

R82G - Pressure Regulators

Excelon® Plus Modular System



- > Port size: 1/4" and 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

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—standard models

Symbol	Port size (PTF)	Pressure range psi (bar)	Adjustment	Integrated gauge psi (bar)	Weight lbs (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

*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 <https://www.norgren.com/en-us/support/technical-support/configurators/air-preparation-configurator> or contact Norgren.

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

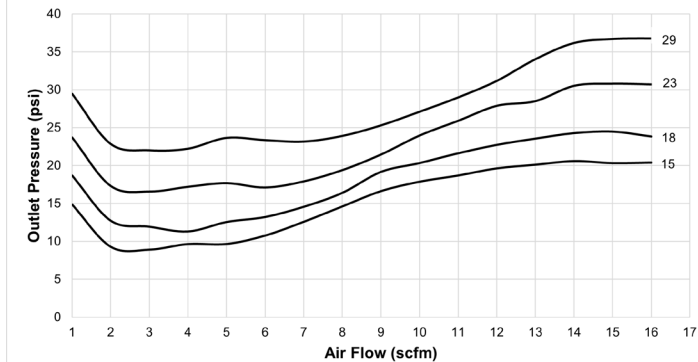
Gauge	Substitute
With fitted integrated gauge	G
Without integrated gauge but with gauge port 1/8"	N
Pressure range *2)	Substitute
4 to 30 psi (0.3 to 2 bar)	C
4 to 58 psi (0.3 to 4 bar)	F
4 to 102 psi (0.3 to 7 bar)	K
4 to 145 psi (0.3 to 10 bar)	M
10 to 247 psi (0.7 to 17 bar)	S*2)
Diaphragm type	Substitute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

*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.

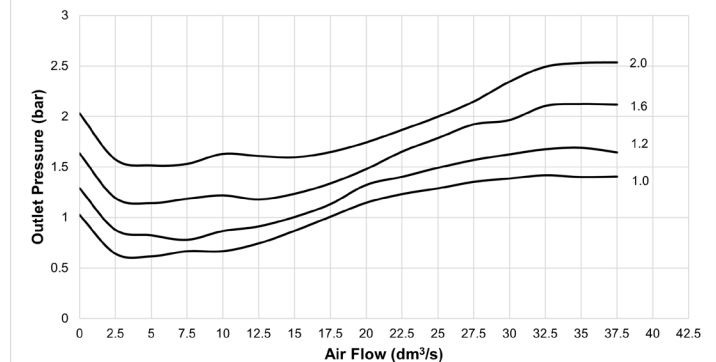
*2) Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

Flow characteristics

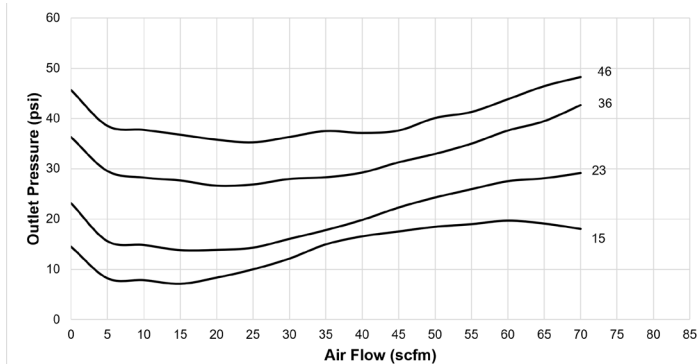
Inlet pressure: 145 psi
Range: 4 to 30 psi
Port size: 1/4"



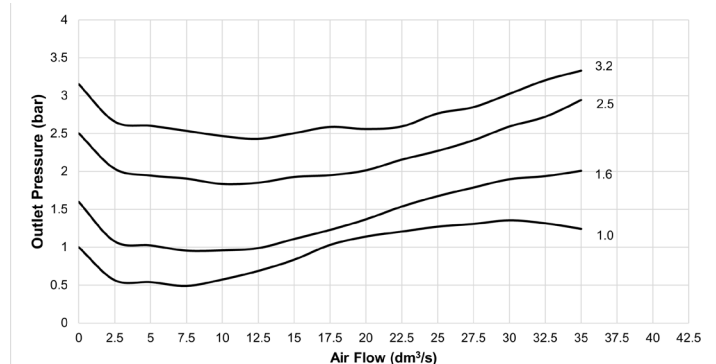
Inlet pressure: 10 bar
Range: 0.3 to 2 bar
Port size: 1/4"



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"

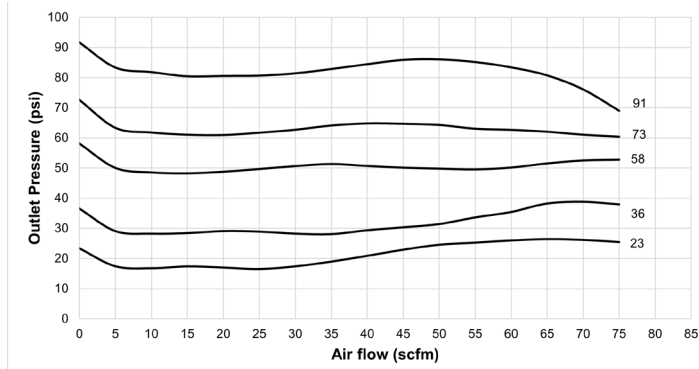


Flow characteristics

Inlet pressure: 145 psi

Range: 4 to 102 psi

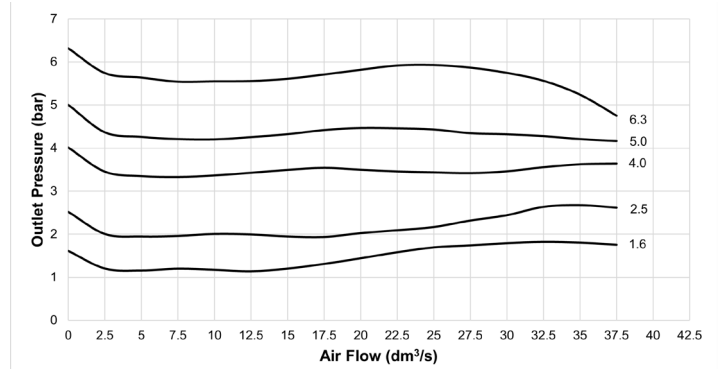
Port size: 1/4"



Inlet pressure: 10 bar

Range: 0.3 to 7 bar

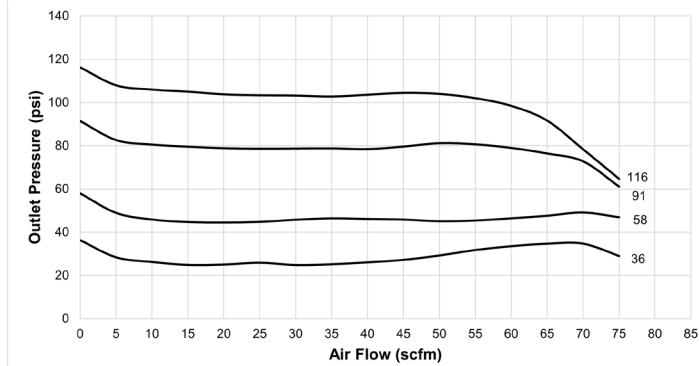
Port size: 1/4"



Inlet pressure: 145 psi

Range: 4 to 145 psi

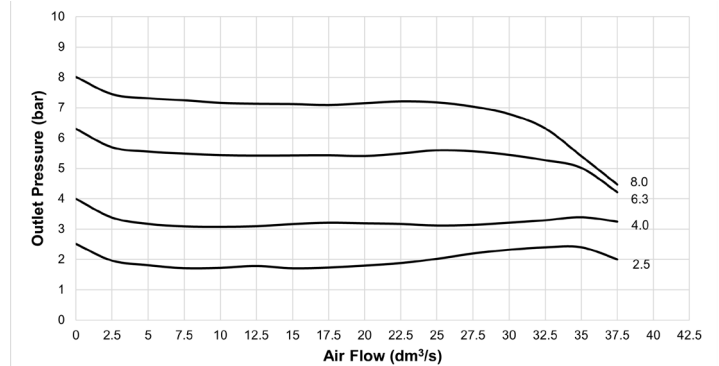
Port size: 1/4"






















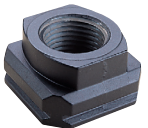
Inlet pressure: 10 bar

Range: 0.3 to 10 bar

Port size: 1/4"




Accessories

Quikclamp®  Page 5 820014-51KIT	Quikclamp® with bracket assembled  Page 5 820014-52KIT	Neck mounting bracket and panel nut  Page 6 820068-51KIT	Panel mounting nut  Page 6 820048-89KIT	Mounting bracket  Page 6 820024-50KIT
Integrated gauge 10 bar gauge  Page 7 820073-01KIT	Integrated gauge 20 bar gauge  Page 7 820073-02KIT	Integrated gauge 4 bar gauge  Page 7 820073-03KIT	Gauge adapter kit 1/8 PTF  Page 7 820143-01KIT	Gauge adapter kit R 1/8  Page 7 820143-02KIT
Pressure sensing block 1/4 PTF  Page 7 820016-50KIT	Pressure sensing block G1/4  Page 7 820016-51KIT	Porting block 3/8" PTF  Page 7 820028-50KIT	Porting block G3/8  Page 7 820028-53KIT	Pressure switch interface block (18D pressure switch) G1/4  Page 7 0523109000000000
Pressure switch 18D (0.5 ... 8bar) *1  Page 7 0881300000000000	Digital pressure switch 54D (-1 ... 10 bar) *2  Page 8 54D-V110G-DD0-AA	Padlock  Page 8 840055-01KIT	Lockout device  Page 8 840055-02KIT	Port Adapter  Page 7 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)	∅	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 1.0	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, white face




Pressure range					
(psi)	(bar) *3)	(MPa)	∅	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 Kits

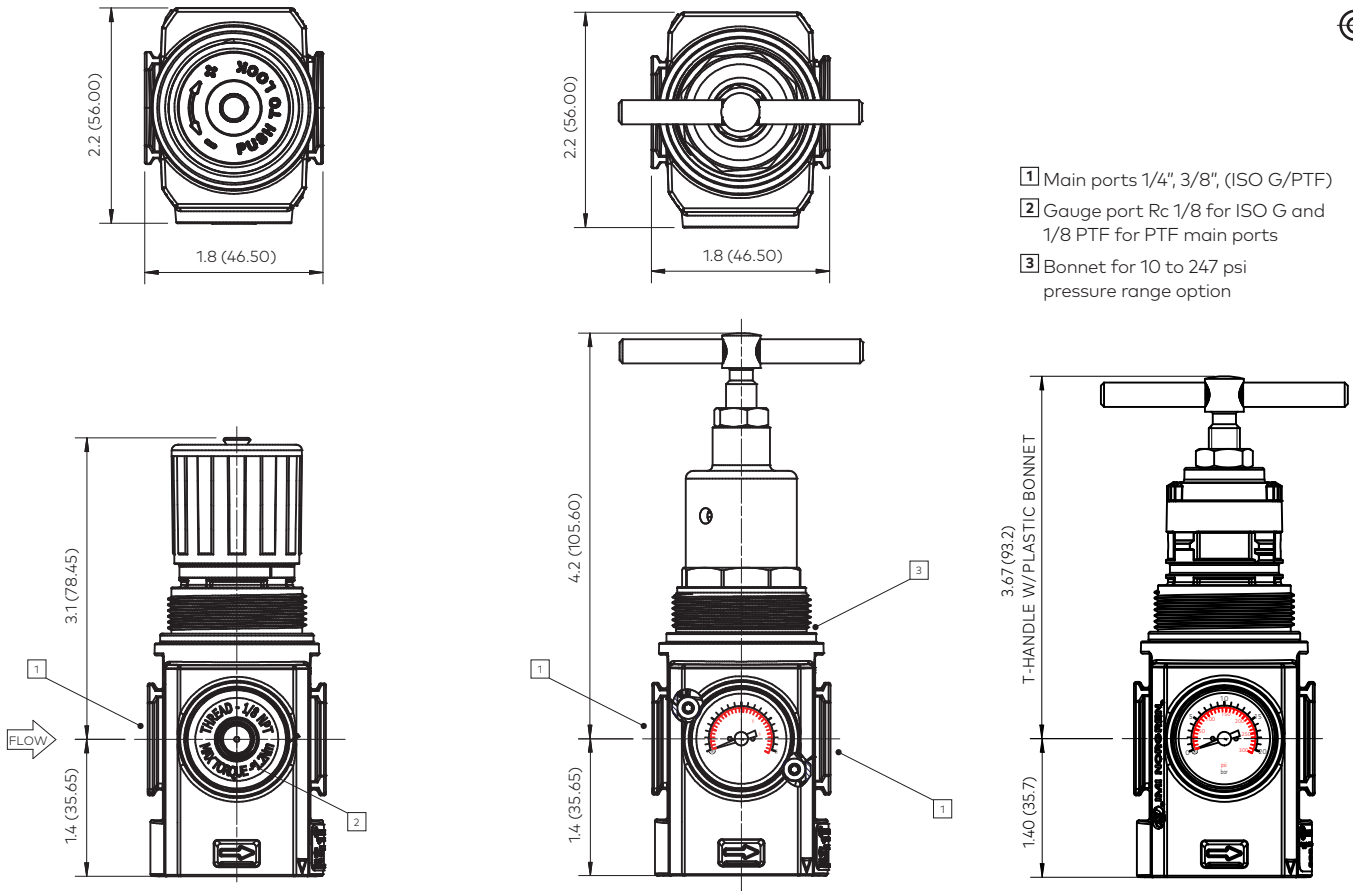
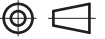
R82 / B82 Elastomer kit



FRLB82-KIT

Dimensions

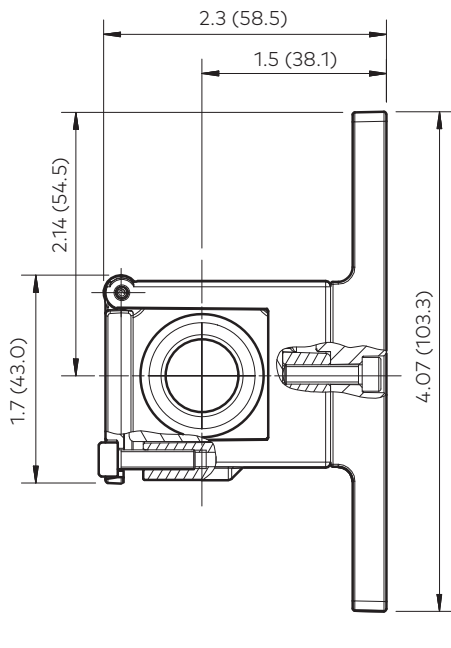
Dimensions in inches (mm)
Projection/Third angle



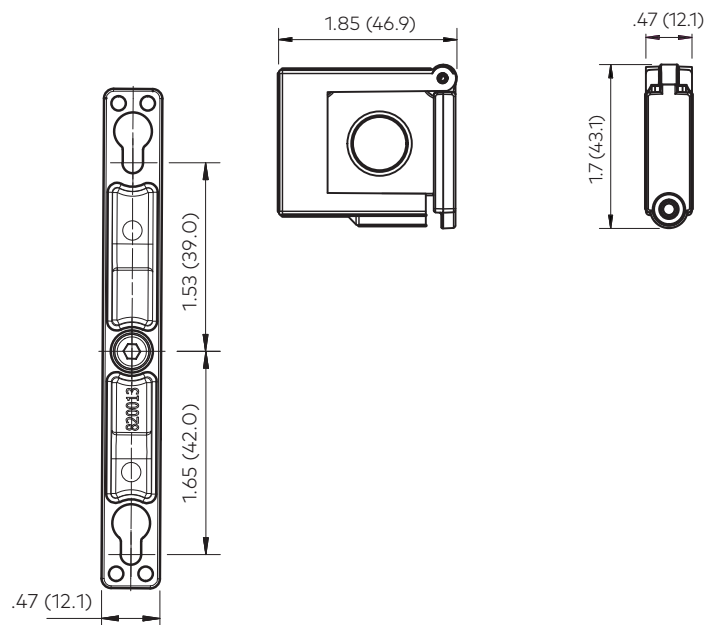
- 1 Main ports 1/4", 3/8", (ISO G/PTF)
- 2 Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports
- 3 Bonnet for 10 to 247 psi pressure range option

Accessories

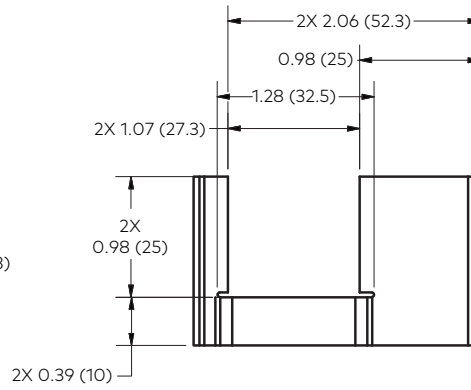
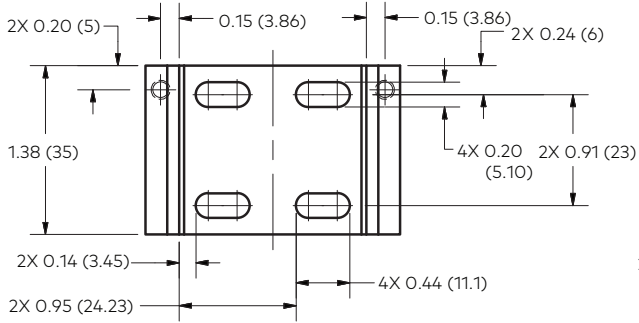
Quikclamp® with wall bracket



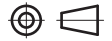
Quikclamp®



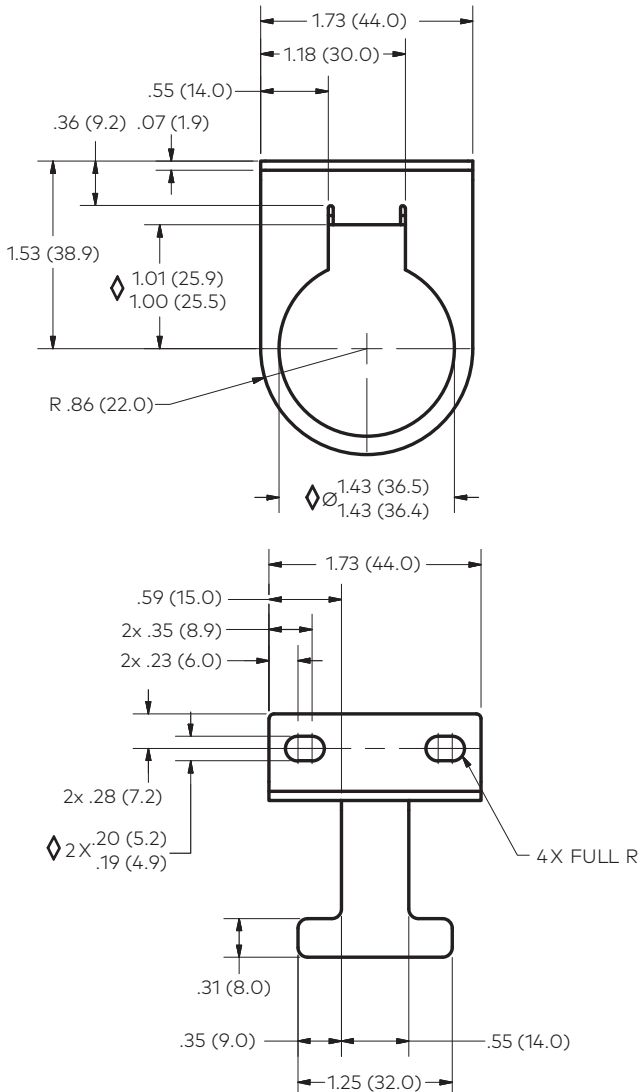
Mounting bracket



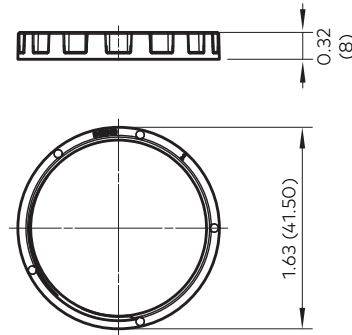
Dimensions in inches (mm)
Projection/Third angle



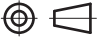
Neck mounting bracket



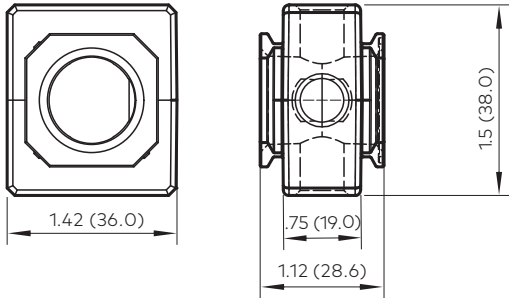
Panel mounting nut



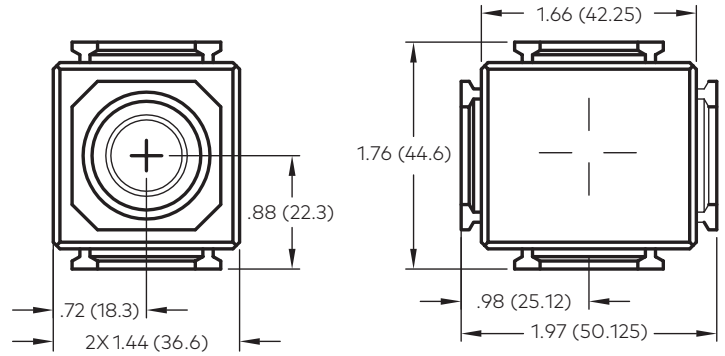
Dimensions in inches (mm)
Projection/Third angle



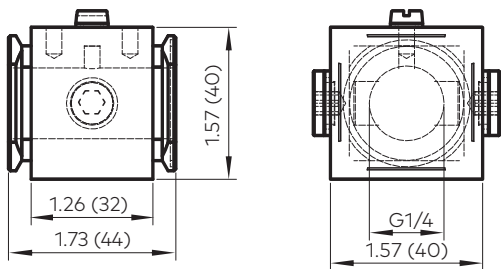
Pressure sensing block



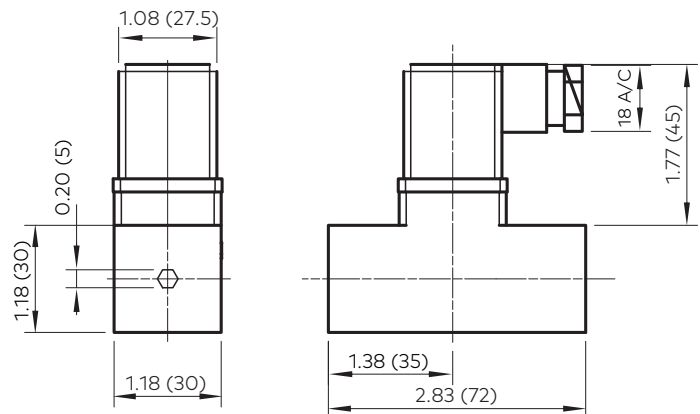
Full flow porting block



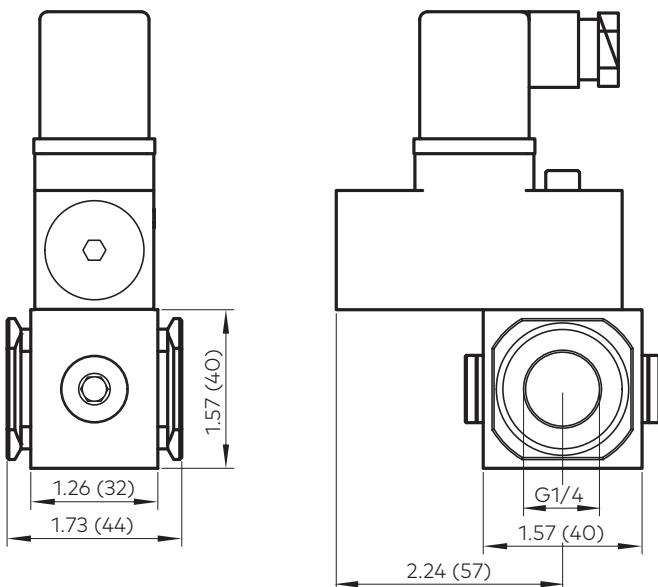
Porting block for 18D pressure switch



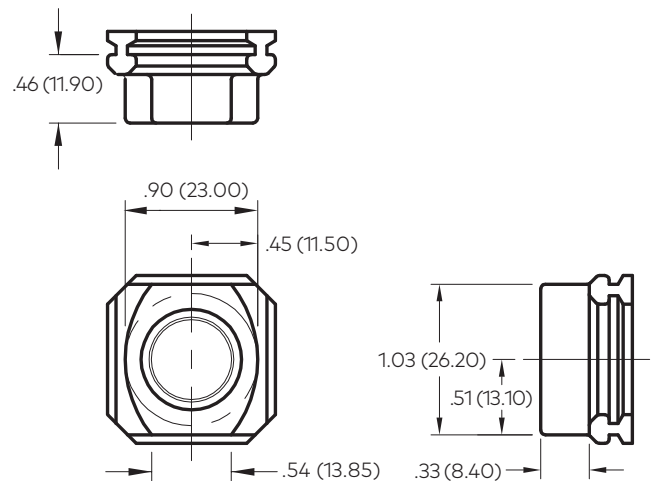
18D Pressure switch



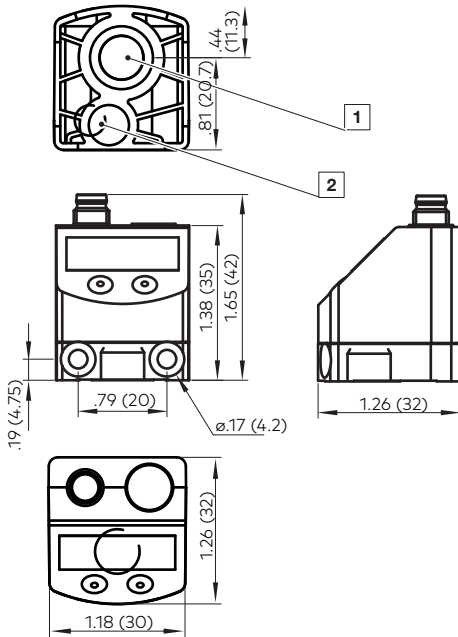
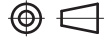
18D Porting block and 18D assembled



Pipe adapter



54D Pressure switch - digital

 Dimensions in inches (mm)
 Projection/Third angle


- 1 Main pressure connection (G1/8)
- 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 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.