

**3 Way Proportional Pressure
Control Valve
Nominal diameter 4
Air piloted spool valve with integrated
electronic pressure control**

- **Air piloted proportional pressure control valve**
- **Fast response time**
- **Adjustable amplification control**
- **Adjustable pressure range**
- **Adjustable zero point**
- **Low power input**

Technical Data
Medium:

Dry and non-lubricated compressed air
filtered to 50 µm

Operation:

Proportional, direct acting air pilot spool

Output pressure:

See general information overleaf

Supply pressure: 14 bar max.

Supply Sensitivity:

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

Flow capacity: 1200 NI/min max.

Response time:

< 80 ms (from 10-90% of output pressure into a 0.1 litre load)

Air consumption: < 5 l/min

Port size:

G¹/₄; manifold versions on request

Total error:

Max. error < ±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 10-2000 Hz

Mounting position: Any screw mounting

Material:

Aluminium body, zinc diecast lid and end cover

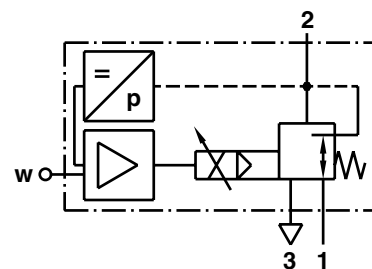
Weight: approx. 800 g


Ordering Information

To order please quote model number from the table overleaf.

Alternative Models

Alternative operating temperature ranges,
ISO 2 manifold version.


Electromagnetic Compatibility

The valve conforms to the EC requirements EN50081-2 (emission) and EN50082-2 (disturbance noise). For this specification shielded cables have to be used.



General Information

Type *	Pressure range and input signal options	
	Control signal	Output pressure
4095810.9000.024.00 VP5010BJ111H00	0-10 V	0-10 bar
4095812.9000.024.00 VP5010BJ411H00	4-20 mA	0-10 bar
4095820.9000.024.00 VP5006BJ111H00	0-10 V	0-6 bar
4095822.9000.024.00 VP5006BJ411H00	4-20 mA	0-6 bar
4095800.9000.024.00 VP5002BJ111H00	0-10 V	0-2 bar
4095802.9000.024.00 VP5002BJ411H00	4-20 mA	0-2 bar

* Types:
 4095... : Designation for distribution in Germany
 VP50... : Designation for distribution outside of Germany

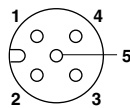
Electrical Information

Electromagnetic compatibility	CE marked, conforms to E.C. requirements EN 50081-2 (1994) and EN 50082-2 (1995)
Electrical input signal	4-20 mA or 0-10V factory set
Electrical power input	24 V DC $\pm 25\%$ (power consumption < 1W)
Output pressure feedback signal	0-10 V full range
Electrical connections	DIN 43650 or M 12x1 connector

Accessories

Designation	Specification	Type
Cables with connectors	M 12 x 1; 5pin; 2 m 5 x 0,34 mm ²	0799845
	M 12 x 1; 5pin; 5 m 5 x 0,34 mm ²	0250081
	M 12 x 1; 5pin; 10 m 5 x 0,34 mm ²	0250472

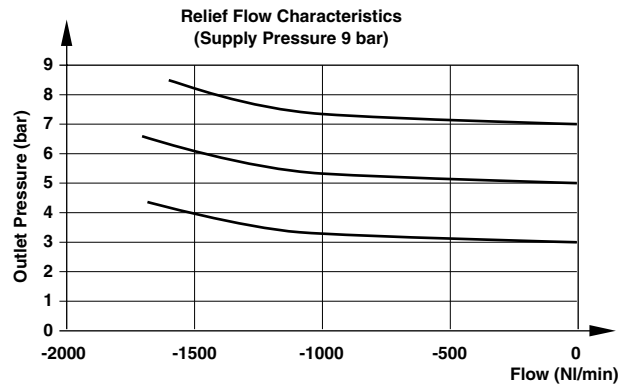
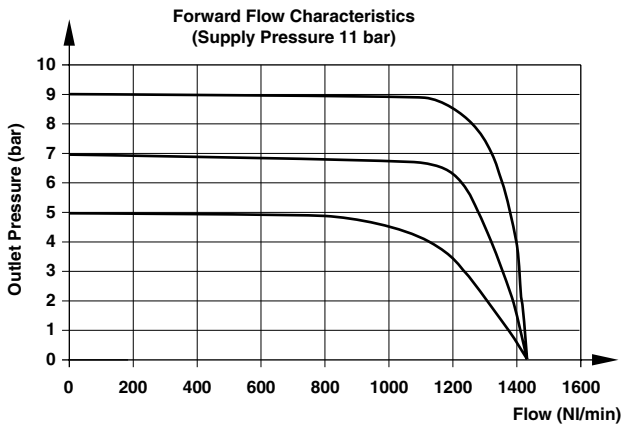
Instrument pin configuration



Pin	Designation	Colour*
1	+24 V DC supply	brown
2	Feedback 0-10 V full range	white
3	Control signal (+ve)	blue
4	Common (DC supply, signal and feedback return)	black
5	Chassis (earth)	grey

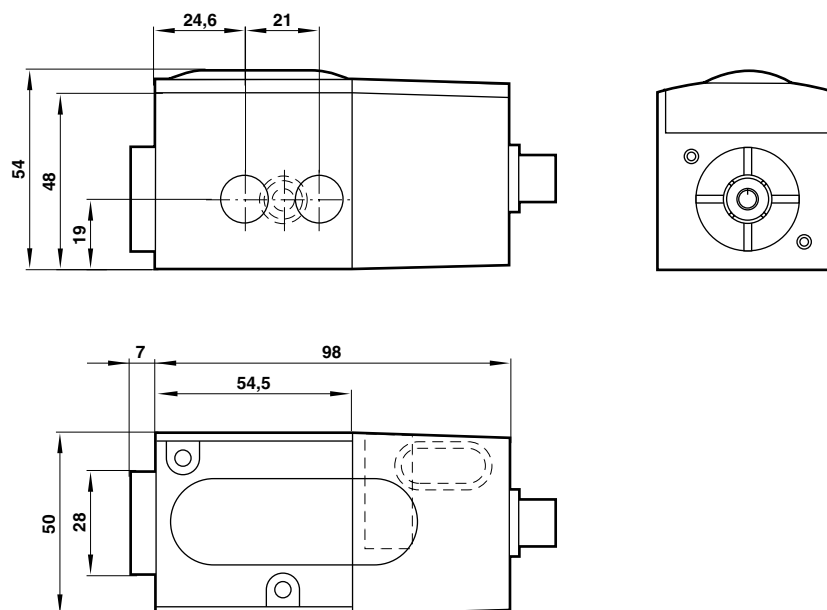
* The mentioned colours refer to the braids of the available cables (see accessories)

Characteristic Curves





General Dimensions



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 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 where applicable.

