- **Port size: 1/4" & 3/8" (ISO G/PTF)**
- **Excelon® Plus design allows in-line installation or modular installation with other Excelon® Plus products**
- **High efficiency oil and particle removal**
- **Double safety lock bowl**
- **Metal bowl with prismatic liquid level indicator lens**
- **Light weight Polycarbonate bowl**
- **Service indicator standard**
- **Air purity class in accordance with ISO 8573-1: Remaining oil aerosol to class 1***

*Tested in accordance with the methods laid out in ISO 12500-1 using an inlet oil aerosol concentration of 4mg/m^3

Technical features

Medium:
Compressed air only

Maximum operating pressure:
Polycarbonate bowl:
145 psi (10 bar)
Metal bowl: 246 psi (17 bar)

Remaining oil content:
0.01 mg/m^3 at +69°F (+21°C)

Particle removal:
To 0.01 µm

Port size:
G1/4, G3/8, 1/4 PTF, 3/8 PTF

Dry element flow:
operating pressure 91 psi (6.3 bar) and a Δp: 7.25 psi (0.5 bar) drop from set. 1/4"= 32 scfm (15.1 dm^3/s)

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 dm^3/s)

Drain:
Manual or automatic

Ambient/Media temperature:
Polycarbonate bowl:
+14 ... +140ºF (-10 ... +60ºC)
Metal bowl:
-4 ... +149°F (-20 ... +65ºC)
Air supply must be dry enough to avoid ice formation at temperatures below +35°F (+2°C).

Note:
Install an F82G filter with a 5 µm filter element upstream of the F82C filter for maximum service life.

Materials:
Body: Die cast aluminium
Body covers: ABS
Bowl: Transparent PC with PP guard or die cast zinc
Liquid level indicator lens (metal bowl): PA
Filter element:
Synthetic fiber & PE foam
Bowl 'o'- ring: Chloroprene
Elastomers: NBR

Technical data F82C

Symbol	Port Size (PTF)	Drain	Bowl	Weight lb (kg)	Model
	1/4	Auto	Guarded polycarbonate	0.55 (0.25)	F82C-2AD-AP0
	3/8	Auto	Guarded polycarbonate	0.55 (0.25)	F82C-3AD-AP0
	1/4	Auto	Metal with level indicator	0.97 (0.44)	F82C-2AD-AD0
	3/8	Auto	Metal with level indicator	0.97 (0.44)	F82C-3AD-AD0
	1/4	Manual	Guarded polycarbonate	0.55 (0.25)	F82C-2AD-QP0
	3/8	Manual	Guarded polycarbonate	0.55 (0.25)	F82C-3AD-QP0
	1/4	Manual	Metal with level indicator	0.99 (0.45)	F82C-2AD-QD0
	3/8	Manual	Metal with level indicator	0.97 (0.44)	F82C-3AD-QD0

Option selector

F82C–★★D–★★0

Port size	Substitute
1/4"	**2**
3/8"	**3**

Thread form	Substitute
PTF	**A**
ISO G	**G**

Bowl	Substitute
Transparent with guard	**P**
Metal with liquid indicator	**D**

Drain	Substitute
Manual	**Q**
Auto drain	**A**

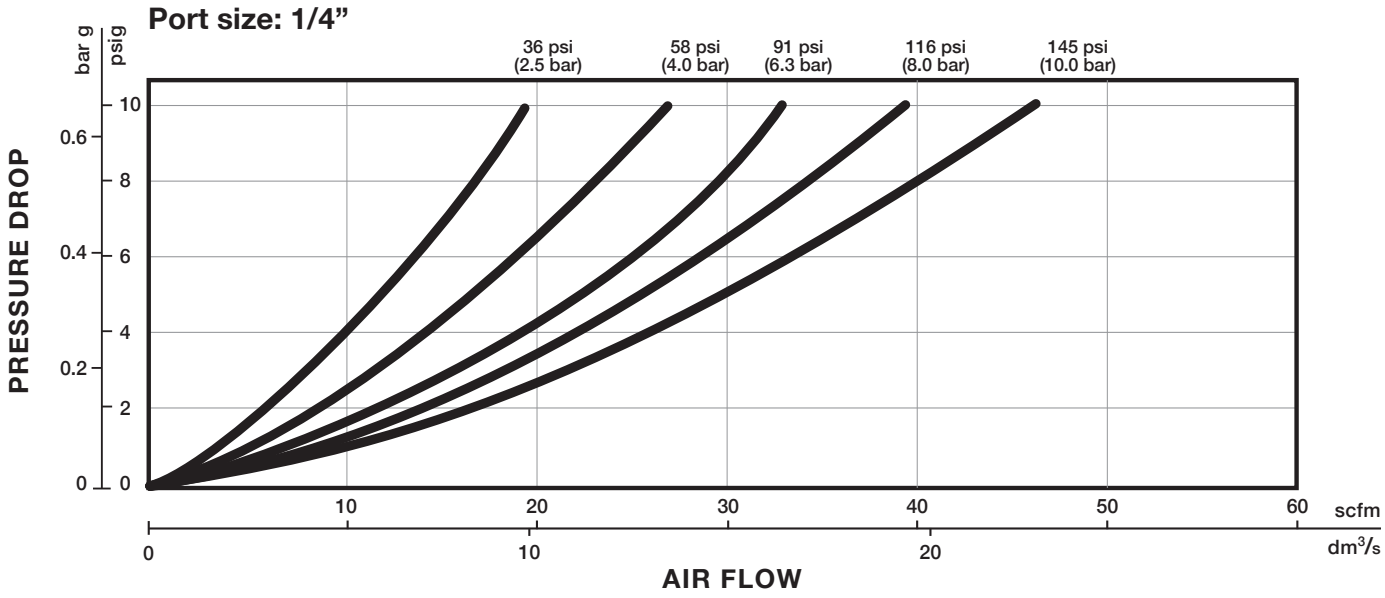
IMI Precision Engineering

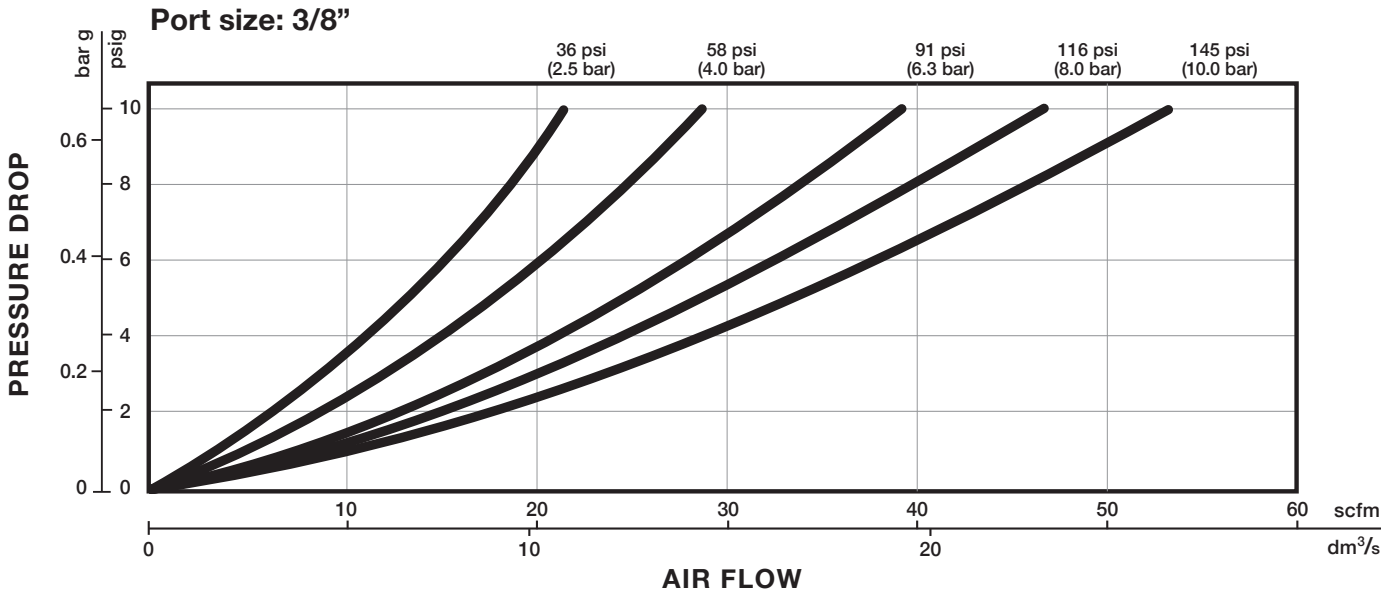
Flow characteristics

Port size: 1/4”
Oil Coalescing Filter

Inlet Pressure psi (bar)	Flow-rate to maintain media velocity of ISO12500-1 test on oil coalescing filter (L/sec)
36 (2.5)	2.6
58 (4)	3.7
91 (6.3)	5.5
116 (8)	6.8
145 (10)	8.3

Dry Flow





Accessories

Wall mounting bracket

page 4

820024-50KIT

Quikclamp®

page 4

820014-51KIT

Quikclamp® with bracket assembled

page 4

820014-52KIT

Pressure sensing block 1/4 PTF

page 4

820016-50KIT

Pressure sensing block G1/4

page 4

820016-51KIT

Full flow porting block 3/8 PTF

page 4

820028-50KIT

Full flow porting block G3/8

page 4

820028-53KIT

Pressure switch interface block (18D pressure switch)

page 5

0523109000000000

Pneumatic pressure switch 18D (0,5 ... 8 bar) *1)

page 5

0881300000000000

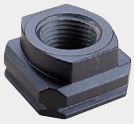
Digital pressure switch 51D(-1 ... 10 bar) *2)

page 6

0860810000000000

*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

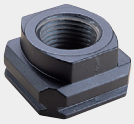
Port Adaptors 1/4 PTF



page 5

820015-02KIT

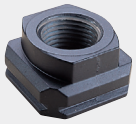
Port Adaptors 3/8 PTF



page 5

820015-03KIT

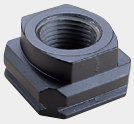
Port Adaptors G1/4



page 5

820015-08KIT

Port Adaptors G3/8



page 5

820015-09KIT

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

820025-53KIT

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

820003-56KIT

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

820003-50KIT

Maintenance/Service

Auto drain kit with metal Nut - Metric

6000-60KIT

Auto drain kit with metal Nut - Imperial

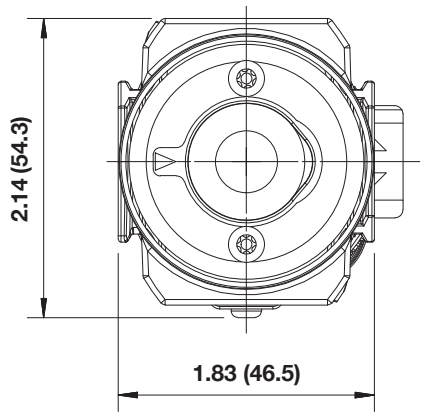
6000-61KIT

Coalescing filter element

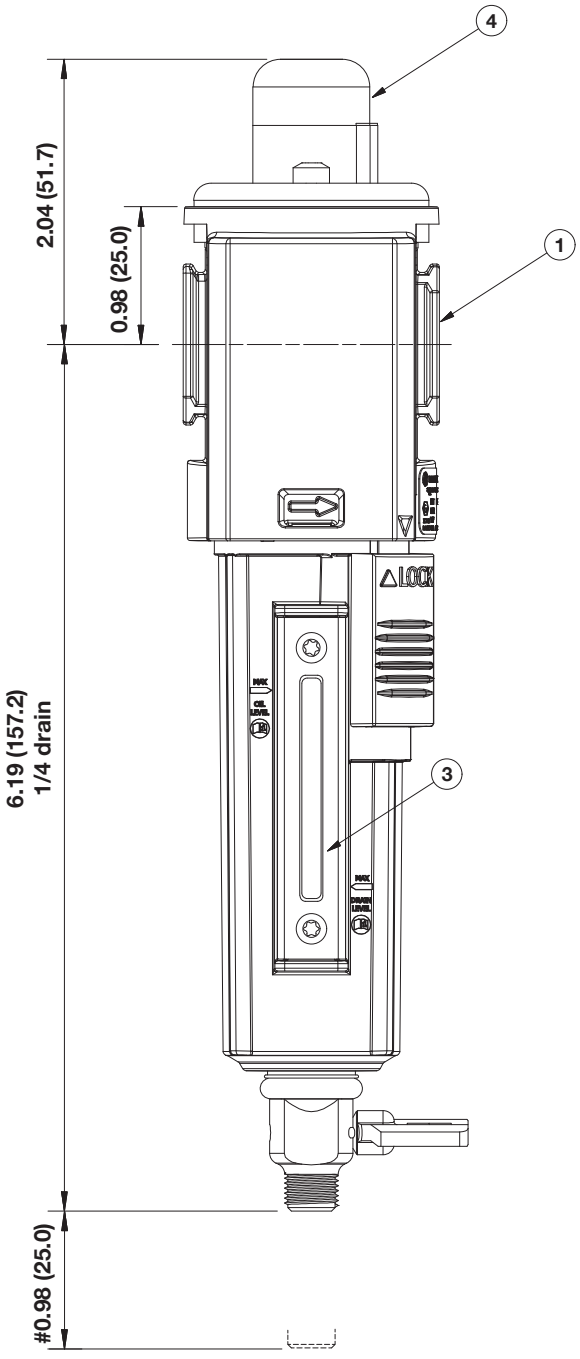
820044-50KIT

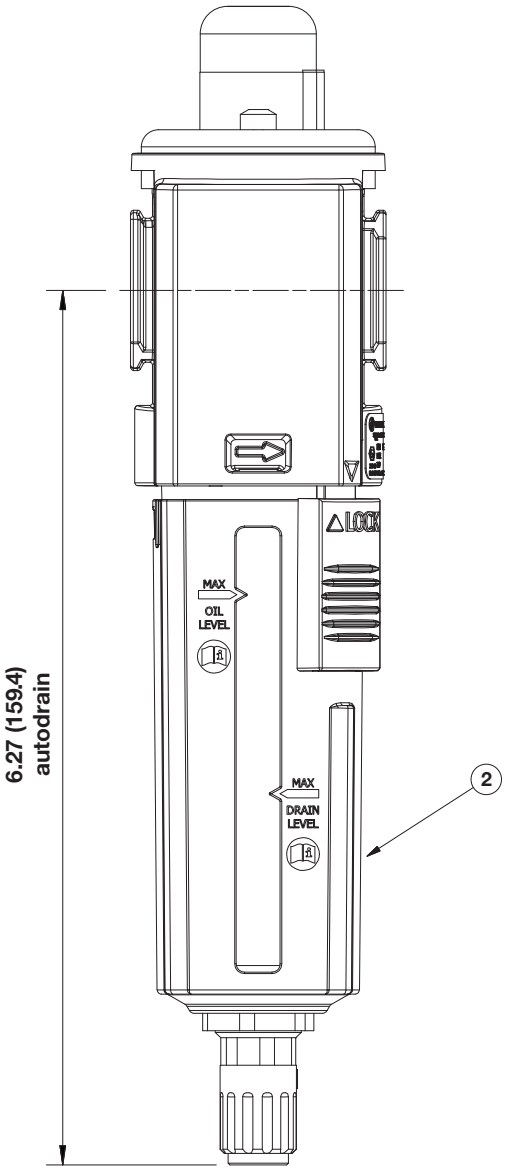
Dimensions

Dimensions in inches (mm)
Projection/Third angle



Minimum clearance for bowl removal
1 Main ports 1/4", 3/8" (ISO G/PTF)
2 Transparent bowl with guard
3 Metal bowl with liquid level indicator lens
4 Service indicator

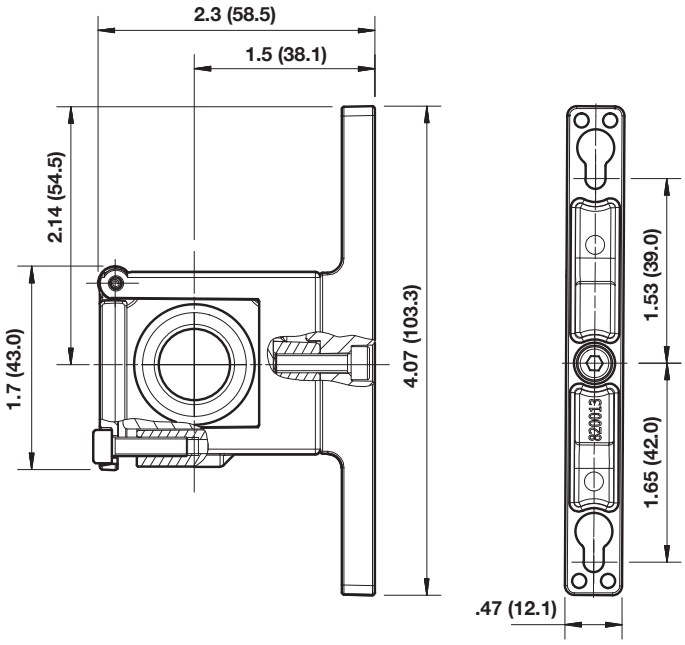




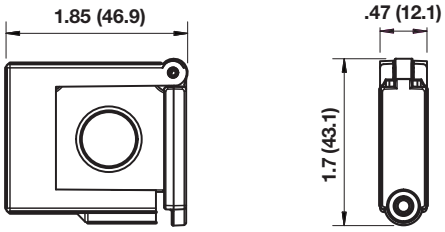
Accessories

Dimensions in inches (mm)
Projection/Third angle

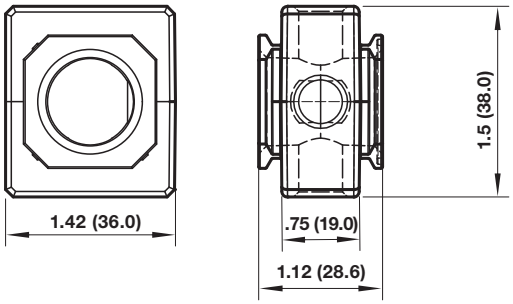
Quikclamp® with wall bracket



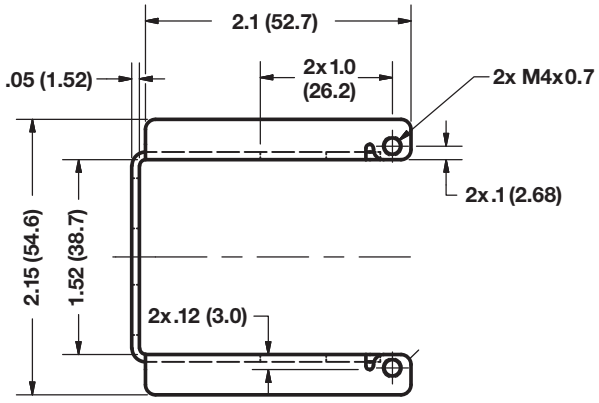
Quikclamp®

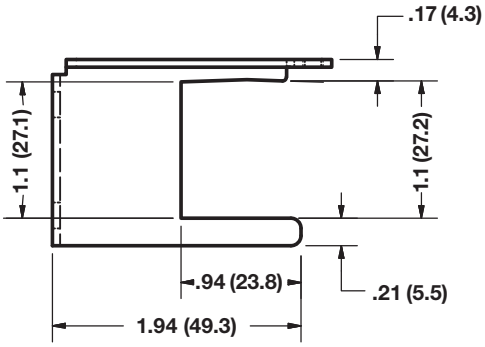


Pressure sensing block

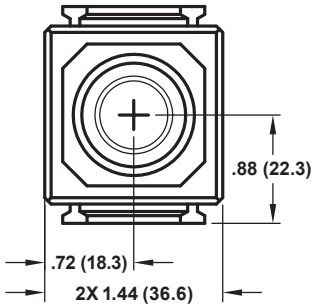


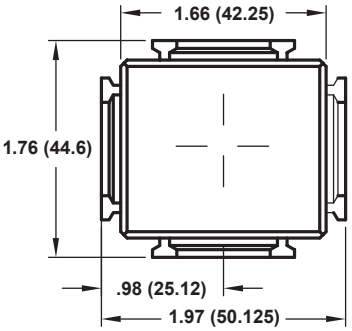
Mounting bracket

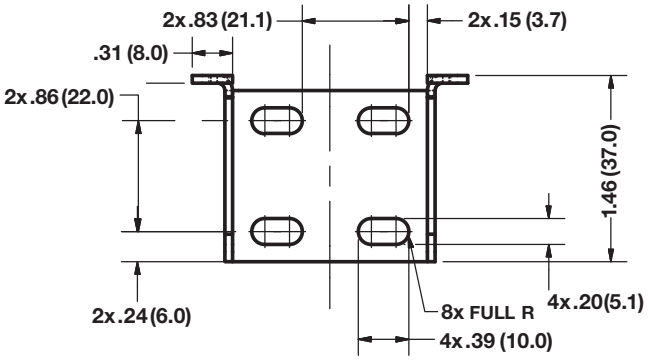




Full flow porting block

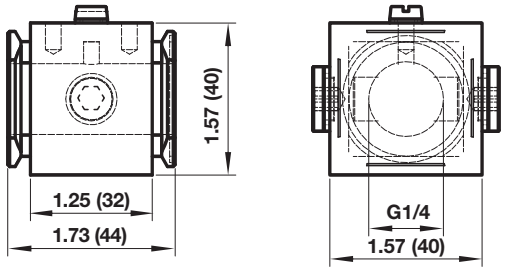




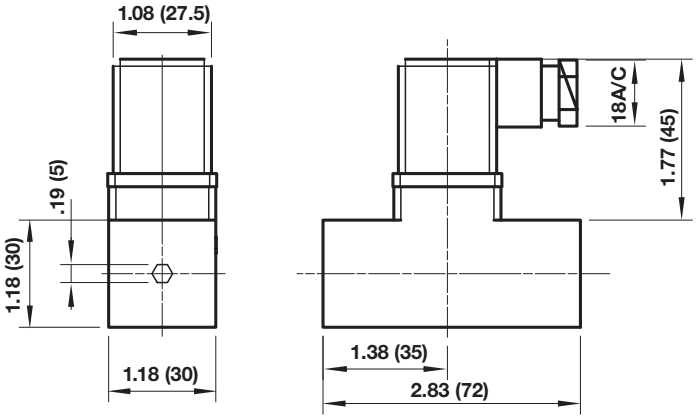


Dimensions in inches (mm)
Projection/Third angle

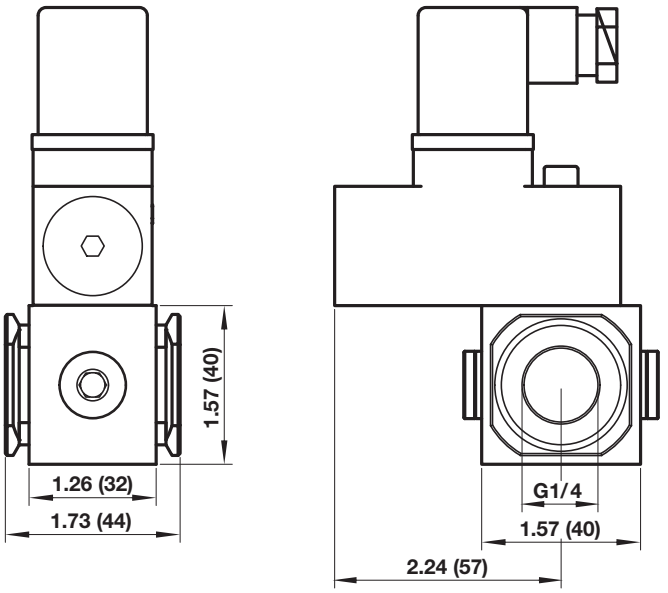
Porting block for 18D pressure switch



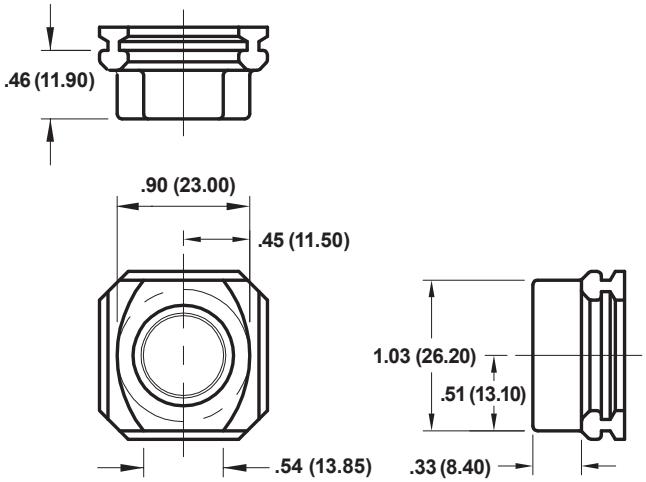
18D Pressure switch



18D Porting block and 18D assembled

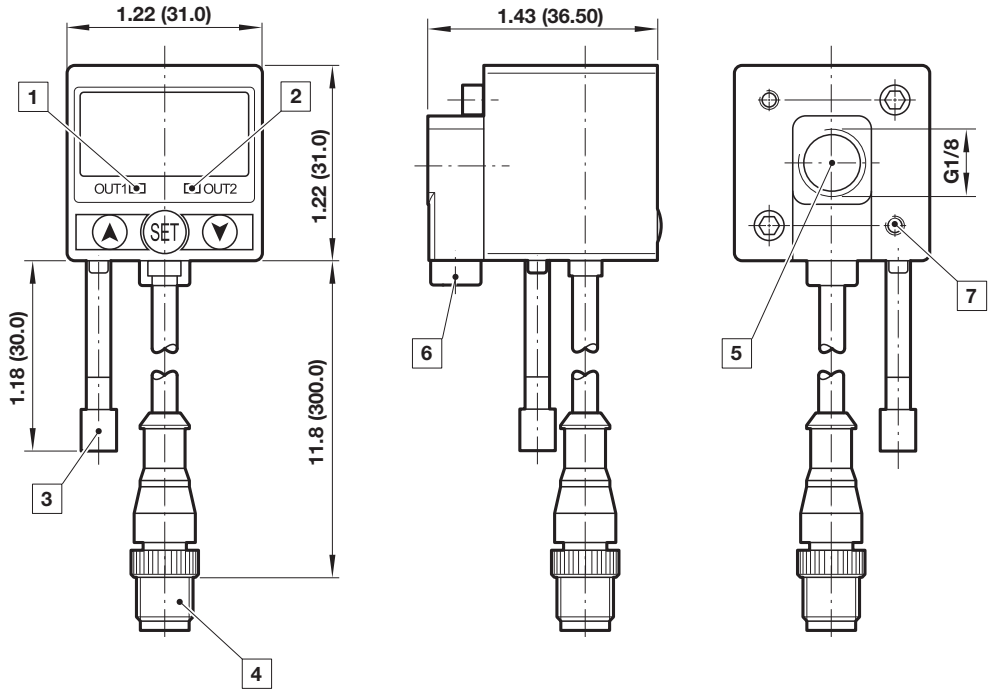


Pipe adaptor



Dimensions in inches (mm)
Projection/Third angle

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.