

B82G - General purpose filter/regulator 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
- > 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
- > Lightweight 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 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)

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 or Non-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

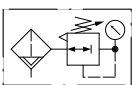
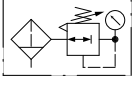
(metal bowl): PA

Filter element: sintered PP

Bowl 'o'- ring: Chloroprene

Elastomers: NBR

Technical data B82G—standard models

Symbol	Port Size (PTF)	Drain	Pressure range psi (bar)	Filter element (µm)	Bowl	Weight lbs (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

Option selector

B82G-***-***-***

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

Gauge	Substitute
With 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*1)
Diaphragm Type	Substitute
Relieving	R
Non-relieving	N
Element	Substitute
40 µm	3
5 µm	1

*1) Units with 246 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.

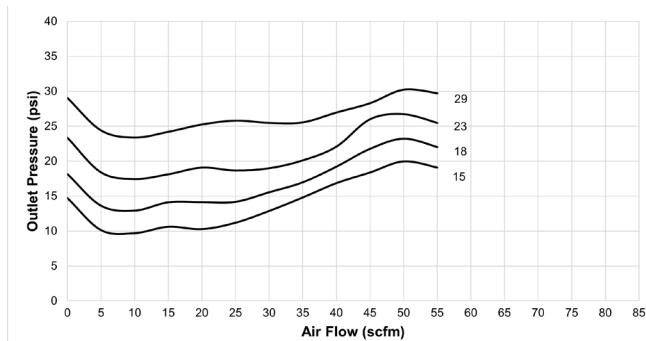
*2) Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

Flow characteristics

Inlet pressure: 145 psi

Range: 4 to 30 psi

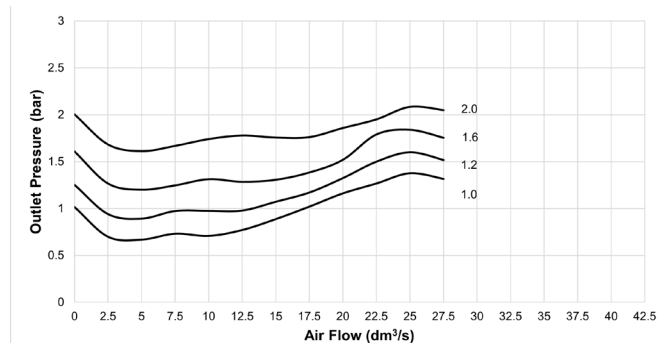
Port size: 1/4", 40 µm element



Inlet pressure: 10 bar

Range: 0.3 to 2 bar

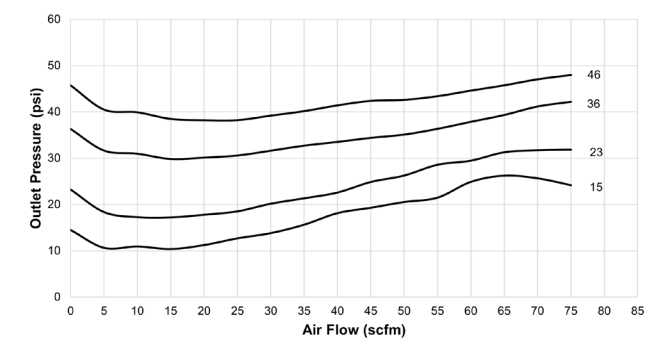
Port size: 1/4", 40 µm element



Inlet pressure: 145 psi

Range: 4 to 58 psi

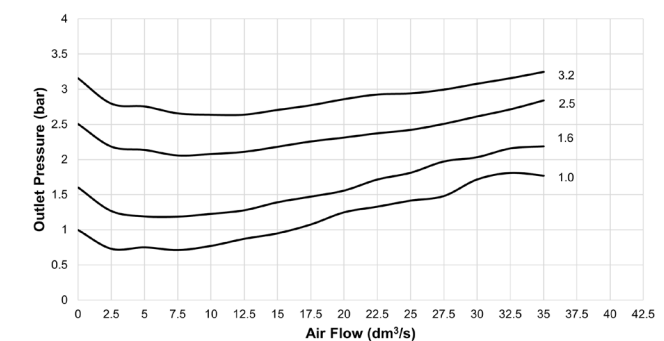
Port size: 1/4", 40 µm element



Inlet pressure: 10 bar

Range: 0.3 to 4 bar

Port size: 1/4", 40 µm element

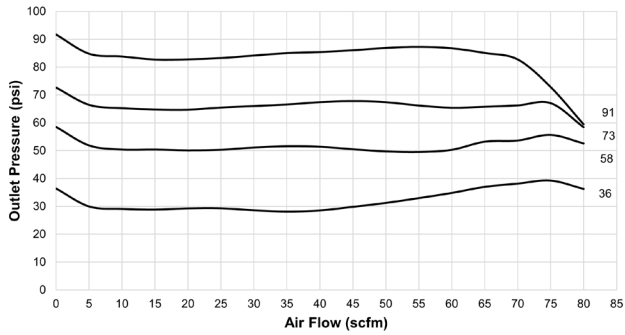


Flow characteristics

Inlet pressure: 145 psi

Range: 4 to 102 psi

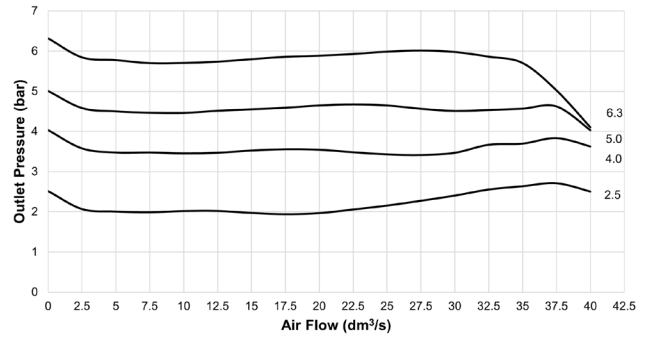
Port size: 1/4", 40 µm element



Inlet pressure: 10 bar

Range: 0.3 to 0.7 bar

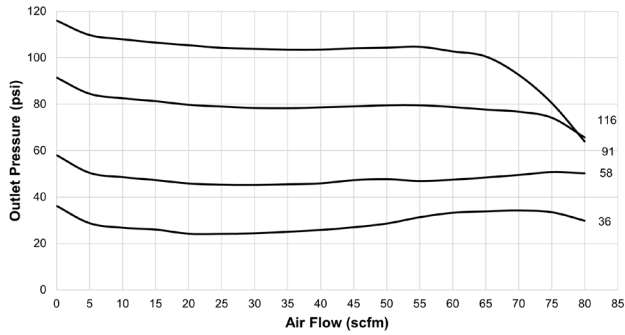
Port size: 1/4", 40 µm element



Inlet pressure: 145 psi

Range: 4 to 145 psi

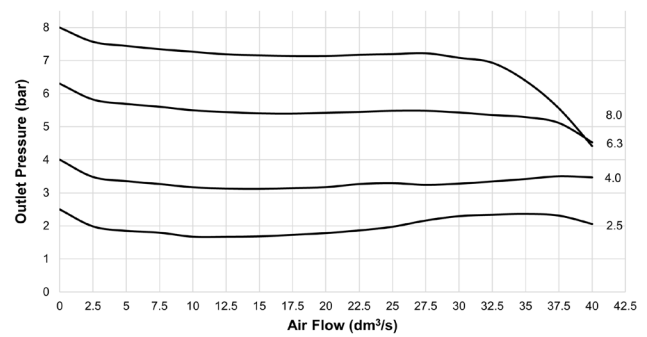
Port size: 1/4", 40 µm element






















Inlet pressure: 10 bar

Range: 0.3 to 10 bar

Port size: 1/4", 40 µm element

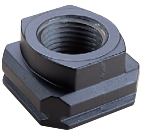




Accessories

Quikclamp®  Page 8 820014-51KIT	Quikclamp® with bracket assembled  Page 8 820014-52KIT	Neck mounting bracket and panel nut  Page 7 820068-51KIT	Panel mounting nut  Page 7 820048-89KIT	Mounting bracket  Page 7 820024-50KIT
Integrated gauge 10 bar gauge  Page 8 820073-01KIT	Integrated gauge 20 bar gauge  Page 8 820073-02KIT	Integrated gauge 4 bar gauge  Page 8 820073-03KIT	Gauge adapter kit (metal) 1/8 PTF  Page 8 820143-01KIT	Gauge adapter kit (metal) R 1/8  Page 8 820143-02KIT
Pressure sensing block 1/4 PTF  Page 8 820016-50KIT	Pressure sensing block G1/4  Page 8 820016-51KIT	Porting block 3/8" PTF  Page 8 820028-50KIT	Porting block G3/8  Page 8 820028-53KIT	Pressure switch interface block (18D pressure switch) G1/4  Page 8 0523109000000000
Pressure switch 18D (7 to 120 psi) *1  Page 8 0881300000000000	Digital pressure switch 54D (-1 to 10 bar) *2  Page 9 54D-V110G-DD0-AA	Padlock  Page 8 840055-01KIT	Lockout device  Page 8 840055-02KIT	

*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)

Port Adapter  Page 9 1/4 PTF 820015-02KIT 3/8 PTF 820015-03KIT G1/4 820015-08KIT G3/8 820015-09KIT	Center back connection, white face  <table border="1"> <thead> <tr> <th colspan="6">Pressure range</th> </tr> <tr> <th>(psi)</th> <th>(bar) *3)</th> <th>(MPa)</th> <th>ø</th> <th>Thread size</th> <th>Model</th> </tr> </thead> <tbody> <tr> <td>0 to 84</td> <td>0 to 6</td> <td>0 to 0.6</td> <td>2"</td> <td>R1/8</td> <td>18-015-012</td> </tr> <tr> <td>0 to 145</td> <td>0 to 10</td> <td>0 to 1</td> <td>2"</td> <td>R1/8</td> <td>18-015-013</td> </tr> <tr> <td>0 to 362</td> <td>0 to 25</td> <td>0 to 2.5</td> <td>2"</td> <td>R1/8</td> <td>18-015-014</td> </tr> </tbody> </table> <p>*3) primary scale</p>	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	Center back connection, black face  <table border="1"> <thead> <tr> <th colspan="6">Pressure range</th> </tr> <tr> <th>(psi)</th> <th>(bar) *3)</th> <th>(MPa)</th> <th>ø</th> <th>Thread size</th> <th>Model</th> </tr> </thead> <tbody> <tr> <td>0 to 60</td> <td>0 to 4</td> <td>0 to 0.4</td> <td>2"</td> <td>1/8" NPT</td> <td>18-015-202</td> </tr> <tr> <td>0 to 160</td> <td>0 to 11</td> <td>0 to 1.1</td> <td>2"</td> <td>1/8" NPT</td> <td>18-015-204</td> </tr> <tr> <td>0 to 300</td> <td>0 to 20</td> <td>0 to 2.1</td> <td>2"</td> <td>1/8" NPT</td> <td>18-015-205</td> </tr> </tbody> </table>	Pressure range						(psi)	(bar) *3)	(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
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Maintenance/Service

**Filter cartridge
5 micron**



820038-50KIT

**Filter cartridge
40 micron**



820038-51KIT

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



6000-61KIT

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



6000-60KIT

**R82 / B82
Elastomer Kit**



FRLB82-KIT

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 (Metal with S/
Glass & manual drain)**



820003-50KIT

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



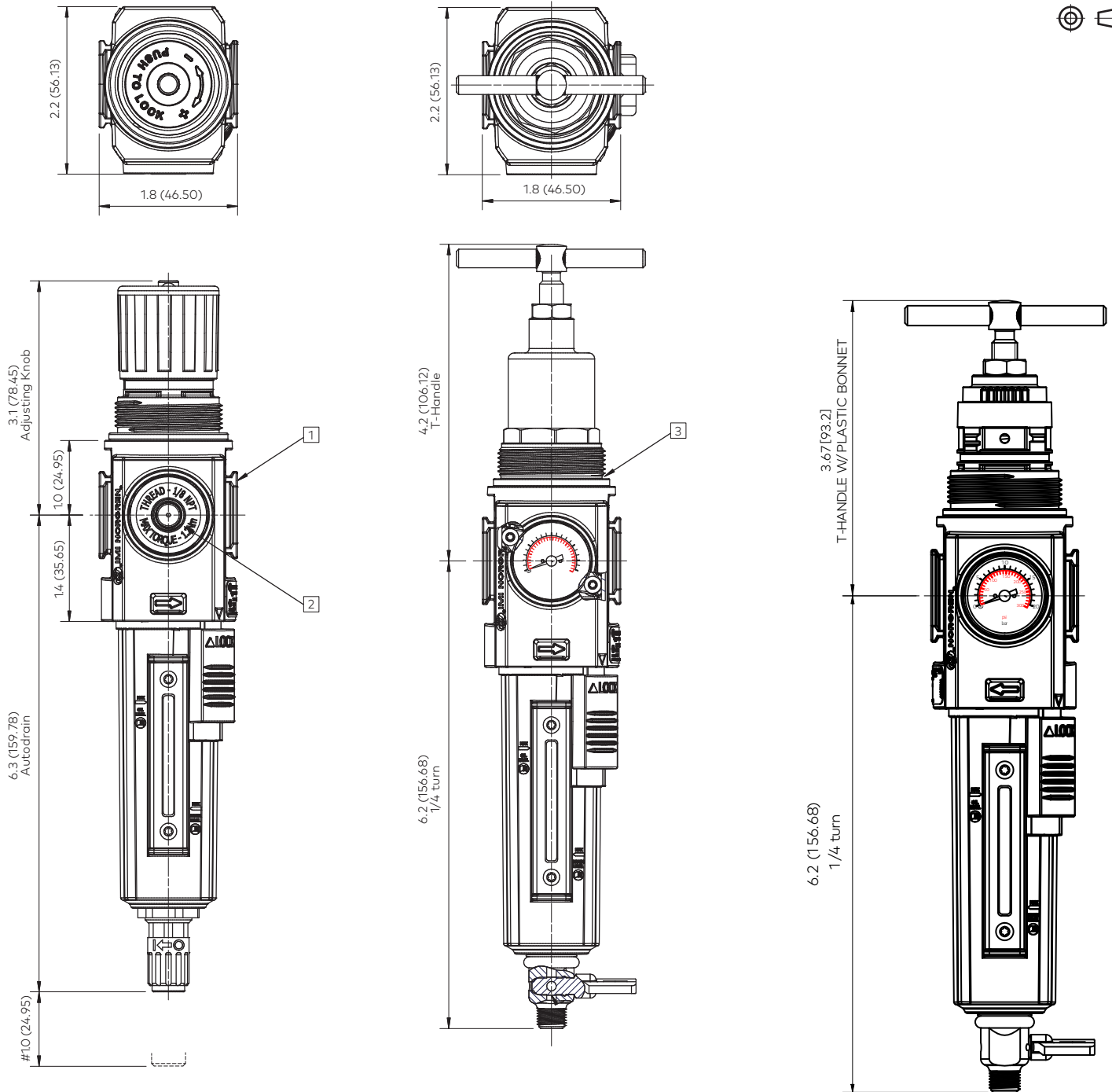
820025-53KIT

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



820003-56KIT

Dimensions

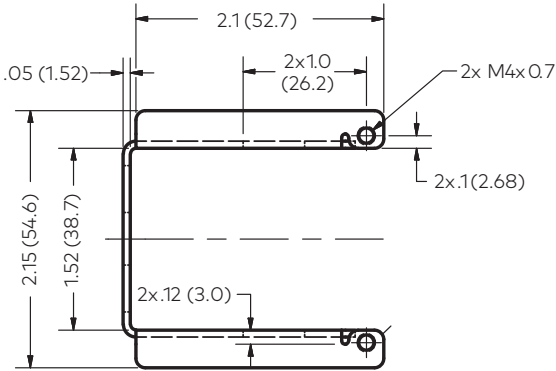
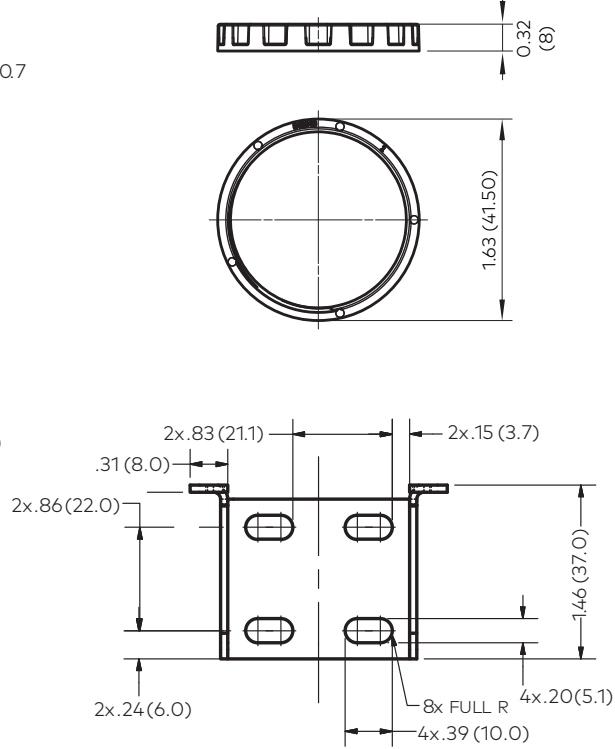
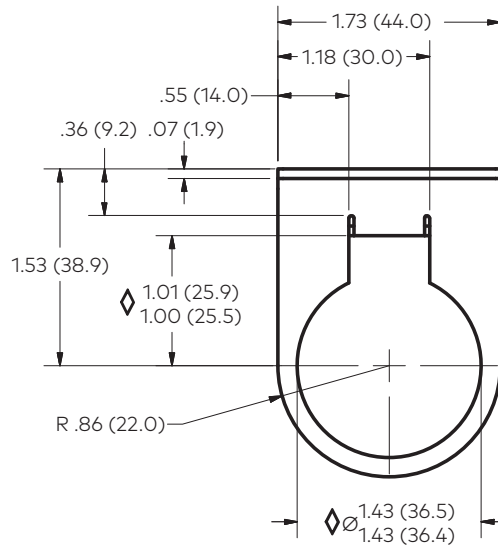
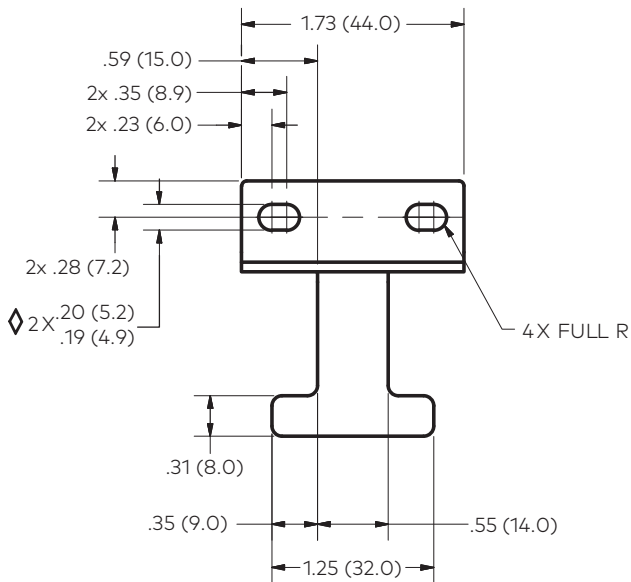
 Dimensions in inches (mm)
 Projection/Third angle


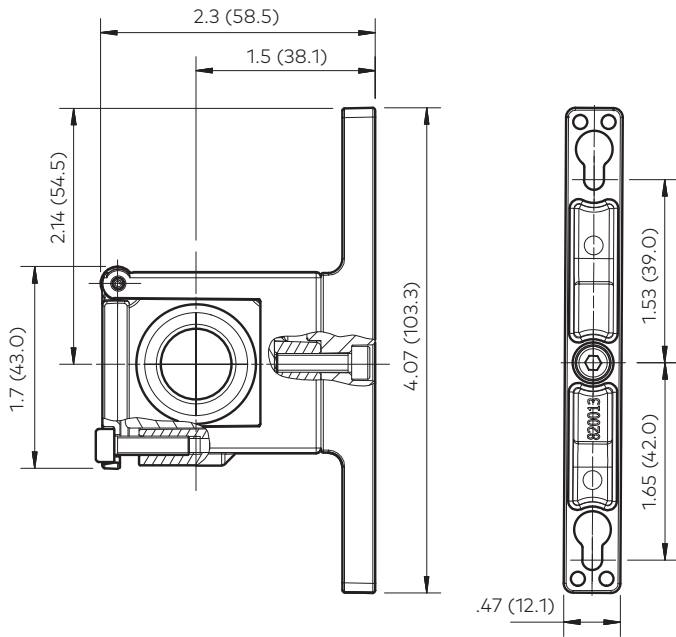
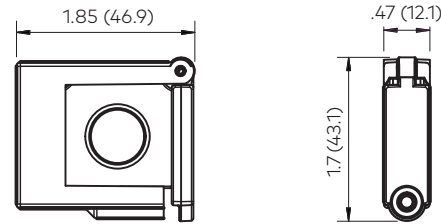
Minimum clearance for bowl removal

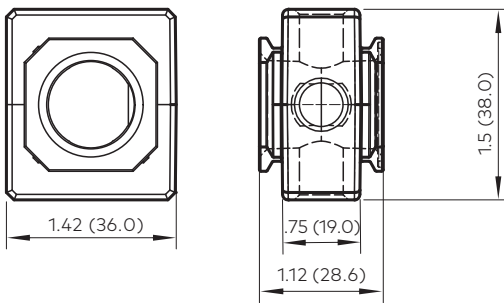
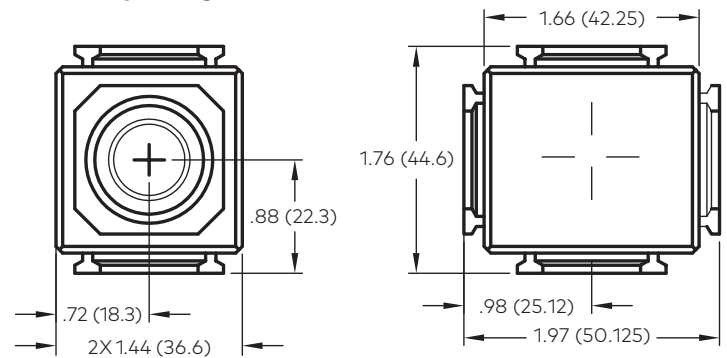
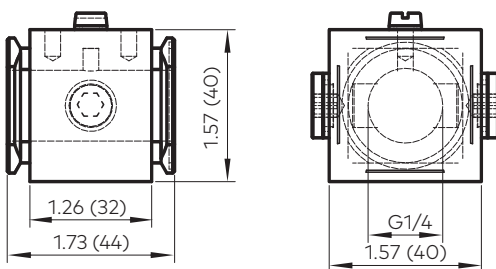
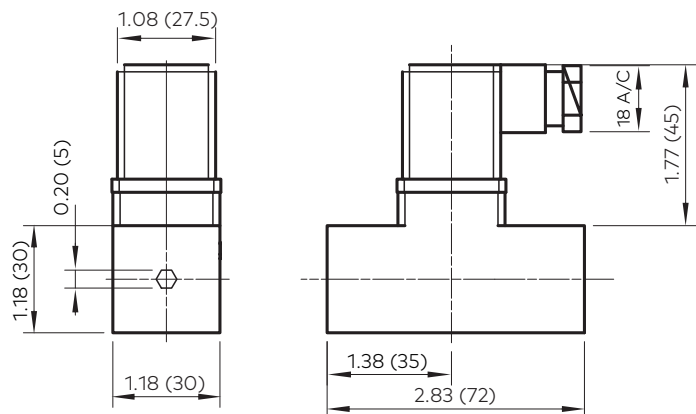
- 1 Main ports 1/4", 3/8" (ISO G/PTF)
- 2 Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports
- 3 Bonnet for 10 to 247 psi pressure range option

Accessories

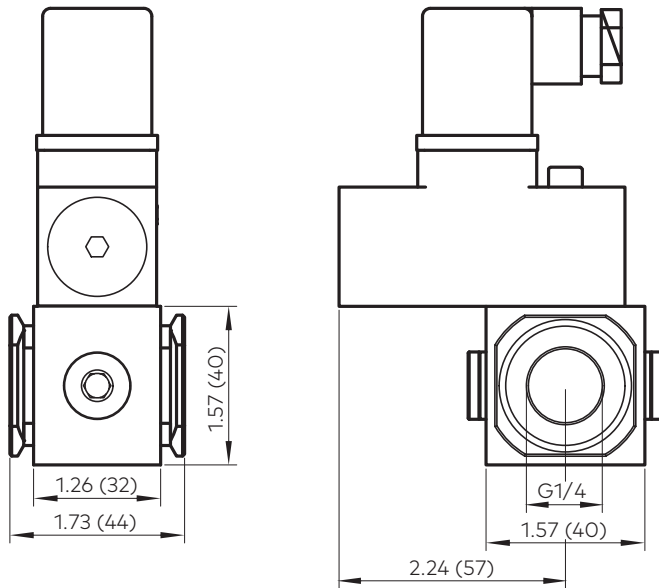
 Dimensions in inches (mm)
 Projection/Third angle

Mounting bracket

Panel mounting nut

Neck mounting bracket


Quikclamp® with wall bracket

Quikclamp®

 Dimensions in inches (mm)
 Projection/Third angle

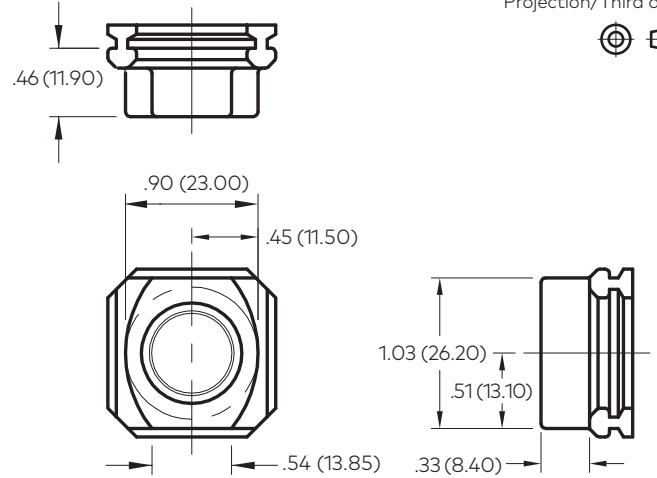
Pressure sensing block

Full flow porting block

Porting block for 18D pressure switch

18D Pressure switch


18D Porting block and 18D assembled

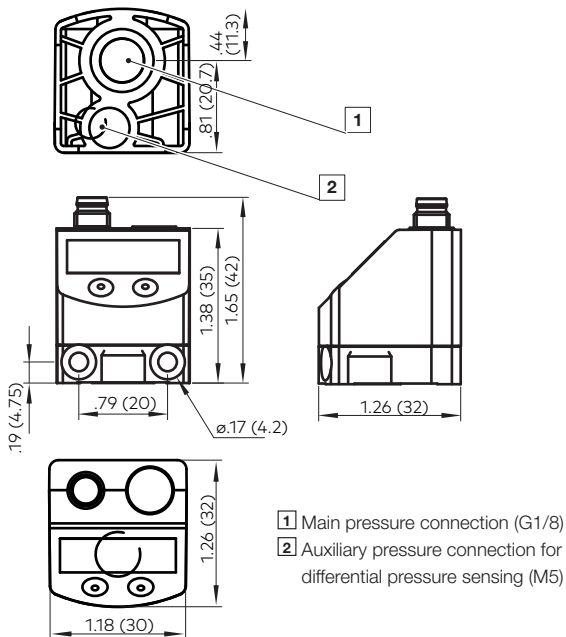


Pipe adapter

Dimensions in inches (mm)
Projection/Third angle



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 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.