

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



Technical features

<p>Medium: Compressed air only</p> <p>Maximum supply pressure: 20 bar (290 psi)</p> <p>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)</p> <p>Gauge: Integrated as standard Gauge port 1/8 as option</p>	<p>Port size: G1/4, G3/8, 1/4 PTF, 3/8 PTF</p> <p>Diaphragm Type: Relieving (Standard) Non-relieving (Optional)</p> <p>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.</p>	<p>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).</p> <p>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</p>	<p>Materials: Body: Die cast aluminium Body covers: ABS Bonnet: POM/Aluminium Valve: PP Elastomers: NBR</p>
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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.

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.

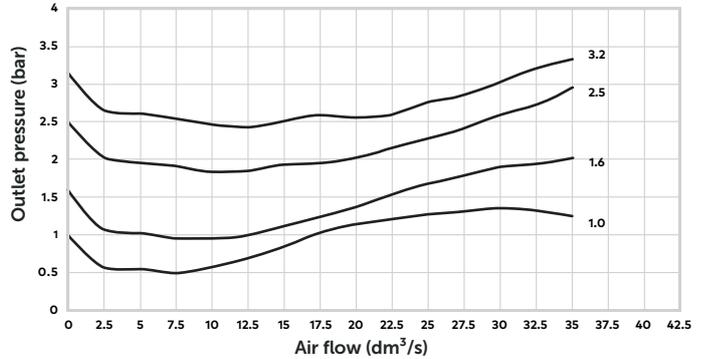
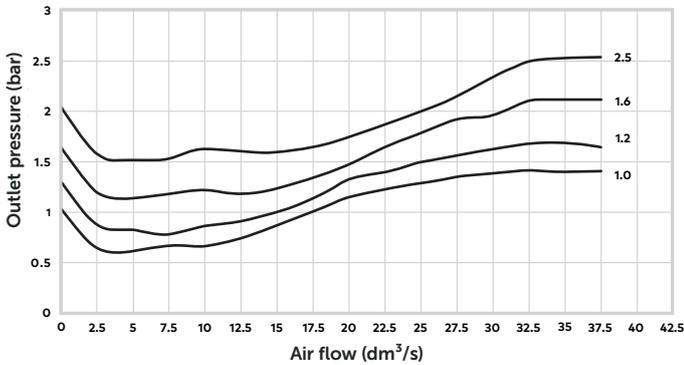
*2) Units with 17 bar outlet pressure range are available only with the T-bar adjustment; therefore substitute T at the 7th position and S at the 9th position. T-bar handle only available with 17 bar option.

*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

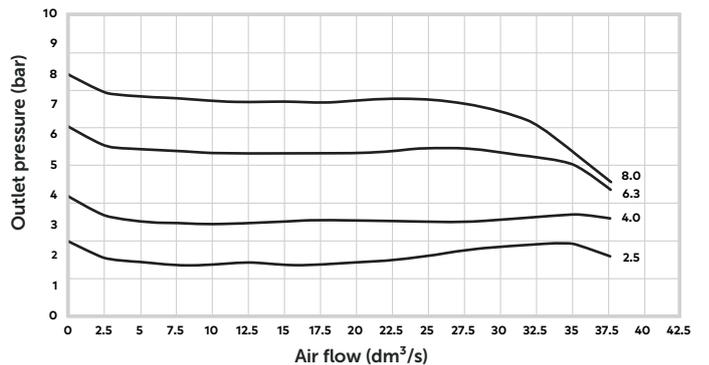
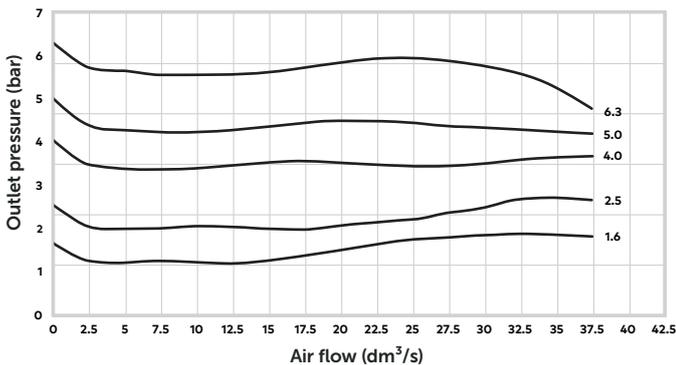
Inlet pressure: 10 bar (145 psi)
Range: 0.3 ... 2 bar (4 ... 29 psi)
Port size: 1/4"

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

<p>Quikclamp</p> <p>Page 3</p> <p>820014-51KIT</p>	<p>Quikclamp with bracket assembled</p> <p>Page 3</p> <p>820014-52KIT</p>	<p>Neck mounting bracket and panel nut</p> <p>Page 4</p> <p>820068-51KIT</p>	<p>Panel mounting nut</p> <p>Page 4</p> <p>820048-89KIT</p>	<p>Mounting bracket</p> <p>Page 4</p> <p>820024-50KIT</p>								
<p>Integrated gauge 10 bar gauge</p> <p>820073-01KIT</p>	<p>Integrated gauge 20 bar gauge</p> <p>820073-02KIT</p>	<p>Integrated gauge 4 bar gauge</p> <p>820073-03KIT</p>	<p>Gauge adaptor kit 1/8 PTF</p> <p>820143-01KIT</p>	<p>Gauge adaptor kit R 1/8</p> <p>820143-02KIT</p>								
<p>Pressure sensing block 1/4 PTF</p> <p>Page 4</p> <p>820016-50KIT</p>	<p>Pressure sensing block G1/4</p> <p>Page 4</p> <p>820016-51KIT</p>	<p>Porting block 3/8" PTF</p> <p>Page 4</p> <p>820028-50KIT</p>	<p>Porting block G3/8</p> <p>Page 4</p> <p>820028-53KIT</p>	<p>Pressure switch interface block (18D pressure switch) G1/4</p> <p>Page 5</p> <p>0523109000000000</p>								
<p>Pressure switch 18D (0,5 ... 8bar) *1</p> <p>Page 5</p> <p>0881300</p>	<p>Digital pressure switch 51D (-1 ... 10 bar) *2</p> <p>Page 5</p> <p>0860810</p>	<p>Port Adaptors</p> <p>Page 5</p> <table border="1"> <tr> <td>1/4 PTF</td> <td>820015-02KIT</td> </tr> <tr> <td>3/8 PTF</td> <td>820015-03KIT</td> </tr> <tr> <td>G1/4</td> <td>820015-08KIT</td> </tr> <tr> <td>G3/8</td> <td>820015-09KIT</td> </tr> </table> <p>Note : Quantity 1 per KIT</p>		1/4 PTF	820015-02KIT	3/8 PTF	820015-03KIT	G1/4	820015-08KIT	G3/8	820015-09KIT	<p>Service Kits</p> <p>R82 / B82 Elastomere kit</p> <p>FRLB82-Kit</p>
1/4 PTF	820015-02KIT											
3/8 PTF	820015-03KIT											
G1/4	820015-08KIT											
G3/8	820015-09KIT											

*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)

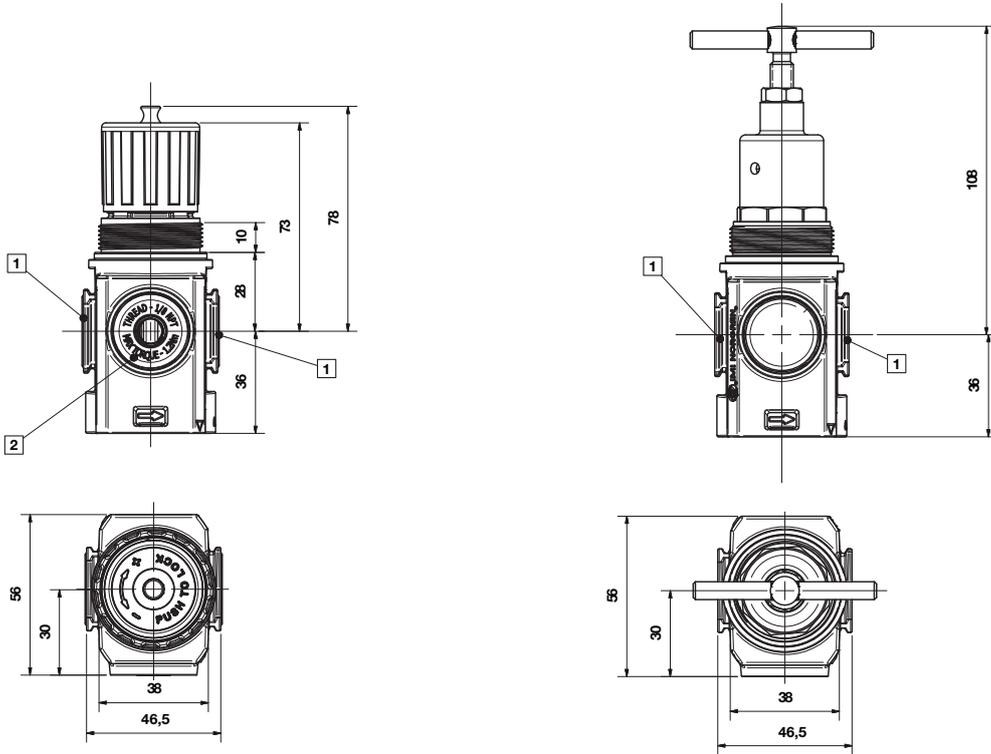
Pressure range		(psi)	ø	Thread size	Model
(bar) *3)	(MPa)				
0 ... 6	0 ... 0,6	0 ... 84	40 mm	R1/8	18-015-885
0 ... 10	0 ... 1	0 ... 145	40 mm	R1/8	18-015-989
0 ... 25	0 ... 2,5	0 ... 362	40 mm	R1/8	18-015-908

*3) primary scale

<p>Padlock</p> <p>840055-01KIT</p>	<p>Lockout device</p> <p>840055-02KIT</p>
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Dimensions

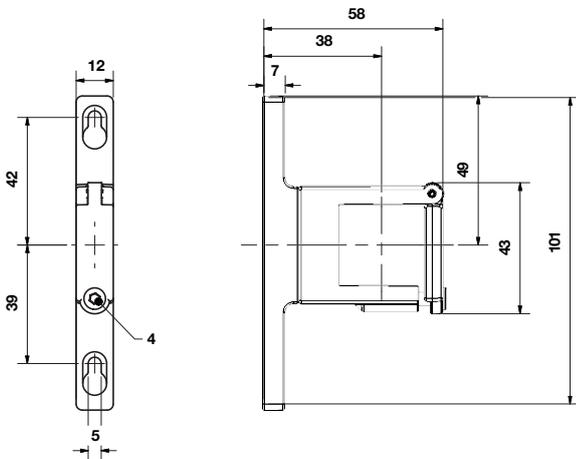
Dimensions in mm
Projection/First angle



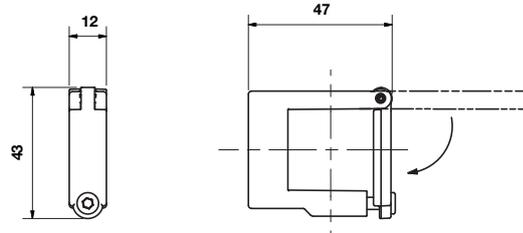
- 1 Main ports 1/4", 3/8", (ISO G/PTF)
- 2 Gauge port Rc 1/8 for ISO G and 1/8 PTF for PTF main ports

Accessories

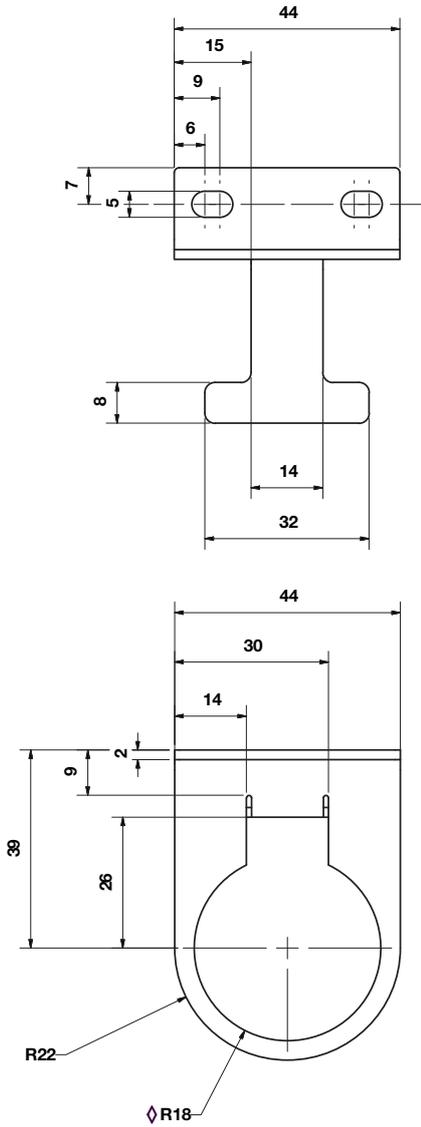
Quikclamp with wall bracket



Quikclamp

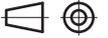
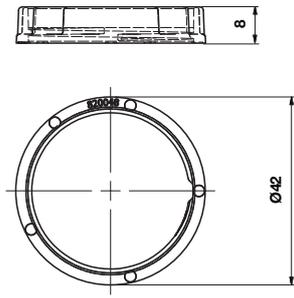


Neck mounting bracket



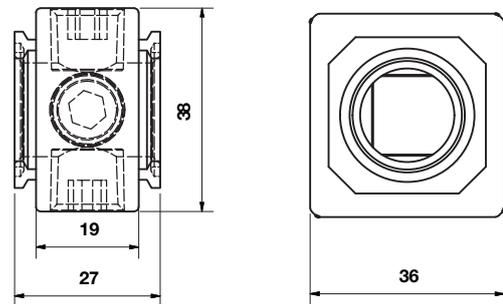
Panel mounting nut

Dimensions in mm
Projection/First angle

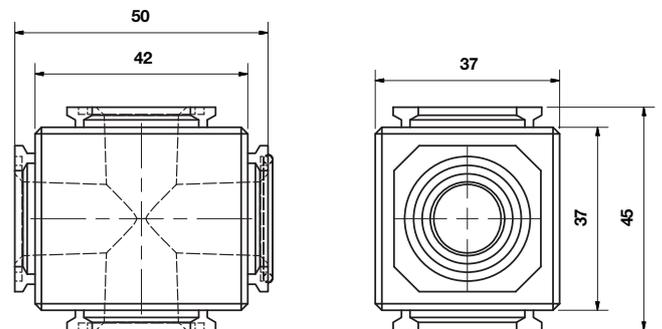


Recommended panel hole size:
ø 36.25 ... 36.75 mm
Panel thickness:
up to 4mm

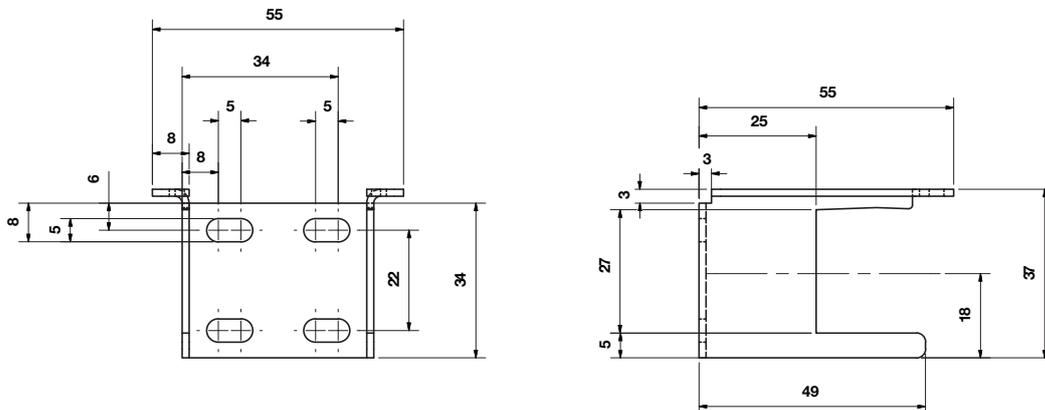
Pressure sensing block



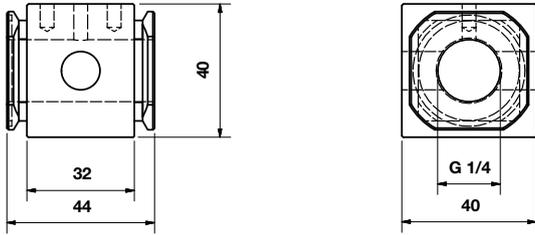
Porting block



Wall Mounting bracket

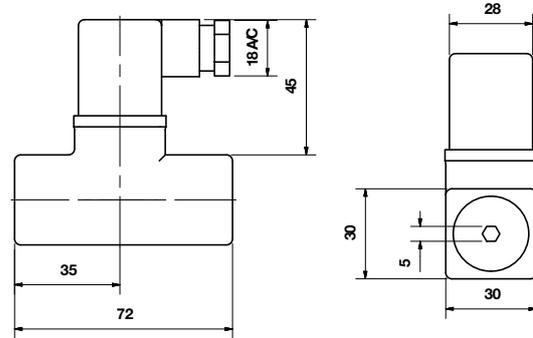


Porting block

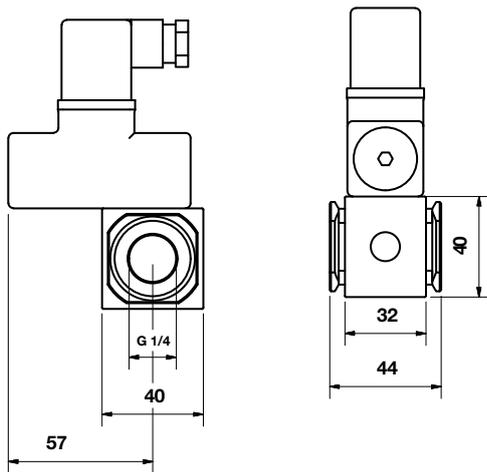


18D Pressure switch

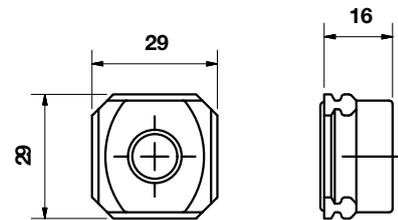
Dimensions in mm
Projection/First angle



18D Porting block and 18D assembled

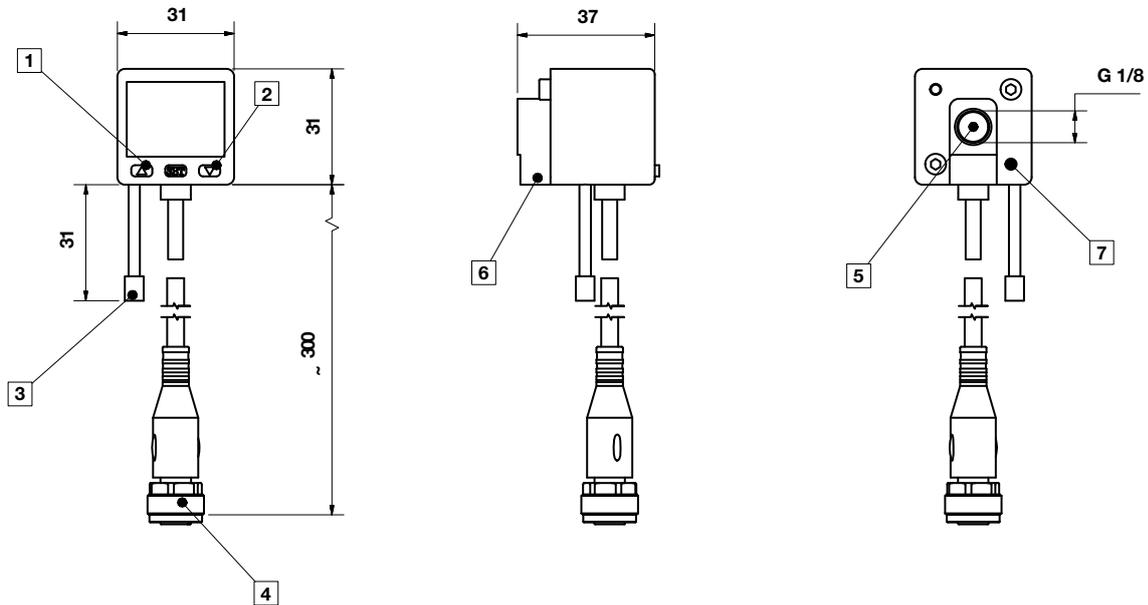


Pipe adaptor



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.