



# R82 – Excelon® Plus Modular System Pressure Regulators

- > 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 145 psi, (0.3 to 10 bar)  
4 to 58 psi, ( 0.3 to 4 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 dm<sup>3</sup>/s) at port size 1/4",  
66 scfm (31 dm<sup>3</sup>/s) at port size 3/8",  
inlet pressure 145 psi (10 bar),  
operating pressure 91 psi (6.3 bar)  
and a Δp: 14.5 psi (1.0 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 aluminium  
Body covers: ABS  
Bonnet: POM/Aluminium  
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

\*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 [www.imi-precision.com/air-preparation-configurator](http://www.imi-precision.com/air-preparation-configurator) or contact Norgren.

## Option selector \*1)

R82★-★★★-R★★

<b>Flow</b>	<b>Substitute</b>	←	→	<b>Gauge</b>	<b>Substitute</b>
General	G			With (fitted integrated gauge)	G
Reverse Flow	R	←	→	Without integrated gauge but with gauge port 1/8"	N
<b>Port size</b>	<b>Substitute</b>	←	→	<b>Pressure range *3)</b>	<b>Substitute</b>
1/4"	2			4 to 58 psi (0.3 to 4 bar)	F
3/8"	3	←	→	4 to 145 psi (0.3 to 10 bar)	M
<b>Thread form</b>	<b>Substitute</b>	←	→	10 to 247 psi (0.7 to 17 bar)	S*2)
PTF	A				
ISO G parallel	G	←	→		
<b>Adjustment</b>	<b>Substitute</b>	←	→		
Knob	K				
T-bar	T*2)				

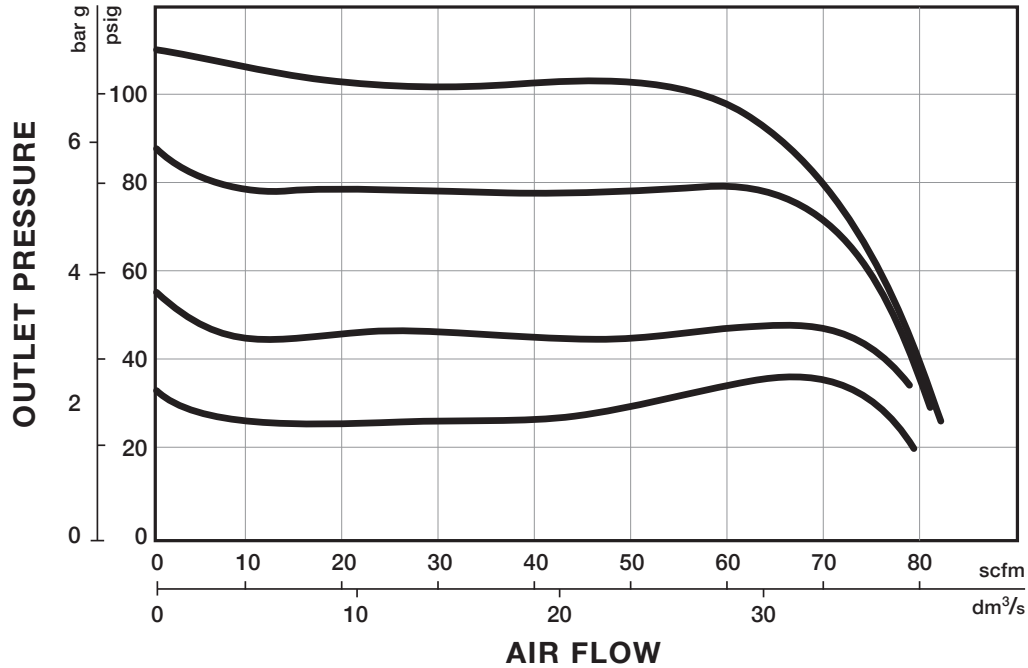
\*3) Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

\*1) All models shown here are applicable for flow direction left to right. With flow direction right to left please use the online configurator [www.imi-precision.com/air-preparation-configurator](http://www.imi-precision.com/air-preparation-configurator) or contact Norgren.

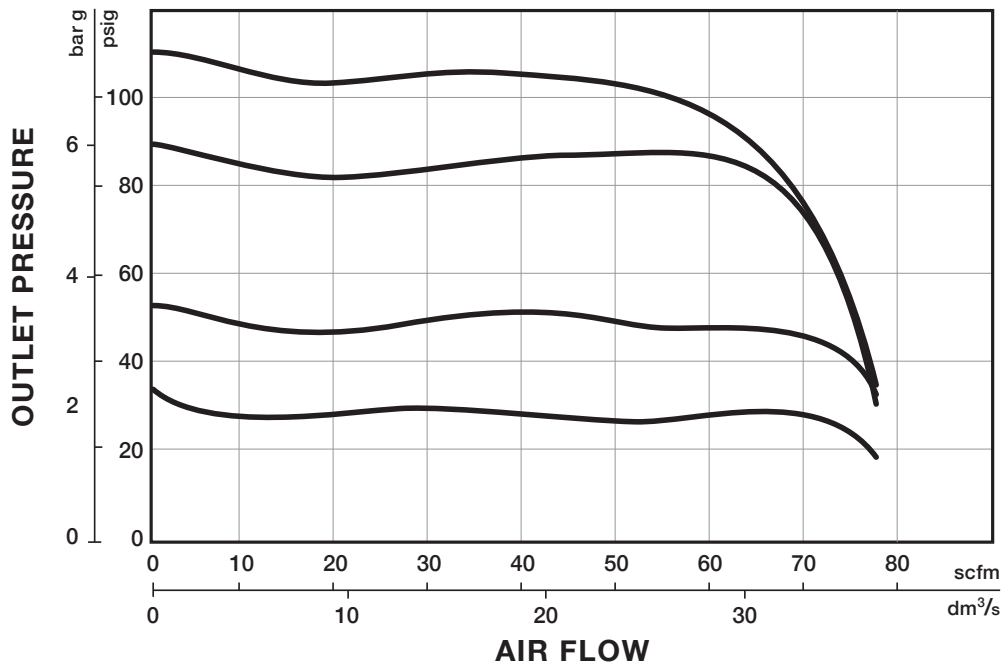
\*2) Units with 247 psi outlet pressure range are available only with the T-bar adjustment; therefore substitute T at the 7th position and S at the 9th position. T-bar handle only available with 247 psi option.

## Flow characteristics




















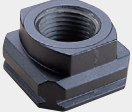
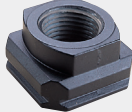
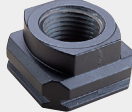
Inlet pressure: 145 psi (10 bar)  
 Range: 4 to 145 psi (0.3 to 10 bar)  
 Port size: 1/4"



Inlet pressure: 145 psi (10 bar)  
 Range: 4 to 145 psi (0.3 to 10 bar)  
 Port size: 3/8"



## Accessories

<b>Quikclamp®</b>  page 4 820014-51KIT	<b>Quikclamp® with bracket assembled</b>  page 4 820014-52KIT	<b>Neck mounting bracket and panel nut</b>  page 5 820068-51KIT	<b>Panel mounting nut</b>  page 5 820048-89KIT	<b>Mounting bracket</b>  page 5 820024-50KIT
<b>Integrated gauge 10 bar gauge</b>  820073-01KIT	<b>Integrated gauge 20 bar gauge</b>  820073-02KIT	<b>Integrated gauge 4 bar gauge</b>  820073-03KIT	<b>Gauge adaptor kit 1/8 PTF</b>  820100-01KIT	<b>Gauge adaptor kit R 1/8</b>  820100-02KIT
<b>Pressure sensing block 1/4 PTF</b>  page 6 820016-50KIT	<b>Pressure sensing block G1/4</b>  page 6 820016-51KIT	<b>Padlock</b>  840055-01KIT	<b>Lockout device</b>  840055-02KIT	<b>Digital pressure switch 51D (-14 to 145 psi)</b>  page 7 0860811000000000
<b>Full flow porting block 3/8 PTF</b>  page 6 820028-50KIT	<b>Full flow porting block G3/8</b>  page 6 820028-53KIT	<b>Pressure switch interface block (18D pressure switch) G1/4</b>  page 6 0523109000000000	<b>Pneumatic pressure switch 18D (7 to 120 psi)</b>  page 6 0881300000000000	<b>Service Kit</b> <b>R82 / B82 Elastomer kit</b>  FRLB82-Kit
<b>Port Adaptors 1/4 PTF</b>  page 6 820015-02KIT	<b>Port Adaptors 3/8 PTF</b>  page 6 820015-03KIT	<b>Port Adaptors G1/4</b>  page 6 820015-08KIT	<b>Port Adaptors G3/8</b>  page 6 820015-09KIT	

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

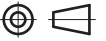
Center back connection, white face					
Pressure range					
(psi)	(bar)*3)	(MPa)	∅	Thread size	Model
0 to 84	0 to 6	0 to 0.6	2"	R1/8	18-015-012
0 to 145	0 to 10	0 to 1	2"	R1/8	18-015-013
0 to 362	0 to 25	0 to 2.5	2"	R1/8	18-015-014

\*3) primary scale

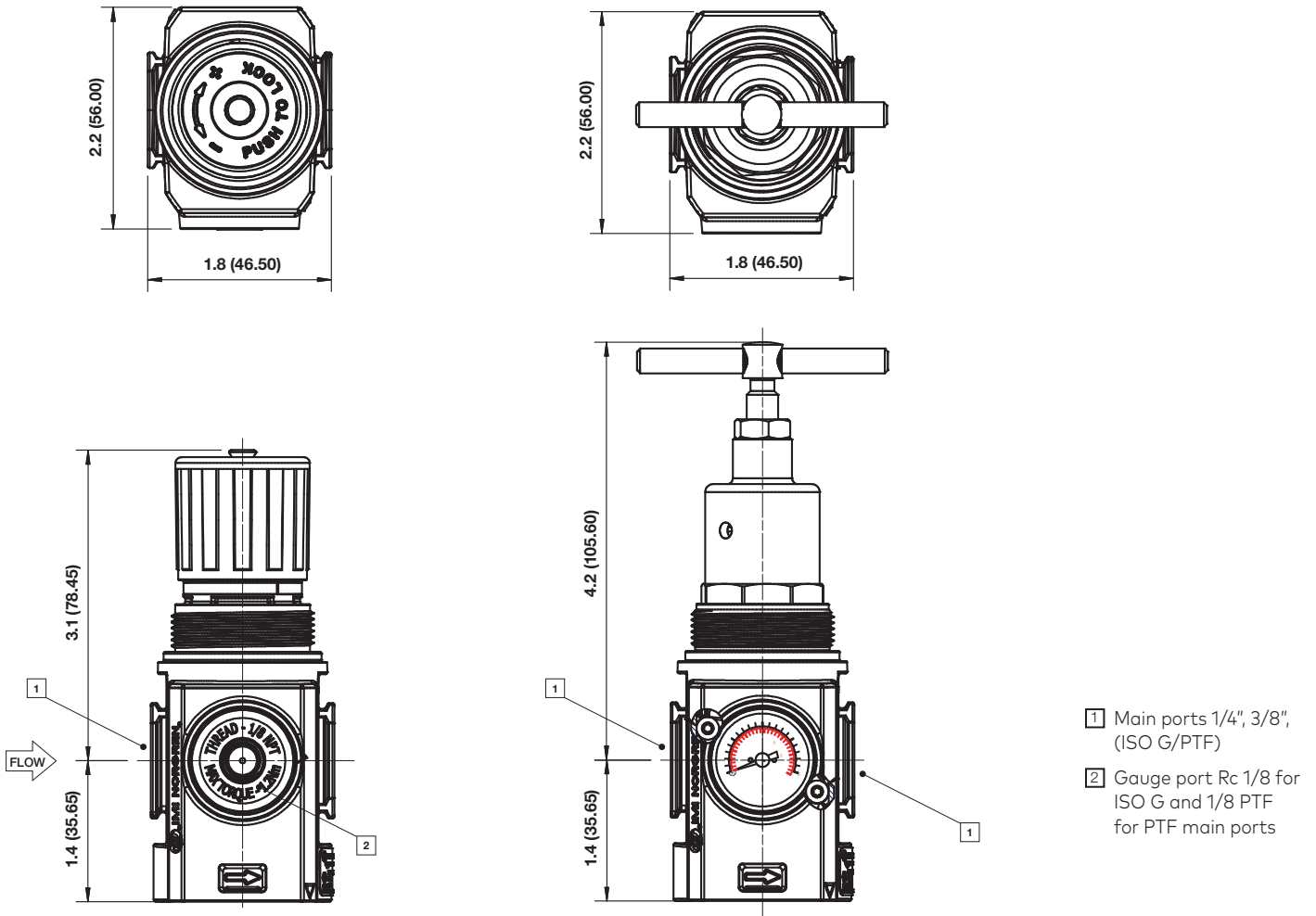
## Gauges

Center back connection, black face					
Pressure range					
(psi) *3)	(bar)	(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



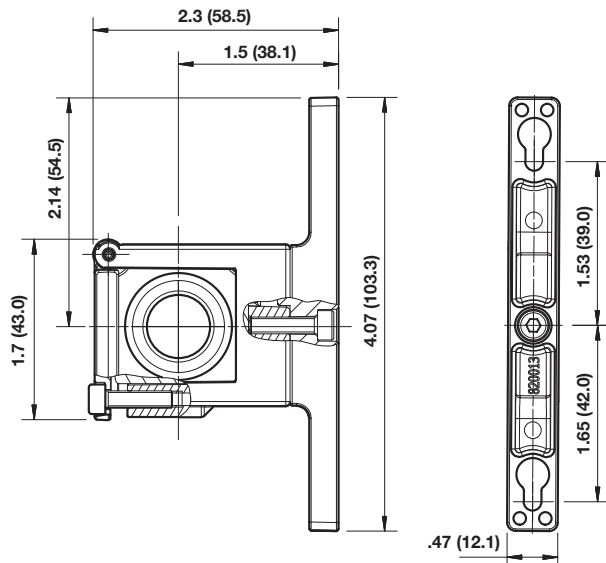
## Dimensions



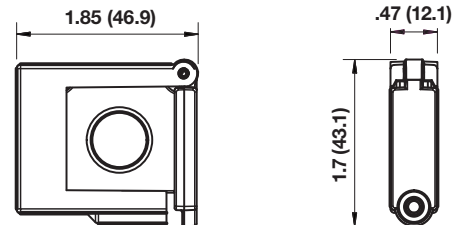
- 1 Main ports 1/4", 3/8", (ISO G/PTF)
- 2 Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports

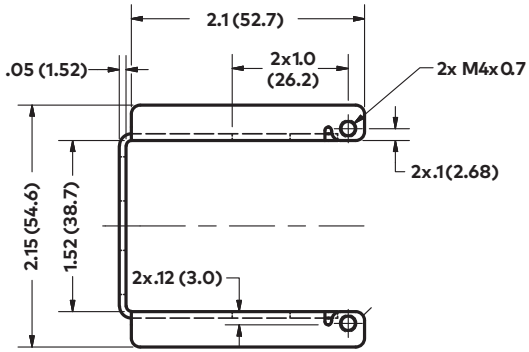
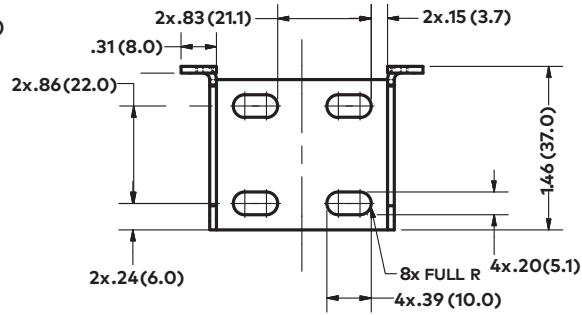
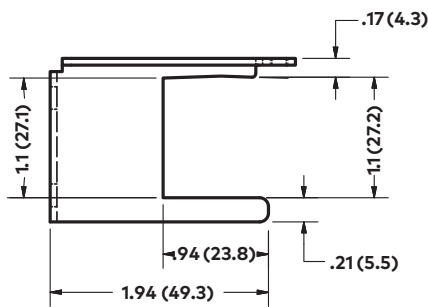
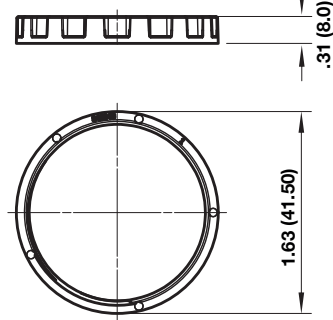
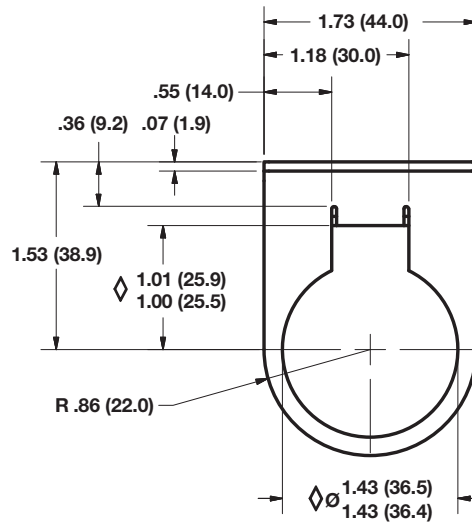
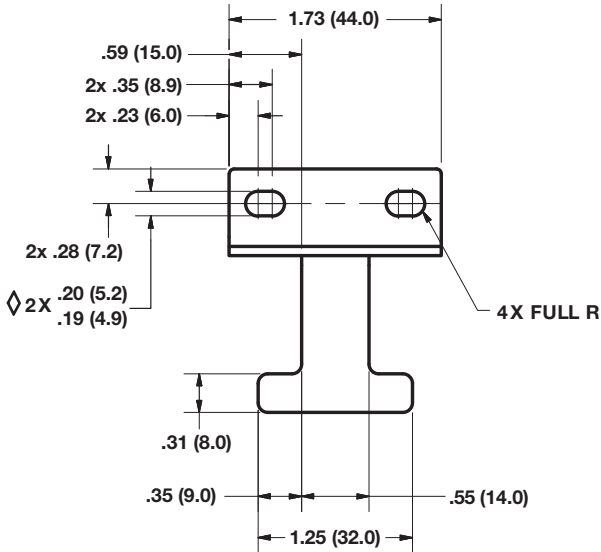
## Accessories

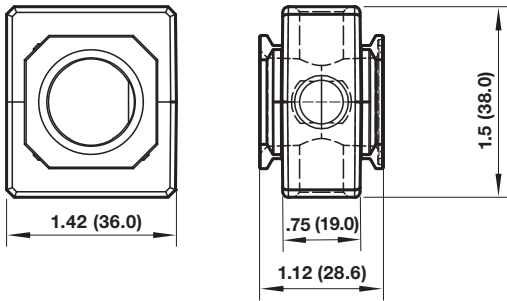
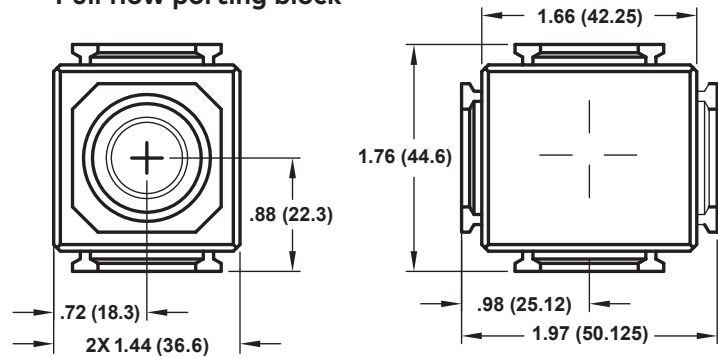
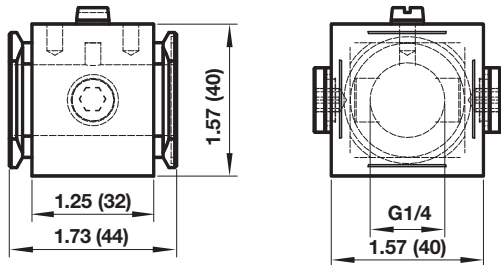
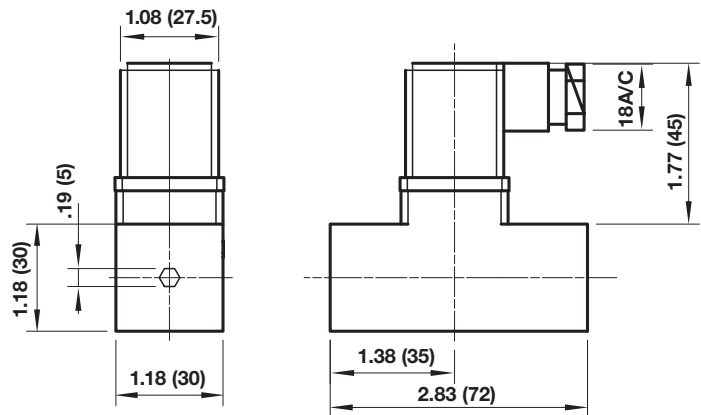
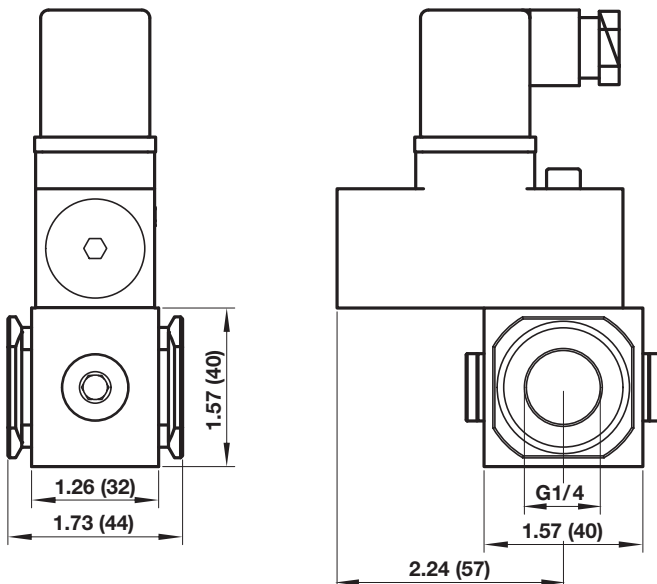
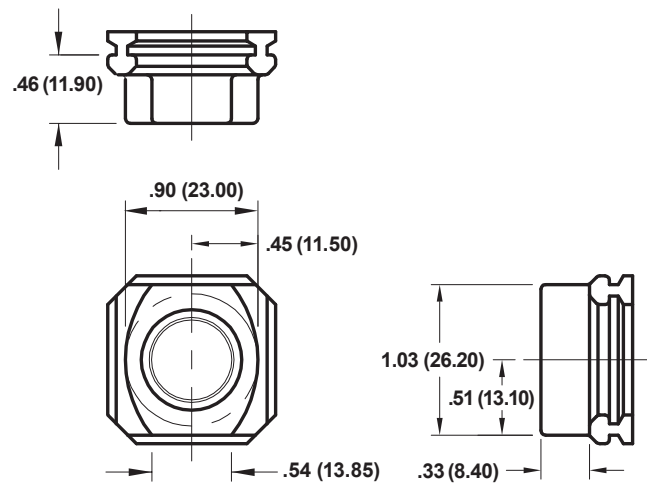
### Quikclamp® with wall bracket

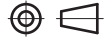
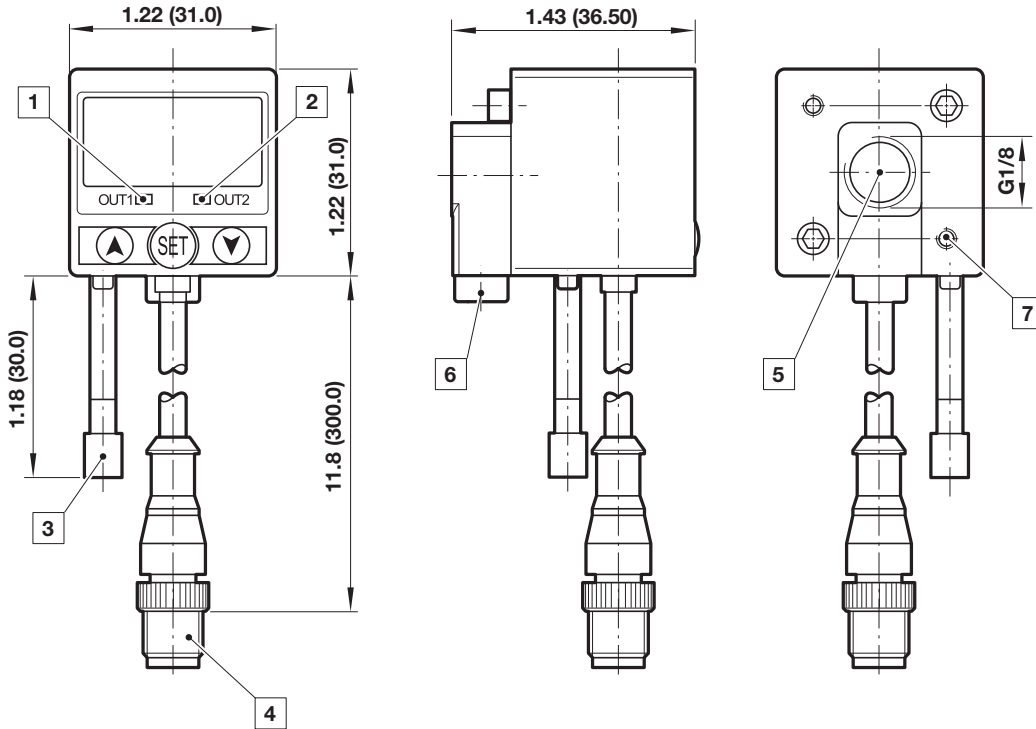


### Quikclamp®




**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**



**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.