ERFAHRUNG ◆ PRÄZISION ◆ INNOVATION
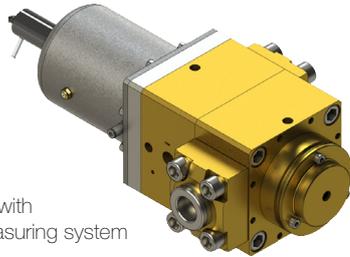
m®tech

HPG 12 PR

Proportional valve

Illustration with
stroke measuring system

- ◆ Medium : inert gases / rare gases / O2 / CO2 / air, other media on request
- ◆ Suitable for high-pressure oxygen service
- ◆ Pressure sensor connectors available as an option
- ◆ Approval : CTE 600 bar test

As market leader for high-pressure valves and systems for the gas filling industry we developed the new valve series HPG for 450 bar filling technology. These valves are designed for a service pressure of 600 bar. The valve type HPG 12 PR is a pressure balanced proportional valve with 12 mm seat. The position of the valve can be controlled by a standard signal, by an electro-pneumatic positioner and a stroke measuring system which detects the position of the valve.

Technical data

|	
◆ Pressure range	PN 600
◆ Standard Connections	SW 1/2"
◆ Nominal diameter	DN 12
◆ Actuation	with an external positioner
◆ Pilot pressure	7 bar
◆ Pilot connections	4 mm
◆ Media temperature	from - 20 °C to + 65 °C
◆ Ambient temperature	from - 20 °C to + 60 °C
◆ Leak rate	10^{-6} mbar l/s
◆ Actuation time (opening / closing)	depending on set point
◆ Flow direction	A $\longrightarrow$ B
◆ Kvs-value	4,2 m³/h
◆ Weight	15,7 kg (including connection adapter)

Flow coefficient (Kv) in relation to valve opening – diagram
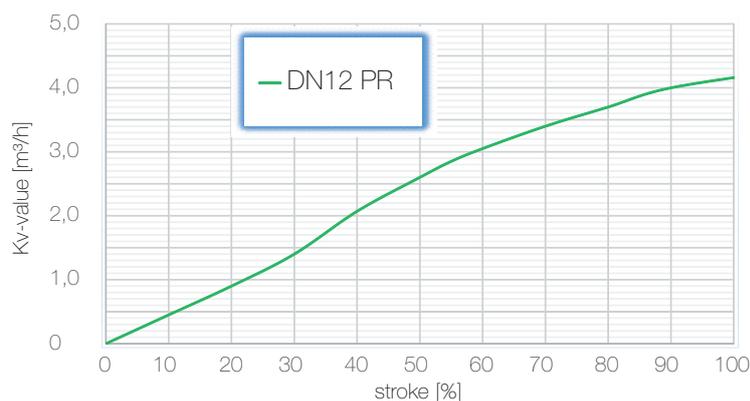
Function
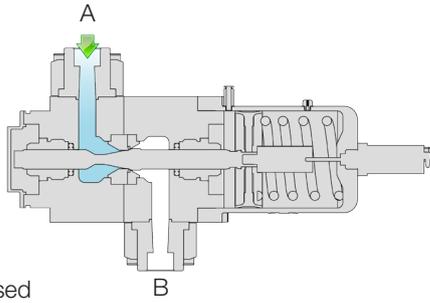
◆ Closed
A
B
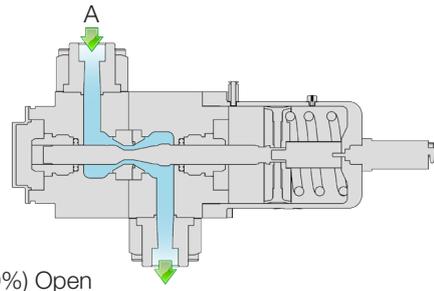
◆ (100%) Open
A

Medium : gas ➡ Flow direction

Options with this valve type

- ◆ Connections
    - Threaded female socket (stainless steel) : G 3/8
    - Weld-on end (stainless steel, Monel) : socket welding SW 1/2", 14mm
- ◆ Sensor ports for pressure registration / measuring NPT 1/4
- ◆ Assembly in compact manifolds (possibility to join up to 7 valves on 1 module)
- ◆ Other options on request

Material specification
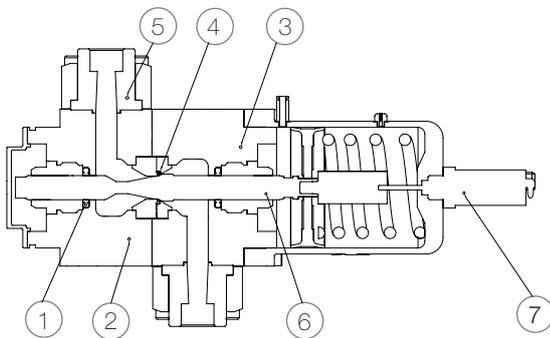
Position	Description	Material
1	Spindle seal	Turcon®
2	Lower valve body	Brass
3	Upper valve body	Brass
4	Valve seat	Tecasint
5	Connection piece	Monel, stainless steel
6	Valve spindle	Monel
7	Stroke measuring system	Aluminium

Dimensions

347,5
90,5
□104
184

Sensor port

Mounting thread M10