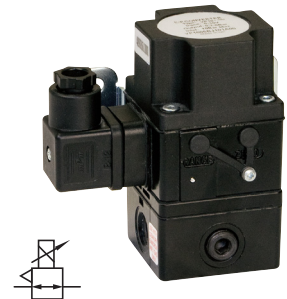


VP10

Proportional pressure control valves



- > Port size: 1/4" (ISO G or NPT)
- > Reliable, rugged, open loop control
- > Proportional I/P and E/P converters
- > Minimum vibration effects
- > IP65 environmental protection
- > Mounting bracket and connector included



Technical features

Medium:

Oil free, dry air, filtered to 5 µm
Output Pressure:
0,2 ... 1 bar (2,9 ... 14 psi)
0,2 ... 2 bar (2,9 ... 29 psi)
0,2 ... 4 bar (2,9 ... 58 psi)
0,2 ... 8 bar (2,9 ... 116 psi)
See ordering options

Supply pressure:

At least 0,7 bar (10 psi) above max. required output pressure.
up to 2 bar (29 psi) instruments:
max 5 bar (72 psi)
up to 8 bar (116 psi) instruments:
max 10 bar (145 psi)

Flow capacity:

> 300NI/min forward & relief flow

Air consumption:

up to 1 bar (1 psi): 2,8 NI/min
up to 2 bar (29 psi): 4,0 NI/min
up to 4 bar (58 psi): 7,5 NI/min

up to 8 bar (116 psi): 9,0 NI/min

Linearity:

≤ 0,5% of span

Hysteresis:

≤ 0,5% of span

Response Time:

<0,35 seconds for 10 ... 90% or 90 ...10% of output pressure into a 10cc load (1 bar range instruments)

Temperature Sensitivity:

< 0,1% of span/°C between -40 ... +85°C (-40 ... 185°F)

Supply sensitivity:

<0,075% span output change per % supply pressure change

Port sizes:

Main ports:
G 1/4 or 1/4 NPT
Integral gauge ports:
G 1/4 or 1/4 NPT

Ambient/Media temperatur:

-40 ... +85°C (-40 ... 185°F)

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

I.P. Rating:

IP65 in normal operation

Weight:

1,0 kg

Mounting Position:

Surface mounting bracket provided.
Alternative mounting options available.

Vibration Effect:

5% of span: 4mmp-p 5 ... 15Hz and 2g sine 15 ... 150Hz.

Materials:

Body: Passivated zinc die-casting, epoxy painted
Cover: Glass reinforced PA
Diaphragms: NBR

Electrical parameters

Input Signal	mA versions 1 ... 4 bar: 2 wire 4 ... 20 mA; 3 wire 4 ... 20 mA +12 ... 24 V mA versions 6 ... 8 bar: 3 wire 4 ... 20 mA +12 ... 24 V voltage versions 1 ... 4 bar: 2 wire 0 ... 10 V; 3 wire 0 ... 10 V +12 ... 24 V voltage versions 6 ... 8 bar: 3 wire 0 ... 10 V +12 ... 24 V
Failure Mode	Output pressure falls to zero signal state when electrical supply fails
Connections	30 mm square connector provided (DIN 43650, form A) mountable in four orientations
Span/Zero	Adjustable up to 20 % output range - further information available

Option selector

VP10★★★★★0★A00

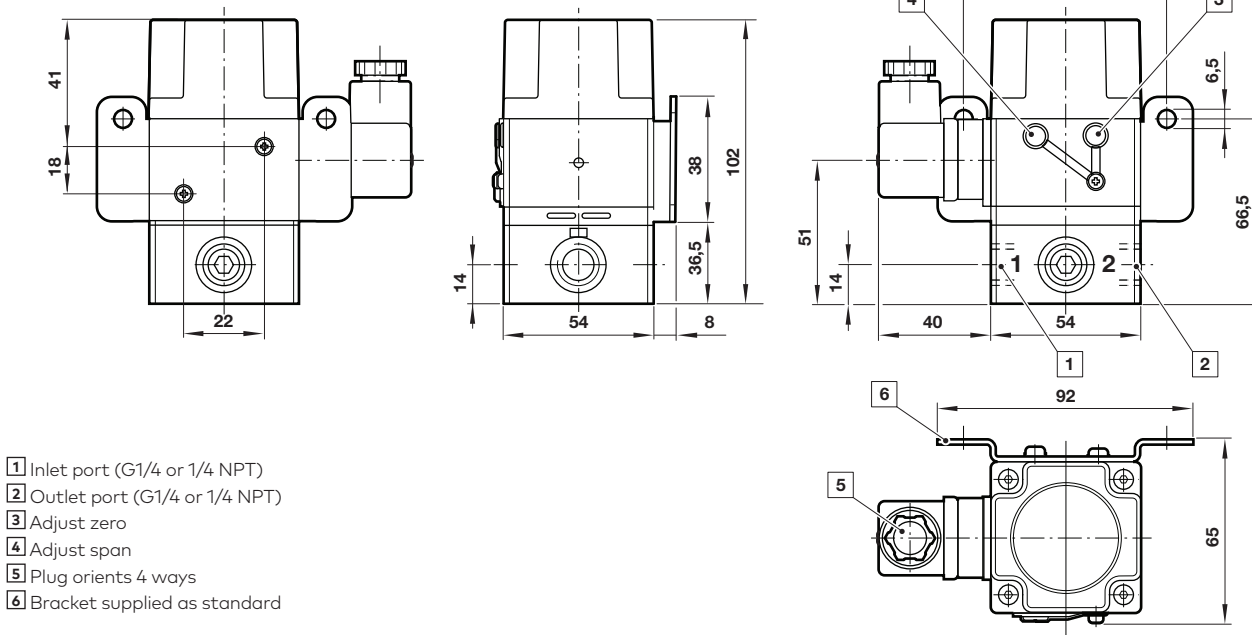
Pressure range	Substitute	Power supply	Substitute
0,2 ... 1 bar / 3 ... 15 psi	01	None required	0
0,2 ... 2 bar / 3 ... 30 psi	02	12 / 24 V (Required for 6 & 8 bar units)	1
0,2 ... 4 bar / 3 ... 60 psi	04		
0,2 ... 6 bar / 3 ... 90 psi	06		
0,2 ... 8 bar / 3 ... 120 psi	08		
Unit of Measure	Substitute	Input signal	Substitute
bar	B	0 ... 10 V / 1 ... 10 V	1
psi	P	4 ... 20 mA	4
		Port size	Substitute
		1/4 NPT	K
		1/4 BSP	J

Other options available:

- Alternative input signal ranges
- Alternative pressure ranges
- Flying Leads
- Conduit entry with flying leads
- Junction box (M20 / 1/2" NPT)
- Intrinsically safe certification
- 50 mm pipe mounting bracket
- Captured exhaust
- Reverse acting
- Split range

Dimensions

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.

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.