

Classic-PPCD04 with 90° deutsch connector Proportional Valve



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	Pilot operated
PPCP09	35 l/min	
PPCP13	72 l/min	

Proportional
valves

Directional
valves

Smart
products

Special
designs



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 % 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)*	< 0,1 l/min (de-energized) < 0,5 l/min (energized)
Filterscreen size	125 µm (P-Port)

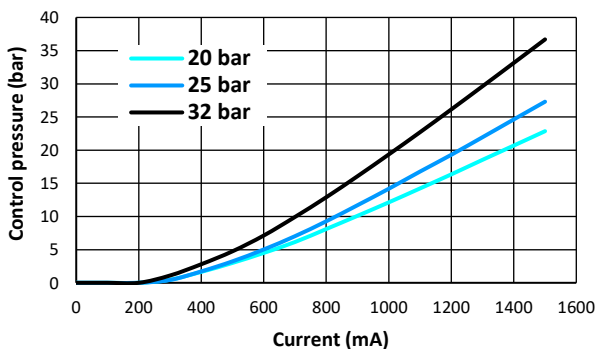
Electrical Data

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

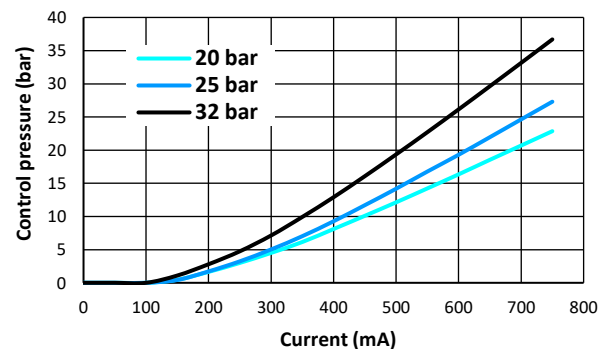
* The reported data are measured @ $P_p=35$ bar (20 and 25 bar version) and 40 bar (32 bar version) an oil viscosity of 32 cSt

Current vs. Pressure (Average characteristic)

P-I CURVE (12 V)



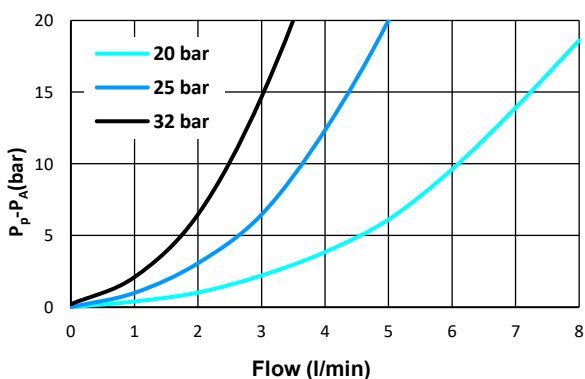
P-I CURVE (24 V)



Flow characteristics (Average characteristic)

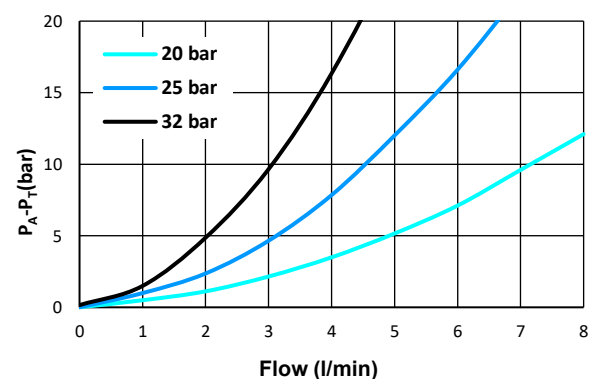
PRESSURE DROP PUMP TO CONTROL PORT (P→A)

Valve only



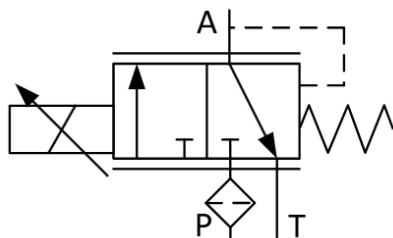
PRESSURE DROP CONTROL PORT TO TANK (A→T)

Valve only





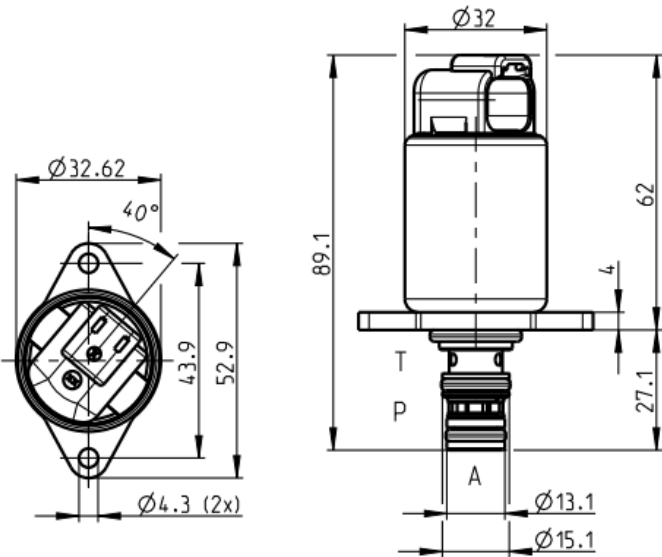
Hydraulic schematic



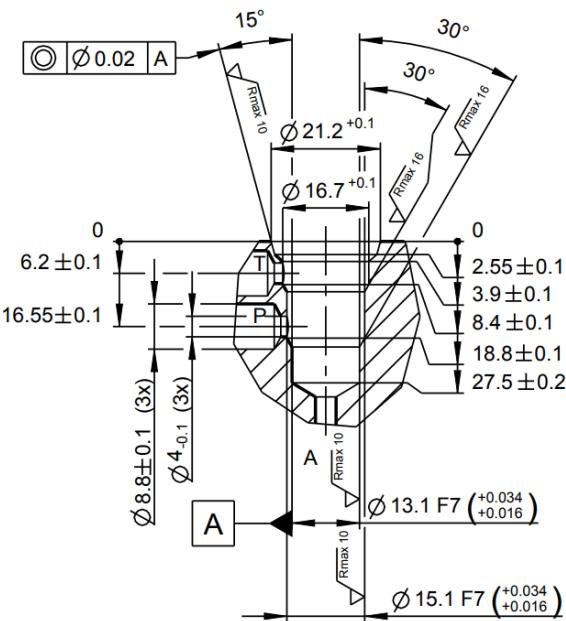
Additional data

Weight	approx. 230 g
Mounting Position (recommended)	any
MTTF _d -value	150 years
Reference	Valve specifications according to Thomas LHP 31

Dimensions 90° DT04-2p connector*
(All dimensions in mm)



Cavity Dimensions
(All dimensions in mm)



*Dimensions for Deutsch Connector and AMP Jr. Connector available on request



Model code

PPCD04	-004	-a	-k	-12	-12	-J	-FKM	-W
				-12	-24	-D		
Valve style				-12		-DH		
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 or DH 90° Deutsch DT04-2P				
							Seal material: F FKM	
								Manual override: W without

- 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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