

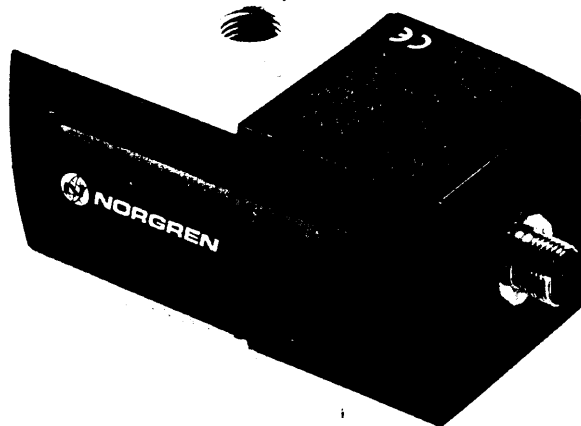
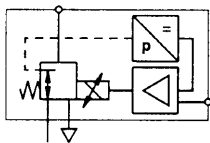
# PROPORTIONAL CONTROL VALVES

3B 8148

## VP50

Proportional pressure control valve

G $\frac{1}{4}$



Data sheet 272 00

### Features

- Air pilot operated proportional pressure control valve
- Adjustable for a wide range of applications
- Fast response
- Low power consumption
- High flow

### Technical data

Medium:

Compressed air filtered to 50  $\mu$ m, non-lubricated

Type:

Proportional, direct acting air piloted spool

Supply pressure: 14 bar max.

Supply sensitivity:

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

Flow capacity: Up to 1400 l/min

Response time:

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

Air consumption: <5 l/min

Total error:

Maximum error <  $\pm 1\%$  of span (independent error includes the combined effect of non-linearity, hysteresis, deadzone and repeatability)

Operating temperature:

-5°C to +50°C

Temperature effect:

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

Degree of protection:

IP 65 in normal operation

Vibration immunity:

<3% output shift for 3 g sine 10-150 Hz

Weight: 0,8 kg

### Materials

Body: aluminium

Lid and end cover: zinc diecast

### Alternative models

Alternative operating temperature ranges

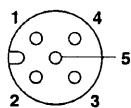
ISO 2 manifold version

Control signal	Output pressure (bar)	Model
0-10 V	0-10	VP5010BJ111H00
4-20 mA	0-10	VP5010BJ411H00
0-10 V	0-6	VP5006BJ111H00
4-20 mA	0-6	VP5006BJ411H00
0-10 V	0-2	VP5002BJ111H00
4-20 mA	0-2	VP5002BJ411H00

### Electrical information

Electromagnetic compatibility	CE marked: conforms to EC requirements EN 50081-2 (1994) and EN 50082-2 (1995)
Electrical input signal	4-20 mA or 0-10 V factory set
Electrical power input	24 V d.c. $\pm 25\%$ (power consumption < 1 W)
Output pressure feedback signal	0-10 V full range
Connections	DIN 43650 or Brad Harrison connection for feedback output

### Instrument pin configuration



- +24V d.c. supply
- 0-10 full range
- Control signal (+ve)
- Common (DC supply, signal and feedback return)
- Chassis (earth)



**VP50**

Proportional pressure control valve

G $\frac{1}{4}$

## Characteristic curves

