**Proportional pressure control valve**
**G 1/4 or 1/4 NPT ports**
**Nominal orifice 2**

**Air piloted proportional pressure valve**

**Reliable, rugged design**

**Low power consumption**

**Excellent performance characteristics**

**Excellent accuracy**

**IP 65 environmental protection in normal operation**

**2 & 3 wire versions available**

## Technical data

Medium:
Compressed air filtered to 5 µm, oil free and dry air
Operation:
Air piloted seat valve
Output pressure:
0,2 to 1 bar, 0,2 to 2 bar, 0,2 to 4 bar,
0,2 to 6 bar and 0,2 to 8 bar (or PSI equivalent)
Operating (nominal) pressure:
At least 1 bar above maximum required output pressure
Supply sensitivity:
Better than 0,075% span output change per % supply pressure change
Flow:
Up to 550 N l/min (see characteristic curves)
Air consumption:
< 4 bar: 0,85 N l/min typical
> 4 bar: 1,75 N l/min typical
Ambient temperature:
-40 to +85 °C
Contact our technical service for use below +2°C
Temperature effect:
Typically better than 0,1% of span/°C for span and zero over operating range
Response time:
< 2 bar: less than 0,5 s for 10 - 90% step change > 2 bar: 2 s for 10 - 90% step change
Degree of protection:
IP65 in normal operation
Linearity:
< 0,5%
Hysteresis:
< 0,35%
Vibration immunity:
< 3% output shift for ± 3 g 10-150 Hz
Weight:
0,83 kg approx

## Materials

Body: zinc die-casting passivated and epoxy paint
Diaphragms: nitrile
Flapper nozzle: stainless steel/beryllium copper
Supply valve: brass

## Electrical parameters

see page 2

## Ordering information

See page 2

## Options

Alternative input signal ranges, alternative pressure ranges, conduit entry with flying leads, junction box, intrinsically safe/ATEX certification, 50 mm pipe mounting bracket, captured bleed/exhaust, reverse acting, split range, DIN rail mounting bracket.

## Electrical parameters

| | |
|---|---|
| Electromagnetic compatibility | CE marked: conforms to EC requirements<br>EN 50081-2 (1994) and EN 50082-2 (1995) |
| Electrical input signal | 2-pin versions 4 to 20 mA or 1 to 10 V<br>3-pin versions requires 12 to 24 V d.c. supply |
| Electrical power input | 24 V d.c. ±25% (power consumption < 1 W) |
| Failure mode | Signal falls to bleed pressure when electrical supply fails |
| Connections | 30 mm square connectors DIN EN 175 301-803<br>(DIN 43650) table A, mountable in four directions |

## Options selector

**VP10★★★★★0★A00**

| Output pressure | Substitute |
|---|---|
| 0,2 to 1 bar | 01 |
| 0,2 to 2 bar | 02 |
| 0,2 to 4 bar | 04 |
| 0,2 to 6 bar* | 06 |
| 0,2 to 8 bar* | 08 |

* The models with 6 and 8 bar pressure only available as 3-pin

| Wire Options | Substitute |
|---|---|
| 2 | 0 |
| 3 (24 V d.c. supply) | 1 |

| Control signal | Substitute |
|---|---|
| 1 to 10 V | 1 |
| 4 to 20 mA | 4 |

| Port size | Substitute |
|---|---|
| G 1/4 | J |
| 1/4 NPT | K |

| Unit of pressure | Substitute |
|---|---|
| Bar | B |
| PSI | P |

### Ordering example 2 wire

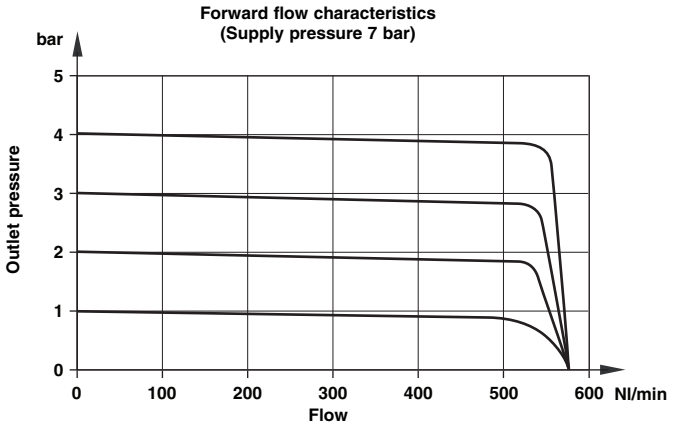
To order a proportional pressure control valve VP10, output pressure: 0,2-2 bar, control signal: 1-10 V quote: VP1002BJ100A00

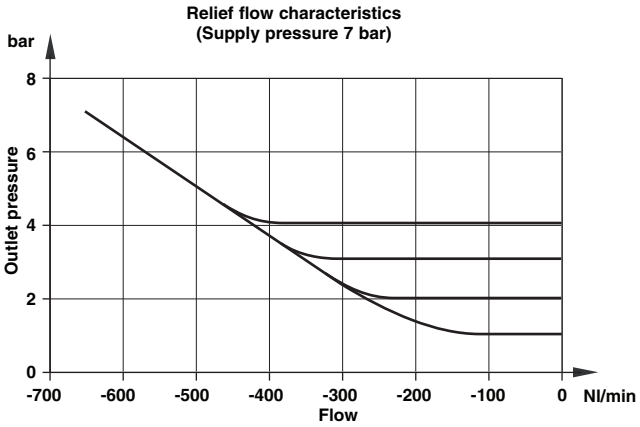
### Ordering example 3 wire

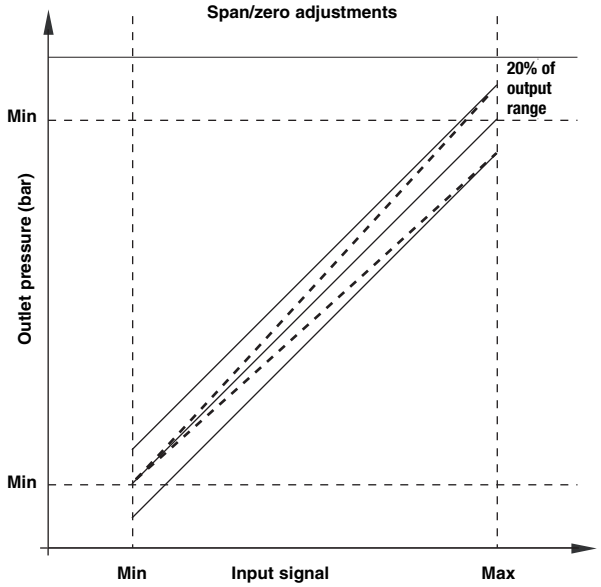
To order a proportional pressure control valve VP10, output pressure: 0,2-2 bar, control signal: 1-10 V quote: VP1002BJ101A00

Options to special order: For options not shown and any specific requirements please contact NORGREN technical support via www.norgren.com/ws

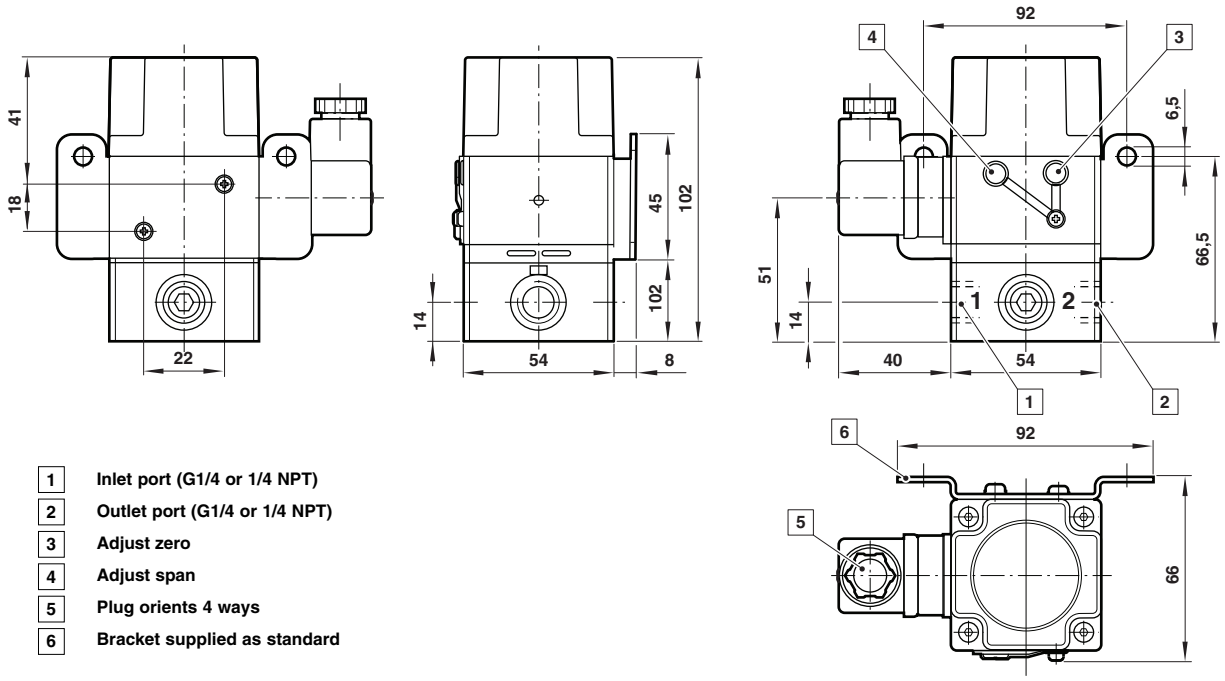
## Characteristic curves



## Basic dimensions




| | |
|---|---|
| 1 | **Inlet port (G1/4 or 1/4 NPT)** |
| 2 | **Outlet port (G1/4 or 1/4 NPT)** |
| 3 | **Adjust zero** |
| 4 | **Adjust span** |
| 5 | **Plug orients 4 ways** |
| 6 | **Bracket supplied as standard** |

## 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.