

## Technical Data Sheet P-HD 101



2/2-Way pressure controlled valve - valve normally closed (NC) If control pressure is applied to the actuator, the actuator lifts the control piston against the spring force and the valve disk from the valve seat. The valve closes by spring power.

### Pressure controlled valve for neutral, gaseous and liquid media

- For high pressure applications up to 120 MPa Reliable and study sealing elements
- No pressure difference is required
- High life time
- Simple compact valve design
- Long-term availability of spare parts
- High-quality materials

### TECHNICAL SPECIFICATIONS

Type of control:	direct acting, pressure controlled	Supply voltage:	-			
Design:	piston design	Voltage tolerance:	-			
Connection:	threaded G 1/8 - G 1/4 DIN ISO 228 (BSP)	Consumption:	-			
	threaded 7/16 UNF - 9/16 UNF (autoclave)	Protection class:	-			
Installation:	actuator preferable upright	Duty factor:	-			
Pressure:	0-120 Mpa	Connection type:	-			
Medium:	clean, neutral, gaseous and liquid	Funktion:	NC - non energized closed			
Viscosity:	22 mm²/s		T I W			
Temperature range:	Medium: -40 °C up to +80 °C					
	Ambient: -40°C up to +60°C					
Body material	Stainless steel 1.4301 (AISI 304)	Certificates:				
Metallic inner parts:	Stainless steel		c <b>Tha</b> us			
Sealing:	PEEK	Ex-proof:	optional with mech. ATEX			
Pilot pressure:	0.4-1 Mpa					
Pilot medium:	clean and neutral gases					

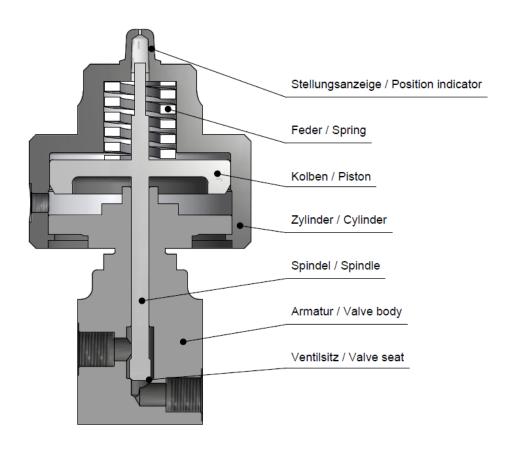
### ORDERING SYSTEM

P-HD	1	01	-G	-B	-8.0	-B	-E	-P08
Туре	Control type	Code	Connection type	Connection size	Nominal diameter mm	Body material	Sealing material	Actuator type
	1 direct		G BSP	A 1/8		B AISI304	E PEEK	
	acting		N NPT	B 1/4				
			S Special	Z Special				

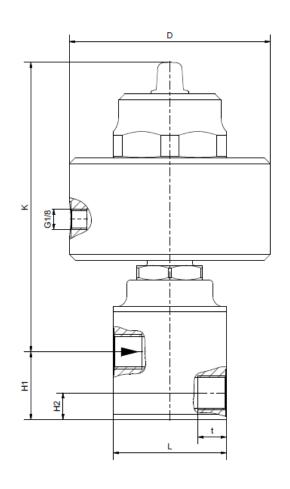
# **Technical Features**

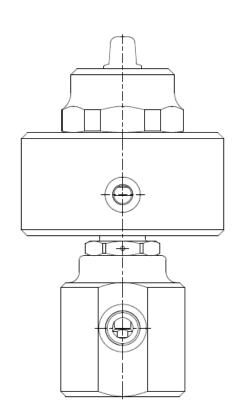


			max. pressure				
Standard NC type	Seat ø mm	Kv-value m³/h	P03	P05	P08	P13	
P-HD 101-G-A-	1.0		0-500	-	-	-	
P-HD 101-G-B-	4.0		-	0-500	-	-	
P-HD 101-G-C-	8.0		-	-	0-400	-	
P-HD 101-S-A-	0.5		0-1000	-	-	-	
P-HD 101-S-B-	4.0		-	-	0-700	-	
P-HD 101-S-B-	8.0		-	-	-	0-1200	









Туре	P-HD 101-G-A-	P-HD 101-G-B-	P-HD 101-G-C-	P-HD 101-S-A-	P-HD 101-S-B-	P-HD 101-S-B-
G	1/8	1/4	1/4	7/16 UNF	9/16 UNF	9/16 UNF
D	on request	61	98	on request	98	149
K		143	141		141	192
H1		33	33		33	33
H2		13	13		13	13
L		55	55		55	55
t		13,5	13,5		10	10
kg		2,3	2,6		2,6	4,9

## Information



- It is imperative to observe the installation and safety instructions in our operating and service manuals.
- For information on our GVT ordering code, please refer to our catalogs. If you have any questions, we will be glad to assist you.
- Required ordering information: valve type, function NC/NO, pressure range, connection, nominal width, medium, flow rate, medium and ambient temperatures, connection voltage.
- Detailed production-specific drawings and other technical information will be made available when an order is placed.

#### TECHNICAL SPECIFICATIONS

Each individual application decides which valve type is required, the main factor being the resistance of the materials to the operating medium. The correct selection of materials requires knowledge of the concentration, temperature and degree of contamination of the medium. Other criteria include the operating pressure and max. volumetric flow, since , in addition to high temperatures , high pressures and high flow rates must also be taken into account when selecting the materials.

All materials used for our valves, be it housing, seals or magnets, will be carefully selected in view of the different application areas. Any information given is non-binding and serves for orientation only. No claims under warranty can be derived therefrom.

### Heating and power of solenoid coils

The default solenoid valves are designed for continuous operation (100% ED = power-on time) under normal operating conditions. The pulling force of a solenoid coil is basically influenced by three elements:

- The self-heating of the magnetic coil
- The medium temperature
- The ambient temperature

Solenoid coils are by default designed for a maximum ambient temperature of +40 °C. This specification applies for the maximum allowable operating pressure specified in the data sheet of the corresponding valve and a medium temperature of +80 °C.

A higher ambient temperature is possible, when lower values are applied for the other influencing parameters. When the max. operation pressure and max. ambient temperature of +50 °C is given the medium temperature is not allowed to be higher than max. +50 °C. In addition to that, deviations from the default design temperature range are possible, e.g. when temperature coils or other constructive measures are used.

More precise specifications and technical data with regard to the operating conditions can be found in the data sheets of the solenoid coils and the solenoid valve regarded. Please observe that the surface temperature of a permanently loaded coil can amount up to  $\pm 120$  °C, solely by the self-heating of the coil. The power consumption of our default solenoid valves was calculated to DIN VDE 05820 for a coil temperature of  $\pm 20$  °C.

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