R82G, R82R -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
- Ex 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 dm^3/s (port size: 1/4") and 31 dm^3/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).

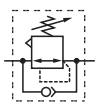
Atex:
Regulators R82 are in conformity with Atex 2014/34/EU
Ex II 2 GD
Ex h IIC T6 Gb
EX h IIIC T85°C Db

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

Technical data R82R - Reverse flow

Symbol	Port size	Pressure range (bar)	Adjustment	Weight (kg)	Model *1)
	G1/4	0,3 ... 10	Knob	0,23	R82R-2GK-RMN
	G3/8	0,3 ... 10	Knob	0,23	R82R-3GK-RMN

*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.

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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

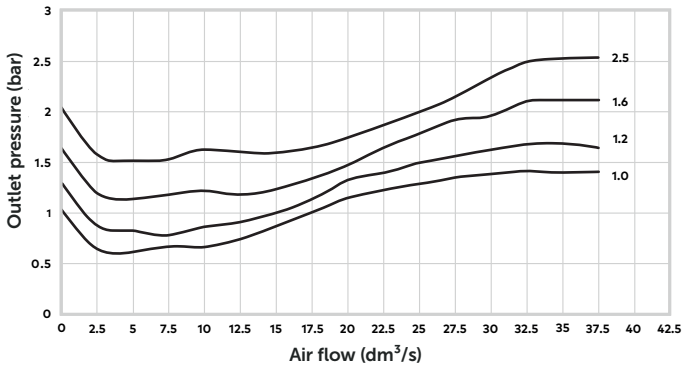
*1) All models shown here are applicable for flow direction left to right.
With flow direction right to left please use the online configurator
www.norgren.com/en/support/configurators/air-preparation-configurator or contact Norgren.

*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.

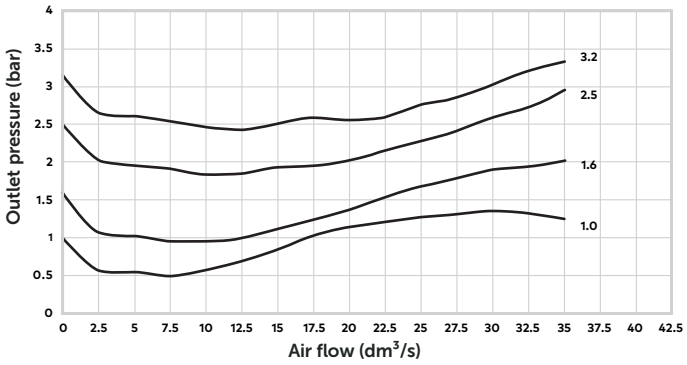
*3) Outlet pressure can be adjusted to pressures in excess of, and less than, those specified. Do not use these units to control pressures outside of the specified ranges.

Flow characteristics

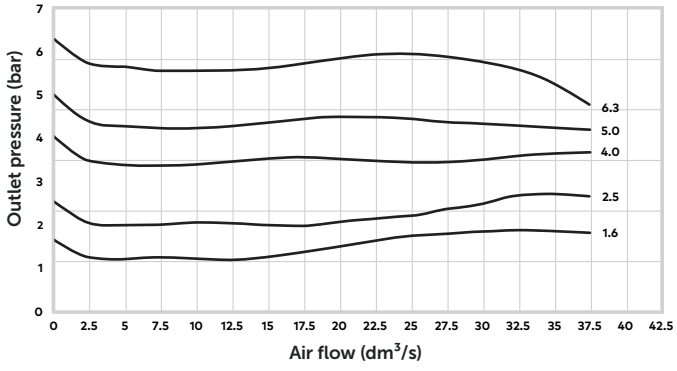
Inlet pressure: 10 bar (145 psi)
Range: 0.3 ... 2 bar (4 ... 29 psi)
Port size: 1/4"



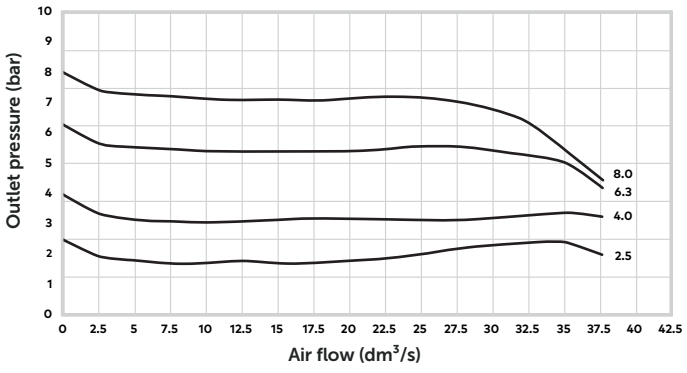
Inlet pressure: 10 bar (145 psi)
Range: 0.3 ... 10 bar (4 ... 145 psi)
Port size: 1/4"



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"



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Accessories

Quikclamp



Page 3

820014-51KIT

Quikclamp 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



Page 4

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



Page 5

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



Page 5

0881300

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



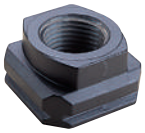
Page 5

0860810

*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

Service Kits

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

R82 / B82 Elastomere kit



FRLB82-Kit

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

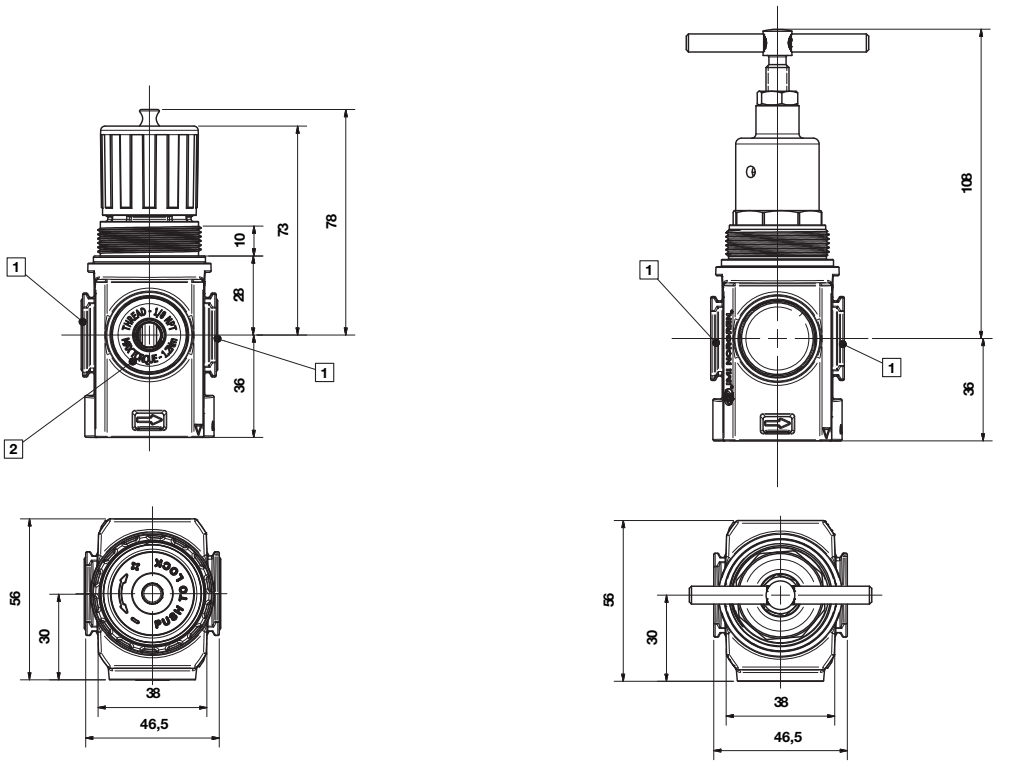


840055-02KIT

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Dimensions

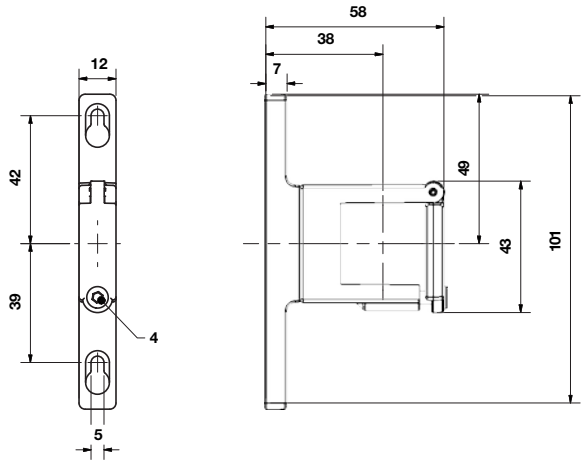
Dimensions in mm
Projection/First angle



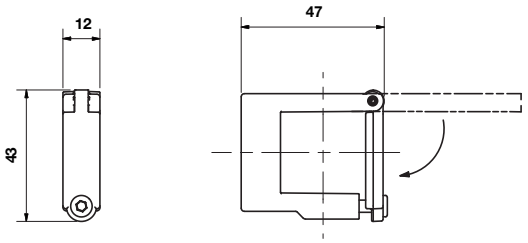
1 Main ports 1/4", 3/8", (ISO G/PTF)
2 Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports

Accessories

Quikclamp with wall bracket

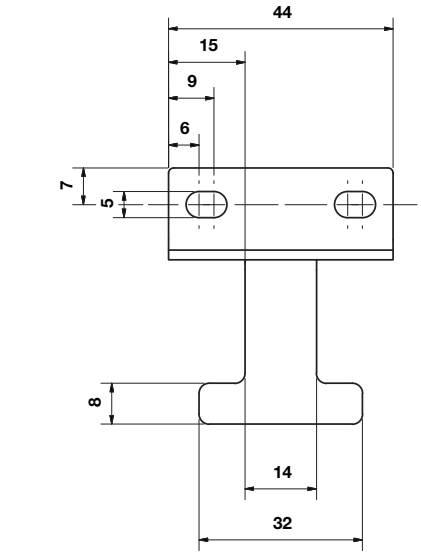


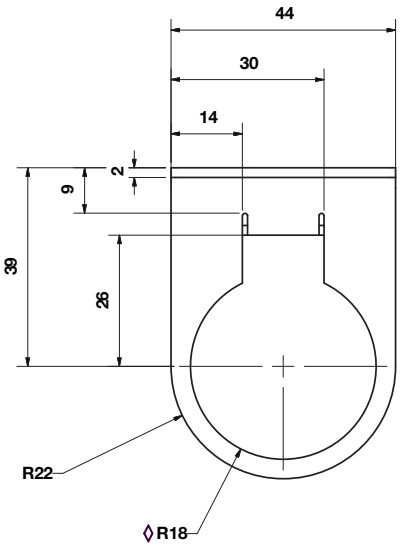
Quikclamp



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Neck mounting bracket

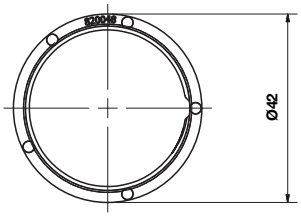




Panel mounting nut

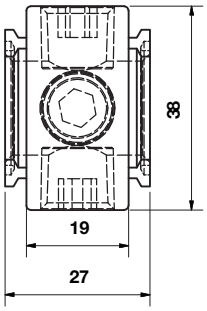
Dimensions in mm
Projection/First angle

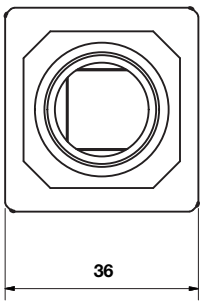




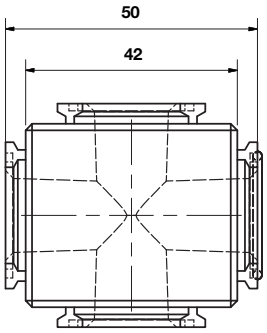
Recommended panel hole size:
ø 36.25 ... 36.75 mm
Panel thickness:
up to 4mm

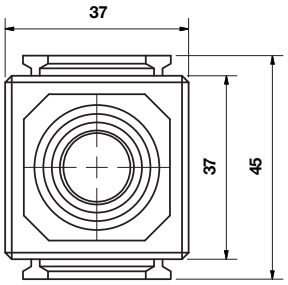
Pressure sensing block



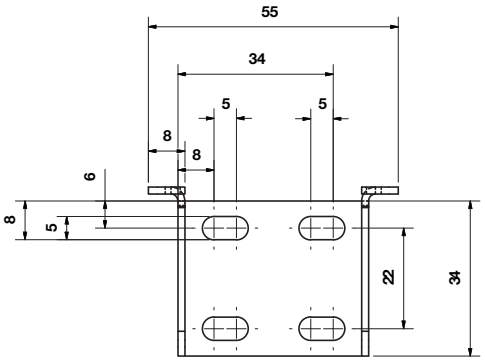


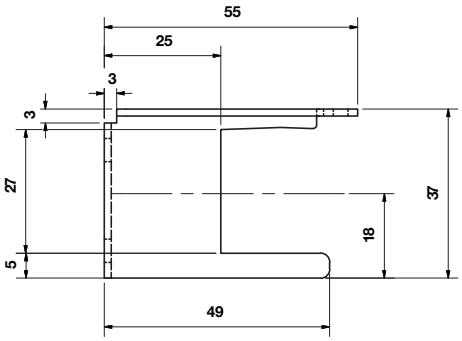
Porting block





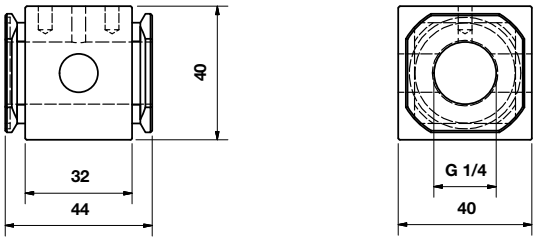
Wall Mounting bracket





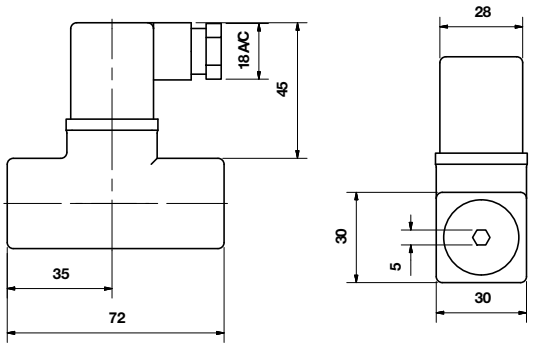
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Porting block

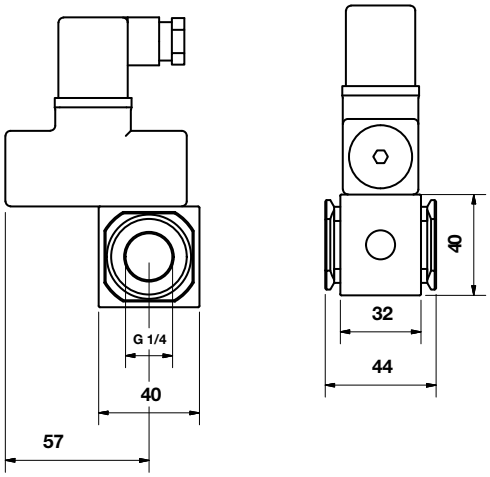


18D Pressure switch

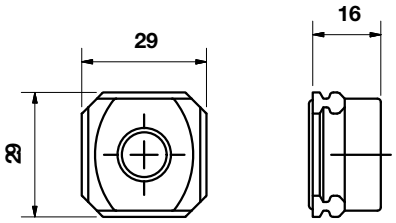
Dimensions in mm
Projection/First angle



18D Porting block and 18D assembled



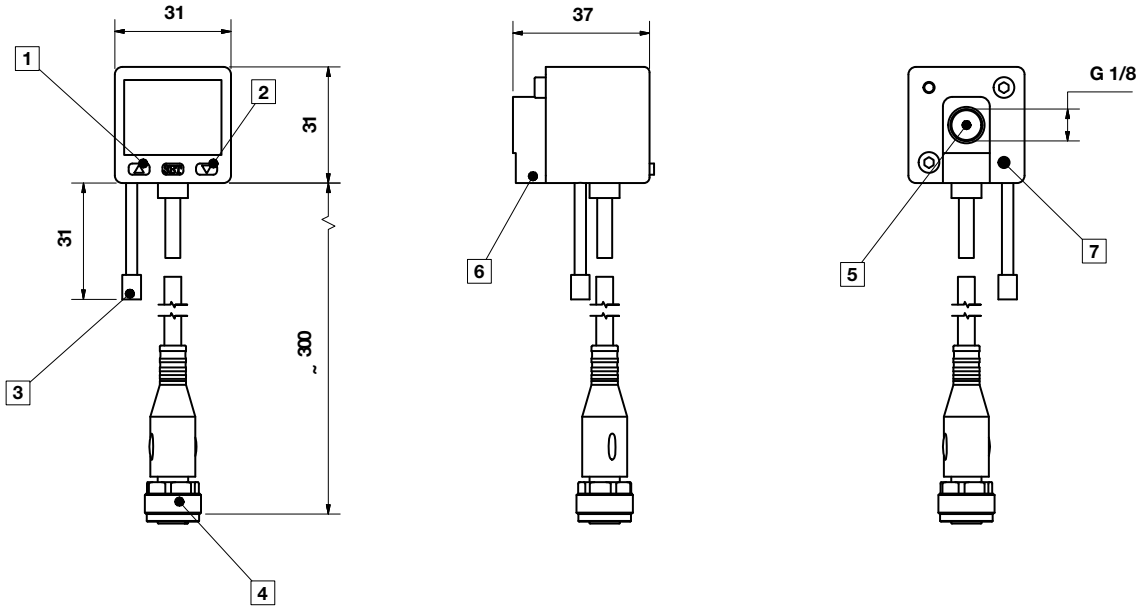
Pipe adaptor



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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.

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