

**Proportional pressure control valve
Nominal diameter 2
Air piloted seat valve**

- **Air piloted proportional pressure valve**
- **Reliable, rugged design**
- **Excellent accuracy**
- **IP 65 environmental protection in normal position**

Technical data
Medium:

Oil free, dry air, filtered to 5 µm

Output pressure:

0,2–1,0 bar, 0,2–2,0 bar, 0,2–4 bar (2 wire version)
0,14–6,0 bar, 0,14–8 bar (3 wire version)

Flow capacity: Up to 300 NI/min

Air consumption:

<4 bar: 0,85 l/min typical
>4 bar: 1,75 l/min typical

Operating pressure:

At least 0,7 bar above maximum required output pressure

Connections: G1/4

Operating temperature range: -20 to +70 °C

Response time:

<2 bar: less than 0,5 s for 10 → 90% step change
>2 bar: 2 s for 10 → 90% step change

Total error:

±0,5 % of span (typical, independent error includes the combined effect of non-linearity, hysteresis, deadzone and repeatability)

Temperature effect:

Typically 0,1 % of span / °C for span and zero over operating range

Supply sensitivity:

> 0,025 % span output change per % supply pressure change

Failure mode:

Signal falls to bleed pressure when electrical supply fails

Mounting:

Integral surface mounting bracket provided for referred vertical mounting. 50 mm pipe mounting kit available.

Material:

Zinc die-casting passivated and epoxy paint, nitrile diaphragms, stainless steel/nylon flapper nozzle and supply valve

Weight:

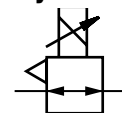
1500 g approx.


Ordering Information

To order please quote model number from the table overleaf.

Options

Alternative input signal ranges, alternative pressure ranges, conduit entry with flying leads, junction box, intrinsically safe certification, 50 mm pipe mounting bracket, 1/8" NPT pneumatic connections, captured bleed/exhaust, reverse acting, split range.

Symbol




General Information

Type*	Pressure range and input signal options	
	Control signal	Output pressure
4090810.0000.000.00 VP1001BJ100A00	1-10 V	0,2-1 bar
4090812.0000.000.00 VP1001BJ400A00	4-20 mA	0,2-1 bar
4090820.0000.000.00 VP1002BJ100A00	1-10 V	0,2-2 bar
4090822.0000.000.00 VP1002BJ400A00	4-20 mA	0,2-2 bar
4090840.0000.000.00 VP1004BJ100A00	1-10 V	0,2-4 bar
4090842.0000.000.00 VP1004BJ400A00	4-20 mA	0,2-4 bar
4090860.0000.000.00 VP1006BJ101A00	1-10 V	0,14-6 bar
4090862.0000.000.00 VP1006BJ401A00	4-20 mA	0,14-6 bar
4090880.0000.000.00 VP1008BJ101A00	1-10 V	0,14-8 bar
4090882.0000.000.00 VP1008BJ401A00	4-20 mA	0,14-8 bar

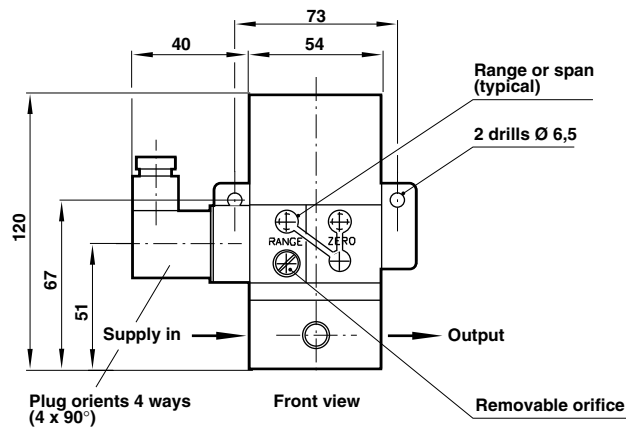
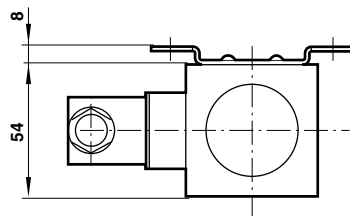
* Part No.:
4090... : for distribution in Germany
VP10... : for distribution abroad

Please Note: For an input signal of 4-20 mA on the 6 bar and 8 bar units, a supply of 12/24 V (3-wire) is also required.

Electrical information

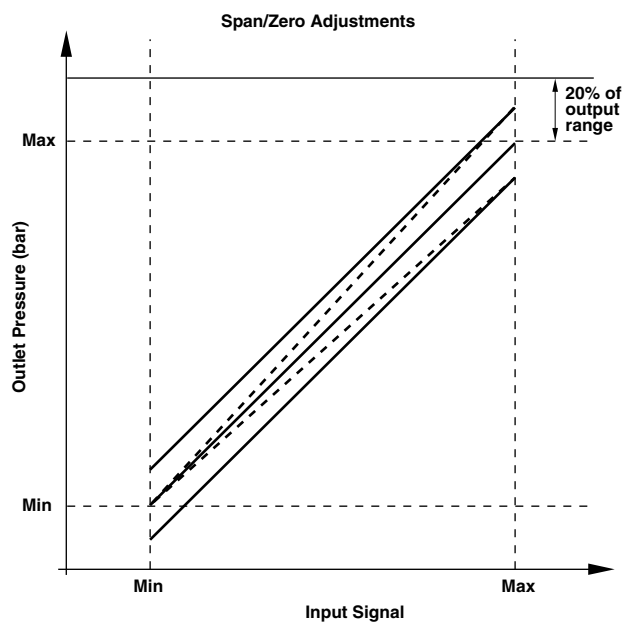
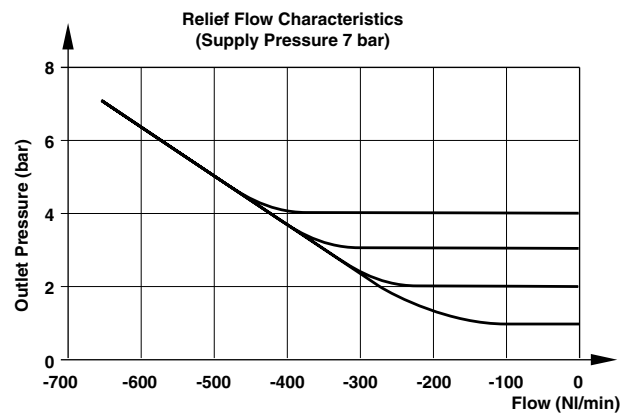
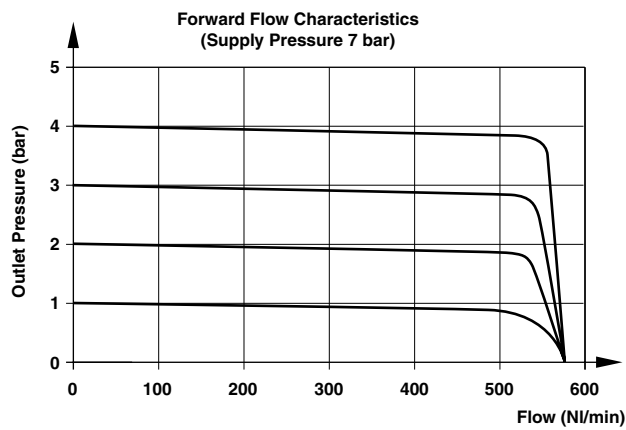
Electromagnetic compatibility	This is a passive electromagnetic instrument and is unaffected by interfering high frequency signals
Electrical signal	2 wire versions 4-20 mA or 1-10 V, 3 wire versions requires 12-24 V DC supply
Connections	30 mm square connector DIN 43650 provided, mountable in four directions (alternative connections available)

General Dimensions





Characteristic Curves



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.

