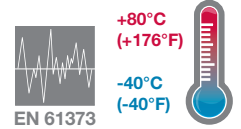
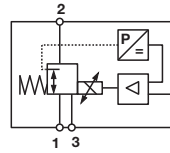


- > Port size: 1/4" (ISO G or NPT) or manifold
- > Closed-loop air piloted proportional pressure control valve
- > High flow
- > Excellent performance characteristics
- > Fast response time
- > 1000 hrs salt spray compliant
- > Adjustable gain and pressure range
- > Low power consumption
- > Feedback signal
- > Rail EMC compliant
- > Fire and smoke compliance to EN45545-2
- > Shock and vibration resistant to EN 61373, Category 1, class A and B



EN 61373

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:

Standard units up to 1400 N l/min (see characteristic curves)

Air consumption:

< 5 N l/min

Ambient/Media temperature:

-40 ... +80°C (-40 ... +176°F)
Air supply must be dry enough to avoid ice formation at temperatures below +2°C (+35°F)

Temperature Sensitivity:

Typically better than 0,03% span/°C

Degree of protection:

IP65 in normal operation [exhaust and baffle protected from water ingress at temperatures <+5°C (+41°F)]

Linearity:

< 1%

Hysteresis and deadband:

< 1%

Response Time:

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

Vibration & shock immunity:

< 3% span
0,75 m/s², 5 ... 150Hz,
1 m/s², 5 ... 150Hz

Weight:

0,55 kg

Materials:

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

Maintenance:

No maintenance required

Calibration:

Gain, Span, Zero

Electrical details

Electrical input signal	4 ... 20 mA or 0 ... 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, <±1% Accuracy
Connections	M12x1, 5-pin

Electromagnetic compatibility	EN 50121-3-2:2016	Railways applications – EMC Part 3-2: Rolling stock - apparatus
	EN 61000-6-2:2005	EMC Part 6-2: Generic standards – Immunity for industrial environments
	EN 61000-6-4:2007+A1:2011	EMC Part 6-4: Generic standards – Emissions standard for industrial environments

Standard proportional valves

Option selector

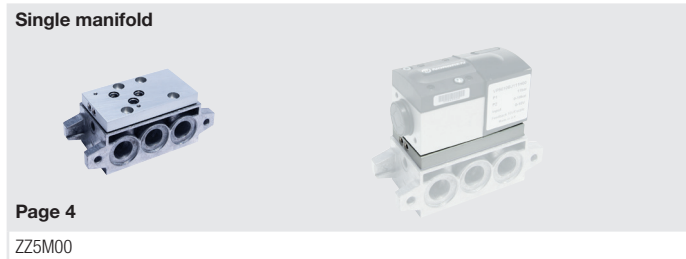
LVP50 ★ ★ ★ ★ ★ 11HSR

Output pressure	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
Port size	Substitute
G 1/4	J
NPT 1/4	K
Manifold	X

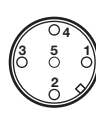
For options not shown and any specific requirements please contact the Norgren technical department via; www.norgren.com/ws

Manifold mount assembly to ISO 2 sub base



O-rings, flat seal and screws are included

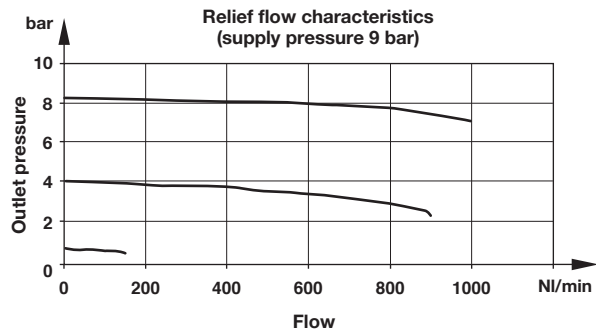
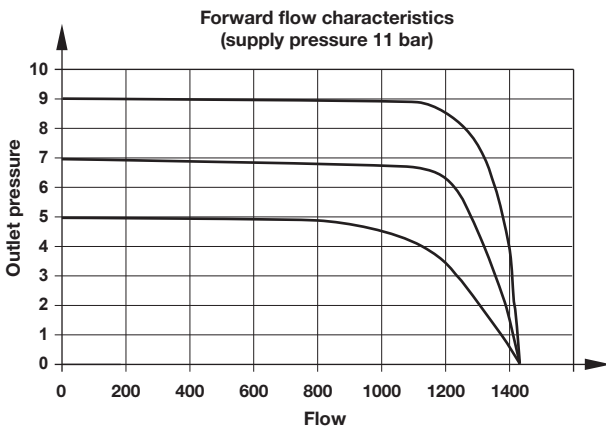
Electrical connector pin looking into the end of the instrument



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

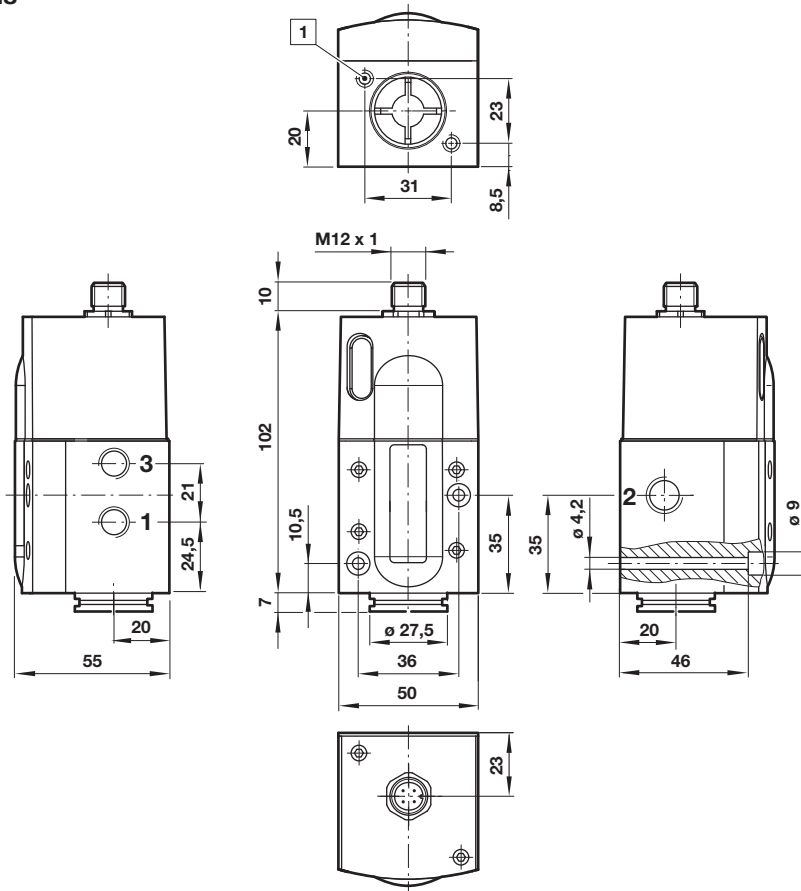
An EMC compliant connector and cable must be fitted to ensure compliance with stated standards.
 To meet IP65 integrity when installed, a compliant connector must be fitted with the cable gland/wiring terminated and sealed correctly.

Characteristic curves (standard units)



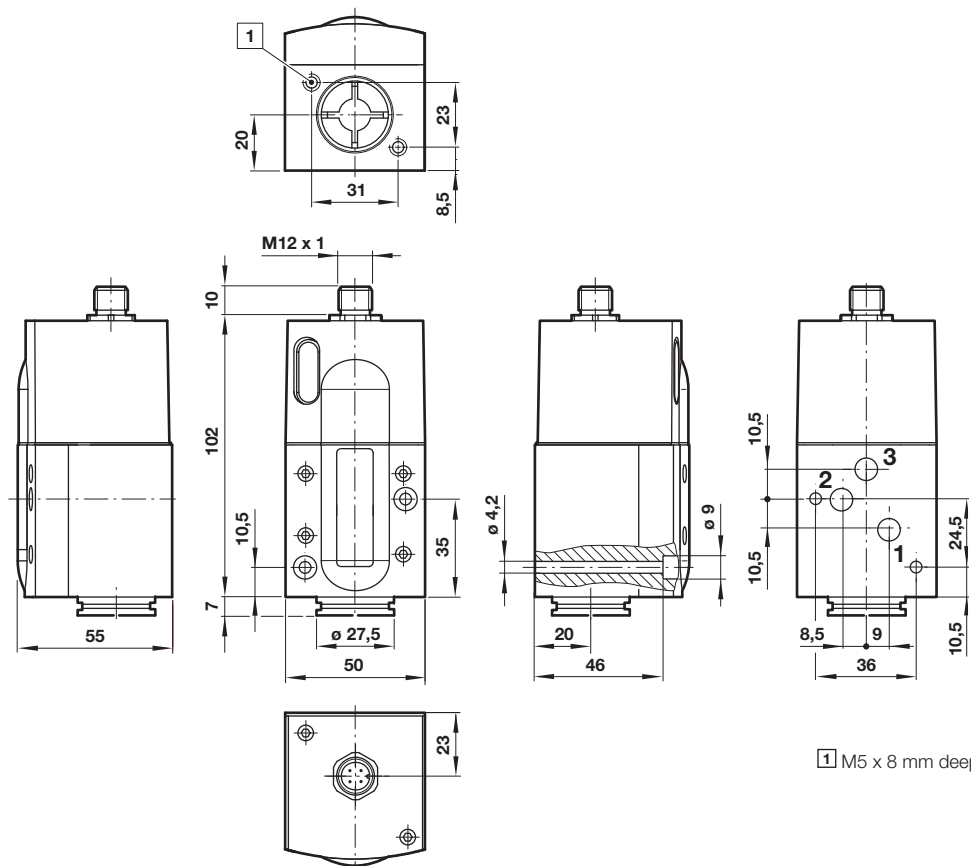
Basic dimensions

Dimensions in mm
Projection/First angle



1 M5 x 8 mm deep

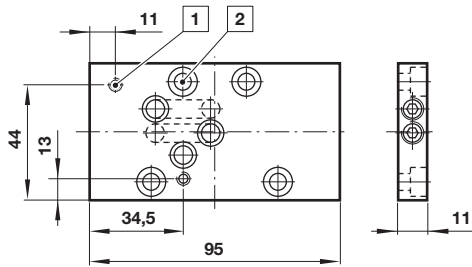
LVP50 with manifold surface



1 M5 x 8 mm deep

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

Dimensions in mm
Projection/First angle



- 1 Two screws M4 x 50 mm deep to mount the LVP50 onto the manifold
- 2 Four screws M6x16 mm deep to mount the manifold onto the iso subbase

Warning

These products are intended for use in industrial compressed air and rail transport 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 IMI 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.