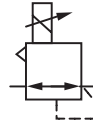


Miniature proportional pressure control valve VP12 G 1/8, 1/8 NPT or manifold

- Compact and flexible design
- Proven low power technology
- Reliable, rugged, open-loop device
- Excellent performance characteristics
- Low power consumption
- Manifold mountable
- Available in 2 and 3 wire



Technical features

Medium:

Compressed air filtered to 5 µm, oil free and dry air

Output (nominal) pressure:

0 ... 1 bar (0 ... 14,5 psi),
0 ... 2 bar (0 ... 30 psi),
0 ... 4 bar (0 ... 58 psi),
0 ... 6 bar (0 ... 90 psi) and
0 ... 8 bar (0 ... 116 psi)

Supply pressure:

At least 1,5 bar above maximum required output pressure

Supply sensitivity:

Less than 0,2 bar/3 psi for
1 bar/15 psi supply pressure
change

Flow capacity:

Up to 200 N l/min
(see characteristic curves)

Air consumption:

≤ 6 bar/90 psi ≤ 3 NU/min (Typical)
8 bar/120 psi ≤ 10 NU/min (Typical)

Response time:

<500 ms (from 0 ... 100% or
<150 ms (from 100 ... 0% of
output pressure into a 10cc load)

Degree of protection:

IP20

Linearity:

< 1,5% of span

Hysteresis and deadband:

< 1% of span

Vibration & shock immunity:

<3% output shift for ± 2 g
15-150 Hz

Fluid/Ambient temperature:

0 ... +60°C

Air supply must be dry enough
to avoid ice formation at
temperatures below +2°C

Temperature effect:

14 mbar max/°C change in
temperature

Weight:

0,20 kg

Materials

Body: zinc casting & nylon
Diaphragms: nitrile

Electrical details

Electrical input signal	2-pin versions 4 to 20 mA or 1 to 10 V 3-pin versions require 12 to 24 V d.c. supply
Electrical power input	24 V d.c. ±10%
Failure mode	Output pressure falls to bleed pressure when electrical supply fails
Loop resistance	2 wire version; 250 Ω max

Option selector

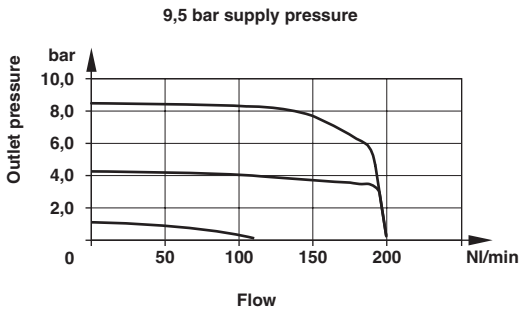
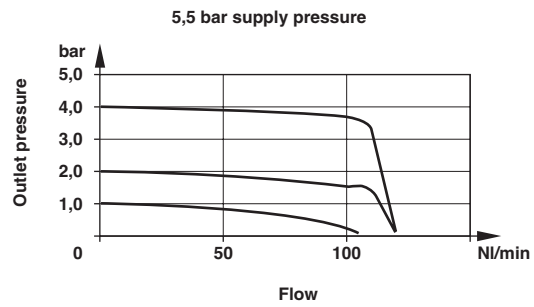
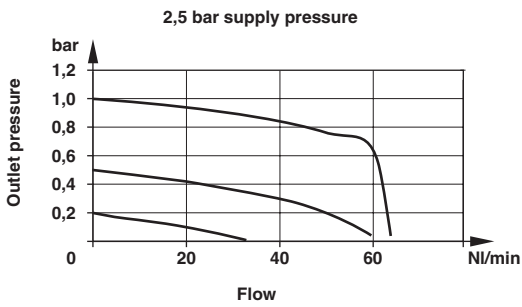
VP12★★★★★0★Q00

Output pressure	Substitute
0 ... 1 bar/15 psi	01
0 ... 2 bar/30 psi	02
0 ... 4 bar/60 psi*	04
0 ... 6 bar/90 psi*	06
0 ... 8 bar/120 psi*	08
Unit for pressure	Substitute
bar	B
psi	P

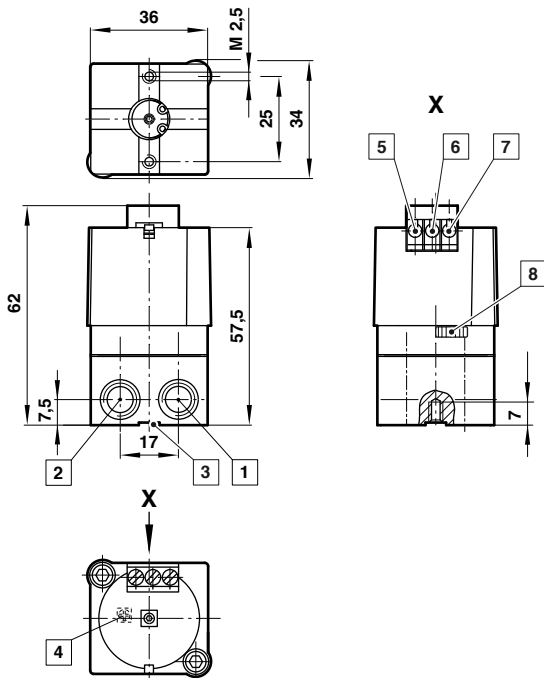
* The models with 4,6 and 8 bar pressure are only available as 3 wire. Options to special order: For options not shown and any specific requirements please contact the Norgren technical department via www.norgren.com/ws

Wire options	Substitute
2	0
3 (24 V d.c. supply)	1
Input signal	Substitute
0 ... 10 V	1
4 ... 20 mA	4
Port size	Substitute
G 1/8	G
NPT 1/8	H
Manifold	X

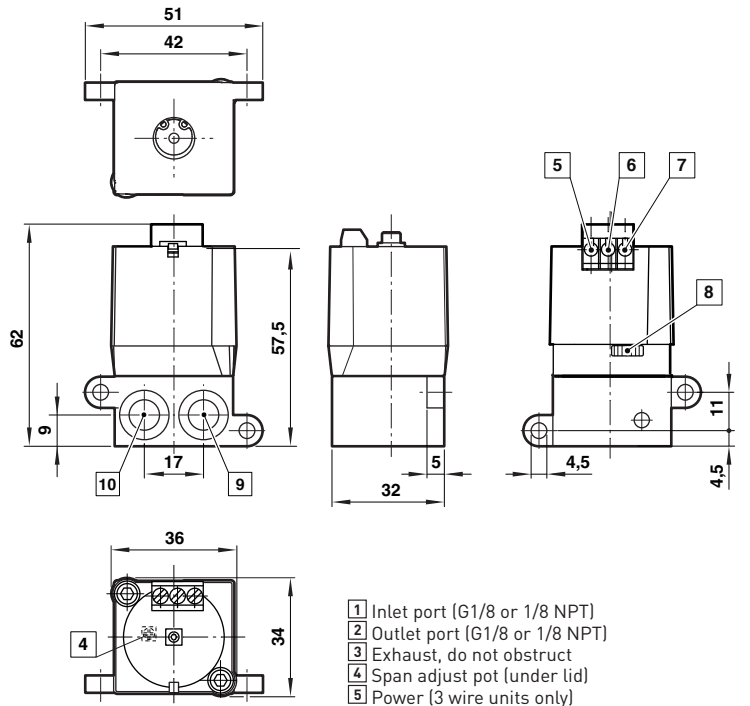
Characteristic curves



Basic dimensions
Standard version



Manifold version



- 1 Inlet port (G1/8 or 1/8 NPT)
- 2 Outlet port (G1/8 or 1/8 NPT)
- 3 Exhaust, do not obstruct
- 4 Span adjust pot (under lid)
- 5 Power (3 wire units only)
- 6 Signal (2 & 3 wire units)
- 7 Common (2 & 3 wire units)
- 8 Adjust zero
- 9 Inlet port (11,1 ID x 1,6 CS O-ring supplied)
- 10 Outlet port (11,1 ID x 1,6 CS O-ring supplied)

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«.

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.

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 pneumatic 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.