

3 Way Proportional pressure control valve
G 1/4 or 1/4 NPT and manifold
Nominal orifice 4

Closed-loop air piloted proportional pressure control valve

High flow

Excellent performance characteristics

Fast response time

Adjustable gain

Adjustable pressure range

Low power consumption

Feedback signal

Manifold mountable

Technical data

Medium:

Compressed air filtered to 5 µm, dry and non-lubricated

Operation:

Air piloted spool valve with integrated electronic pressure control

Output (nominal) pressure:

0 to 2 bar, 0 to 6 bar, 0 to 10 bar (or PSI equivalent)

Supply pressure:

Minimum 2 bar above maximum output required,
 14 bar max.

Supply sensitivity:

Better than 0,75% span output change per bar supply pressure change

Flow:

Up to 1400 N l/min (see characteristic curves)

Air consumption:

< 5 N l/min

Ambient temperature:

0°C to +50°C

Contact our technical service for use below +2°C

Temperature effect:

Typically better than 0,03% of span/°C for span and zero over operating range

Response time:

< 80 ms (from 10 to 90% of output pressure into a 0,1 litre load)

Degree of protection:

IP65 in normal operation

Linearity:

< 1%

Hysteresis:

< 1%

Vibration immunity:

< 3% output shift for ± 3 g 10-150 Hz

Weight:

0,63 kg

Materials:

Body: aluminium

Lid and end cover: zinc diecast,
 nylon



Electrical parameters

see page 2

Ordering information

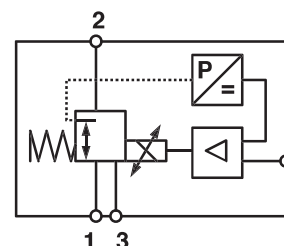
See page 2

Alternative models

ISO 2 manifold version, with adaptor plate

Vacuum version

Low temperature version



Electrical parameters

Electromagnetic compatibility	CE marked: conforms to EC requirements EN 50081-2 (1994) and EN 50082-2 (1995)
Electrical input signal	4 to 20 mA or 0 to 10 V factory set
Electrical power input	24 V d.c. ±25% (power consumption < 1 W)
Output pressure feedback signal	0 ... 10 V full range
Connections	M12x1, 5-pin

Options selector

VP50 ★ ★ ★ ★ ★ 11H00

Control signal	Substitute
0 ... 2 bar/30 psi	02
0 ... 6 bar/90 psi	06
0 ... 10 bar/150 psi	10

Unit for pressure	Substitute
Bar	B
PSI	P

Input signal	Substitute
0 ... 10 V	1
4 ... 20 mA	4

Ports size	Substitute
G 1/4	J
NPT 1/4	K
Manifold	X

Other versions on request

Ordering example

Proportional pressure control valve, output 0-2 bar, port size G1/4, input signal 4 ... 20 mA
 Please note: An wireable straight connector (M12x1, 5-pin) is included
Quote: VP5002BJ411H00

Connecting plugs

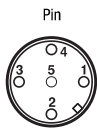
Straight connector M 12 x 1	Elbow connector M 12 x 1
page 7	page 7
0523822 (5-pin, 5 m cable, 5 x 0,34 mm ²)	0250081 (5-pin, 5 m cable, 5 x 0,34 mm ²)
-	0250472 (5-pin, 10 m cable, 5 x 0,34 mm ²)
-	0252543 (5-pin, wireable)

Manifold mount assembly to ISO 2 sub base

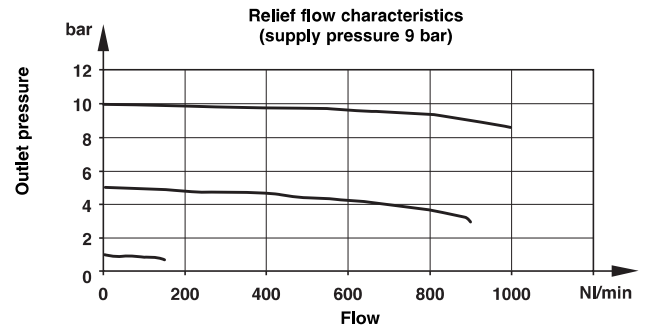
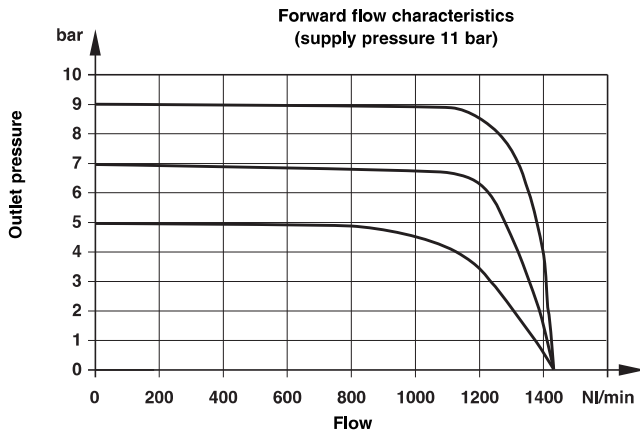
Single manifold
page 4
ZZ5M00
O-rings, flat seal and screws are included

Electrical connector pin looking into the end of the instrument

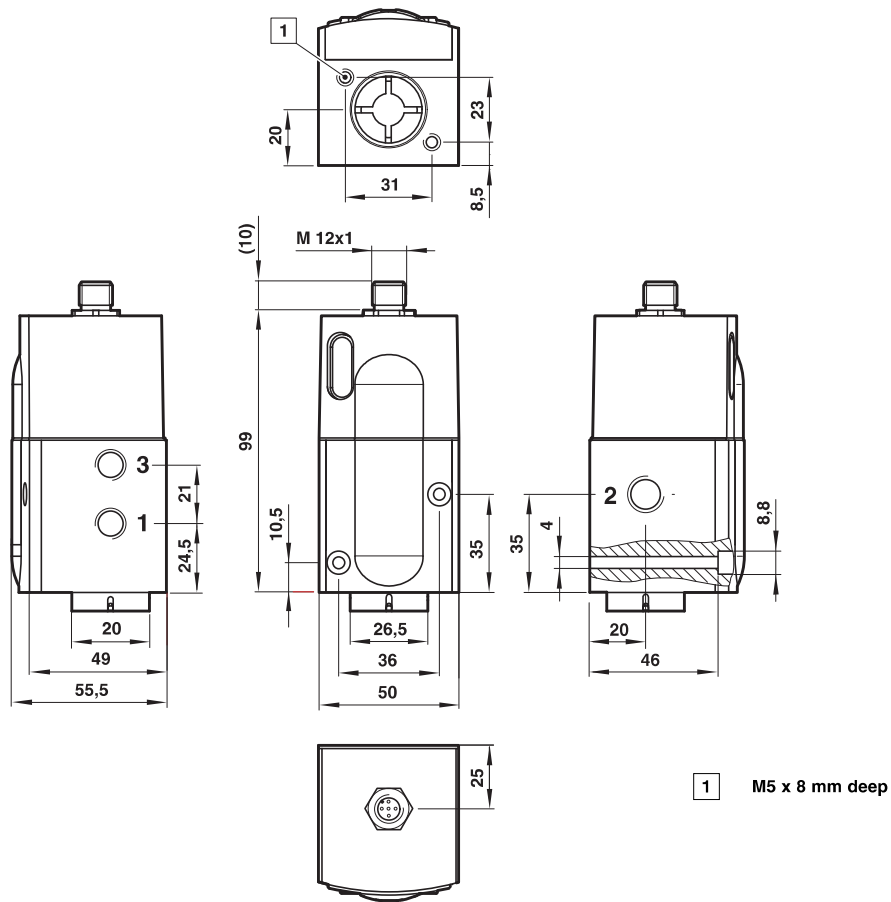
Pin No.	Function
1	+24 V d.c. supply
2	0 ... 10 V feedback
3	Control signal (+VE)
4	Common (supply signal and feedback return)
5	Chassis



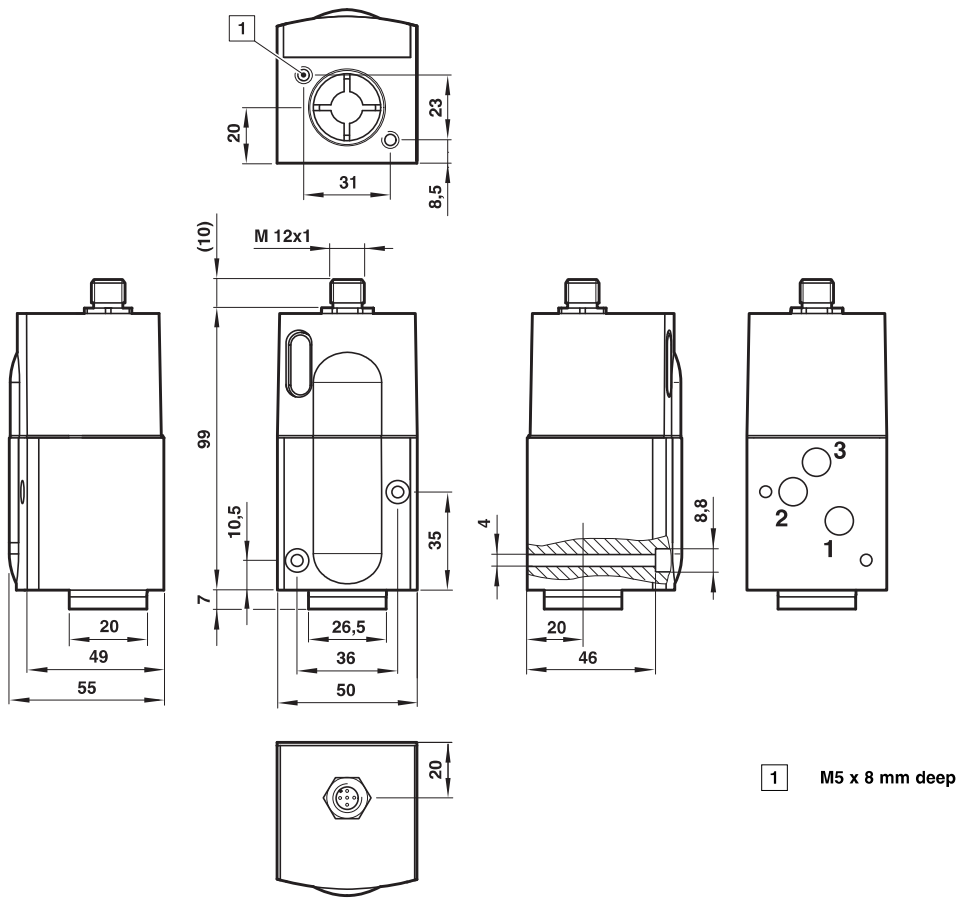
Characteristic curves



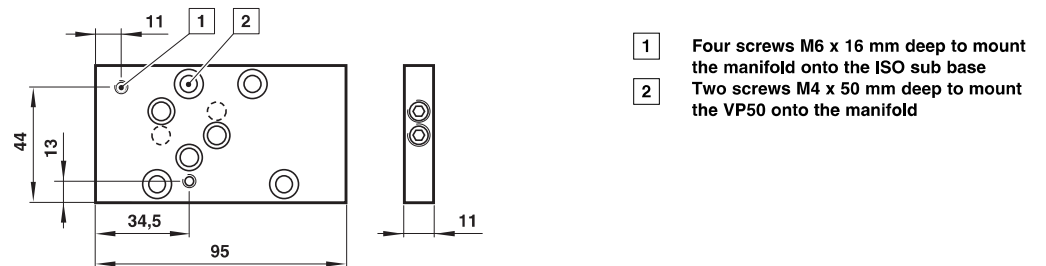
Basic dimensions

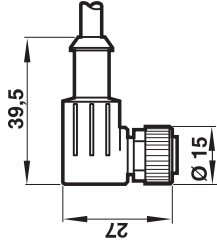


VP50 with manifold surface



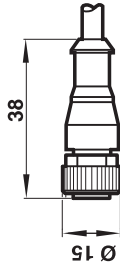
Manifold mount assembly to ISO 2 sub base
Included all seals and screws



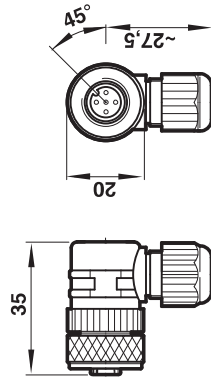
Connector**Connector, 90°**

M12 x 1, 5-pin, female, A coded and
5 m cable length
Model: 0250081

M12 x 1, 5 pin, female, A coded and
10 m cable length
Model: 0250472

**Connector, straight**

M12 x 1, 5 pin, female, A coded and
5 m cable length
Model: 0523822

**Connector, 90°**

M12 x 1, 5 pin, female, A coded
Model: 0252543