

Proportional Pressure Control Valve PPCP09 – PPRV HF



PRODUCT CLASSIFICATION

Proportional valves

Directional valves

Smart products

Special designs

Name Max volume flow @ 6 bar dp

PPCD 03	1,25 l/min	Direct controlled
PPCD 04	2,5–5 l/min	
PPCD 05	10 l/min	
PPCD 06	15 l/min	
PPCD 08	20 l/min	
PPCD 09	30 l/min	
PPCP 09	35 l/min	Pilot operated
PPCP 13	72 l/min	

HYDRAULIC DATA

Max pressure pump	$P_p = 32$ bar
Max pressure tank	$P_T = 10$ bar
Max pressure work	$P_A = 30$ bar
Hysteresis	< 2 % of the nominal pressure at tbd. Hz PWM signal
Contamination level	Min Filtration: 18/15/13 According to ISO 4406
Fluid	Mineral Oil According to DIN 51524
Temperature range fluid	-40°C to +105°C
Leakage (internal)	< 1,25 l/min (de-energized) < 1,5 l/min (energized) caused by the pilot flow
Filterscreen size	320 μ m (P-Port)

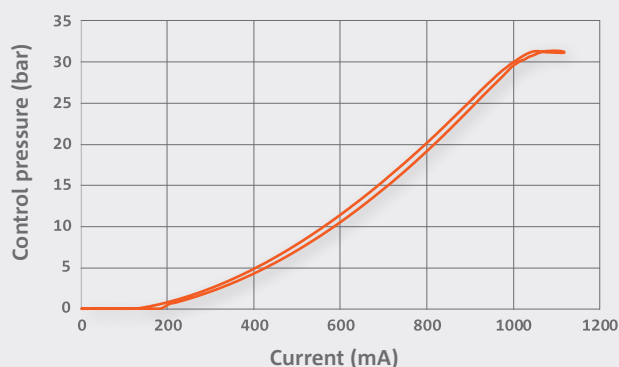
ELECTRICAL DATA

Voltage	12 V	24 V
Max current	1000 mA	500 mA
Resistance	7,7 $\Omega \pm 5\%$	31,0 $\Omega \pm 5\%$
Type of control	Current control PWM 600 Hz recommended	
Connector	Deutsch Connector DT04-2P	
Protection class	up to IP6K6 / IPX9K	
Switching time	$t_{on} < 60$ ms ($p_A = 0\%$ to 90%) $t_{off} < 60$ ms ($p_A = 100\%$ to 10%)	

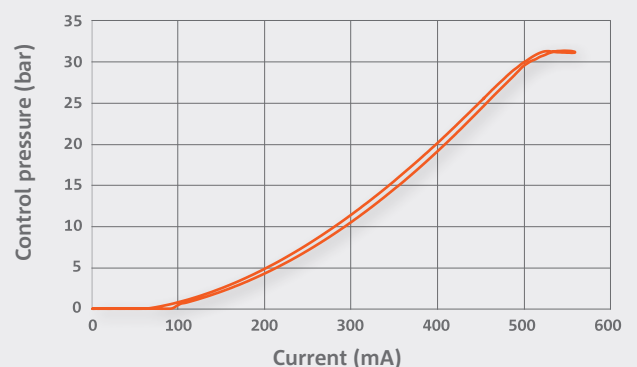
* The reported data are measured @ $P_p = 32$ bar and an oil viscosity of 32 cSt

CURRENT VS. PRESSURE (AVERAGE CHARACTERISTIC)

P-I CURVE (12 V)



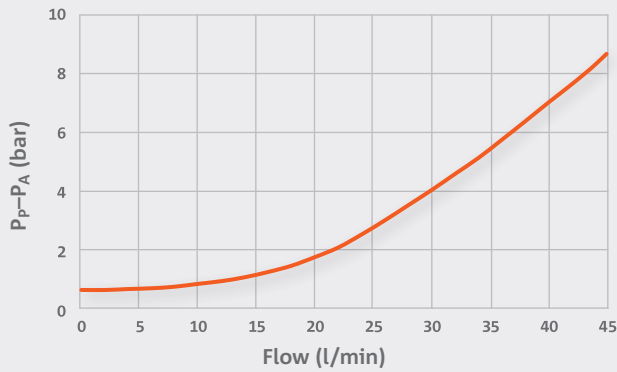
P-I CURVE (24 V)



FLOW CHARACTERISTICS (AVERAGE CHARACTERISTIC)

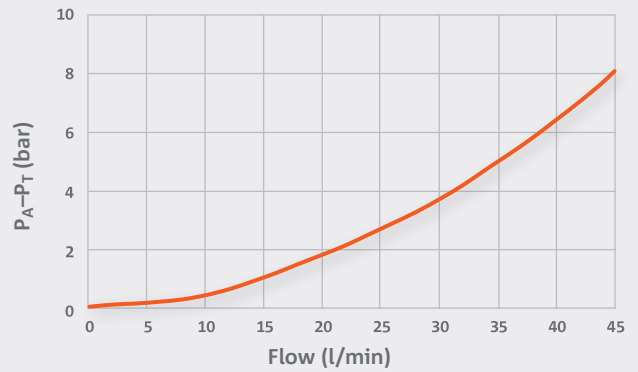
PRESSURE DROP PUMP TO CONTROL PORT (P→A)

Valve only

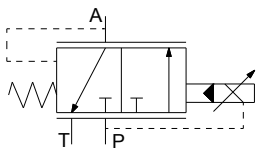


PRESSURE DROP CONTROL PORT TO TANK (A→T)

Valve only



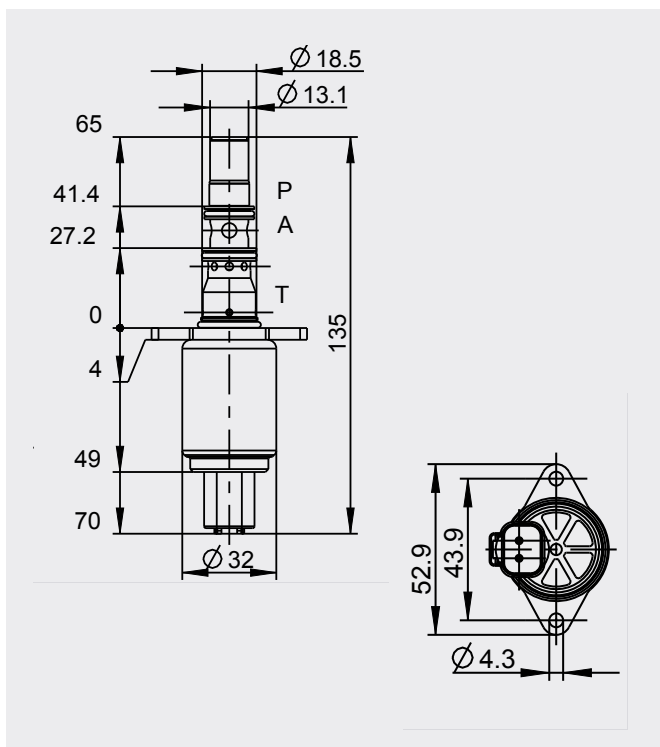
HYDRAULIC SCHEMATIC



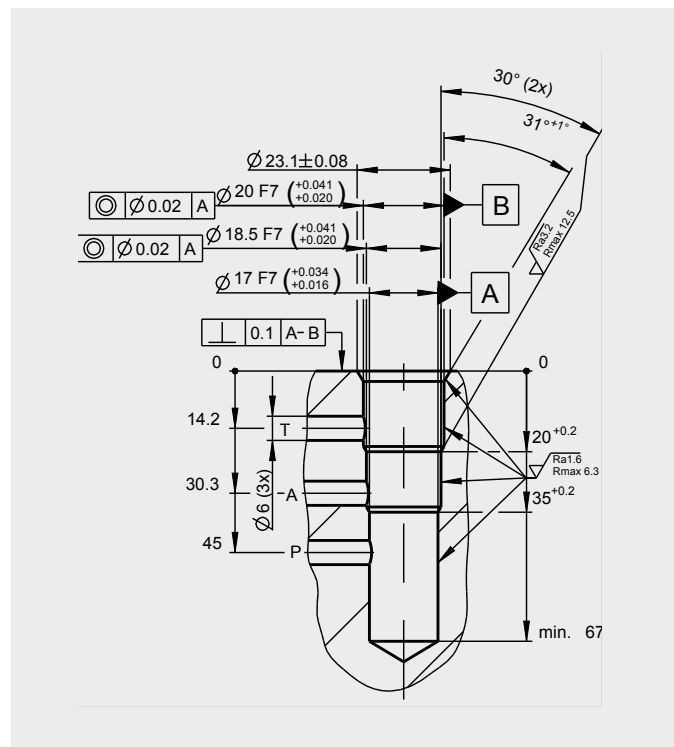
ADDITIONAL DATA

Weight	approx. 270 g
Mounting position (recommended)	any
MTTF_d-value	150 years
Reference	Valve specifications according to Thomas LHP - 79

DIMENSIONS WITH DEUTSCH CONNECTOR* (All dimensions in mm)



CAVITY DIMENSIONS (All dimensions in mm)



MODEL CODE

PPCP 09	-001	-b	-h	-30	-12	-D	-F	-0
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Valve Style

Version

Solenoid type

Cavity type

Control pressure range: 30 bar

Voltage: 12 V or 24 V

Connector: D Deutsch DT04-2P

Seal material: F FKM

Manual override: 0 without

● Defined by Thomas

● Customers choice

CONTACT DETAILS

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