11-818
Precision pressure regulator



- Port size: G1/4
- Precision instruments with integral pilot to ensure very close pressure control in a compact form
- Panel mounting facility

Note: Not recommended for dead-end applications

Technical features

Medium:
Compressed air
Note: 5 µm prefiltration and oil-free are required!

Maximum inlet pressure:
LP: 8 bar (116 psi)
NP: 10 bar (145 psi)
HP: 14 bar (203 psi)

Flow:
See diagrams on page 2

Relieving:
Standard

Pressure range:
NP: 0,07 ... 4 bar (1 ... 58 psi)
LP: 0,02 ... 0,5 bar (0,2 ... 7 psi)
HP: 0,4 ... 10 bar (5,8 ... 145 psi)

Port size:
G1/4

Gauge port:
See table below

Standard compliances:
II 2G Ex h IIC T6 Gb
II 2D Ex h IIIC T85° Db

Ambient/Media temperature:
0 ... +70°C (+32° ... +158°F)
Version with gauge:
0 ... +65°C (+32° ... +149°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F).

Maximum bleed flow at :
LP - 6.9 bar (100 psig) : 0,013 dm^3/s (0.03 scfm)
NP - 6.9 bar (100 psig) : 0,013 dm^3/s (0.03 scfm)
HP - 13.8 bar (200 psig) : 0,027 dm^3/s (0.06 scfm)
Maximum bleed rate occurs under dead-end (no flow) conditions.

Materials:
Body & bonnet: Zinc alloy
Adjusting knob: Acetal resin
Elastomers: NBR

Technical data, standard models

Symbol	Port size	Pressure range (bar)	Accuracy (bar) *1)	Relieving	Gauge port	Tamper proof adjusting screw	Weight (kg)	Model
	G1/4	0,02 ... 0,5 (low)	0,01	Standard	–	–	0,64	11-818-999
	G1/4	0,02 ... 0,5 (low)	0,01	Standard	–	Standard	0,64	11-818-998
	G1/4	0,07 ... 4 (standard)	0,03	Standard	–	–	0,64	11-818-100
	G1/4	0,07 ... 4 (standard)	0,03	Standard	–	Standard	0,64	11-818-101
	G1/4	0,4 ... 10 (high)	0,05	Standard	–	–	0,64	11-818-110
	G1/4	0,02 ... 0,5 (low)	0,01	Standard	R1/4	–	0,64	11-818-987
	G1/4	0,07 ... 4 (standard)	0,03	Standard	R1/4	–	0,64	11-818-993
	G1/4	0,4 ... 10 (high)	0,05	Standard	R1/4	–	0,64	11-818-991

*1) Typical mid-range variance from set pressure with 7 bar inlet at 2 dm^3/s

Note: 11-818 is not a constant bleed device, when being used under flow conditions no air is consumed.
Air bleed is only effective under zero flow conditions as in a dead end application.

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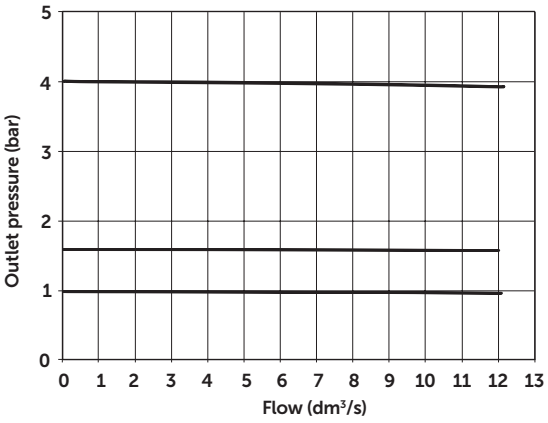
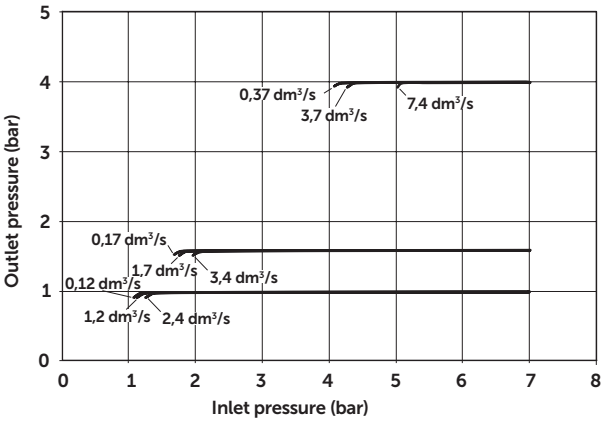
Flow characteristics

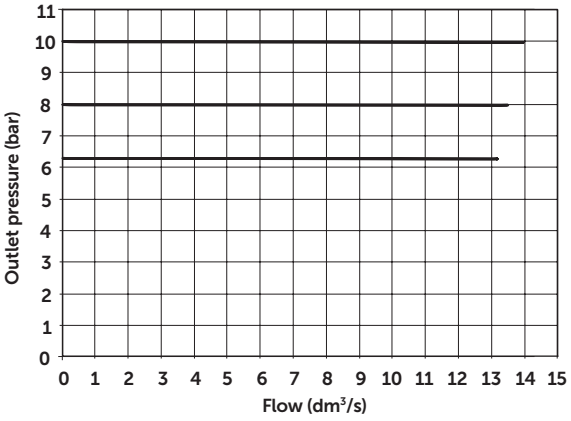
Regulating characteristics

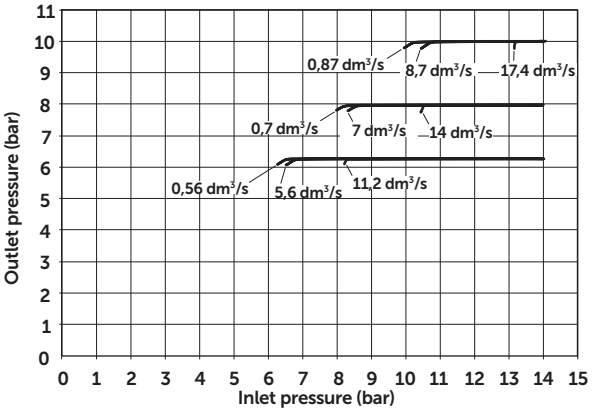
Standard pressure version:
Inlet pressure 7 bar (100 psi); pressure range 0,07 ... 4 bar (1 ... 58 psi)



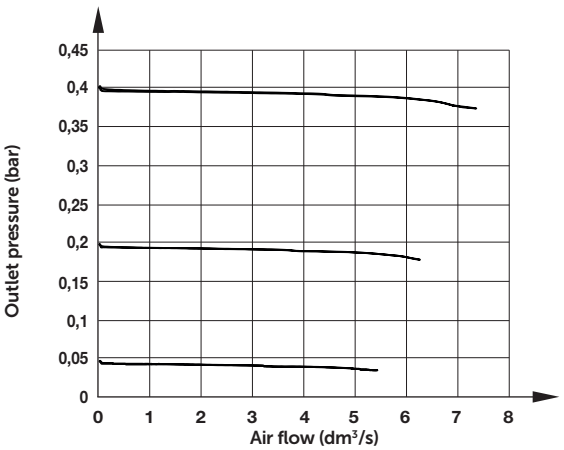


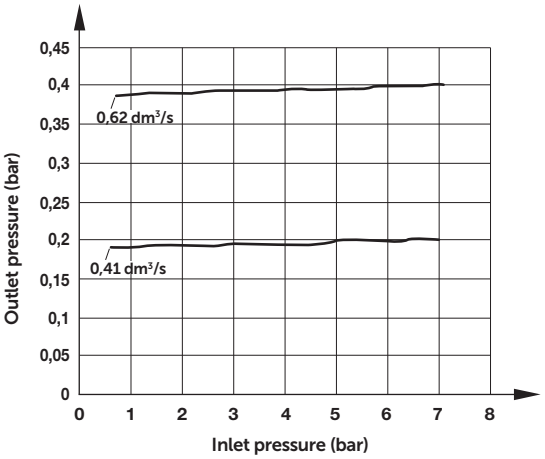
High pressure version:
Inlet pressure 14 bar (200 psi); pressure range 0,4 ... 10 bar (5,8 ... 145 psi)





Low pressure version:
Inlet pressure 7 bar (100 psi); pressure range 0,02 ... 0,5 bar (0,2 ... 7 psi)





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Accessories

Bracket	Gauge Ø 40 mm, Port size R1/8	Concentric reducing adaptors for gauge ports*
		
D50159014	0 ... 1,6 bar: 18-015-991	R1/4-G1/8 150232818
	0 ... 4 bar: 18-015-990	
	0 ... 10 bar: 18-015-989	

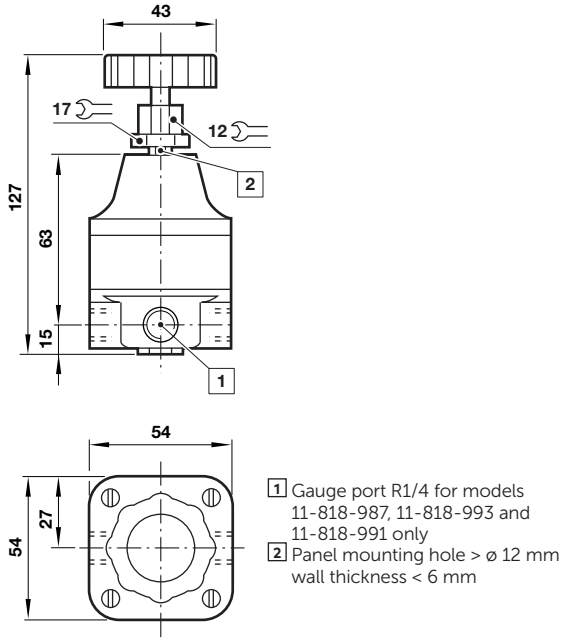
*Required to screw above mentioned gauges into the regulator.

Service kits

Service kits

2787-96 (low pressure)
2787-98 (standard pressure)
2787-97 (high pressure)

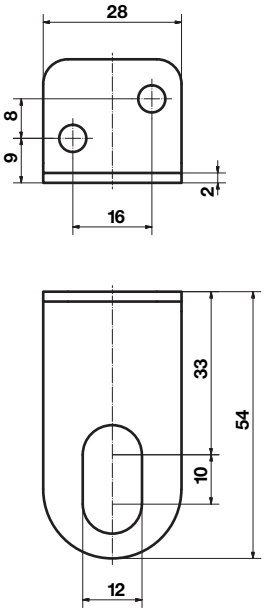
Dimensions



1 Gauge port R1/4 for models 11-818-987, 11-818-993 and 11-818-991 only
2 Panel mounting hole > ø 12 mm wall thickness < 6 mm

Bracket

Dimensions in mm
Projection/First angle



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 Inc.
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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