

R82 – Pressure Regulators 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
- Push to lock adjusting knob with built in tamper resistant feature
- Easy to read flush mounted integrated pressure gauge as standard

Technical features

Medium:

Compressed air only

Maximum supply pressure:

290 psi (20 bar)

Outlet pressure ranges:

4 to 30 psi (0.3 to 2 bar),
4 to 58 psi (0.3 to 4 bar),
4 to 102 psi (0.3 to 7 bar),
4 to 145 psi (0.3 to 10 bar),
10 to 247 psi (0.7 to 17 bar)

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 or Non-relieving

Flow:

69 scfm (33 dm³/s) at port size 1/4",
66 scfm (31 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.

Ambient/Media temperature:

-4 ... +149°F (-20 ... +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: POM/Aluminum
Valve: PP
Elastomers: NBR

Technical data R82G

Symbol	Port Size (PTF)	Pressure range psi (bar)	Adjustment	Integrated gauge psi (bar)	Weight lb (kg)	Model *1)
	1/4	4 to 145 (0.3 to 10)	Knob	0 to 145 psi (0 to 10)	0.50 (0.23)	R82G-2AK RMG
	3/8	4 to 145 (0.3 to 10)	Knob	0 to 145 psi (0 to 10)	0.50 (0.23)	R82G-3AK-RMG

Option selector

R82 ★ – ★ ★ ★ – ★ ★ ★ ★

Flow	Substitute
General	G
Reverse Flow	R
Port size	Substitute
1/4"	2
3/8"	3
Thread form	Substitute
PTF	A
ISO G	G
PTF (right to left flow)	J
ISO G parallel (right to left flow)	L
Adjustment	Substitute
Knob	K
T-bar	T*1)
Knob (down)	U
T-bar (down)	Y

Gauge	Substitute
With (fitted integrated gauge)	G
Without integrated gauge but with gauge port 1/8"	N
Pressure range *2)	Substitute
4 to 30 psi (0.3 to 2 bar)	C
4 to 58 psi (0.3 to 4 bar)	F
4 to 102 psi (0.3 to 7 bar)	K
4 to 145 psi (0.3 to 10 bar)	M
10 to 247 psi (0.7 to 17 bar)	S*2)
Diaphragm type	Substitute
Relieving	R
Non-relieving	N

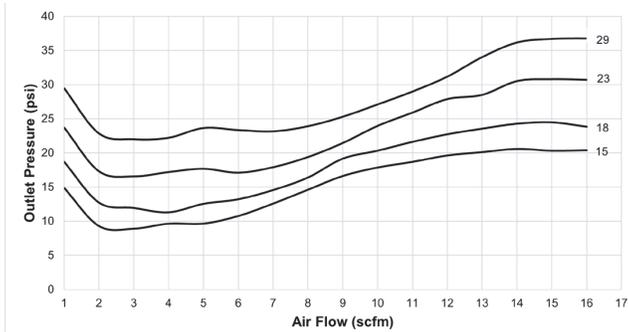
*2) Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

*1) Units with 247 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

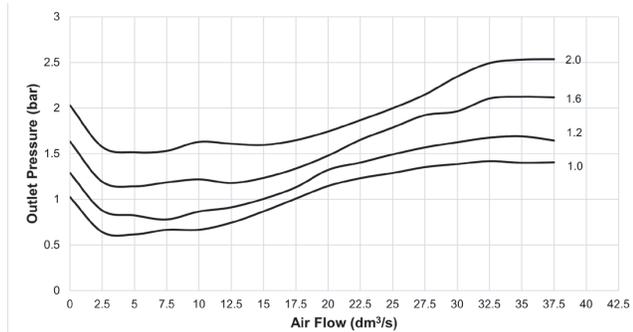


Flow characteristics

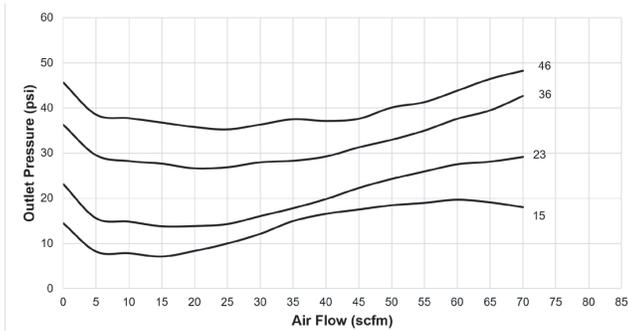
Inlet pressure: 145 psi
Range: 4 to 30 psi
Port size: 1/4"



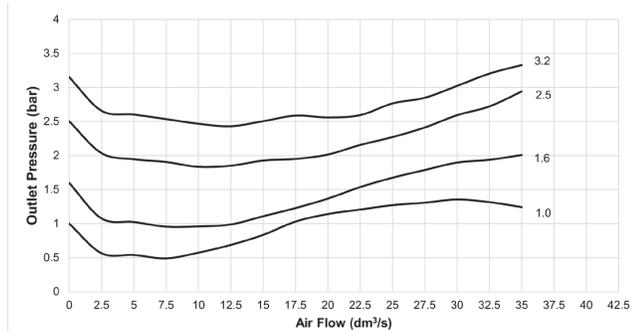
Inlet pressure: 10 bar
Range: 0.3 to 2 bar
Port size: 1/4"



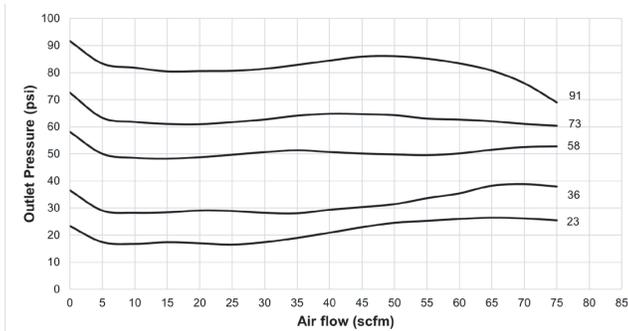
Inlet pressure: 145 psi
Range: 4 to 58 psi
Port size: 1/4"



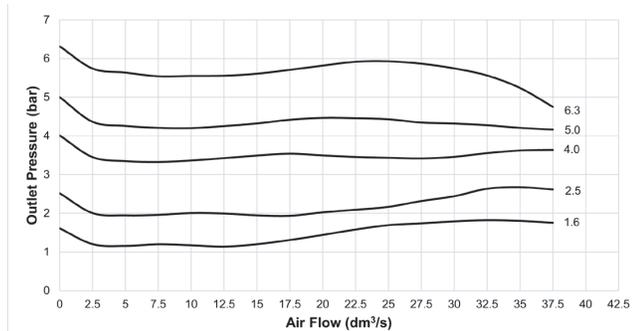
Inlet pressure: 10 bar
Range: 0.3 to 4 bar
Port size: 1/4"



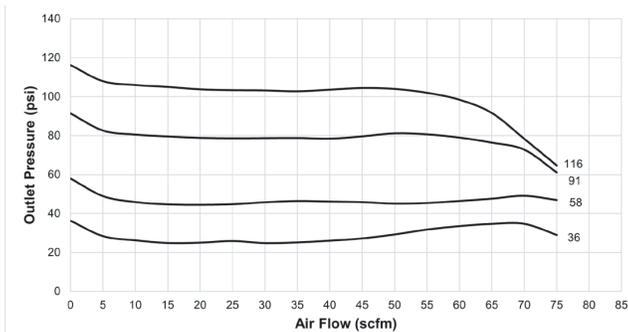
Inlet pressure: 145 psi
Range: 4 to 102 psi
Port size: 1/4"



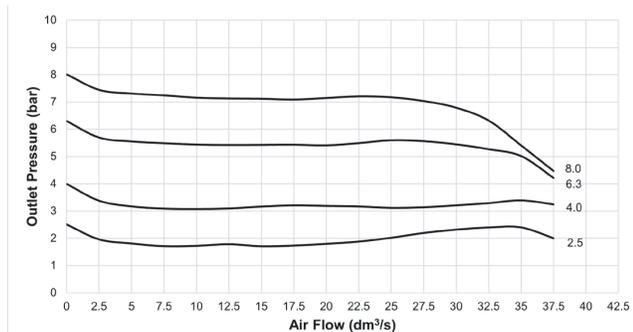
Inlet pressure: 10 bar
Range: 0.3 to 7 bar
Port size: 1/4"



Inlet pressure: 145 psi
Range: 4 to 145 psi
Port size: 1/4"



Inlet pressure: 10 bar
Range: 0.3 to 10 bar
Port size: 1/4"



Accessories

Quikclamp® <p>page 4 820014-51KIT</p>	Quikclamp® with bracket assembled <p>page 4 820014-52KIT</p>	Neck mounting bracket and panel nut <p>page 5 820068-51KIT</p>	Panel mounting nut <p>page 5 820048-89KIT</p>	Mounting bracket <p>page 5 820024-50KIT</p>								
Integrated gauge 10 bar gauge <p>820073-01KIT</p>	Integrated gauge 20 bar gauge <p>820073-02KIT</p>	Integrated gauge 4 bar gauge <p>820073-03KIT</p>	Gauge adaptor kit 1/8 PTF <p>820100-01KIT</p>	Gauge adaptor kit R 1/8 <p>820100-02KIT</p>								
Pressure sensing block 1/4 PTF <p>page 6 820016-50KIT</p>	Pressure sensing block G1/4 <p>page 6 820016-51KIT</p>	Porting block 3/8 PTF <p>page 6 820028-50KIT</p>	Porting block G3/8 <p>page 6 820028-53KIT</p>	Pressure switch interface block (18D pressure switch) G1/4 <p>page 6 0523109000000000</p>								
Pressure switch 18D (7 to 120 psi) *1 <p>page 6 0881300000000000</p>	Digital pressure switch 54D (-14.5 to 145 psi) *2 <p>page 7 54D-V110G-DD0-AA</p>	Padlock <p>840055-01KIT</p>	Lockout device <p>840055-02KIT</p>	Port Adaptors <p>Page 6</p> <table border="1"> <tbody> <tr> <td>1/4 PTF</td> <td>820015-02KIT</td> </tr> <tr> <td>3/8 PTF</td> <td>820015-03KIT</td> </tr> <tr> <td>G1/4</td> <td>820015-08KIT</td> </tr> <tr> <td>G3/8</td> <td>820015-09KIT</td> </tr> </tbody> </table>	1/4 PTF	820015-02KIT	3/8 PTF	820015-03KIT	G1/4	820015-08KIT	G3/8	820015-09KIT
1/4 PTF	820015-02KIT											
3/8 PTF	820015-03KIT											
G1/4	820015-08KIT											
G3/8	820015-09KIT											

*1) For other pressure ranges, please see 18D data sheet

*2) For other pressure ranges, please see 54D data sheet

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

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

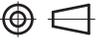
Center back connection, black face						
Pressure range						
(psi) *3	(bar)	(MPa)	ø	Thread size	Model	
0 to 60	0 to 4	0 to 0.4	2"	1/8" NPT	18-015-202	
0 to 160	0 to 11	0 to 1.1	2"	1/8" NPT	18-015-204	
0 to 300	0 to 20	0 to 2.1	2"	1/8" NPT	18-015-205	

*3) primary scale

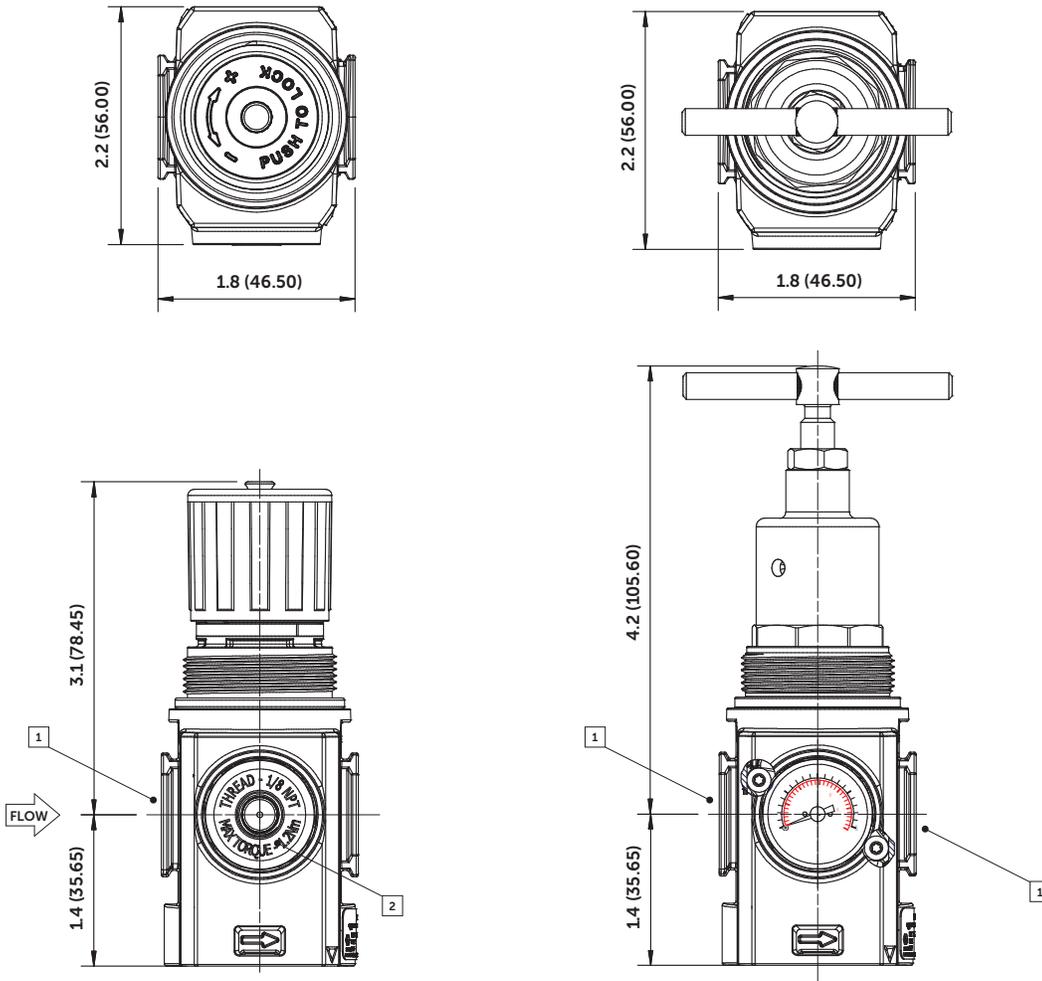
Service Kit

R82 / B82 Elastomer kit

FRLB82-KIT



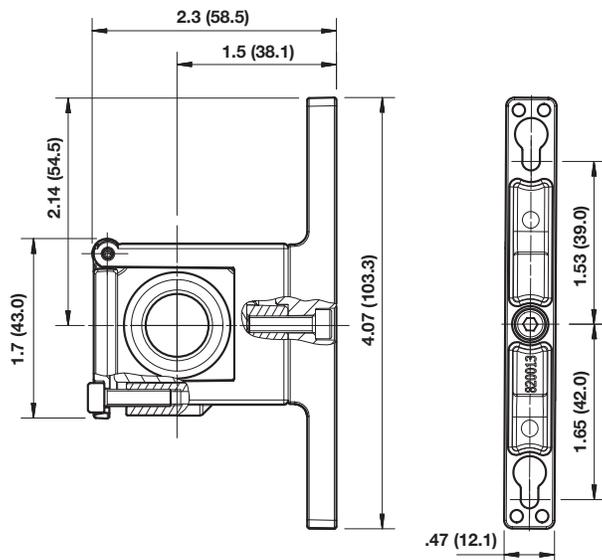
Dimensions



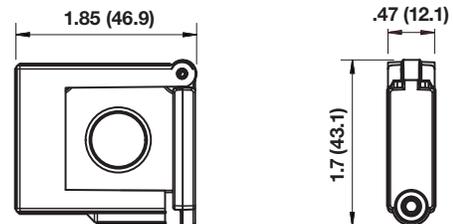
- 1 Main ports 1/4", 3/8", (ISO G/PTF)
- 2 Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports

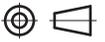
Accessories

Quikclamp® with wall bracket

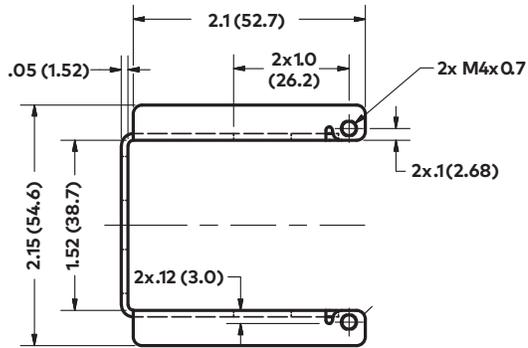


Quikclamp®

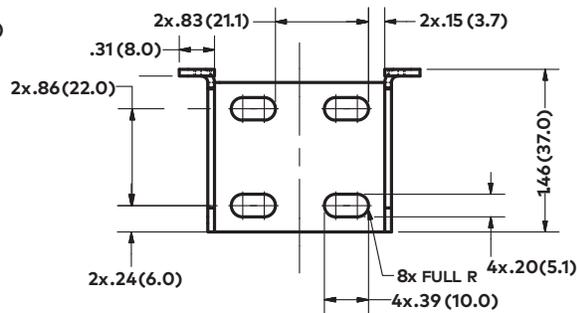
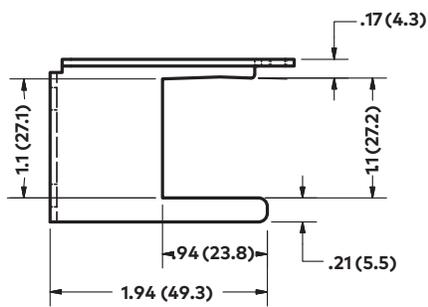
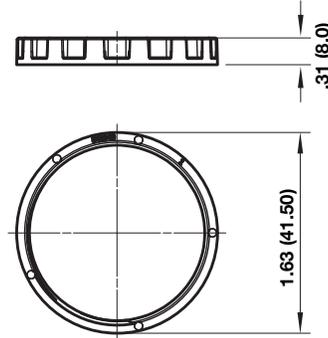




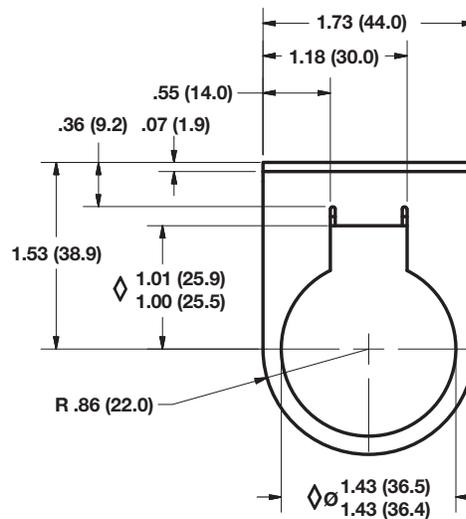
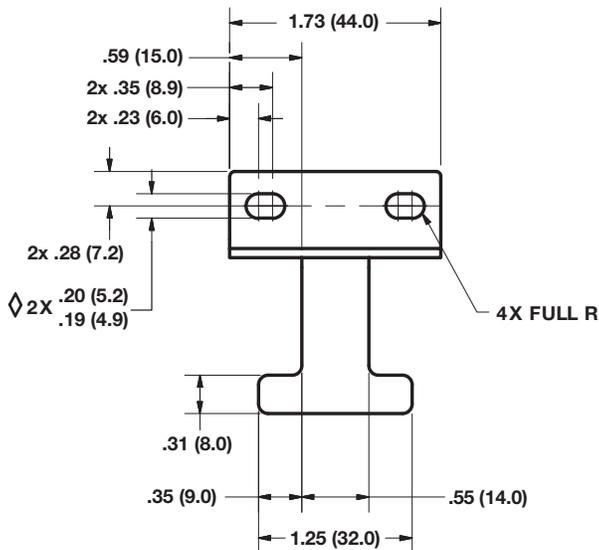
Mounting bracket



Panel mounting nut

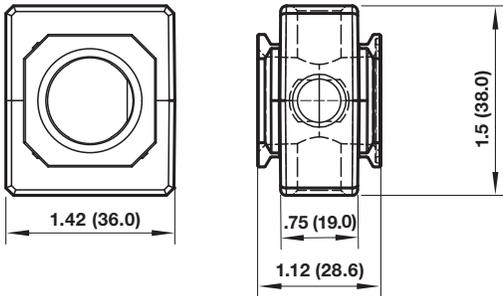


Neck mounting bracket

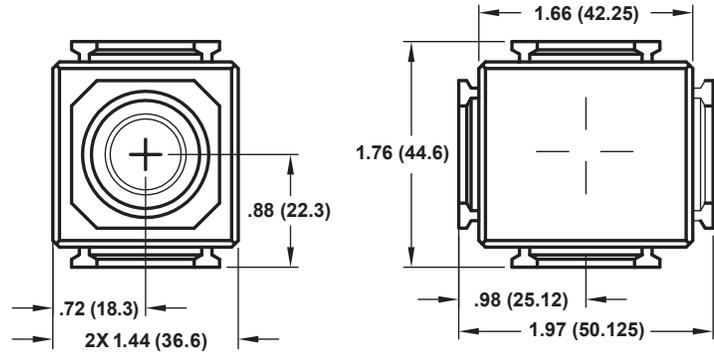




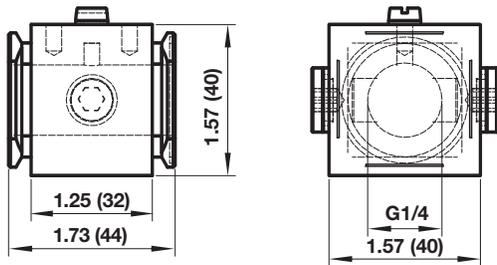
Pressure sensing block



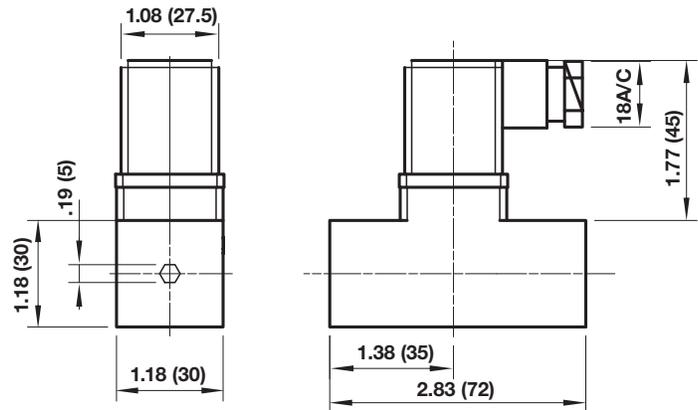
Full flow porting block



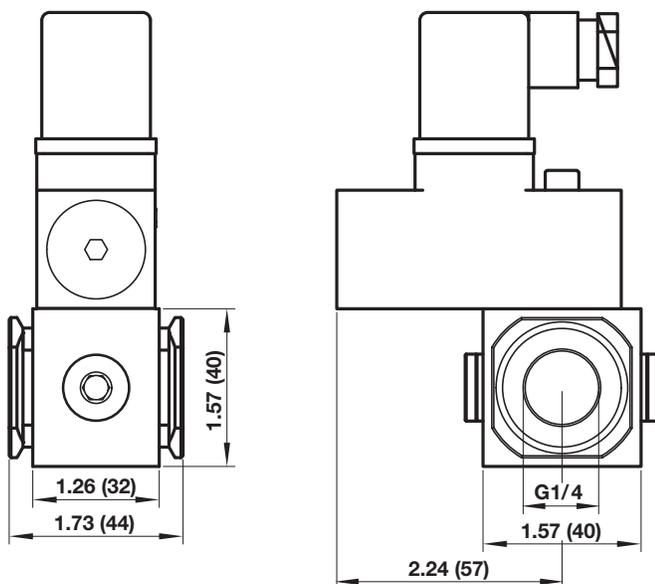
Porting block for 18D pressure switch



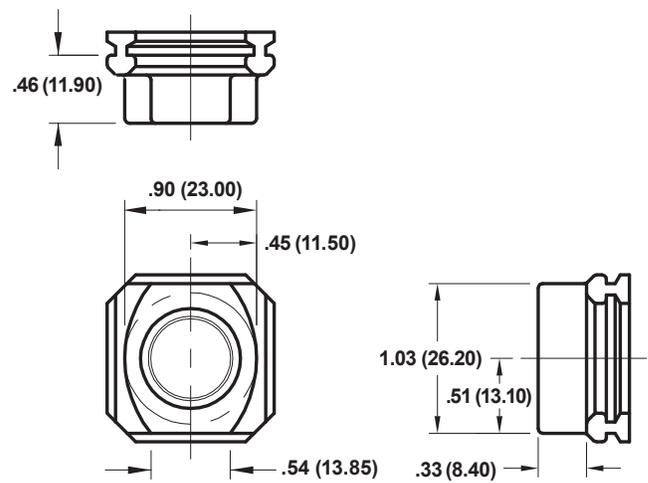
18D Pressure switch

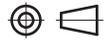


18D Porting block and 18D assembled

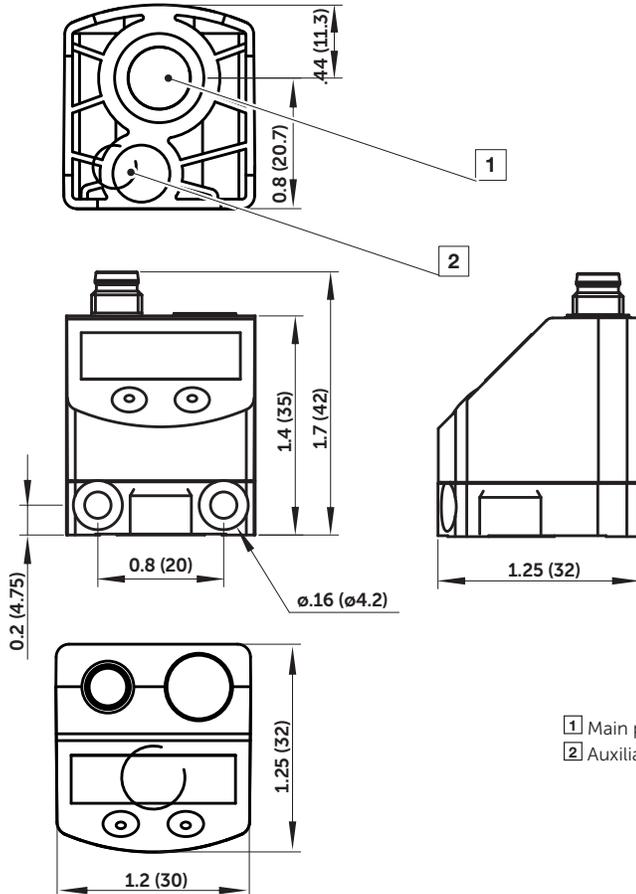


Pipe adaptor





54D Pressure switch - digital



- 1 Main pressure connection (PTF 1/8)
- 2 Auxiliary pressure connection for differential pressure sensing (M5)

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.