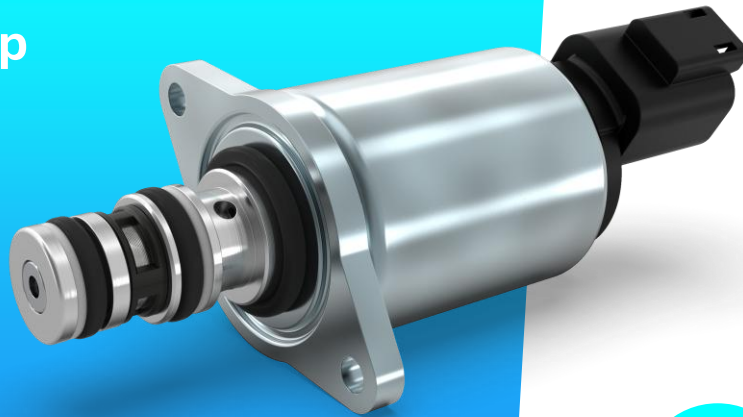


Classic-PPCD04 HP

Proportional Valve

High pressure Pump



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 – 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:

- High pressure inlet up to 350 bar
- Inlet Filter protection

Flexibility: 90° Deutsch connector available

Now available: Low leakage option



Hydraulic Data

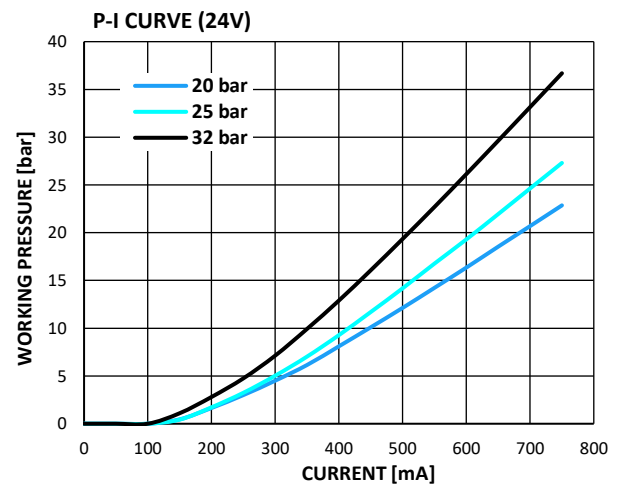
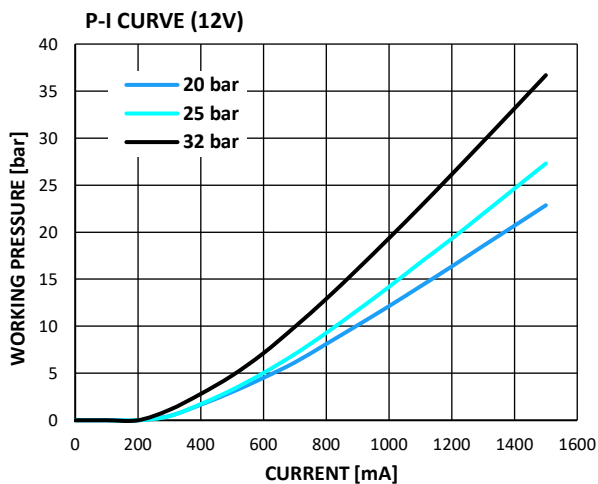
Max pressure pump	$P_p = 350$ bar
Max pressure tank	$P_T = 30$ bar
Max pressure work	$P_A = 20, 25$ or 30 bar
Hysteresis	< 4% of the nominal pressure @ 100Hz PWM signal
Contamination level	Min. Filtration: 20/18/15 According to ISO 4406
Fluid	Mineral Oil According to DIN 51524
Temperature range fluid	-30 °C to +105 °C
Leakage (internal)*	Standard: < 0,4 l/min (de-energized) < 0,8 l/min (energized) Low leakage: < 0,02 l/min (de-energized) < 0,05 l/min (energized)
Filterscreen size	125 μ m (P-Port)

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	AMP Junior Timer Deutsch Connector DT04-2P 90° Deutsch Connector DT04-2P	
Protection class	Up to IP6K6 / IPX9K	
Switching time	$t_{on} < 50$ ms (pA = 0% to 90%) $t_{off} < 50$ ms (pA = 100% to 10%)	

* The reported data are measured @ $P_p = 350$ bar, oil viscosity of 32 cSt

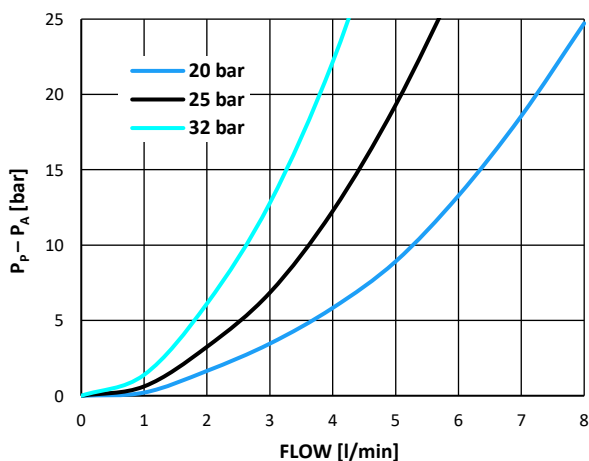
Current vs. Pressure (Average characteristic)



Flow characteristics (Average characteristic)

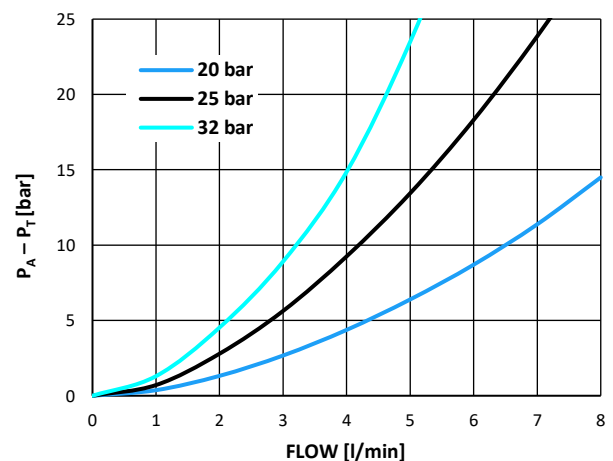
PRESSURE DROP PUMP TO CONTROL PORT (P→A)

Valve only



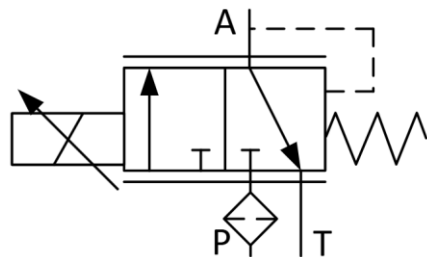
PRESSURE DROP CONTROL PORT TO TANK (A→T)

Valve only





Hydraulic schematic

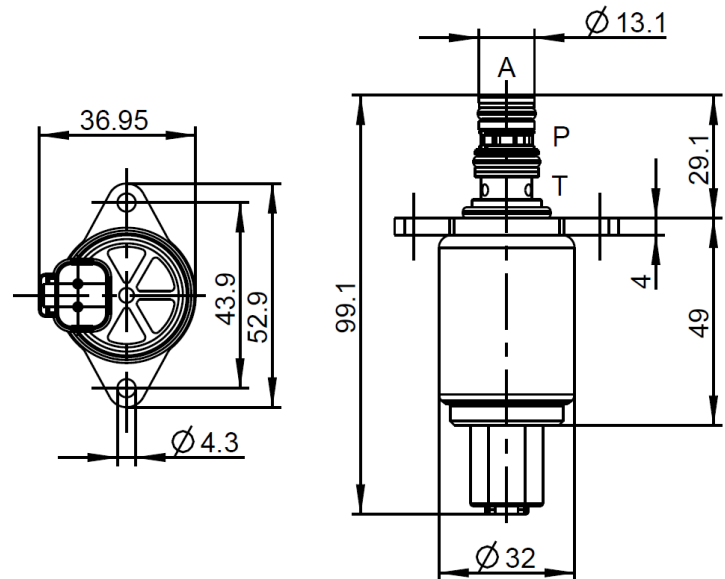


Additional data

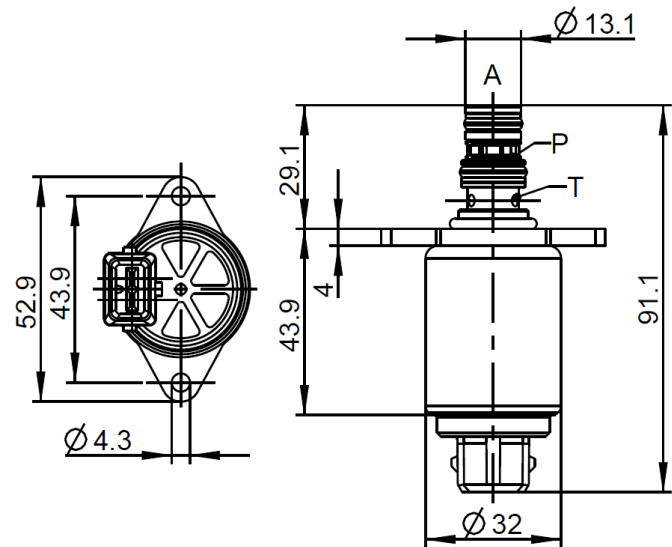
Weight	approx. 230 g
Mounting position	any
Switching cycles (lifetime)	5 Mio.
MTTF _d -value	150 years According to ISO 13849-2 C1, C2
Reference	Valve specification according to Thomas LHP 24

Dimensions with Deutsch Connector [mm]

(Dimensions with 90° Deutsch Connector on request)

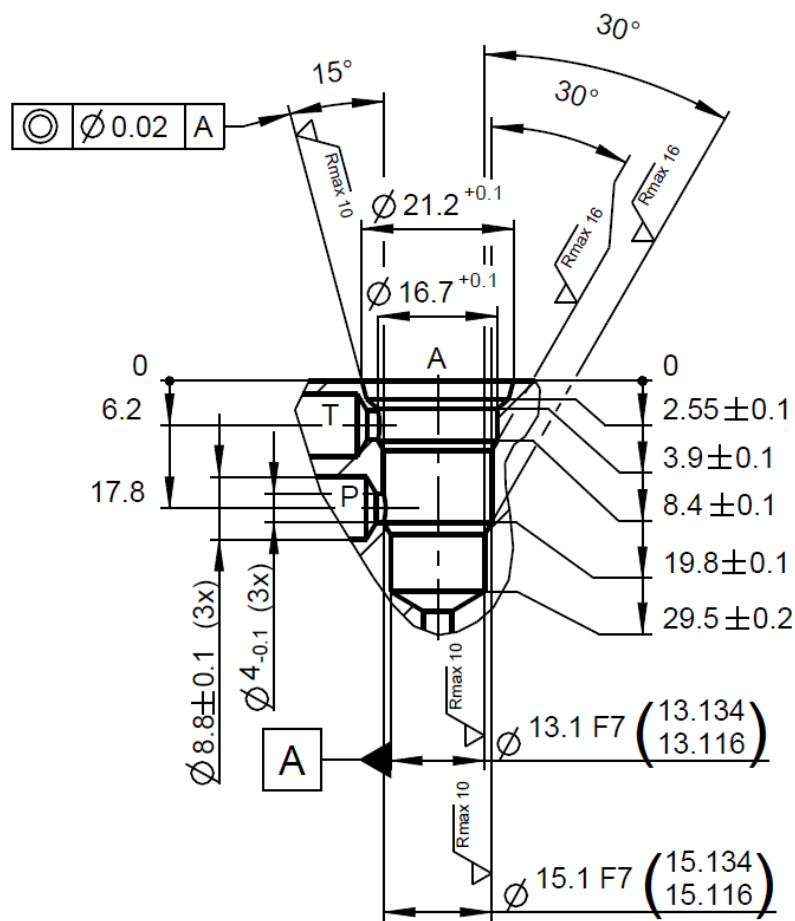


Dimensions with AMP Junior Timer [mm]





Cavity Dimensions [mm]





Model Code

PPCD04	-002	-b	-d	-20	-12	-J	-N	-W
	-013			-25	-24	-D		-M
				-32		-DH		
Valve style								
Version: 002 Standard 013 Low leakage								
Solenoid type								
Cavity type								
			Control pressure range: 20, 25 or 32 bar					
				Voltage: 12 V or 24 V				
					Connector: J AMP Jr Power Timer or D Deutsch DT04-2P or DH 90° Deutsch DT04-2P			
						Sealing material: N NBR		
							Manual override: W without M with (only with connector type J)	

- Defined by Thomas
- Customers choice

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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