

R82G -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
-  DoC in accordance with 2014/34/EU/ATEX



Technical features

Medium:
Compressed air only

Maximum supply pressure:
20 bar (290 psi)

Outlet pressure ranges:
0.3 ... 2bar (4...29psi)
0.3 ... 4 bar (4... 58psi)
0.3... 7 bar (4... 102psi)
0.3... 10 bar (4... 145 psi)
0.7 ...17 bar (10... 245 psi)

Gauge:
Integrated as standard
Gauge port 1/8 as option

Port size:
G1/4, G3/8,
1/4 PTF, 3/8 PTF

Diaphragm Type:
Relieving (Standard)
Non-relieving (Optional)

Flow:
33 dm³/s (port size: 1/4") and
31 dm³/s (port size: 3/8") at
inlet pressure 10 bar (145 psi),
6,3 bar (91 psi) set pressure and a
Δp: 1 bar (14,5 psi) droop from set.

Ambient/Media temperature:
-20 ... +65°C (-4 ... +149°F)
Air supply must be dry enough to avoid
ice formation at temperatures below
+2°C (+35°F).

Atex:
Regulators R82 are in conformity
with Atex 2014/34/EU
 II 2 GD
Ex h IIC T6 Gb
EX h IIIC T85°C Db

Materials:
Body: Die cast aluminium
Body covers: ABS
Bonnet: POM/Aluminium
Valve: PP
Elastomers: NBR

Technical data R82G — standard models

Symbol	Port size	Pressure range (bar)	Adjustment	Integrated gauge (bar)	Weight (kg)	Model *1)
	G1/4	0,3 ... 10	Knob	0 ... 10	0,23	R82G-2GK RMG
	G3/8	0,3 ... 10	Knob	0 ... 10	0,23	R82G-3GK-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.norgren.com/en/support/configurators/air-preparation-configurator or contact Norgren.

Option selector *1)

R82★-★★★-★★★

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

Gauge	Substitute
With integrated gauge	G
Without integrated gauge but with gauge port 1/8"	N
Pressure range *3)	Substitute
0.3 ... 2 bar	C
0.3 ... 4 bar	F
0.3 ... 7 bar	K
0.3 ... 10 bar (standard)	M
0.7 ... 17 bar	S*2)
Diaphragm type	Substitute
Relieving	R
Non-relieving	N

*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.norgren.com/en/support/configurators/air-preparation-configurator or contact Norgren.

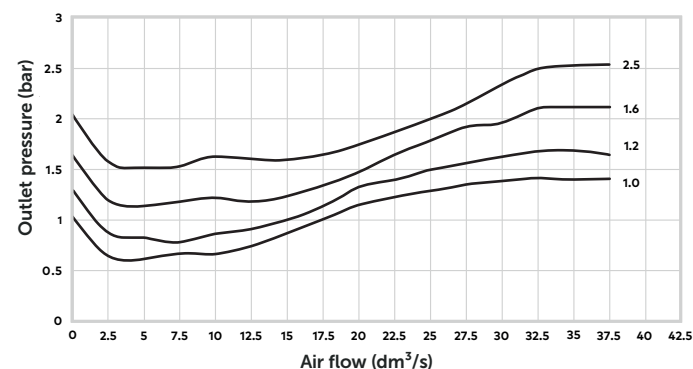
*2) Units with 17 bar outlet pressure range are available only with the T-bar adjustment; therefore substitute

T at the 7th position and S at the 9th position. T-bar handle only available with 17 bar option.

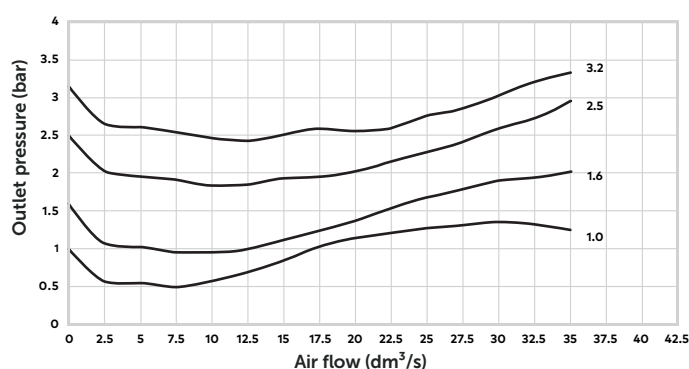
*3) Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

Flow characteristics

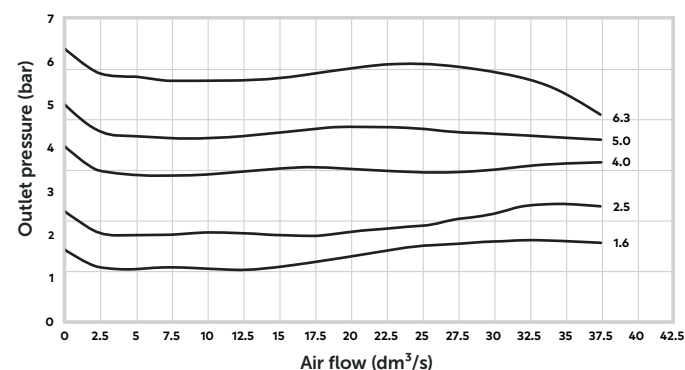
Inlet pressure: 10 bar (145 psi)
Range: 0.3 ... 2 bar (4 ... 29 psi)
Port size: 1/4"



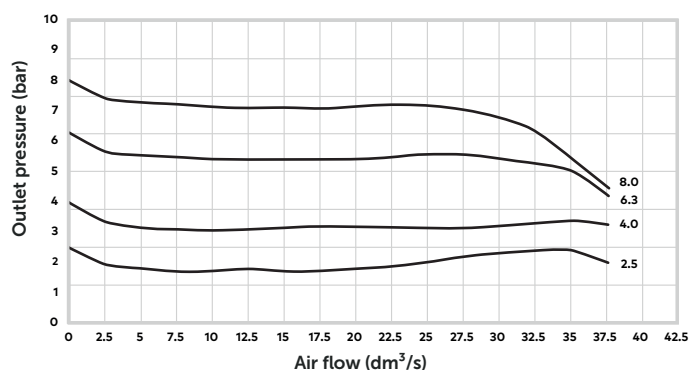
Inlet pressure: 10 bar (145 psi)
Range: 0.3 ... 10 bar (4 ... 145 psi)
Port size: 1/4"



Inlet pressure: 10 bar (145 psi)
Range: 0.3...7 bar (4 ... 101 psi)
Port size: 1/4"



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



Accessories

Quickclamp



Page 3

820014-51KIT

Quickclamp with bracket assembled



Page 3

820014-52KIT

Neck mounting bracket and panel nut



Page 4

820068-51KIT

Panel mounting nut



Page 4

820048-89KIT

Mounting bracket



Page 4

820024-50KIT

Integrated gauge
10 bar gauge



820073-01KIT

Integrated gauge
20 bar gauge



820073-02KIT

Integrated gauge
4 bar gauge



820073-03KIT

Gauge adaptor kit
1/8 PTF



820143-01KIT

Gauge adaptor kit
R 1/8



820143-02KIT

Pressure sensing block
1/4 PTF



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820016-50KIT

Pressure sensing block
G1/4



Page 4

820016-51KIT

Porting block
3/8" PTF



Page 4

820028-50KIT

Porting block
G3/8



Page 4

820028-53KIT

Pressure switch interface block
(18D pressure switch) G1/4



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Pressure switch 18D
(0,5 ... 8bar) *1



Page 5

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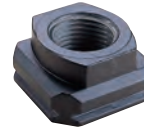
Digital pressure switch
51D (-1 ... 10 bar) *2



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Port Adaptors



Page 5

1/4 PTF 820015-02KIT

3/8 PTF 820015-03KIT

G1/4 820015-08KIT

G3/8 820015-09KIT

Note : Quantity 1 per KIT

Service Kits

R82 / B82
Elastomere kit



FRLB82-Kit

*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

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

(bar) *3)	(MPa)	(psi)	Ø	Thread size	Model
0 ... 6	0 ... 0,6	0 ... 84	40 mm	R1/8	18-015-885
0 ... 10	0 ... 1	0 ... 145	40 mm	R1/8	18-015-989
0 ... 25	0 ... 2,5	0 ... 362	40 mm	R1/8	18-015-908

*3) primary scale

Padlock



840055-01KIT

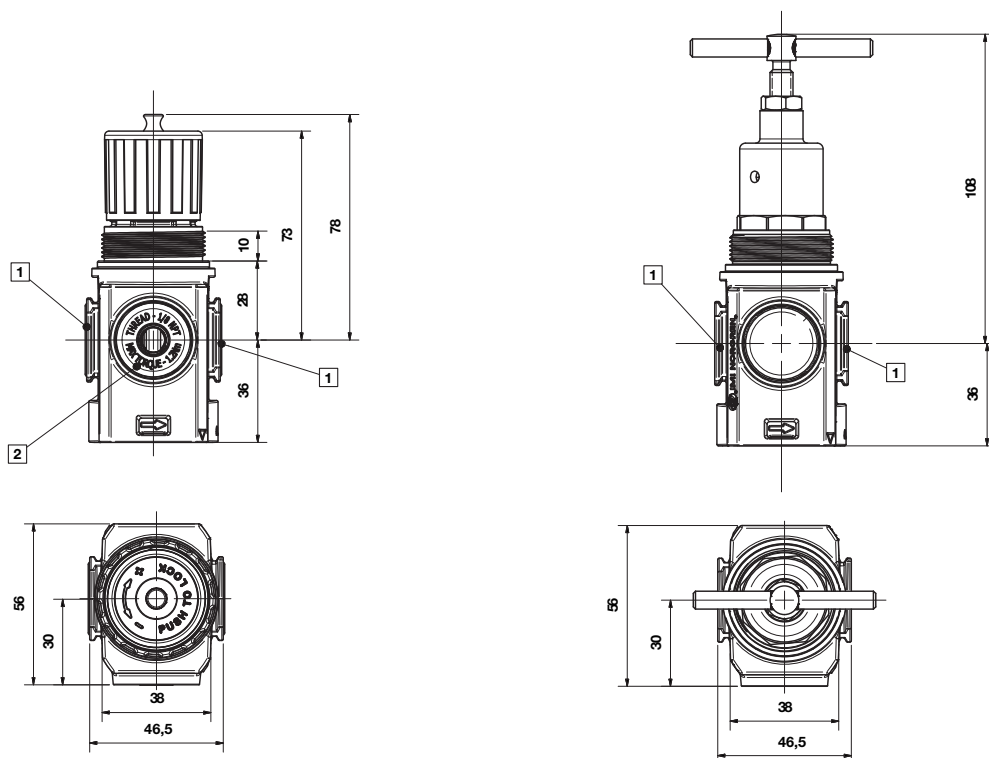
Lockout device



840055-02KIT

Dimensions

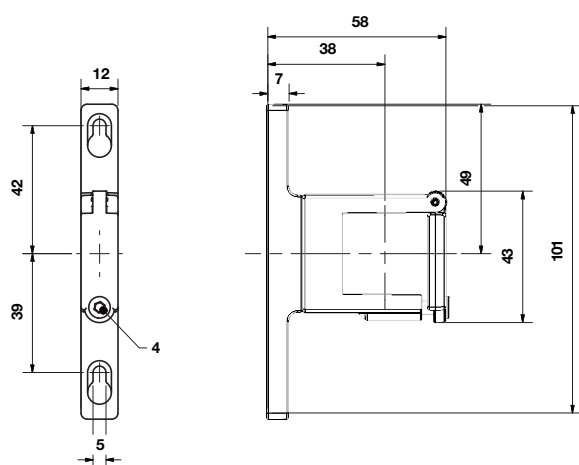
Dimensions in mm
Projection/First angle



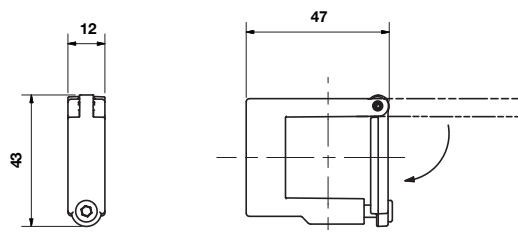
- 1 Main ports 1/4", 3/8", (ISO G/PTF)
- 2 Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports

Accessories

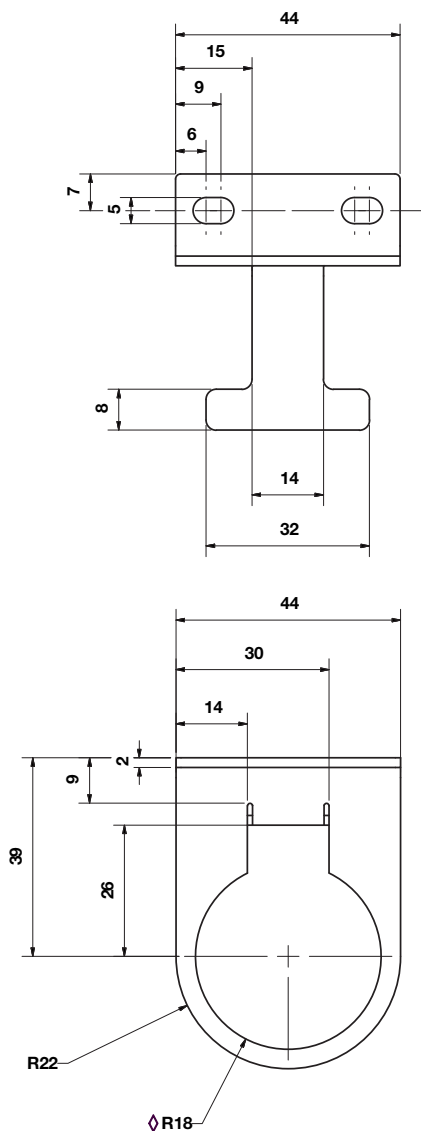
Quikclamp with wall bracket



Quikclamp

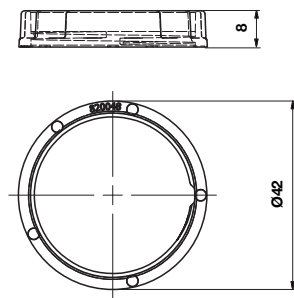


Neck mounting bracket



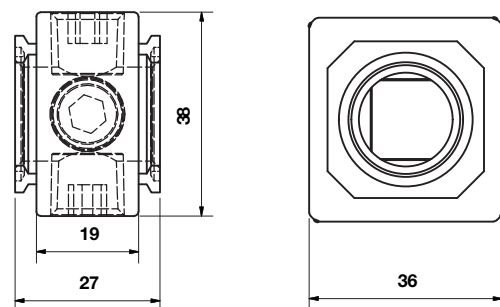
Panel mounting nut

Dimensions in mm
Projection/First angle

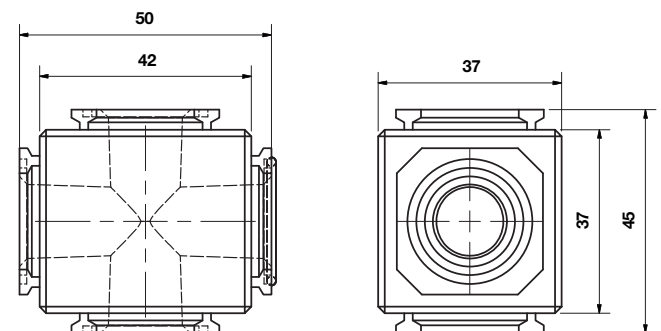


Recommended panel hole size:
ø 36.25 ... 36.75 mm
Panel thickness:
up to 4mm

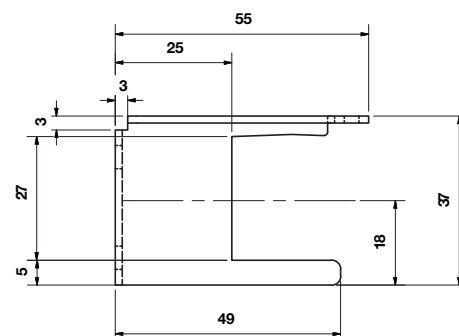
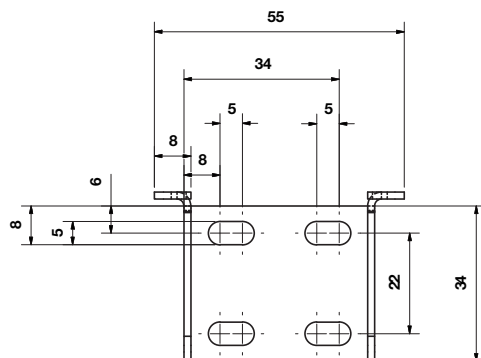
Pressure sensing block



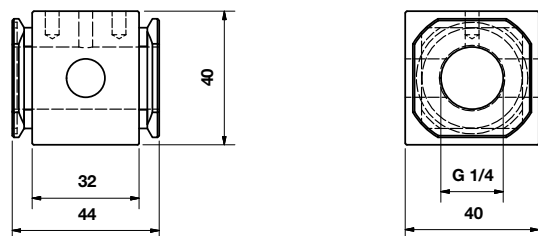
Porting block



Wall Mounting bracket

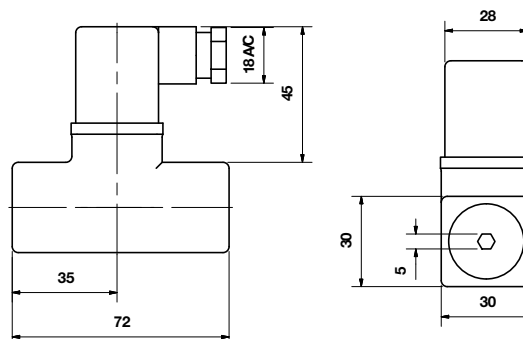


Porting block

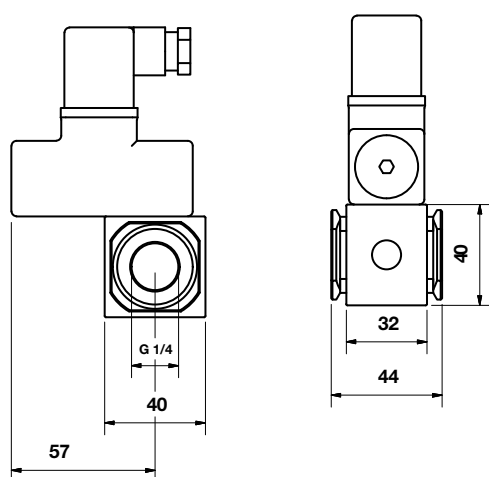


18D Pressure switch

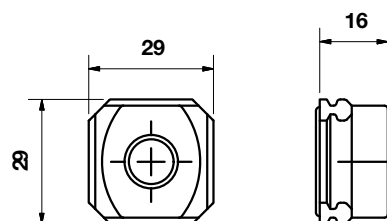
Dimensions in mm
Projection/First angle



18D Porting block and 18D assembled

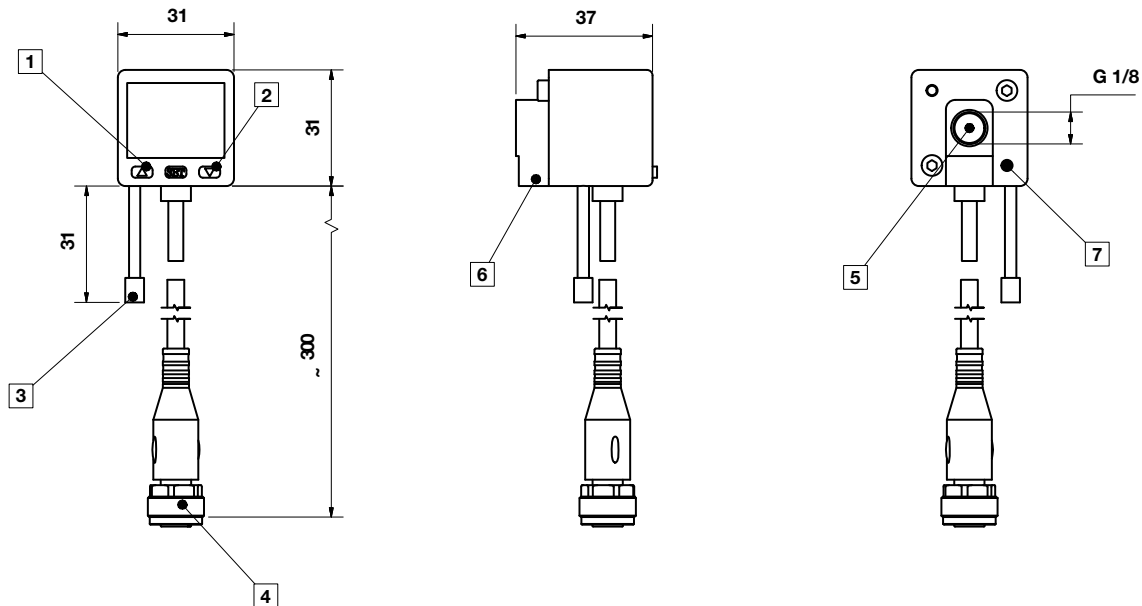


Pipe adaptor



51D Pressure switch - digital

Dimensions in mm
Projection/First angle



- 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 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.