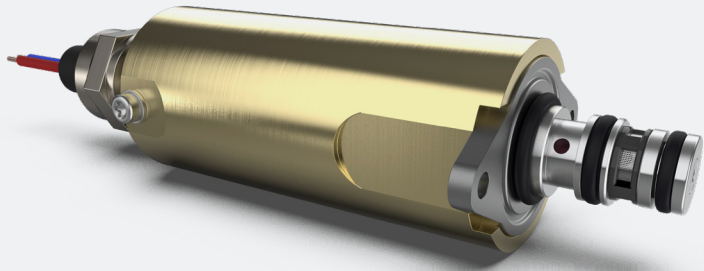


Proportional Pressure Control Valve

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 μ m (P-Port) available

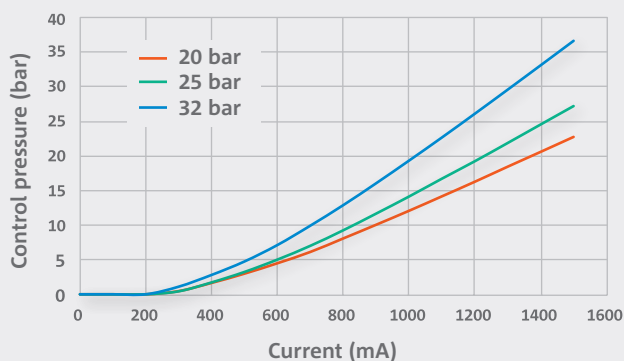
ELECTRICAL DATA

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%)	

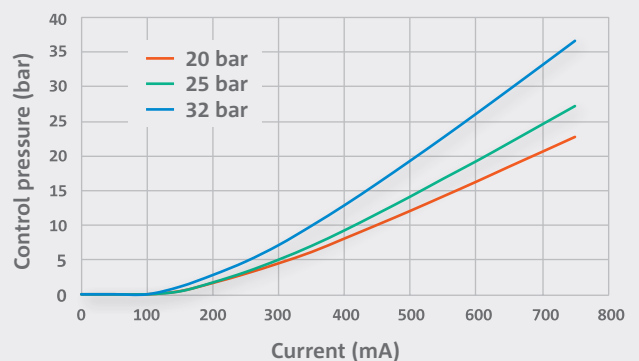
* The reported data are measured @ $P_p=35$ bar (20 and 25 bar version and 40 bar (32 bar version) an oil viscosity of 32 cSt

CURRENT VS. PRESSURE (AVERAGE CHARACTERISTIC)

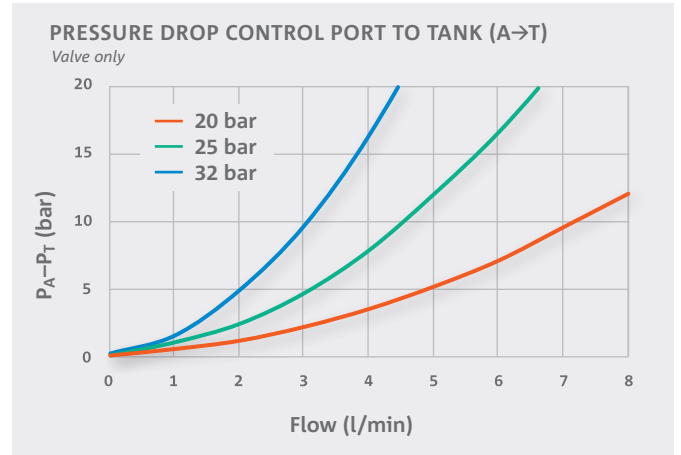
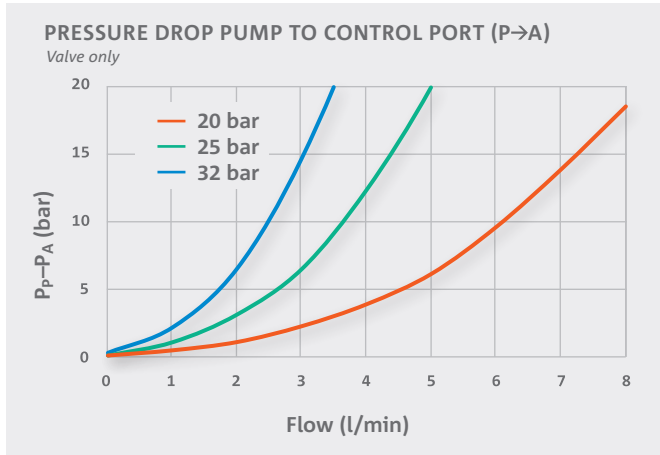
P-I CURVE (12 V)



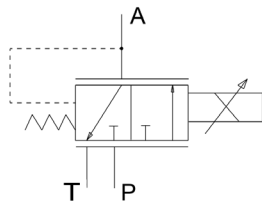
P-I CURVE (24 V)



FLOW CHARACTERISTICS (AVERAGE CHARACTERISTIC)



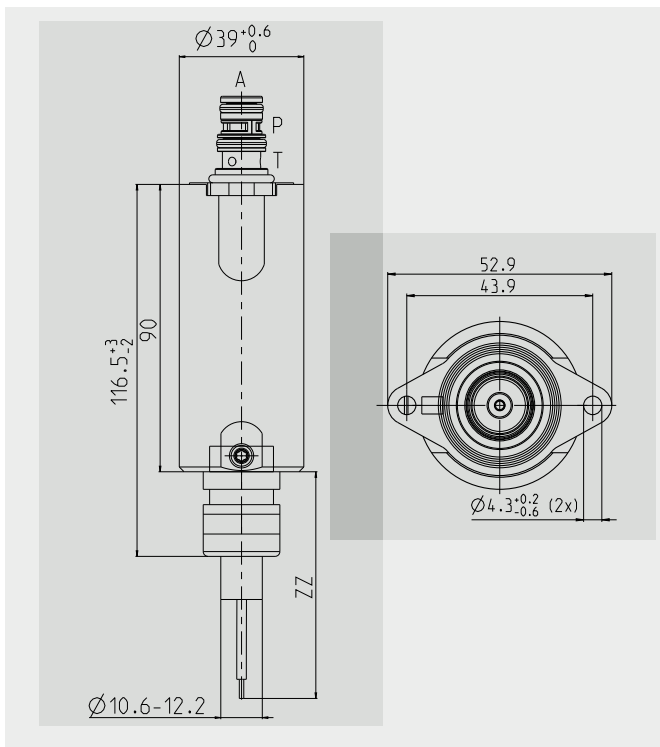
HYDRAULIC SCHEMATIC



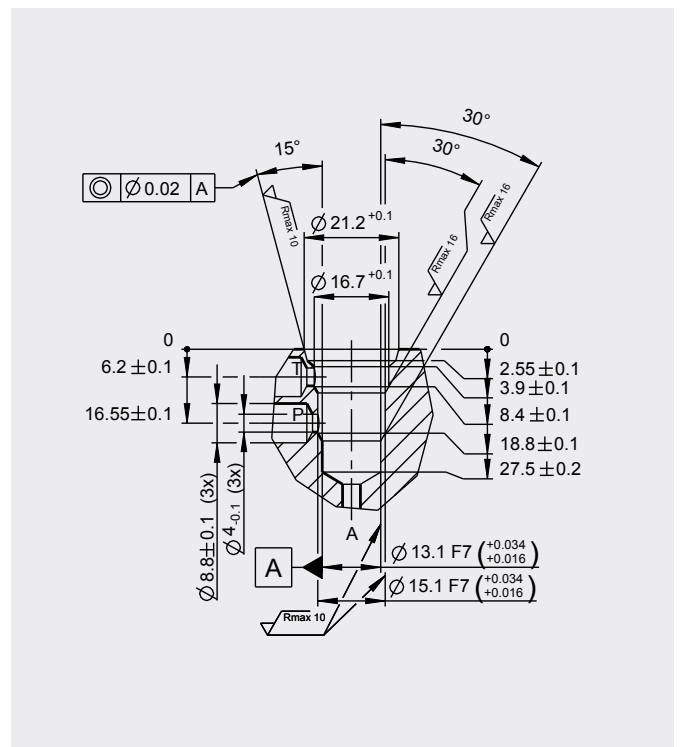
ADDITIONAL DATA

Weight	approx. 580 g
Mounting position (recommended)	any
MTTF_d-value	150 years
Reference	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 mm²

- Defined by Thomas
- Customers choice

CONTACT DETAILS

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