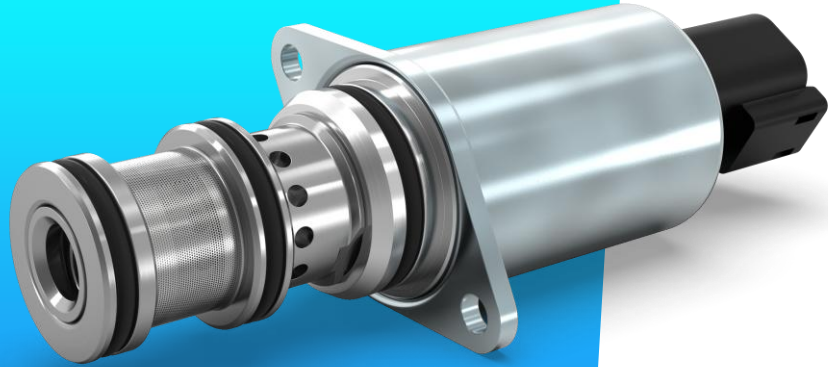


NG-PPCD09

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	$P_A = 22$ bar
Hysteresis	Typical 0,5 - 1,2 bar depending on control 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)*	< 0,08 l/min (de-energized) < 0,4 l/min (energized)
Filterscreen size	(P-Port) – tbd.

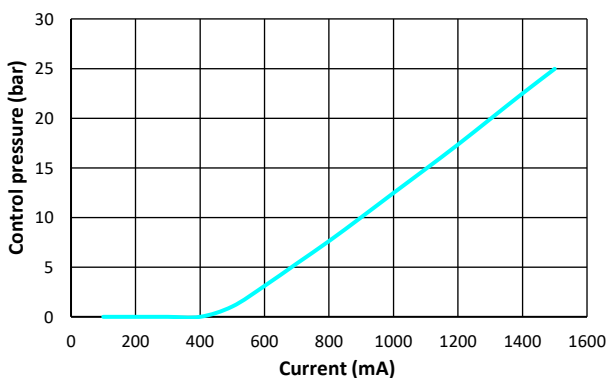
Electrical Data

Voltage	12 V	24 V	
Max current	1500 mA	1400 mA	750 mA
Resistance	4,72 $\Omega \pm 5\%$	8,15 $\Omega \pm 5\%$	20,8 $\Omega \pm 5\%$
Type of control	Recommended: Dither 100 Hz (Amplitude PTP: 300mA @ 12V 150mA @ 24V)		
Connector	AMP Junior timer (except 8,15 Ω -coil) Deutsch Connector DT04-2P		
Protection class	up to IP6K6 / IPX9K		
Switching time	$t_{on} < 45$ ms (pA = 0% to 90%) $t_{off} < 45$ ms (pA = 100% to 10%)		

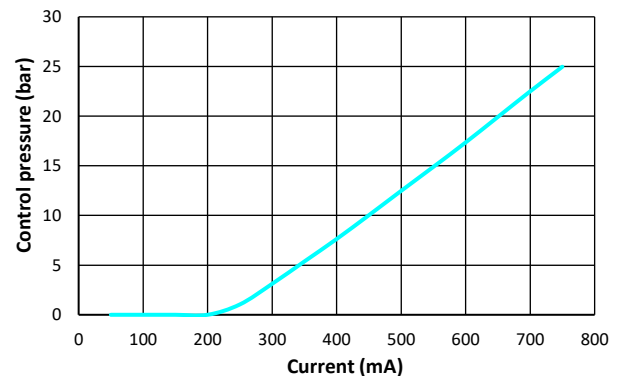
* The reported data are measured @ $P_p = 35$ bar and an oil viscosity of 32 cSt

Current vs. Pressure (Average characteristic)

P-I CURVE (12 V)

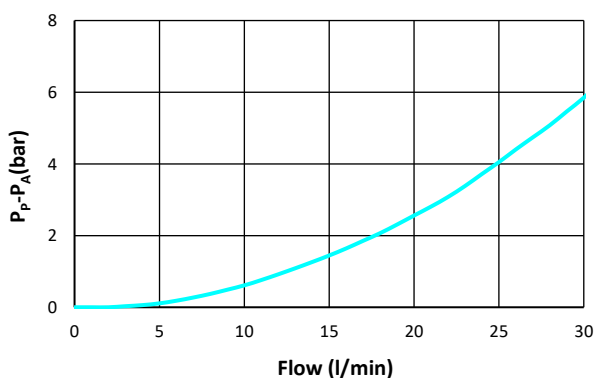


P-I CURVE (24 V)

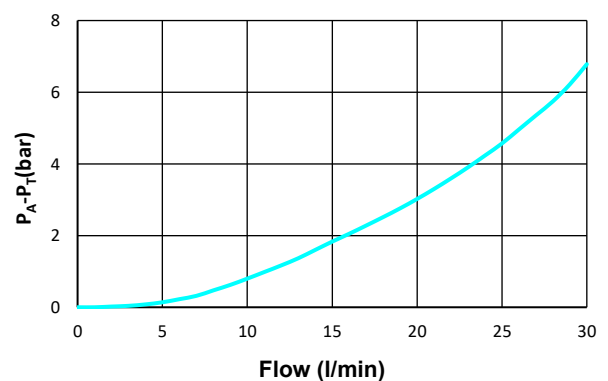


Flow characteristics (Average characteristic)

PRESSURE DROP PUMP TO CONTROL PORT (P→A)

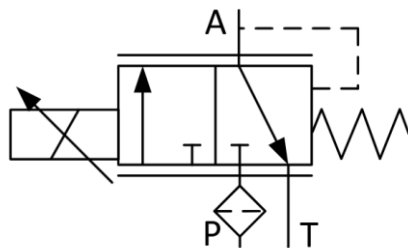


PRESSURE DROP CONTROL PORT TO TANK (A→T)





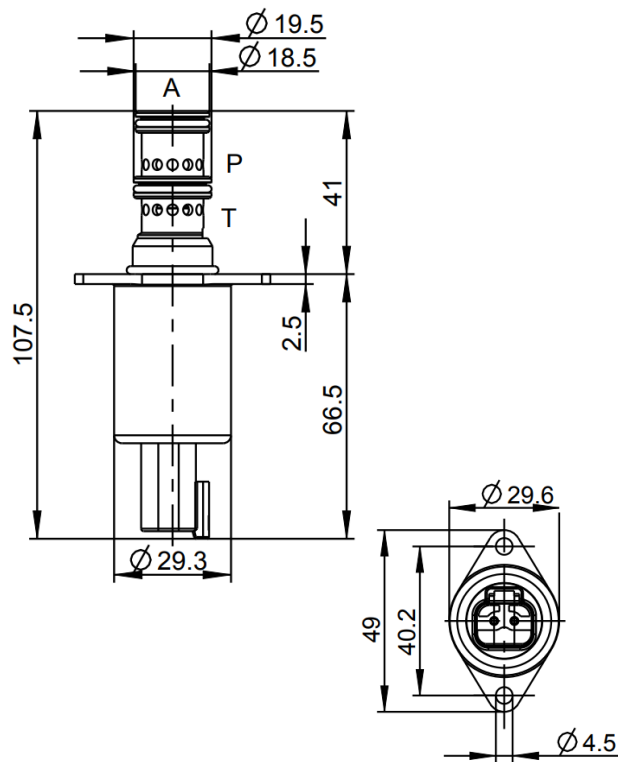
Hydraulic schematic



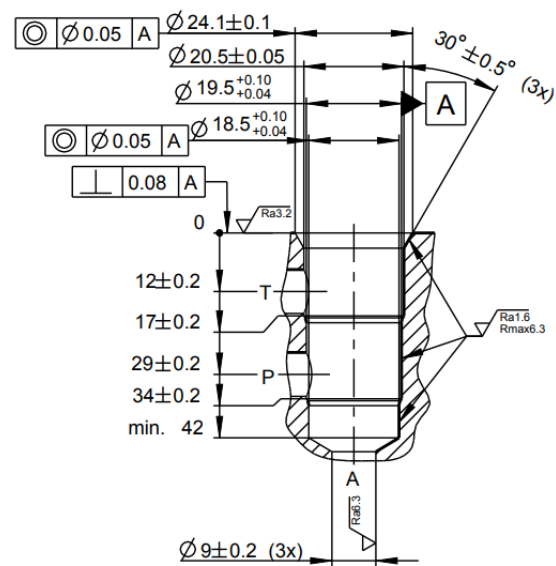
Additional data

Weigth	Approx. 230 g
Mounting Position (recommended)	any
MTTFd-value	150 years
Reference	Valve specification according to Thomas LHP 95

Dimensions with Deutsch Connector*
(All dimensions in mm)



Cavity Dimensions
(All dimensions in mm)



*Dimensions for AMP Jr. Connector available on request



Model code

PPCD09	-001	-a	-v	-22	-12	-J	-F	-W
					-24	-D		
Valve style								
Version								
Solenoid type								
Cavity type								
Control pressure range: 22 bar								
Voltage: 12 V or 24 V								
Connector: J AMP Jr Power Timer or D 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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