NG-PPCD04 IPH

Proportional valves

Directional valves

Smart products

Special designs

Product classification

Name	Max volume flow @ 6 bar dp	
PPCD03	1,25 l/min	**Direct controlled**
PPCD04	**2,5 l/min**	
PPCD05	10 l/min	
PPCD06	15 l/min	
PPCD08	20 l/min	
PPCD09	30 l/min	
PPCP09	35 l/min	**Pilot operated**
PPCP13	72 l/min	

Benefits

- **Robustness:**
  - Excellent resistance to contamination due to less friction points
  - No water ingress into the coil thanks to an additional sealing lip
  - Filter protection on all ports
- **Assembly:** Simple and secure enabled by a flat interface
- **Space-saving:** Reduced installation height thanks to elimination of the external valve sleeve

Hydraulic Data

Max pressure pump	P_P = 45 bar
Max pressure tank	P_T = 10 bar
Max pressure work	P_A = 25 or 30 bar
Hysteresis	Typical 0,5 - 1,2 bar (depending on control signal)
Contamination level	Min. Filtration: 20/18/15 According to ISO 4406
Fluid	Mineral Oil According to DIN 51524
Temperature range fluid	-30 °C to +90 °C
Leakage (internal)*	< 0,06 l/min (de-energized) < 0,15 l/min (energized)
Filterscreen size	200 µm (all ports)

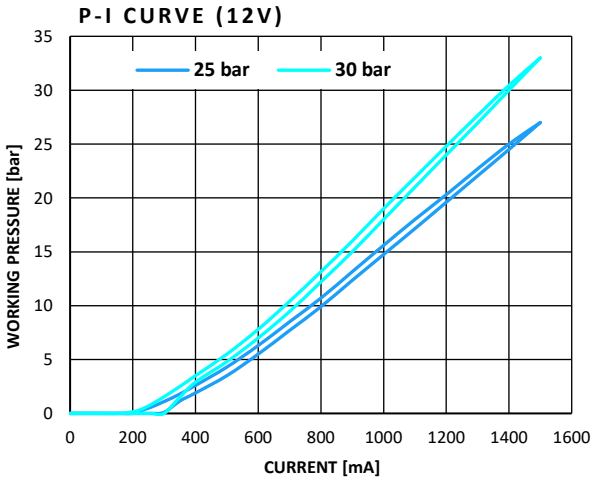
* The reported data are measured @P_P = 45 bar, oil viscosity of 32 cSt

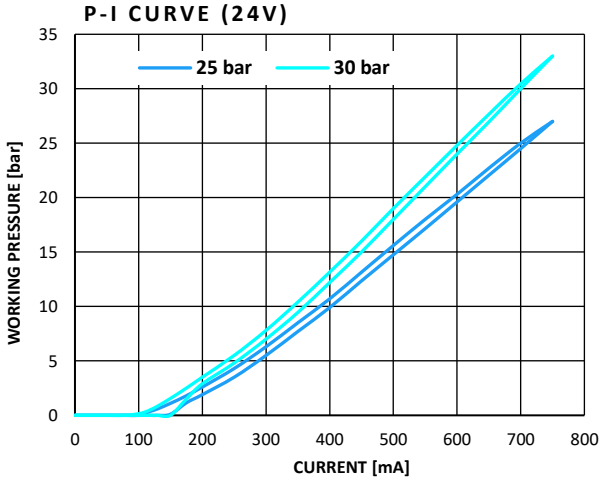
Electrical Data

Voltage	12 V	24 V
Max current	1500 mA	750 mA
Resistance	4,72 Ω ± 5%	20,8 Ω ± 5%
Type of control (possibilities)**	• PWM: 100 - 280 Hz • Superimposed Dither: 100 - 250 Hz (100 mA - 200mA amplitude p-to-p) (Ground PWM > 1000Hz) • Recommended: Dither 100 Hz (Amplitude: 200 mA @ 12V, 100 mA @24V)	
Connector	AMP Junior Timer Deutsch Connector DT04-2P	
Protection class	Up to IP6K6 / IPX7 / IPX9K	
Switching time	t_{on} < 40 ms (pA = 0% to 90%) t_{off} < 40 ms (pA = 100% to 10%)	

** System performance can be optimized due to pilot valve control signal. Evaluation on system necessary.

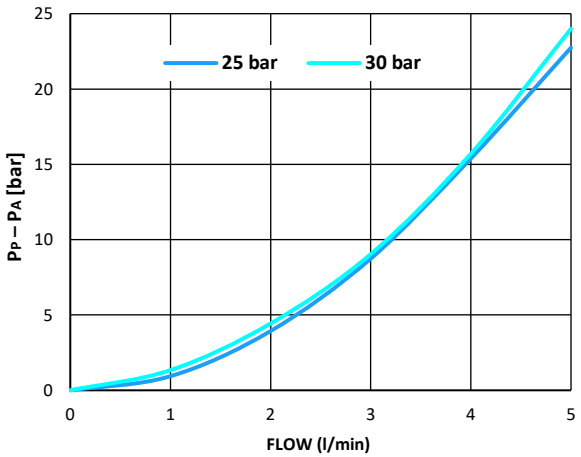
Current vs. Pressure (Average characteristic)



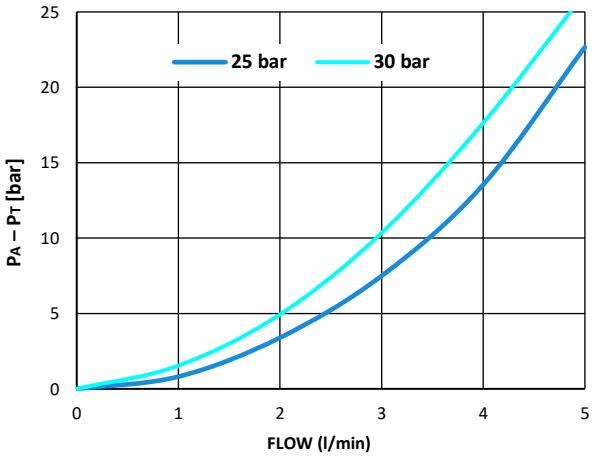


Flow characteristics (Average characteristic)

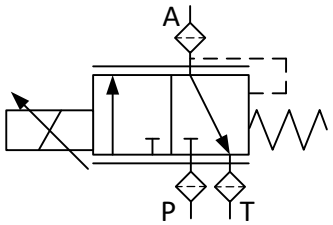
PRESSURE DROP PUMP TO CONTROL PORT (P→A)
Valve only



PRESSURE DROP CONTROL PORT TO TANK (A→T)
Valve only



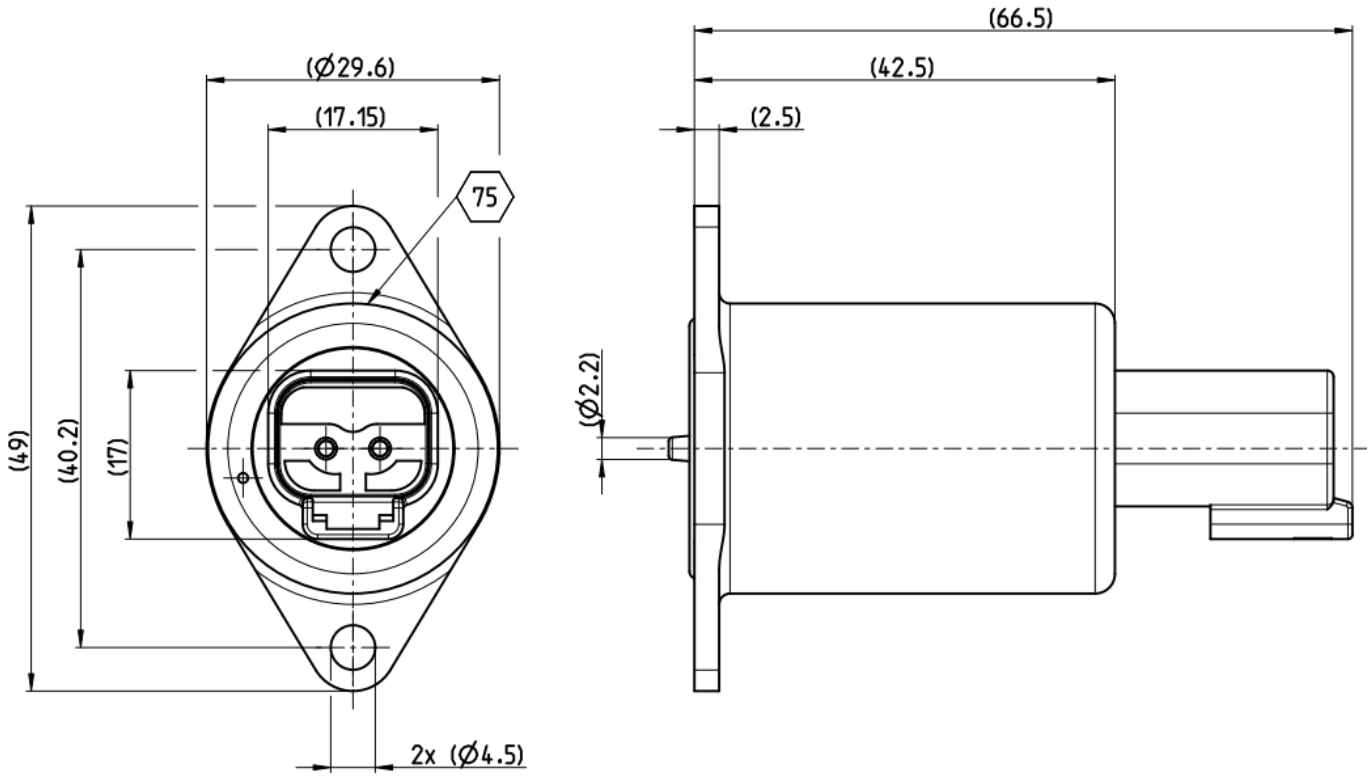
Hydraulic schematic



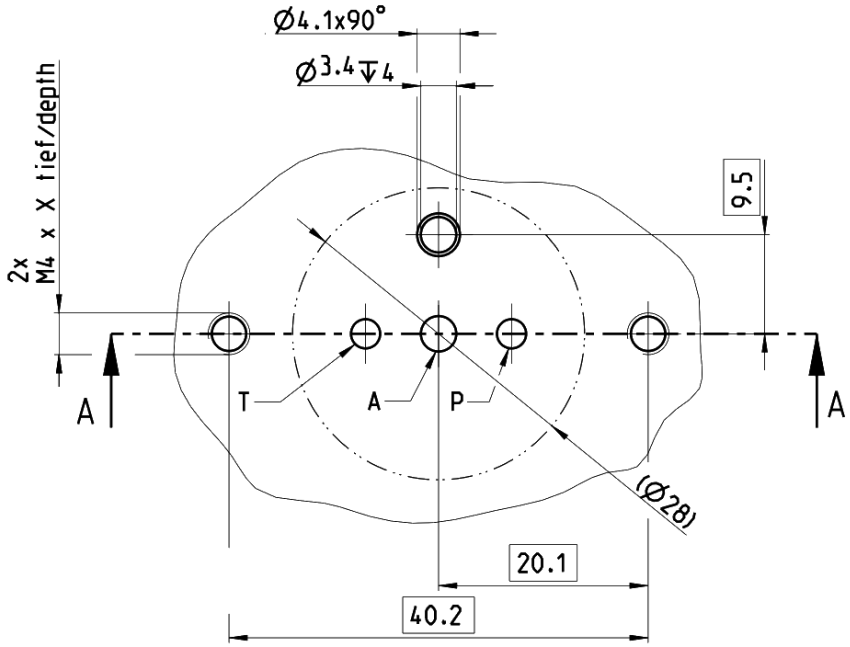
Additional data

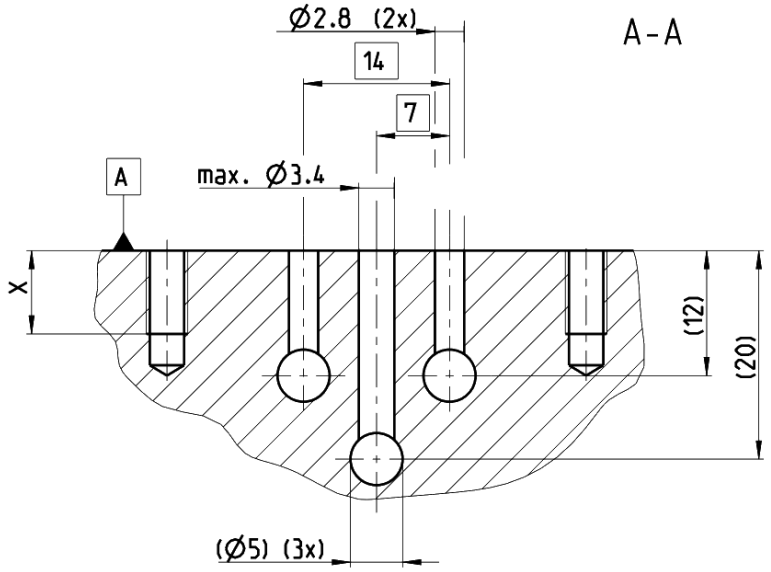
Weight	155 g
Mounting position	any
Switching cycles (life time)	5 Mio.
MTTFd-value	150 years According to ISO 13849-2 C1, C2
Reference	Valve specification according to Thomas LHP 97

Dimensions with Deutsch Connector [mm]

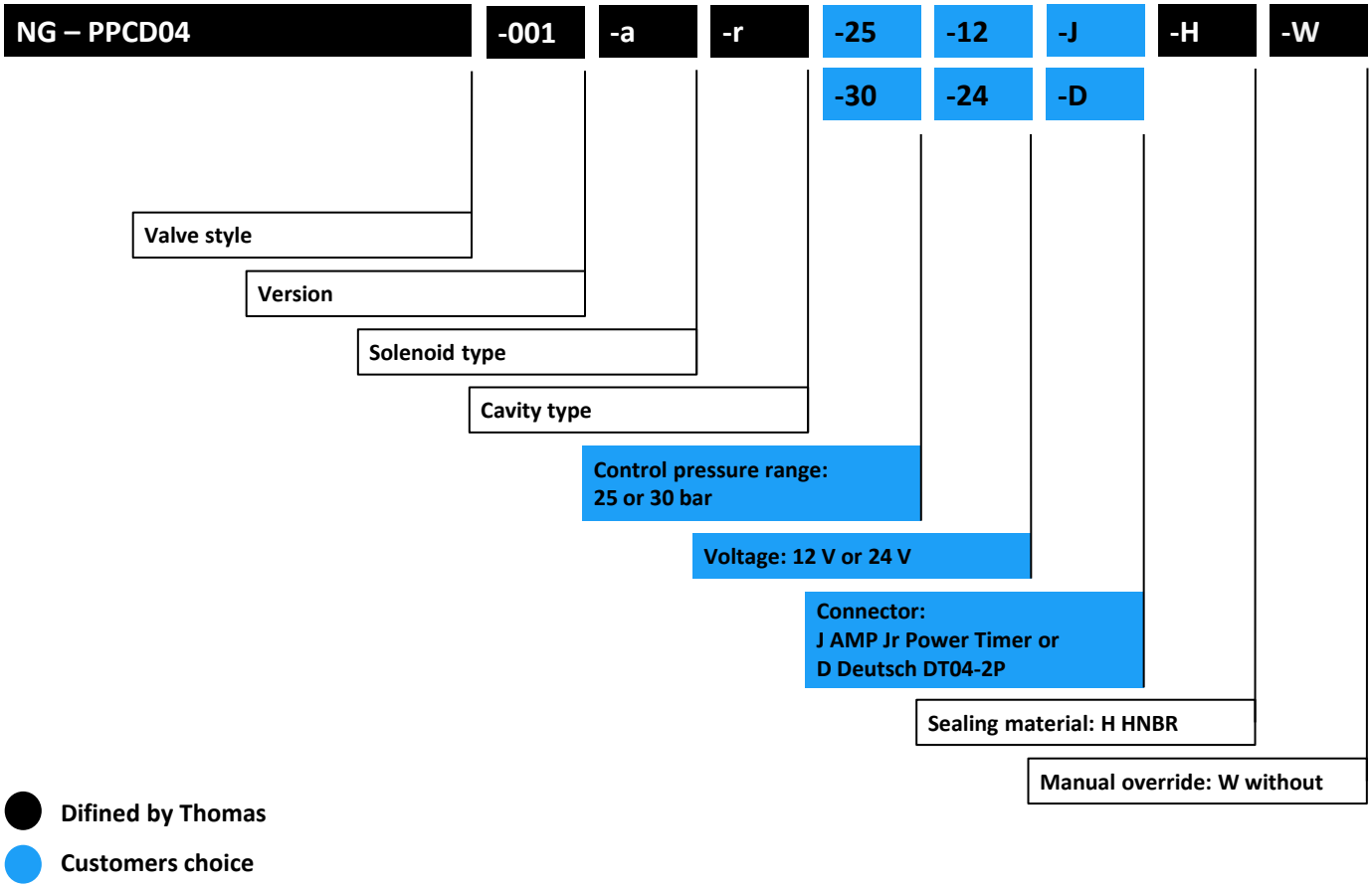


Cavity Dimensions (All dimensions in mm)





Model Code



DISCLAIMER

The presented information is based on current knowledge and provides only non-binding information to the customer. Any liability in connection with this information is excluded.
It is the responsibility of the customer to determine the suitability and appropriateness of the product for his intended purpose. We reserve the right to change the product with regard to technical progress and new developments.

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