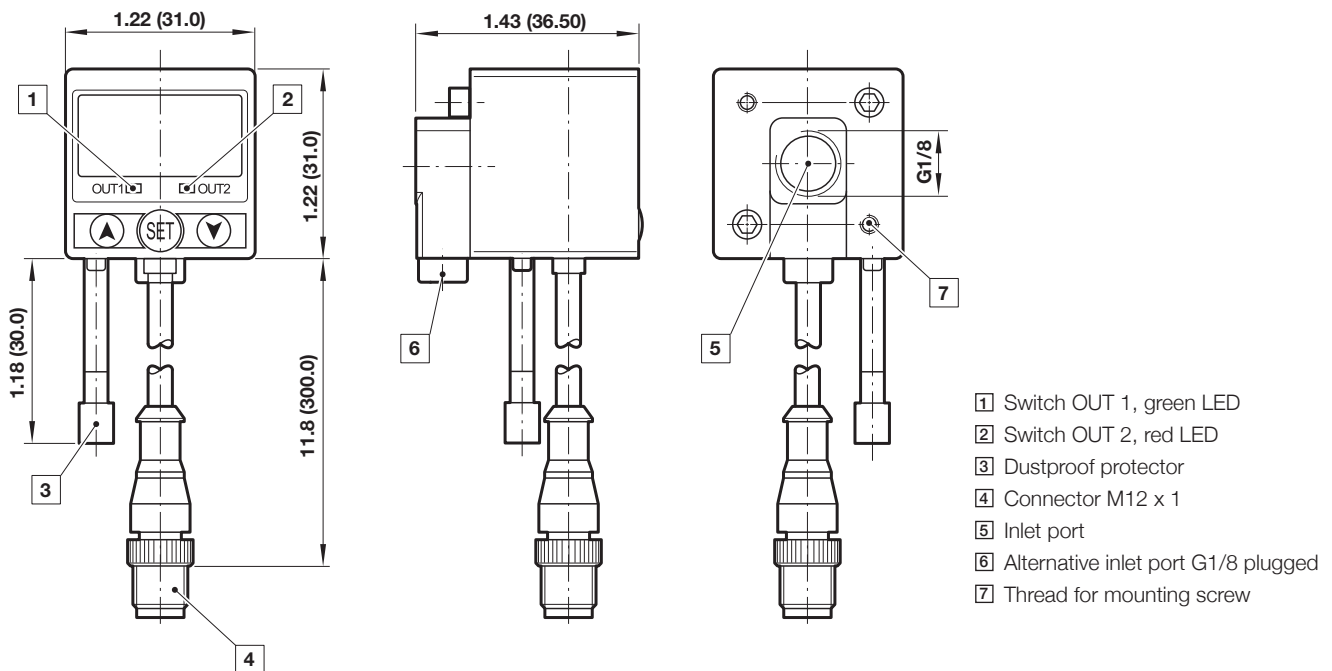
### 18D Porting block and 18D assembled



### Pipe adaptor



### 51D Pressure switch - digital



- 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 IMI Precision Engineering, 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.