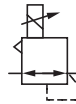


# VP12

## Miniature proportional pressure control valve



- > Port size: 1/8" (ISO G, NPT)
- > 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 (21 psi) 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 Nl/min (Typical)

8 bar/120 psi ≤ 10 Nl/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

#### Ambient/Media temperature:

0 ... +60°C (+32 ... 140°F)

Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F)

#### Temperature effect:

14 mbar max/°C change in temperature

#### Weight:

0,20 kg

#### Materials:

Body: zinc casting & nylon  
Diaphragms: NBR

### Electrical details

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

### Option selector

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

VP12★★★★★0★Q00

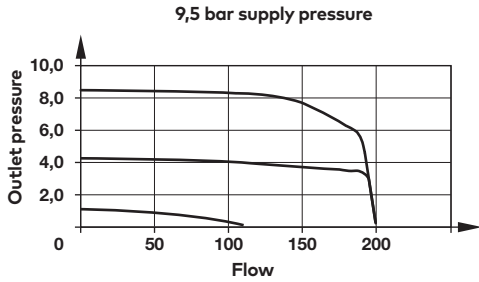
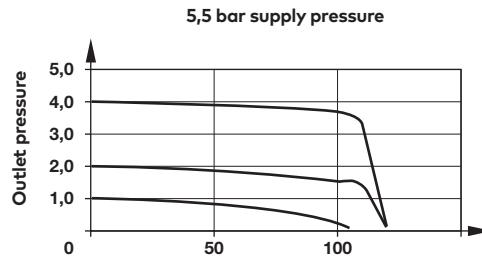
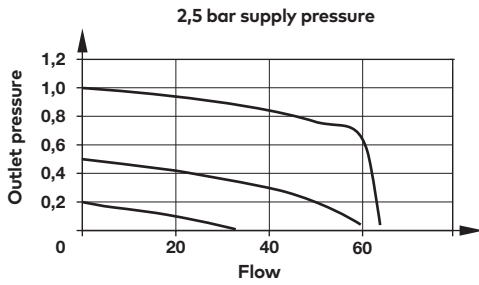
Wire options	Substitute
2	<b>0</b>
3 (24 V d.c. supply)	<b>1</b>
Input signal	Substitute
0 ... 10 V	<b>1</b>
4 ... 20 mA	<b>4</b>
Port size	Substitute
G 1/8	<b>G</b>
NPT 1/8	<b>H</b>
Manifold	<b>X</b>

\* 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](http://www.norgren.com/ws)

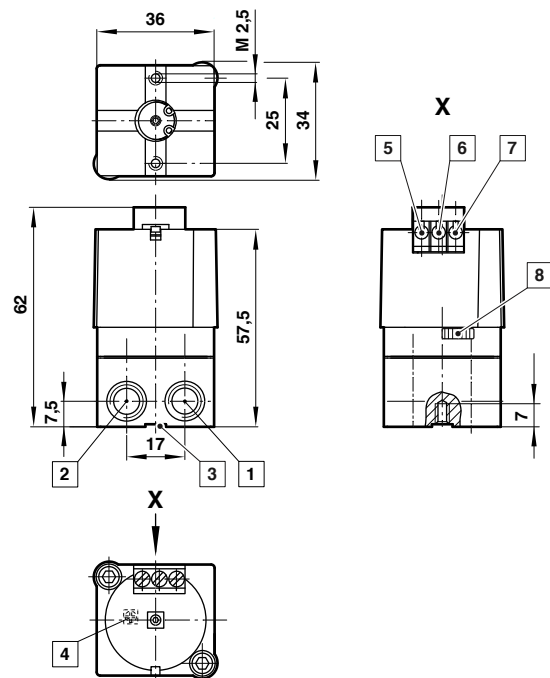
## Characteristic curves



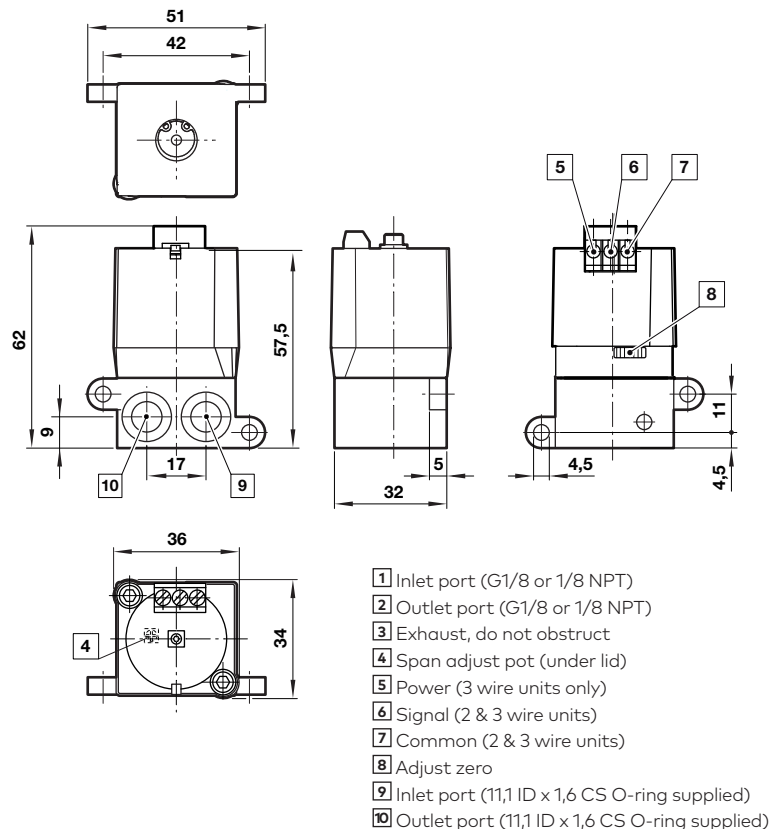
Dimensions in mm  
Projection/First angle



## Basic dimensions Standard version



## Manifold version



## 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 GmbH.

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.