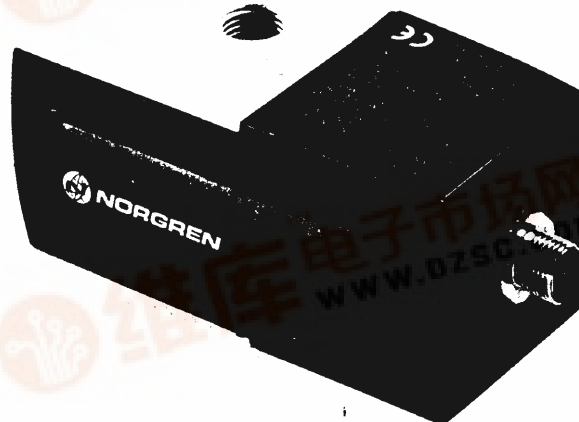
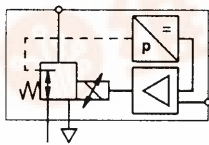


PROPORTIONAL CONTROL VALVES

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 μ 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)

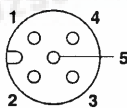
Output pressure feedback signal

0-10 V full range

Connections

DIN 43650 or Brad Harrison connection for feedback output

Instrument pin configuration



- 1 +24V d.c. supply
- 2 0-10 full range
- 3 Control signal (+ve)
- 4 Common (DC supply, signal and feedback return)
- 5 Chassis (earth)



NORGREN

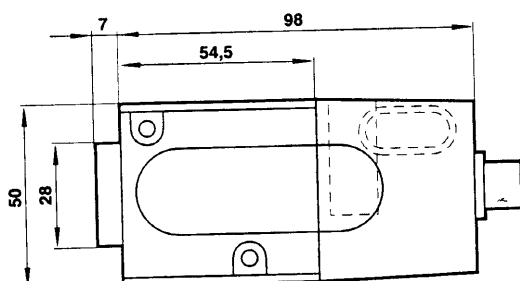
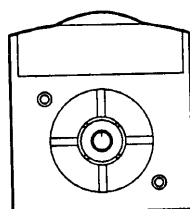
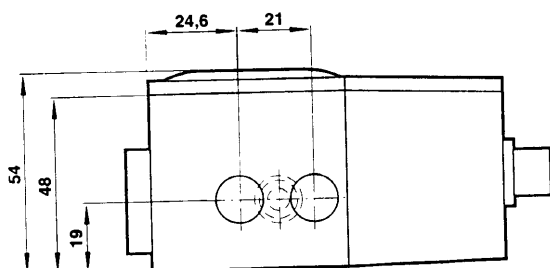
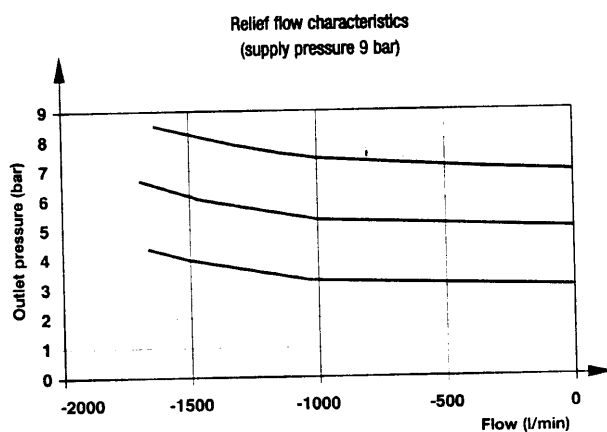
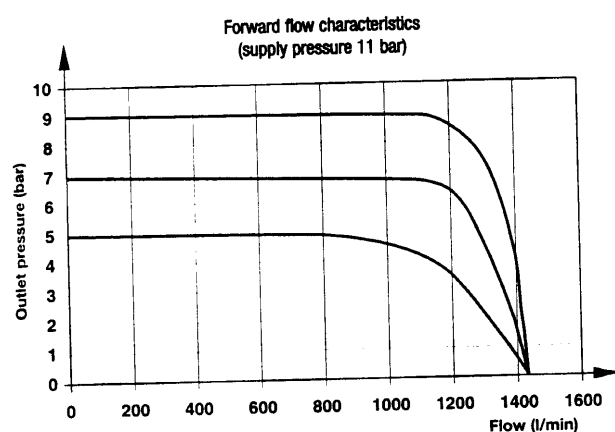
PROPORTIONAL CONTROL VALVE

VP50

Proportional pressure control valve

G $\frac{1}{4}$

Characteristic curves



www.norgren.com
e-pneumatics is easier