

# VP50 IO-Link IO-Link proportional pressure control valve

- Closed-loop air piloted proportional control valve
- > IO-Link communications
- User Adjustable settings
- > Fast Response time
- > Low Power consumption
- Output Pressure Feedback
- High visibility LED status lights
- > Manifold mountable
- > RoHS compliant







#### **Technical features**

#### Medium:

Compressed dry air, oil free filtered to 5 µm.

#### Operation:

Air piloted spool valve with integrated electronic pressure control

#### Output (nominal) pressure:

Standard units:

0 ... 2 bar, (0 ... 30 psi);

0 ... 6 bar, (0 ... 90 psi); 0 ... 10 bar, (0 ... 150 psi)

## Supply pressure:

Minimum 2 bar (29 psi) above maximum output required. Standard units: 12 bar max. (174 psi)

#### Air Supply sensitivity:

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

#### Flow:

Up to 1000 NI/min

## Air consumption:

< 5 N I/min

#### Ambient/Media temperature:

0 ... +60°C (+32 ... 140°F) Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F)

#### Temperature Sensitivity:

Typically <0.1% span/°C between 0 ... +60°C (+32 ... 140°F)

#### Degree of protection:

IP65, with LED cover fitted **Linearity:** 

- 1%

#### Hysteresis and deadband:

< 1%

#### **Response Time:**

< 100 ms (from 10 ... 90% of output pressure into a 0,1 litre load).

#### Vibration & shock immunity:

<3% of span, 3g sine, 10 to 150Hz (3 axis).

#### Weight:

0.55 kg

#### Materials:

Body: Aluminium Lid: Zinc die cast, Front cover: Grivory End cap: PA

#### Maintenance:

No maintenace required

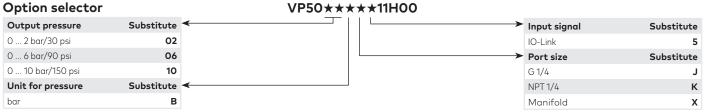
#### **Electrical details**

Electromagnetic compatibility	Conforms to EC requirements EN 61000-6-4:2007+A1:2011 and EN 61000-6-2:2005
Signal	IO-Link
Electrical power input	24 V d.c. ±25%, (power consumption < 0,55 W)
Feedback	IO-Link
Connections	M12x1, 5-pin





## Standard proportional valves



For options not shown and any specific requirements please contact the Norgren technical department via; www.norgren.com/uk/en/technical-support

## **Connecting plugs**



## Manifold mount assembly to ISO 2 sub base



O-rings, flat seal and screws are included

## Electrical connector pin looking into the end of the instrument



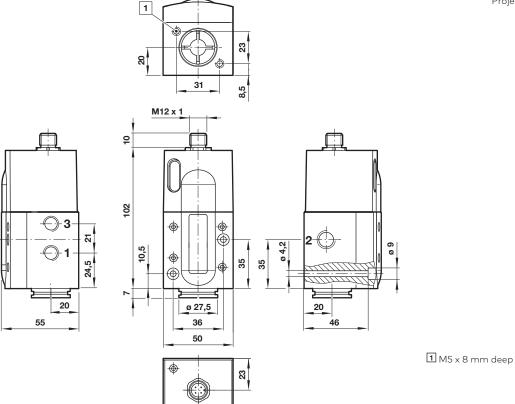
Pin-No.	Function
1	+24 V d.c. supply (+/-25%)
2	N/A
3	Power Ground (-V)
4	Signal (C/Q)
5	N/A



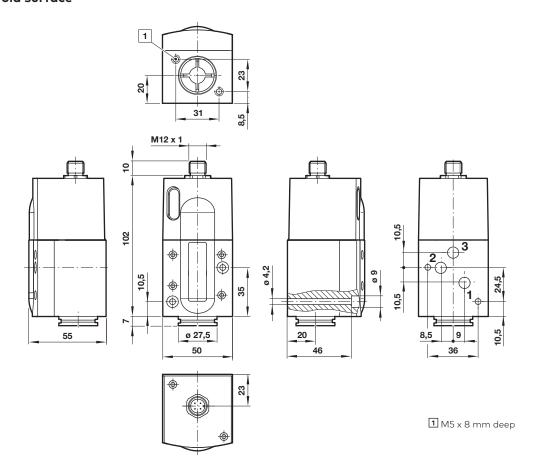
#### **Basic dimensions**

Dimensions in mm Projection/First angle





## VP50 with manifold surface



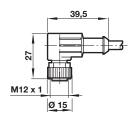


#### Manifold mount assembly to ISO 2 sub base included all seals and screws

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1 Two screws M4 x 50 mm deep to mount the VP50 onto the manifold 2 Four screws M6x16 mm deep to mount the manifold onto the iso subbase

#### Connector Model: 0250081



Connector, 90°  $M12 \times 1$ , 5 pin, female, 5 m cable length, A coded

#### 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/

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

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.