

F82C – Oil removal filters 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
- 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/m³



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/m³ 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 dm³/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 dm³/s)

Drain:

Manual or automatic

Ambient/Media temperature:

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


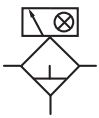
Note:

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

Materials:

Body: Die cast aluminum
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)
	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	0.97 (0.44)	F82C-2AD-QD0
	3/8	Manual	Metal with level indicator	0.97 (0.44)	F82C-3AD-QD0

Option selector

Port size	Substitute
1/4"	2
3/8"	3
Thread form	Substitute
PTF	A
ISO G	G
Differential Pressure Indicator	Substitute
With differential pressure indicator	D
Without differential pressure indicator	N

F82C-***-***0

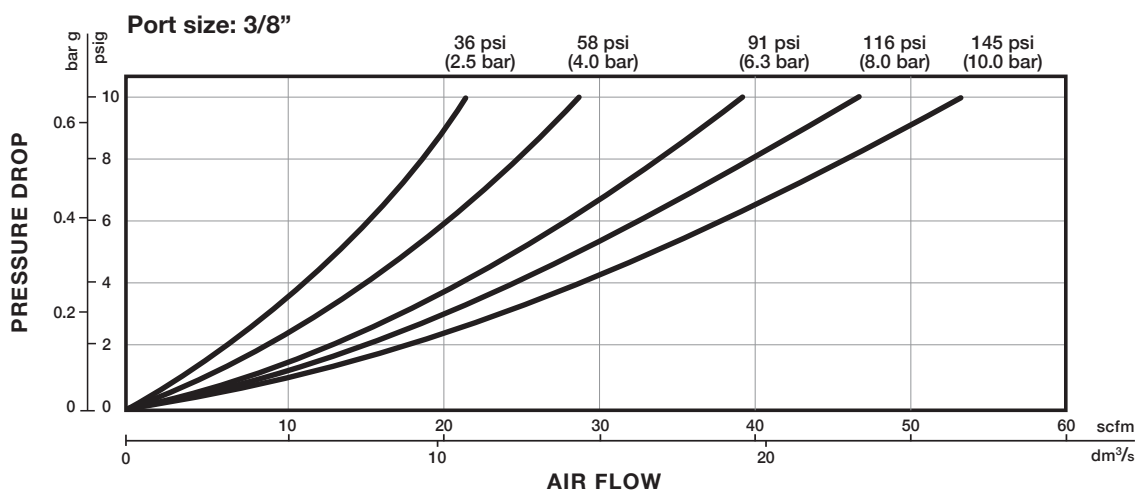
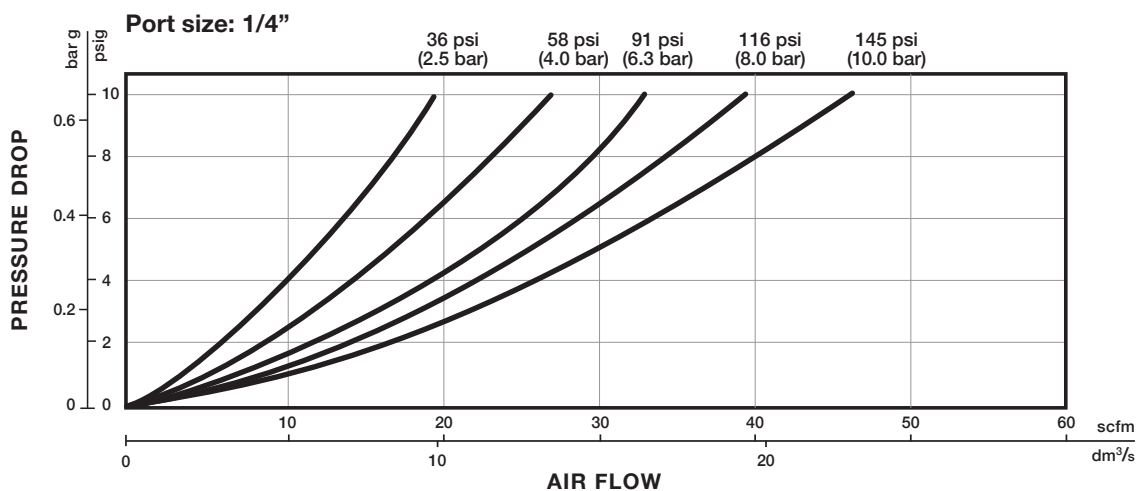
Element	Substitute
Coalescing	0
Bowl	Substitute
Transparent with guard	P
Metal with liquid indicator	D
Drain	Substitute
Manual	Q
Auto drain	A

Port size: 1/4" Oil Coalescing Filter











Inlet Pressure psi (bar)	Flow-rate to maintain media velocity of ISO12500-1 test on oil vapor filter (L/sec)
36 (2.5)	5.5 (2.6)
58 (4)	7.8 (3.7)
91 (6.3)	11.7 (5.5)
116 (8)	14.4 (6.8)
145 (10)	17.6 (8.3)

Flow characteristics

Dry Flow



Accessories







Wall mounting bracket  page 6 820024-50KIT	Quikclamp®  page 6 820014-51KIT	Quikclamp® with bracket assembled  page 6 820014-52KIT	Pressure sensing block 1/4 PTF  page 6 820016-50KIT	Pressure sensing block G1/4  page 6 820016-51KIT
Full flow porting block 3/8 PTF  page 6 820028-50KIT	Full flow porting block G3/8  page 6 820028-53KIT	Pressure switch interface block (18D pressure switch)  page 6 0523109000000000	Pneumatic pressure switch 18D (7 to 120 psi)  page 6 0881300000000000	Digital pressure switch 54D (-14.5 to 145 psi)  page 8 54D-V110G-DD0-AA

*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 7 820015-02KIT	Port Adaptors 3/8 PTF  page 7 820015-03KIT	Port Adaptors G1/4  page 7 820015-08KIT	Port Adaptors G3/8  page 7 820015-09KIT
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Spare parts

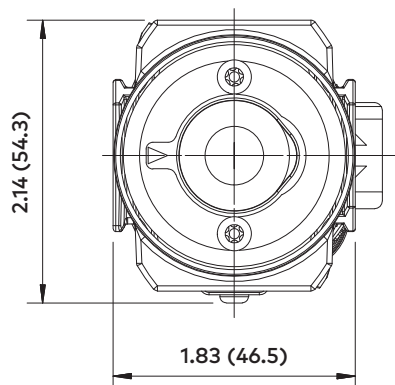
Filter Bowl (Guarded Poly bowl with auto drain 6 mm PIF)  820025-51KIT	Filter Bowl (Guarded Poly bowl with manual drain)  820025-50KIT	Filter Bowl (Guarded Poly bowl with auto drain, 1/4 PIF)  820025-53KIT
Filter Bowl (Metal with S/Glass & auto drain, 6 mm PIF)  820003-51KIT	Filter Bowl (Metal with S/Glass & manual drain)  820003-50KIT	Filter Bowl (Metal with S/Glass & auto drain, 1/4 PIF)  820003-56KIT

Maintenance/Service

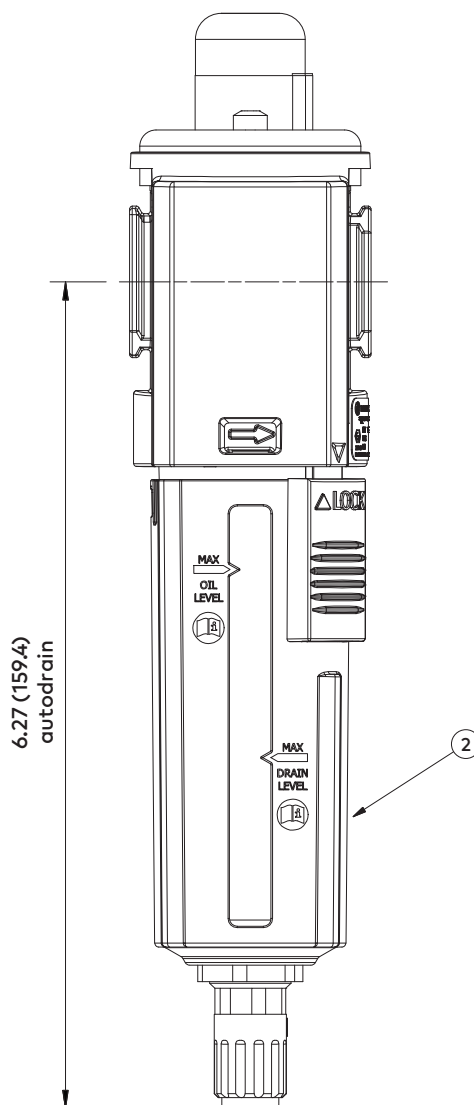
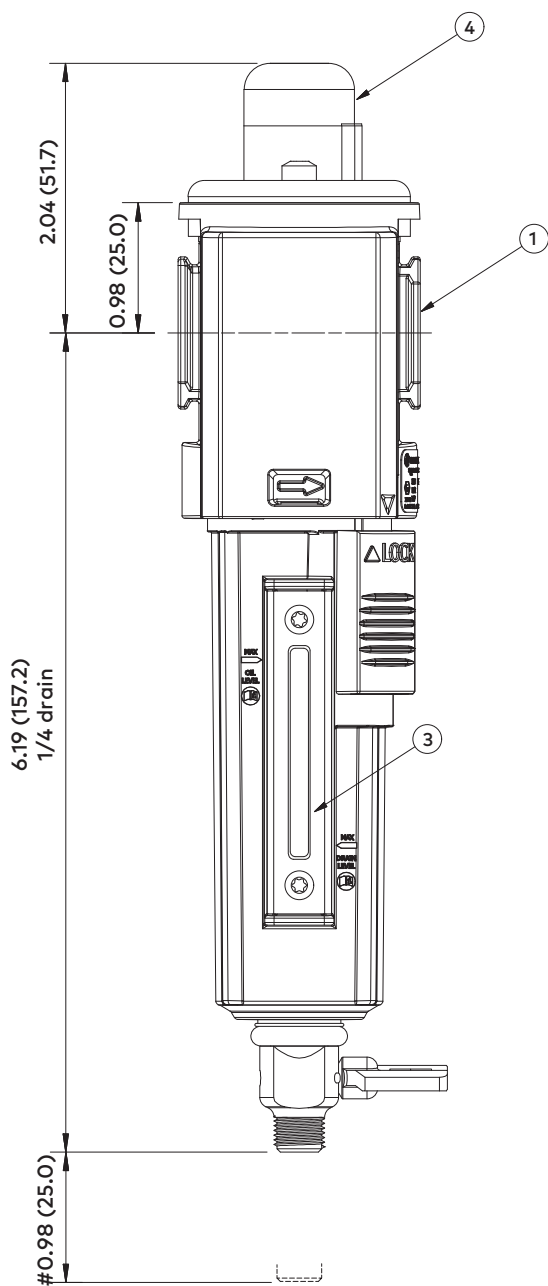
Auto drain kit with metal Nut - Metric  6000-60KIT	Auto drain kit with metal Nut - Imperial  6000-61KIT
Coalescing filter element 0.01µm  820044-50KIT	

Dimensions

Dimensions in inches (mm)
Projection/Third angle

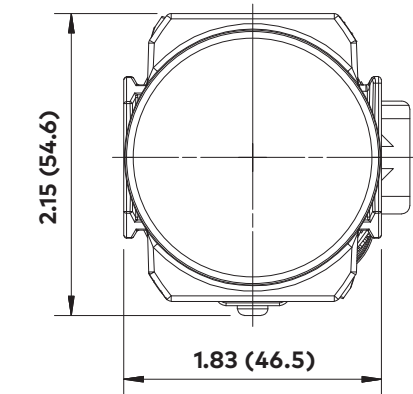


- # Minimum clearance for bowl removal
- 1 Main ports 1/4", 3/8" (ISO G/PTF)
- 2 Transparent bowl with guard
- 3 Metal bowl with liquid level indicator lens
- 4 Service indicator



Dimensions

Dimensions in inches (mm)
Projection/Third angle

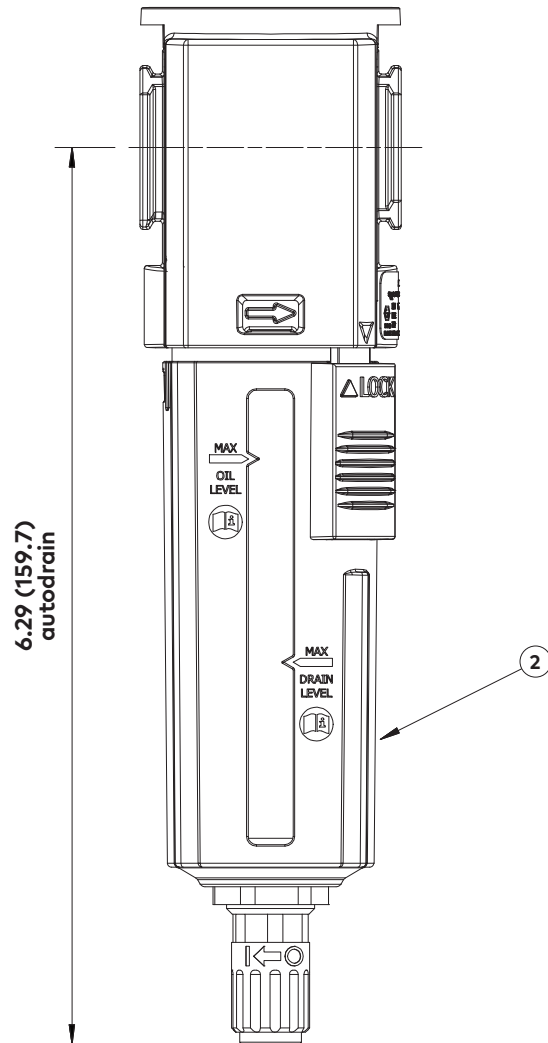
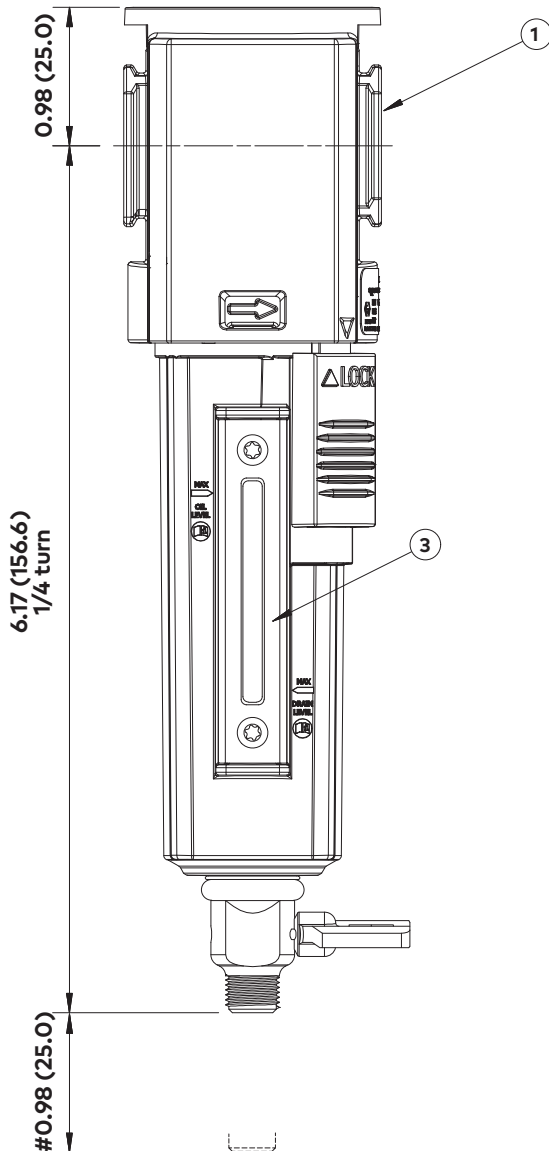


Minimum clearance for bowl removal

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

2 Transparent bowl with guard

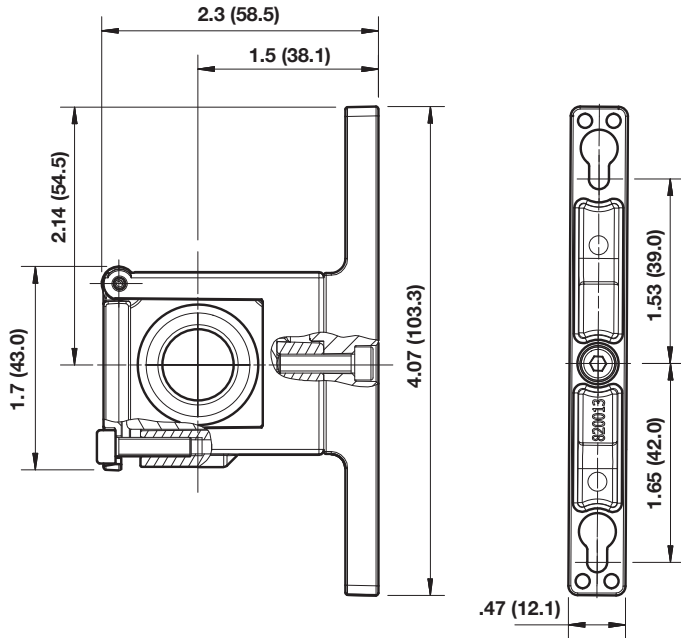
3 Metal bowl with liquid level indicator lens



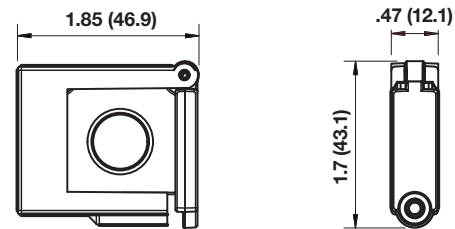
Accessories

Dimensions in inches (mm)
Projection/Third angle

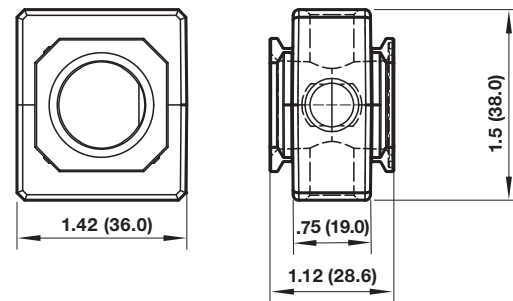
Quikclamp® with wall bracket



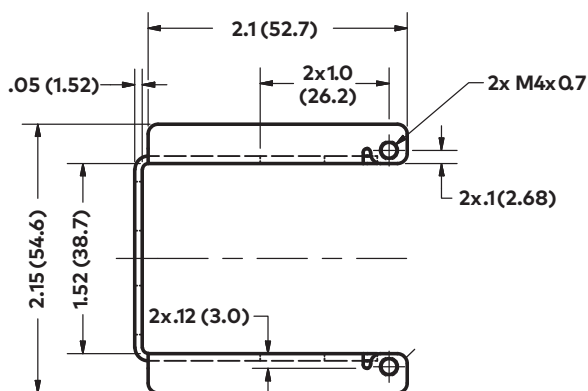
Quikclamp®



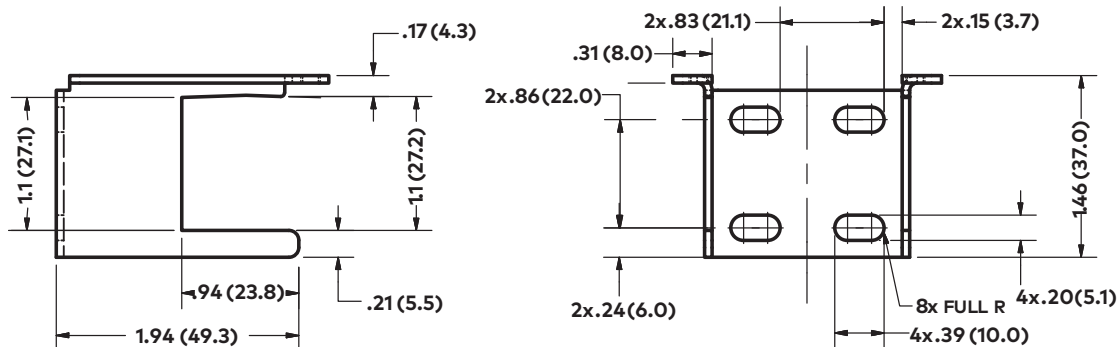
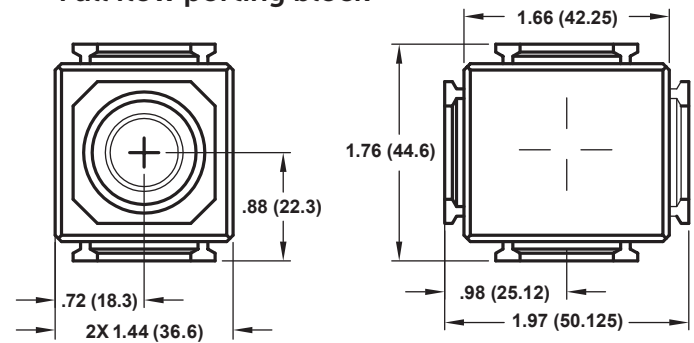
Pressure sensing block



Mounting bracket

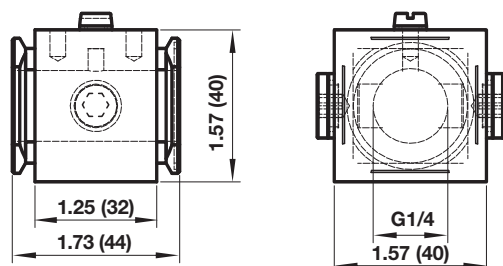


Full flow porting block

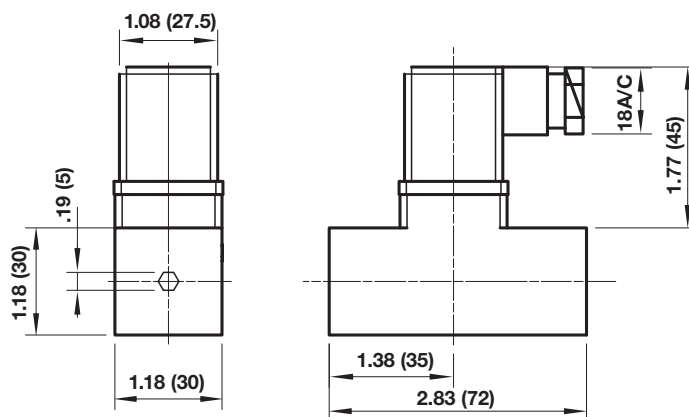




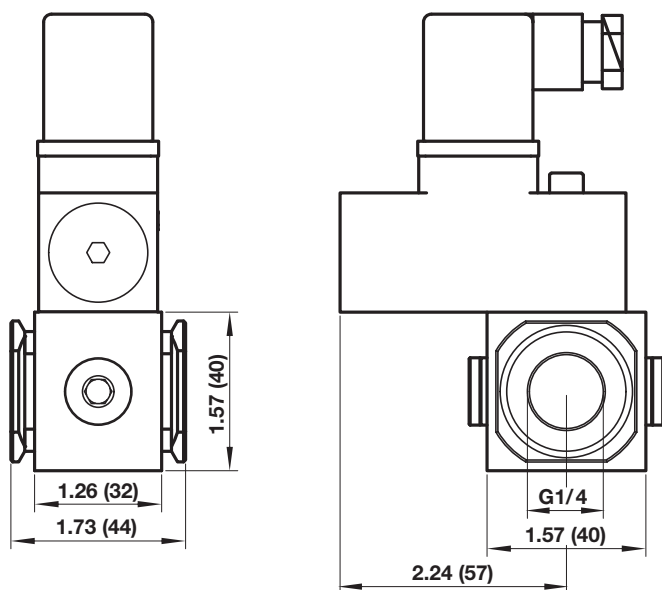
Porting block for 18D pressure switch



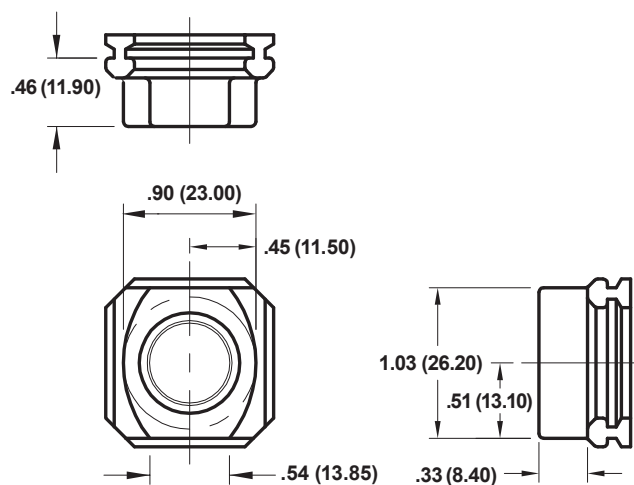
18D Pressure switch

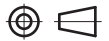


18D Porting block and 18D assembled

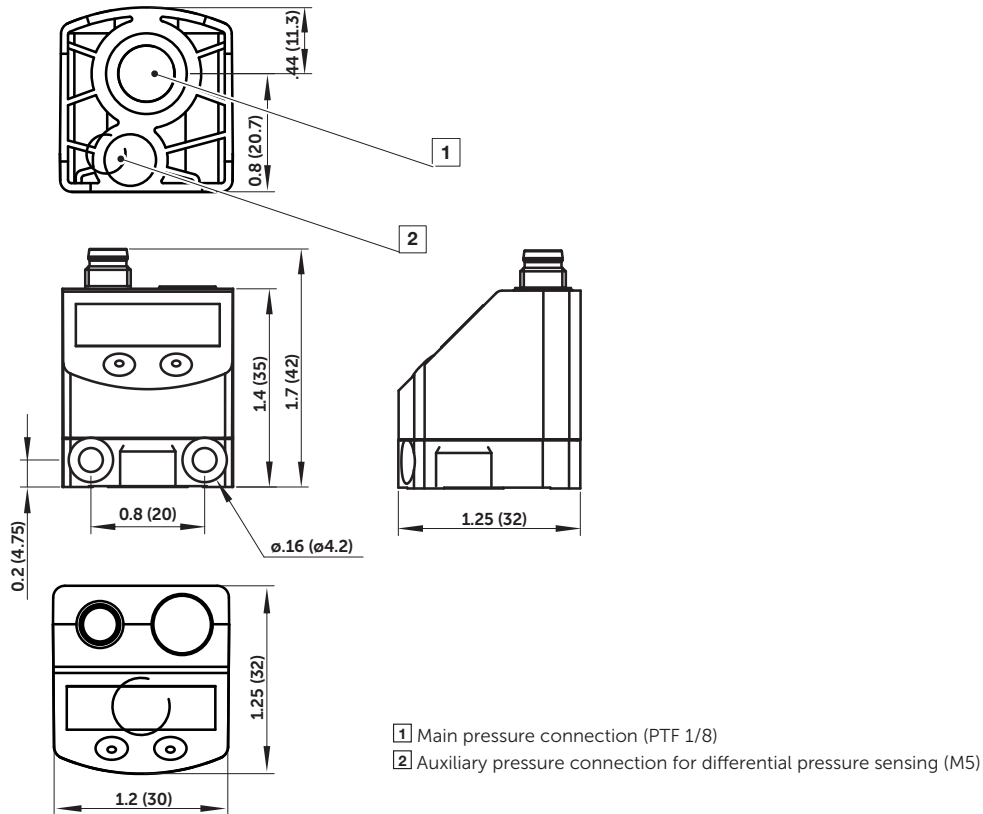


Pipe adaptor





54D Pressure switch - digital



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.