

**Miniature proportional
pressure control valve
G1/8 or 1/8 NPT and manifold
Nominal orifice 0,5**

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 data

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

Output pressure:
0 to 1 bar, 0 to 2 bar, 0 to 4 bar, 0 to 6 bar and
0 to 8 bar (or PSI equivalent)

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

Air consumption:
≤ 6 bar/90 psi = < 3 N l/min typical
8 bar/120 psi = < 10 N l/min typical

Ambient temperature:
0 to +60 °C
Contact our technical service for use below +2°C

Temperature effect:
Typically less than 7 mbar

Response time:
≤ 500 ms from 0 to 100% or
≤ 100 ms from 100 to 0% of output pressure into a
10cc load

Degree of protection:
IP20

Linearity:
< 1,5% of span

Hysteresis:
< 1% of span

Vibration immunity:
< 3% output shift for ± 2 g 15-150 Hz

Weight:
0,20 kg

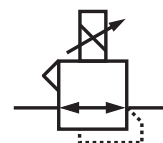
Materials

Body: zinc casting
Diaphragms: nitrile
Spacer: nylon



Electrical parameters
see page 2

Ordering information
see page 2



Electrical parameters

Electromagnetic compatibility	CE marked: conforms to EC requirements EN61000-6-4:2001(Emissions) and EN61000-6-2:1999(Immunity)
Electrical input signal	2-pin versions 4 to 20 mA or 1 to 10 V 3-pin versions requires 12 to 24 V d.c. supply
Electrical power input	24 V d.c. ±10%
Failure mode	Signal fails to bleed pressure when electrical supply fails
Loop resistance	mA = 220 W max., V = 16 kW min.

Options selector

VP12★★★★★0★Q00

Output pressure	Substitute
0 to 1 bar/15 psi	01
0 to 2 bar/30 psi	02
0 to 4 bar/60 psi*	04
0 to 6 bar/90 psi*	06
0 to 8 bar/120 psi*	08

Unit of pressure	Substitute
Bar	B
PSI	P

Wire options	Substitute
2	0
3 (24 V d.c. supply)	1

Control signal	Substitute
0 to 10 V	1
4 to 20 mA	4

Port size	Substitute
G1/8	G
1/8 NPT	H
Manifold optional	X

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

Ordering example 3 wire

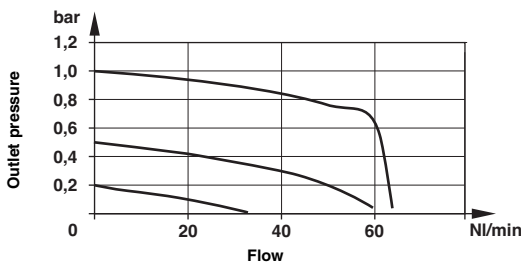
e.g. output pressure: 2 bar,
port size: G1/8, input: 4-20 mA
quote: **VP1202BG401Q00**

Ordering example 2 wire

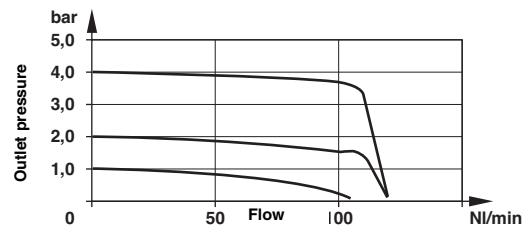
e.g. output pressure: 15 psi,
port size: 1/8" NPT, input: 4-20 mA
quote: **VP1201PH400Q00**

Characteristics curves

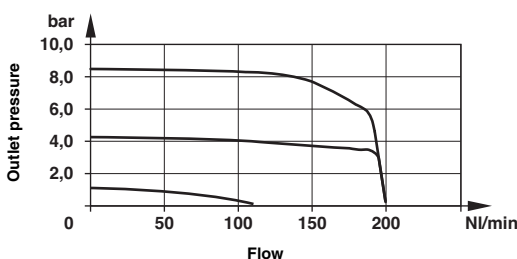
2,5 bar supply pressure



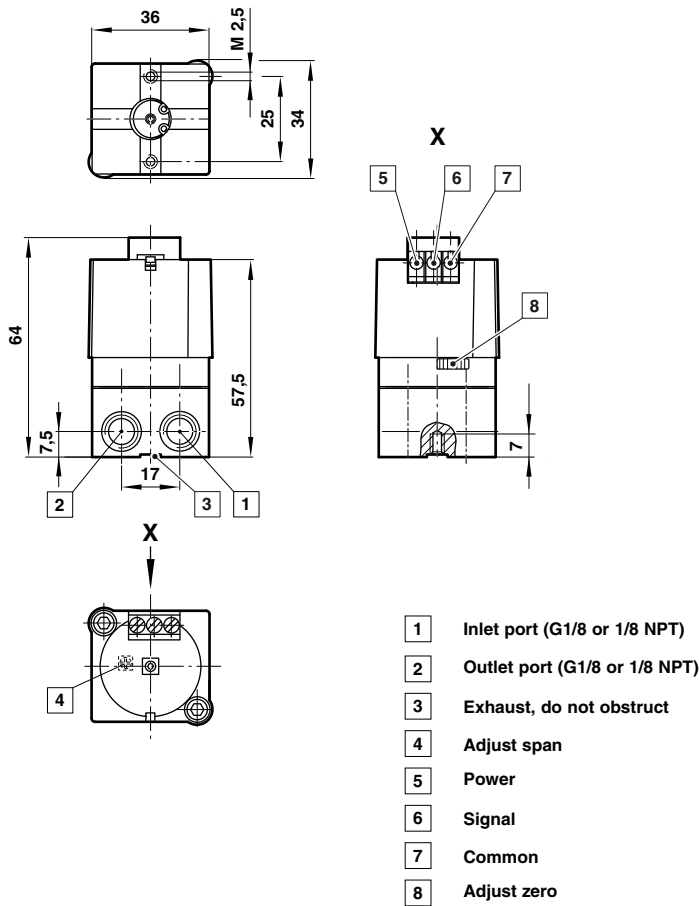
5,5 bar supply pressure



9,5 bar supply pressure



Basic dimension



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 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. 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.