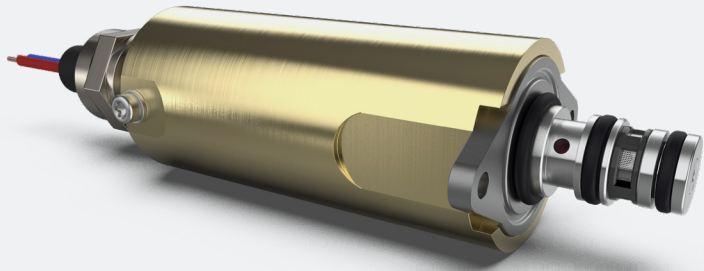


# Proportional Pressure Control Valve

## ATEX/IECEX PPCD04-PPRV



### PRODUCT CLASSIFICATION

Special designs

Proportional valves

Directional valves

Smart products

Name Max volume flow @ 6 bar dp

ATEX	2,5–5 l/min	Direct controlled
IPH		
IPRV		

### HYDRAULIC DATA

Max pressure pump	$P_p = 50$ bar
Max pressure tank	$P_T = 30$ bar
Max pressure work	$P_A = 20, 25$ or 32 bar
Hysteresis	< 3,5 % of the nominal pressure at 100 Hz PWM signal
Contamination level	Min Filtration: 20/18/15 According to ISO 4406
Fluid	Mineral Oil According to DIN 51524
Temperature range fluid	-20°C to +80°C
Leakage (internal)	< 0,1 l/min (de-energized) < 0,5 l/min (energized)
Filterscreen size	125 $\mu$ m (P-Port) available

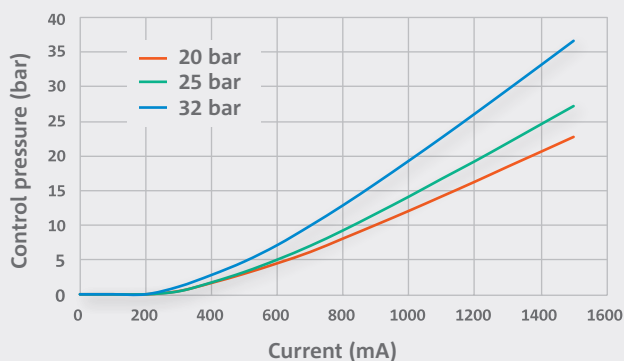
### ELECTRICAL DATA

Voltage	12 V	24 V
Max current	1500 mA	750 mA
Resistance	5,3 $\Omega \pm 5\%$	21,2 $\Omega \pm 5\%$
Type of control	Current control PWM 100 Hz recommended	
Connector	Shielded cable	
Protection class	up to IP6K6 / IPX7 / IPX9K	
Switching time	$t_{on} < 50$ ms ( $p_A = 0\%$ to 90%) $t_{off} < 50$ ms ( $p_A = 100\%$ to 10%)	

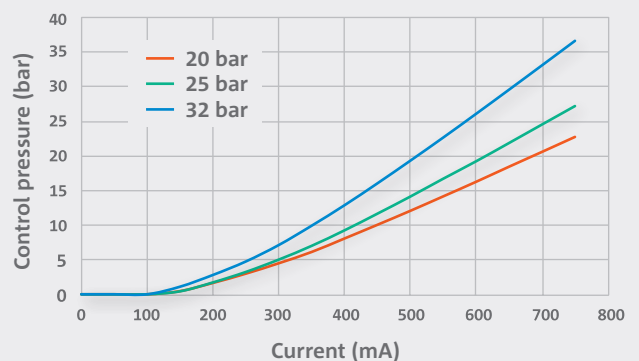
\* The reported data are measured @  $P_p=35$  bar (20 and 25 bar version and 40 bar (32 bar version) an oil viscosity of 32 cSt

### CURRENT VS. PRESSURE (AVERAGE CHARACTERISTIC)

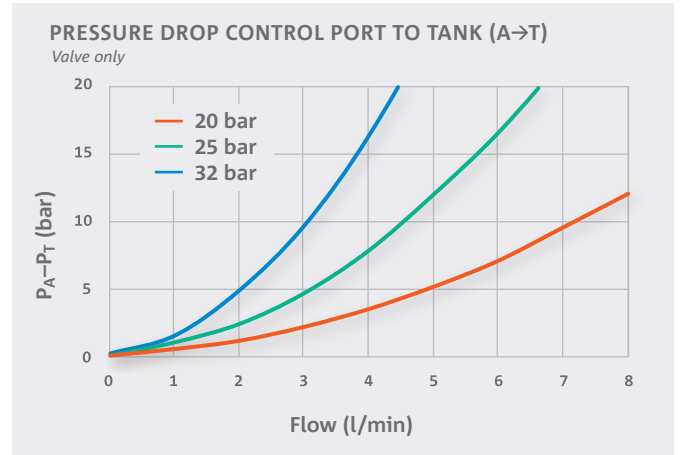
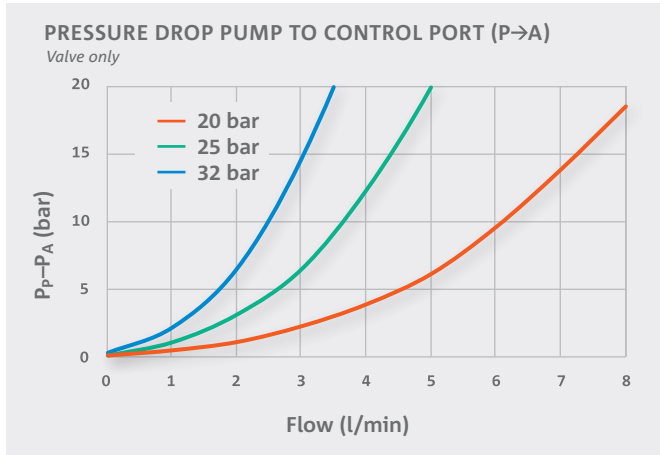
P-I CURVE (12 V)



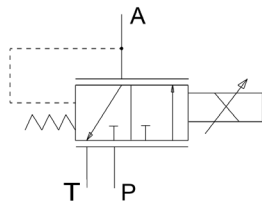
P-I CURVE (24 V)



## FLOW CHARACTERISTICS (AVERAGE CHARACTERISTIC)



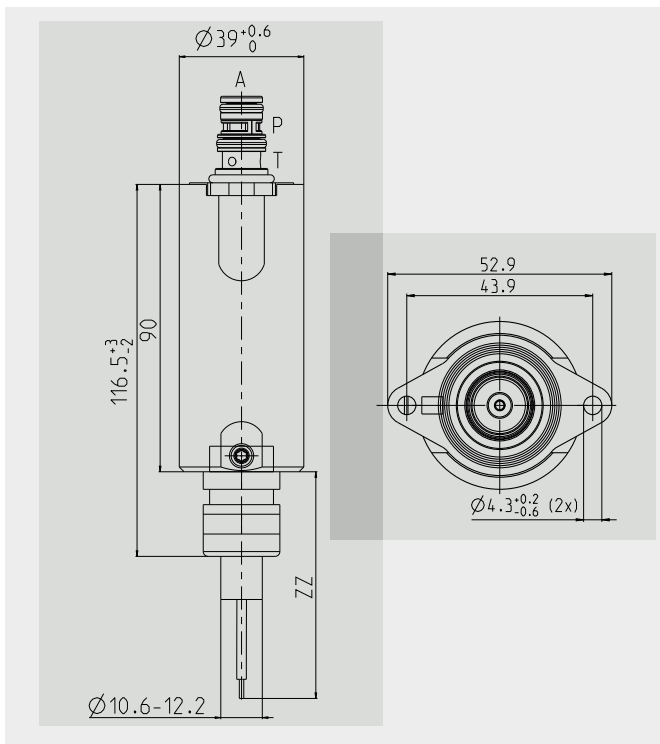
## HYDRAULIC SCHEMATIC



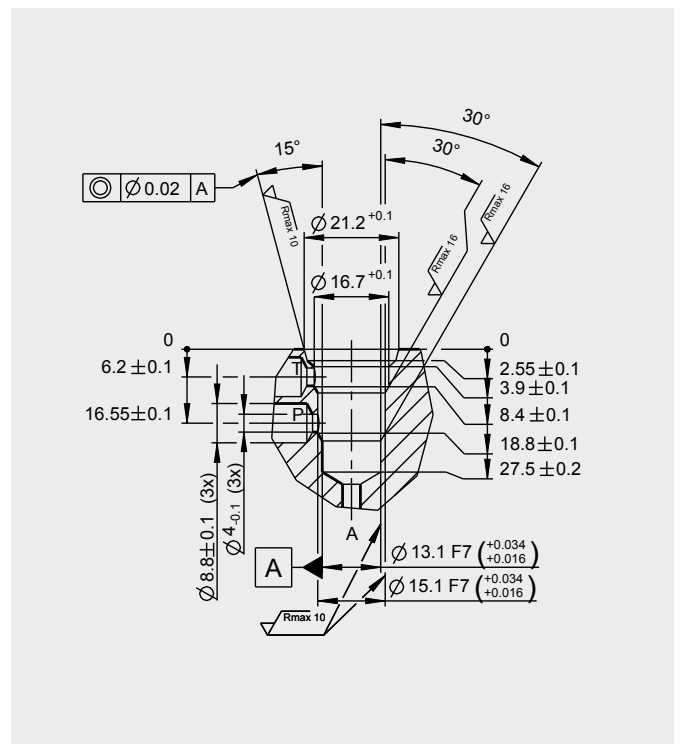
## ADDITIONAL DATA

<b>Weight</b>	approx. 580 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 31

## DIMENSIONS WITH DEUTSCH CONNECTOR\* (All dimensions in mm)



## CAVITY DIMENSIONS (All dimensions in mm)



**CERTIFIED FIELD OF OPERATION**

**Thomas Magnete GmbH**

---

Ex - PPCD 04 / ec / 20/12/C/05 - 13.02.2015

---

TÜV13 ATEX 7418 X IECEX TUR - 13.0015

---

Ex I M2 Ex mb I Mb

---

Ex II 2G Ex mb IIC T4 Gb

---

Ex II AD Ex mb IIIC T130°C Db

---

CE 0035

**MODEL CODE**

ex-PPCD 04	-b	-02	-F	-20	-12	-C
		-05		-25	-24	
		-10		-32		

Valve Style

Cavity type

Cable length: 02, 05 or 10 m

Sealing material: F FKM

Control pressure range: 20, 25 or 32 bar

Voltage: 12 V or 24 V

Cable type: C NSSHHÖU-O 2\*1,5 mm<sup>2</sup>

- Defined by Thomas
- Customers choice

**CONTACT DETAILS**

**Michael Lutz**

Thomas Magnete GmbH

- Innomotion Park 3
- 57562 Herdorf, Germany
- Tel. +49 2744 929-220
- michael.lutz@thomas-magnete.com
- www.thomas-group.com

**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.