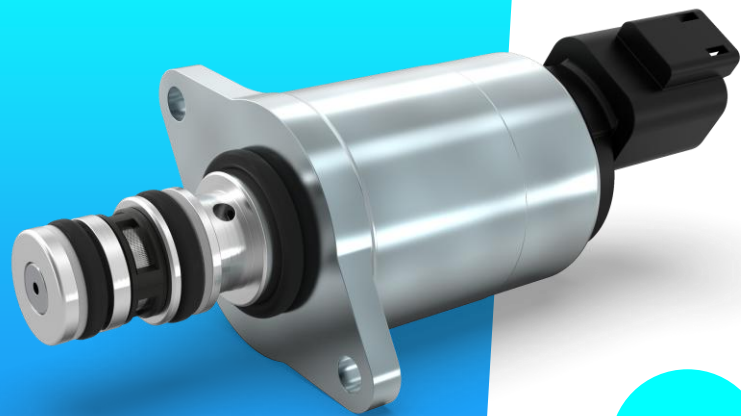


Classic-PPCD04 HTHP

Proportional Valve

High pressure Tank

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	

Robustness:

-  High pressure inlet up to 350 bar
-  High pressure tank up to 210 bar
-  Inlet Filter protection



Hydraulic Data

Max pressure pump	$P_p = 350 \text{ bar}$
Max pressure tank	$P_T = 210 \text{ bar}$
Max pressure work	$P_A = 20, 25 \text{ or } 32 \text{ bar}$
Hysteresis	< 4 % 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	-30°C to +105°C
Leakage (internal)*	< 0,4 l/min (de-energized) < 0,8 l/min (energized)
Filterscreen size	125 μm (P-Port)

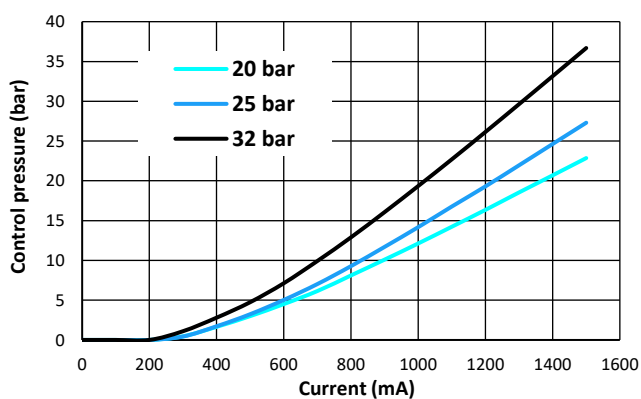
Electrical Data

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	
Protection class	up to IP6K6 / IPX9K	
Switching time	$t_{on} < 50 \text{ ms}$ (pA = 0% to 90%) $t_{off} < 50 \text{ ms}$ (pA = 100% to 10%)	

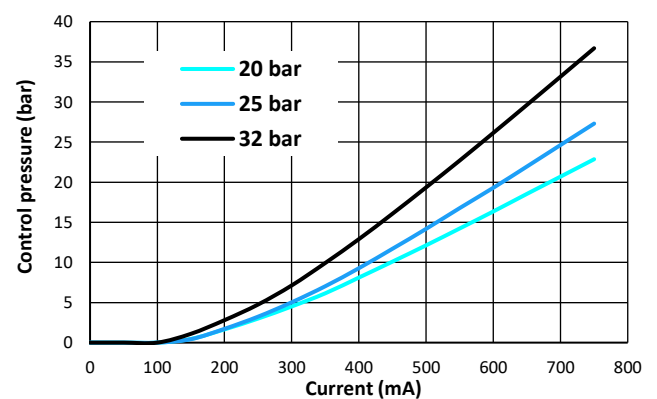
* The reported data are measured @ $P_p=35 \text{ bar}$ (20 and 25 bar version) and 40 bar (32 bar version) an oil viscosity of 32 cSt

Current vs. Pressure (Average characteristic)

P-I CURVE (12 V)



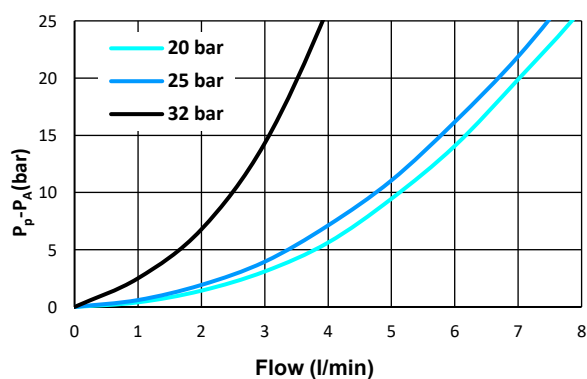
P-I CURVE (24 V)



Flow characteristics* (Average characteristic)

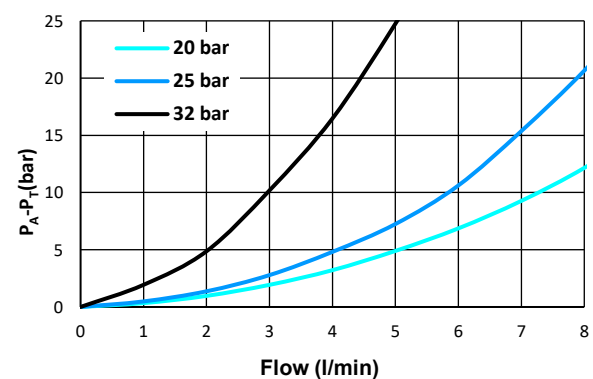
PRESSURE DROP PUMP TO CONTROL PORT (P→A)

Valve only



PRESSURE DROP CONTROL PORT TO TANK (A→T)

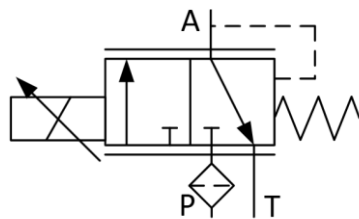
Valve only



* Due to system related valve adaptations values might differ.



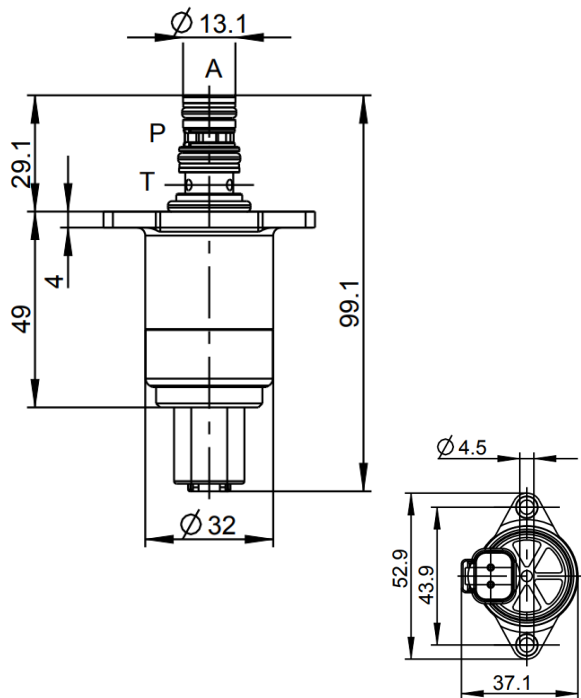
Hydraulic schematic



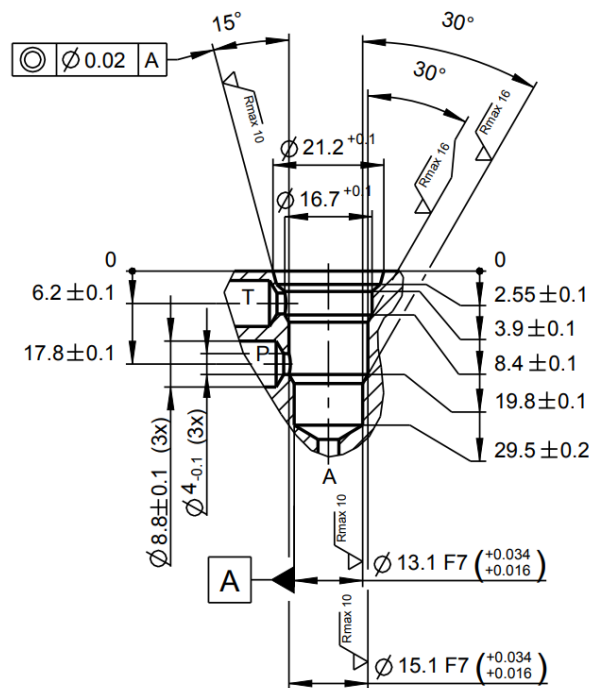
Additional data

Weigth	approx. 175 g
Mounting Position (recommended)	any
MTTF _d -value	150 years
Reference	Valve specifications according to Thomas LHP 39

Dimensions with Deutsch Connector*
(All dimensions in mm)



Cavity Dimensions
(All dimensions in mm)



* Dimensions for AMP Jr. Connector available on request.



Model code

PPCD04	-003	-g	-d	-20	-12	-J	-H	-W
				-25	-24	-D		-M
				-32				
Valve style								
	Version							
		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		
							Seal material: N NBR	
								Manual override: W without or 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.

CONTACT DETAILS



Thomas GmbH

Innomotion Park 3
57562 Herdorf
Germany

Sales:
sales@thomas-group.com
Technical support:
TECsupport@thomas-group.com