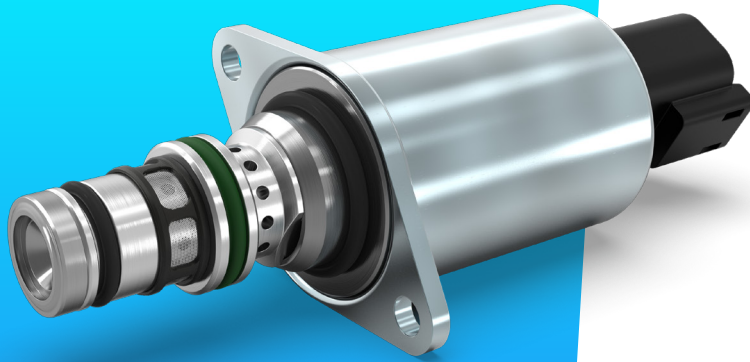


## Proportional Pressure Control Valve PPCD05 – NG PPRV



Proportional  
valves

Directional  
valves

Smart  
products

Special  
designs

### Product classification

Name	Max volume flow @ 6 bar dp	
PPCD 03	1,25 l/min	Direct controlled
PPCD 04	2,5–5 l/min	
<b>PPCD 05</b>	<b>10 l/min</b>	
PPCD 06	15 l/min	
PPCD 08	20 l/min	
PPCD 09	30 l/min	Pilot operated
PPCP 09	35 l/min	
PPCP 13	72 l/min	



## Hydraulic Data

Max pressure pump	$P_p = 50 \text{ bar}$
Max pressure tank	$P_T = 30 \text{ bar}$
Max pressure work	$P_A = 30 \text{ bar}$
Hysteresis	< 3 % of the nominal pressure at recommended type of control
Contamination level	Min Filtration: X/20/18 According to ISO 4406
Fluid	Mineral Oil According to DIN 51524
Temperature range fluid	-30°C to +105°C
Leakage (internal)*	< 0,03 l/min (de-energized) < 0,25 l/min (energized)
Filterscreen size	140 $\mu\text{m}$ (P-Port)

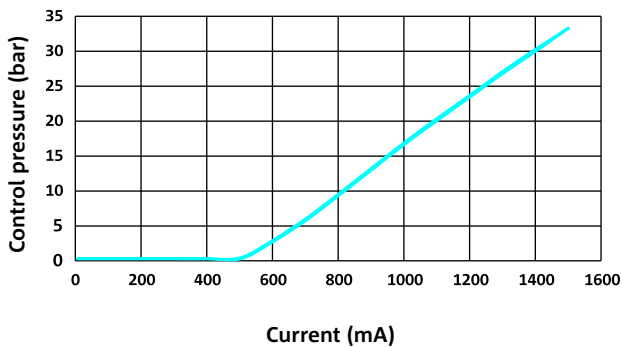
## Electrical Data

Voltage	12 V	24 V	
Max current	1500 mA	750 mA	
Resistance	4,72 $\Omega \pm 5\%$	8,15 $\Omega \pm 5\%$	20,8 $\Omega \pm 5\%$
Type of control	PWM signal > 1000 Hz + superimposed dither 120 Hz (200 mA peak to peak) recommended		
Connector	AMP Junior timer Deutsch Connector DT04-2P		
Protection class	up to IP6K6 / IPX9K		
Switching time	$t_{on} < 40 \text{ ms}$ (pA = 0% to 90%) $t_{off} < 40 \text{ ms}$ (pA = 100% to 10%)		

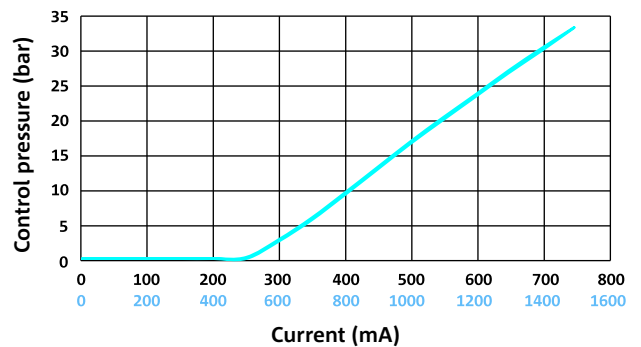
\* The reported data are measured @  $P_p=41 \text{ bar}$  and an oil viscosity of 32 cSt

## Current vs. Pressure (average characteristic)

P-I CURVE (12 V\_4,72  $\Omega$ )



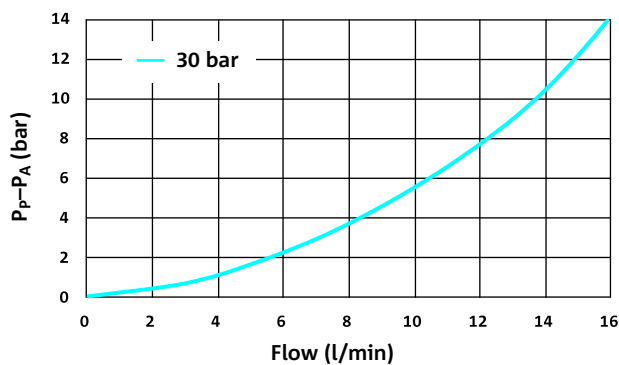
P-I CURVE (24 V\_8,15  $\Omega$  / 24 V\_20,8  $\Omega$ )



## Flow characteristics (Average characteristic)

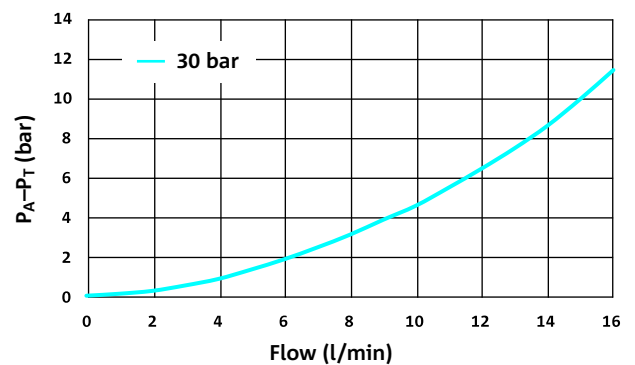
PRESSURE DROP PUMP TO CONTROL PORT (P→A)

Valve only



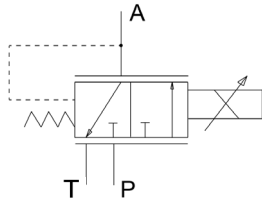
PRESSURE DROP CONTROL PORT TO TANK (A→T)

Valve only





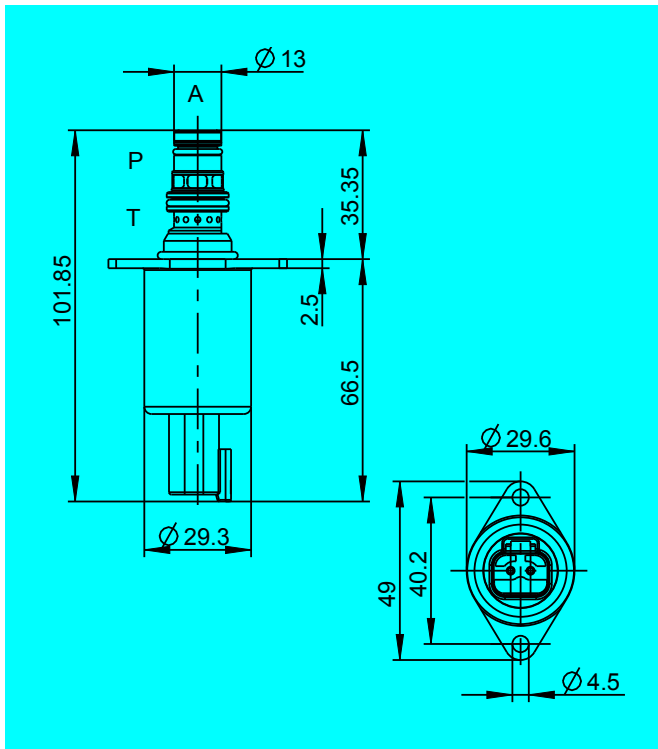
## Hydraulic schematic



## Additional data

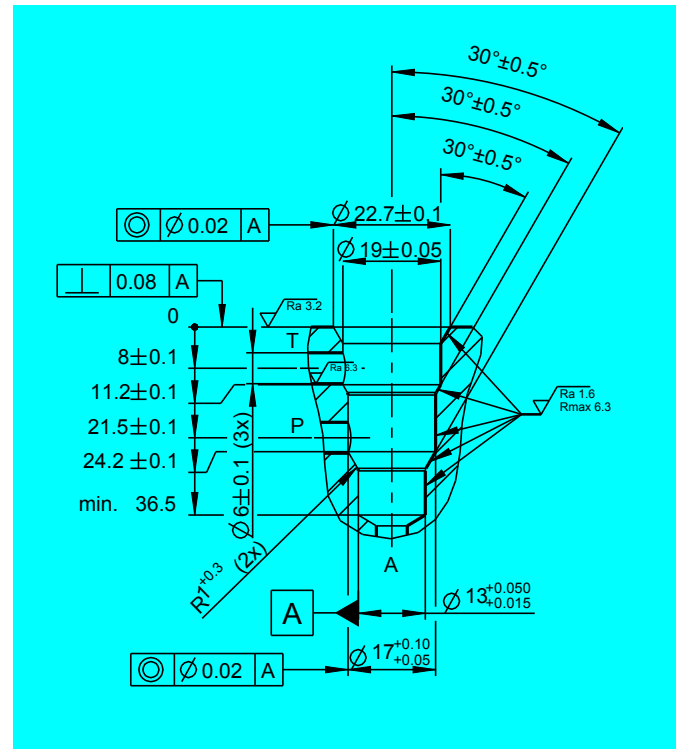
<b>Weight</b>	approx. 235 g
<b>Mounting position (recommended)</b>	any
<b>MTTF<sub>d</sub>-value</b>	150 years
<b>Reference</b>	Valve specifications according to Thomas LHP 86

## Dimensions with Deutsch Connector\* (All dimensions in mm)



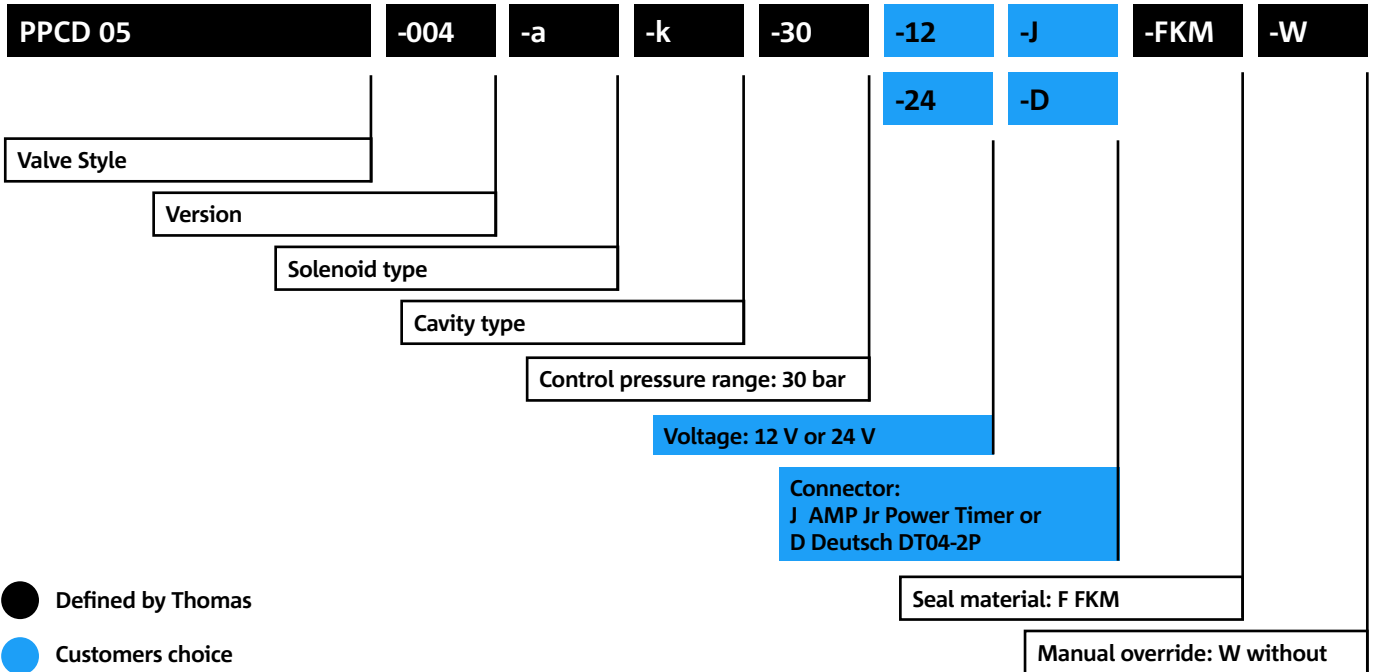
\* Dimensions for AMP Jr. Connector available on request.

## Cavity Dimensions (All dimensions in mm)





## Model code



- Defined by Thomas
- Customers choice

### CONTACT DETAILS

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