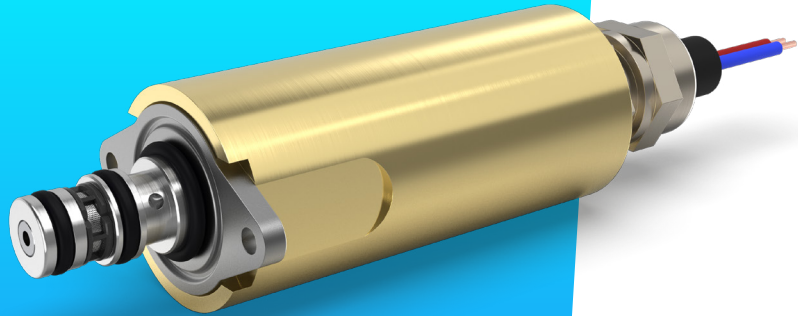


Proportional Pressure Control Valve ATEX/IECEX PPCD04-PPRV



Product classification

Name	Max volume flow @ 6 bar dp	
ATEX	2,5-5 l/min	Direct controlled
IPH		
IPRV		

Proportional valves

Directional valves

Smart products

Special designs



Hydraulic Data

Max pressure pump	$P_p = 50 \text{ bar}$
Max pressure tank	$P_T = 30 \text{ bar}$
Max pressure work	$P_A = 20, 25 \text{ or } 32 \text{ bar}$
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 μm (P-Port) available

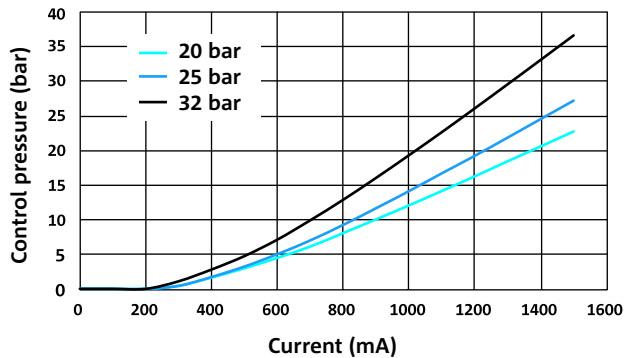
Electrical Data

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	$t_{on} < 50 \text{ ms}$ (pA = 0% to 90%) $t_{off} < 50 \text{ ms}$ (pA = 100% to 10%)	

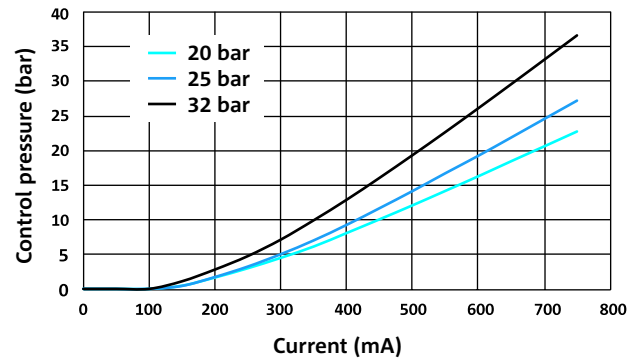
* The reported data are measured @ $P_p=35 \text{ bar}$ (20 and 25 bar version) and 40 bar (32 bar version) an oil viscosity of 32 cSt

Current vs. Pressure (average characteristic)

P-I CURVE (12 V)



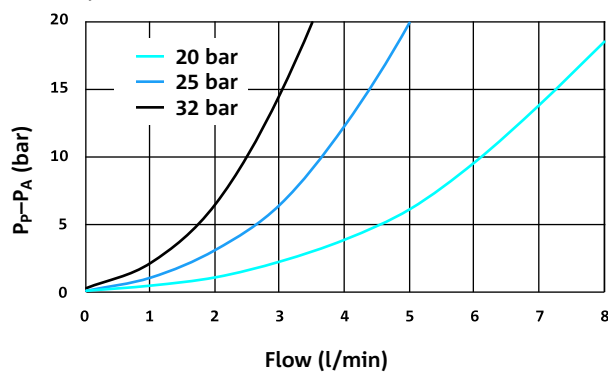
P-I CURVE (24 V)



Flow characteristics (Average characteristic)

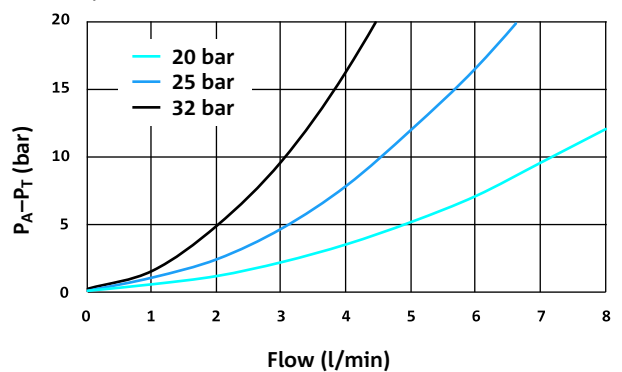
PRESSURE DROP PUMP TO CONTROL PORT (P→A)

Valve only



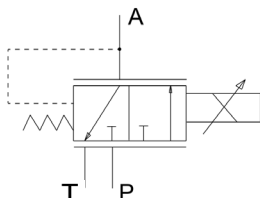
PRESSURE DROP CONTROL PORT TO TANK (A→T)

Valve only





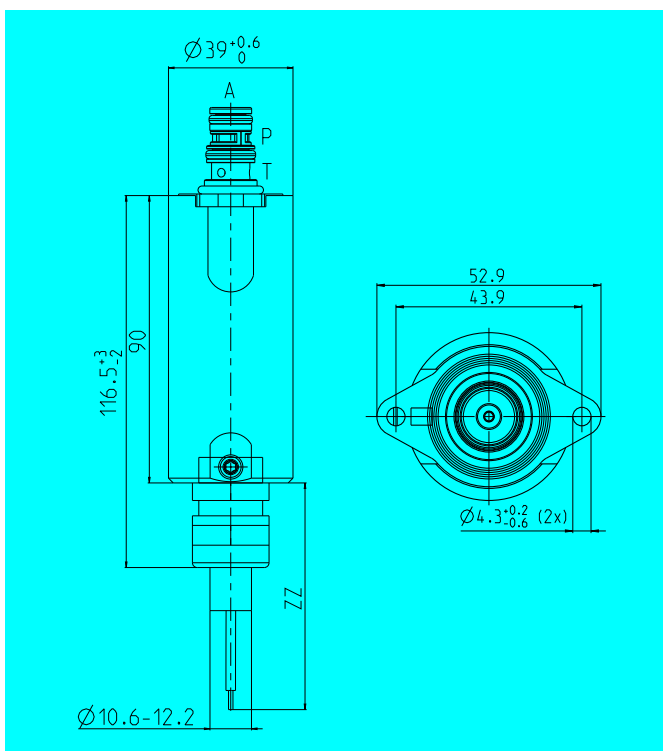
Hydraulic schematic



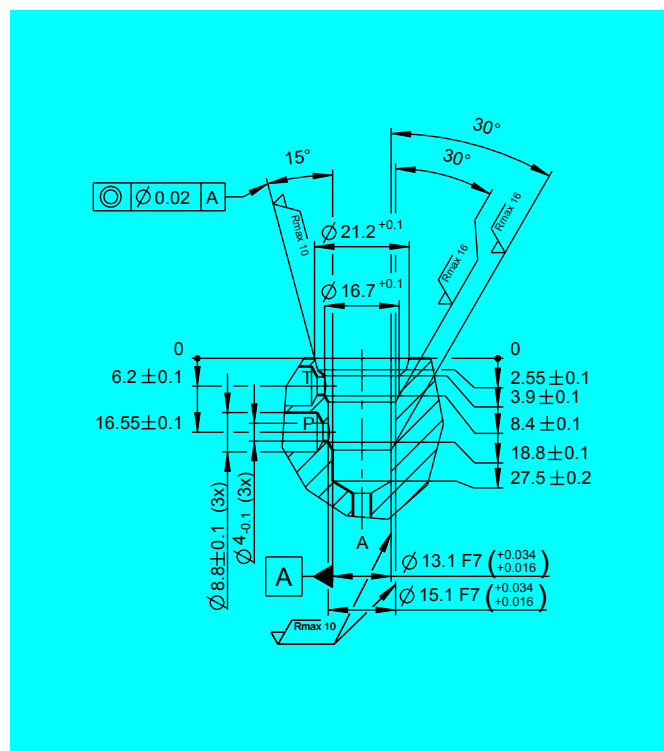
Additional data

Weight	approx. 580 g
Mounting position (recommended)	any
MTTF_d-value	150 years
Reference	Valve specifications according to Thomas LHP 31

Dimensions with Flying Leads (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

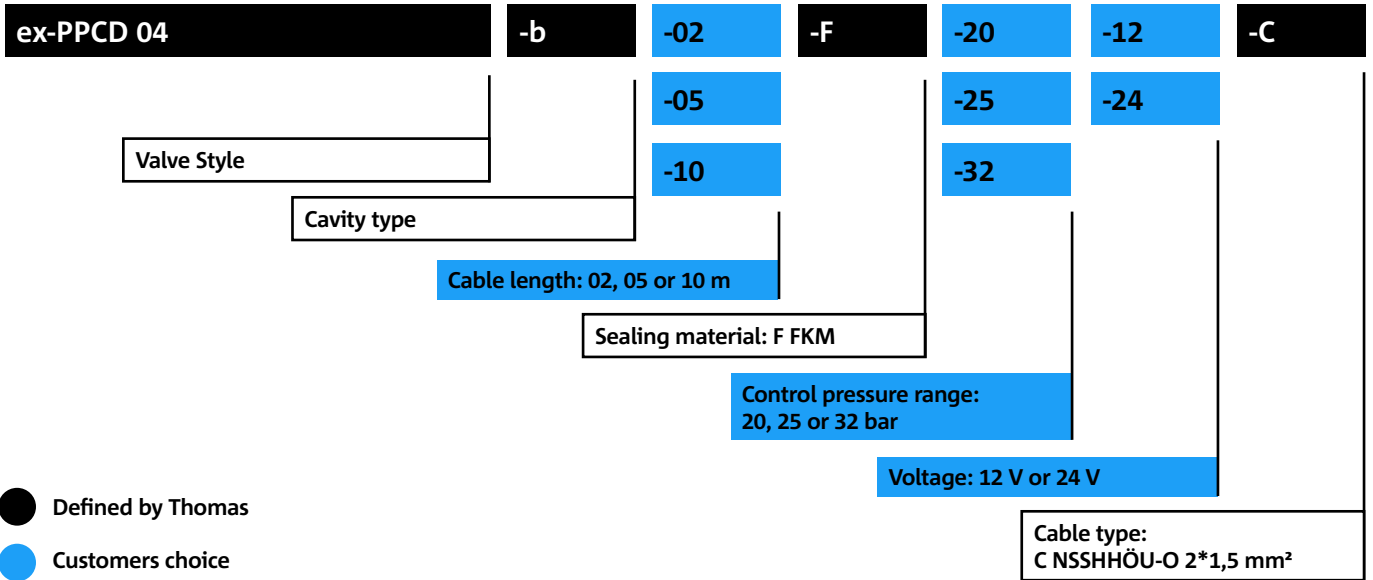
Ex II 2G Ex mb IIC T4 Gb

Ex II AD Ex mb IIIC T130°C Db

CE 0035



Model code



CONTACT DETAILS



Michael Lutz

Thomas Magnete GmbH

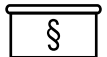
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