

Pilot valve CLASSIC PPCD04-PPRV DATA SHEET

Description

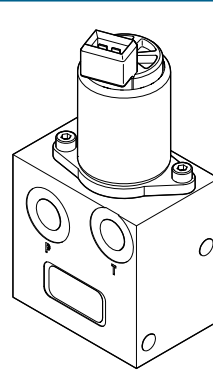
SVAB pilot valve is a small smooth valve, based on Thomas Magnetes proportional pressure reducing valve, that controls a limited-flow control feed to a separate piloted main valve on a machine. Typically, this valve controls a high pressure or high flow feed. SVAB pilot valves are useful because they allow a small and easily operated feed to control a much higher pressure or higher flow feed, which would otherwise require a much larger force to operate.

Features	Benefits
Stackable housing with measuring point.	Easy to expand the valve to add functions and socket for a pressure sensor.
Valve with shuttle.	Easy to install on existing installation.
Integrated relief function.	Protection against pressure spikes.
Compact dimensions.	Easy to fit in small spaces.
Low leakage.	Lower energy losses.
Precise current vs pressure control.	Excellent controllability.
Teflon coated bronze bearings.	Small hysteresis, improved resolution.
Excellent Repeatability.	No calibration over the lifetime of the machine.
Highest quality standard.	No maintenance, no downtime.
Small valve to valve variance.	Easy replacement, no service calibration.
Flexibility.	Modular.

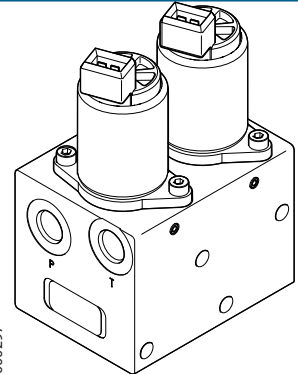
Technical data

Port size housing	R 1/4"
Material housing	EN AW-6082
Total weight singel ppr valve	571,0g
Total weight singel ppr valve with shuttle	576,0g
Total weight dubble ppr valves	1136,5g
Total weight dubble ppr valves with shuttle	1146,5g

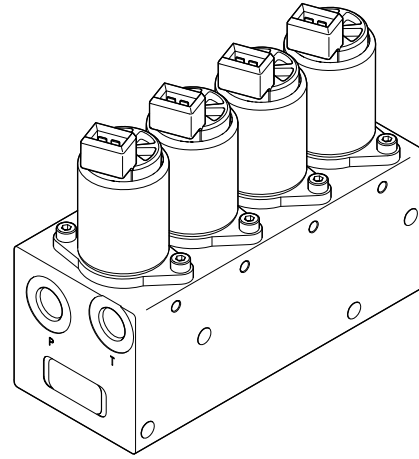
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000298



Total weight dubble MP ppr valves	1456,5g
Total weight dubble MP ppr valves with shuttle	1471,5g
Total weight four ppr valves	2129,5g
Total weight four ppr valves with shuttle	2149,5g

Hydraulic PPCD04-PPRV

Max Pressure (P,T)	pP = 50 bar, pT = 30 bar
Hysteresis (w/ PWM)	< 0.7 bar (pA=20) < 1.0 bar (pA=25) < 1.5 bar (pA=35)
Filter Screen	125 µm
Contamination Level	Min Filtration: 20/18/15 According to ISO 4406
Fluid	Mineral Oil According to DIN 51524
Temperature Range Fluid	-40 to +105°C
Seal material	NBR
Valve Specifications According to Thomas LHP-31	

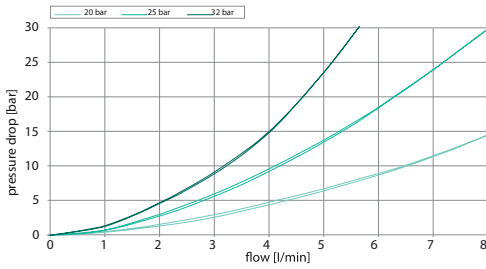
Name	Authorized	Date	Revision no
DOC-0000263_Data sheet Pilot valve_Classic	DAPE	2015-11-27	B

Electrical PPCD04-PPRV

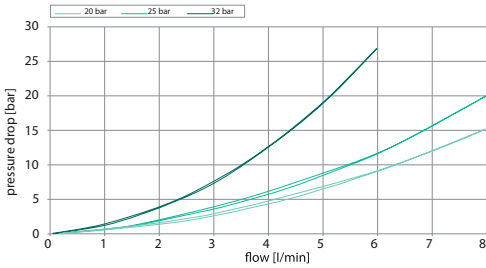
Voltage	12V	24V
Current	1500 mA	750 mA
Resistance	5.3 $\Omega \pm 5\%$	21.2 $\Omega \pm 5\%$
Type of Control	Current Control PWM 100 Hz Recommended	
Connector	AMP Junior Timer Deutsch Connector DT04-2P	
Protection Class	Up to IP6K6 / IPX9K	

Flow Characteristics

Pressure Drop Control Port to Tank

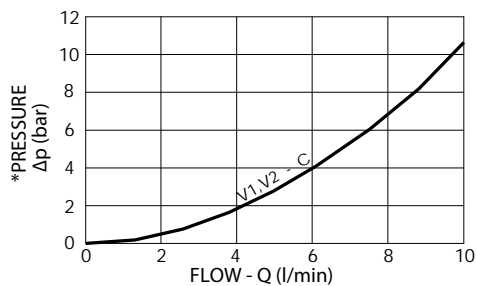


Pressure Drop Pump to Control Port



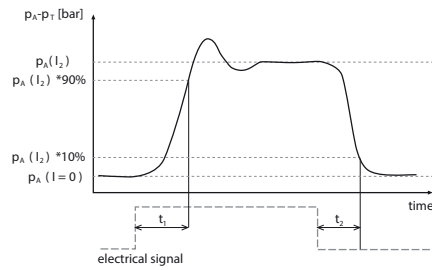
Shuttle valv

Rated flow	5 l/m
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Step Response

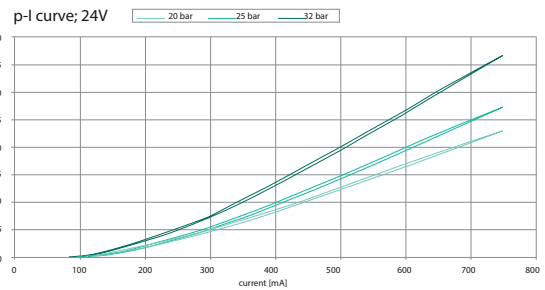
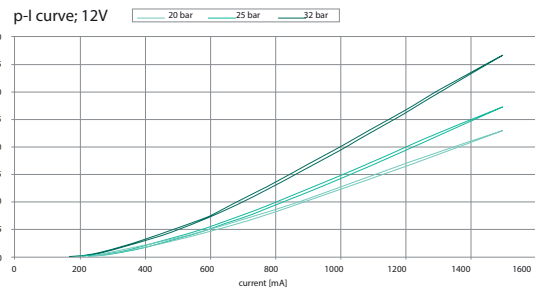
(50°C Oil Temperature) $t_1, t_2 < 50$ ms



Proportional Pressure Reducing Valve PPCD04-PPRV

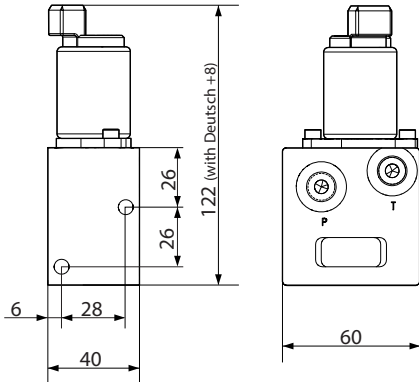
Current vs. Pressure

Less than 2% Hysteresis

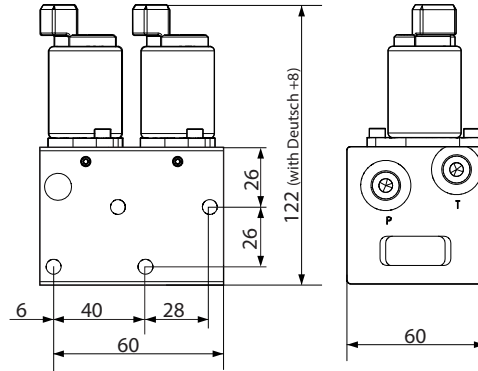


Dimensions complete valve (AMP Jr)

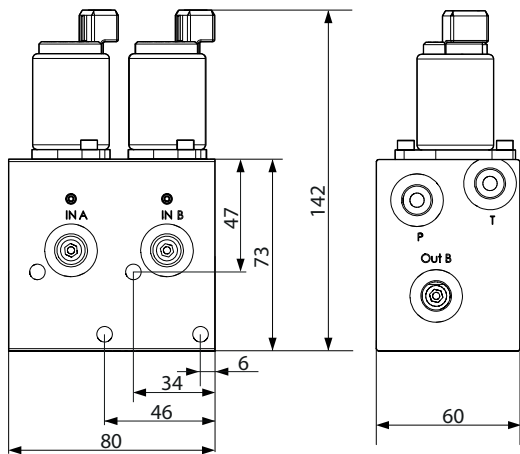
(1) - single housing



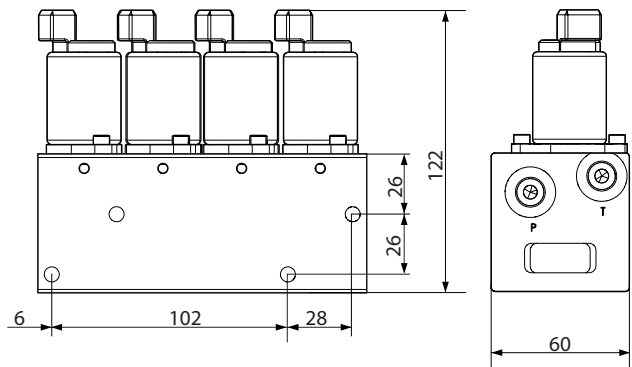
(2) - double housing



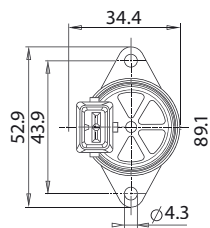
(2 MP) - double housing with measuring point



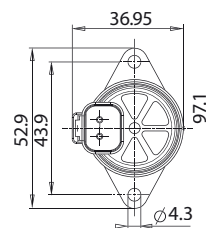
(4) - quadruple housing



Dimensions with AMP Jr. Connector

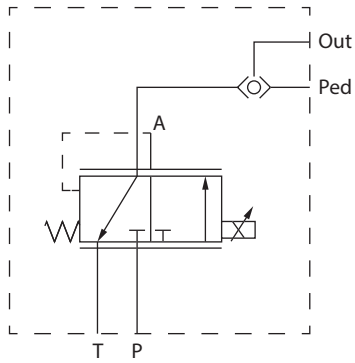


Dimensions with Deutsch Connector

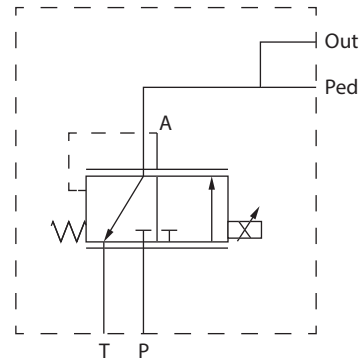


Hydraulic schematics

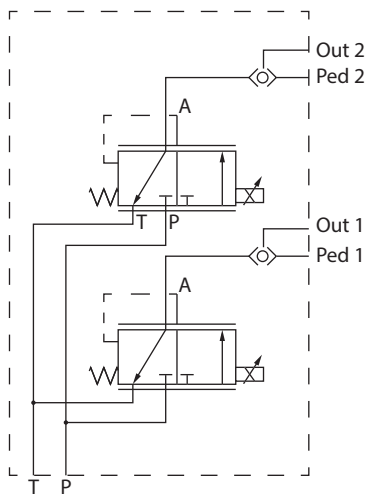
SINGLE PPR VALVE
with shuttle



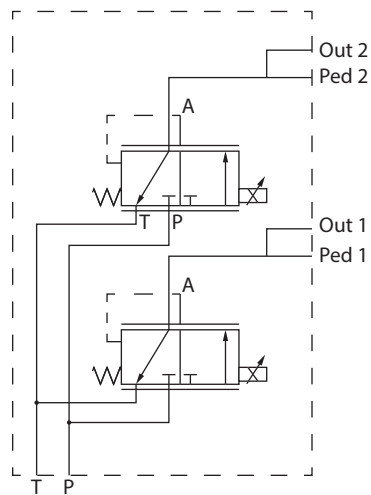
without shuttle



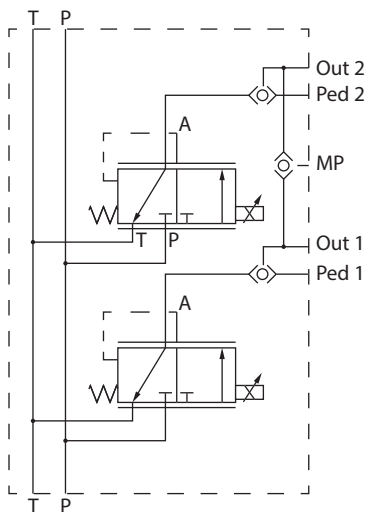
DOUBLE PPR VALVES
with shuttle



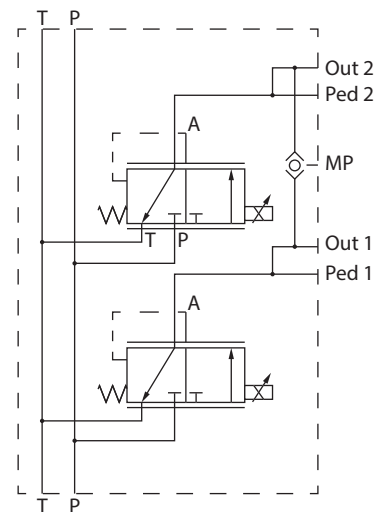
without shuttle



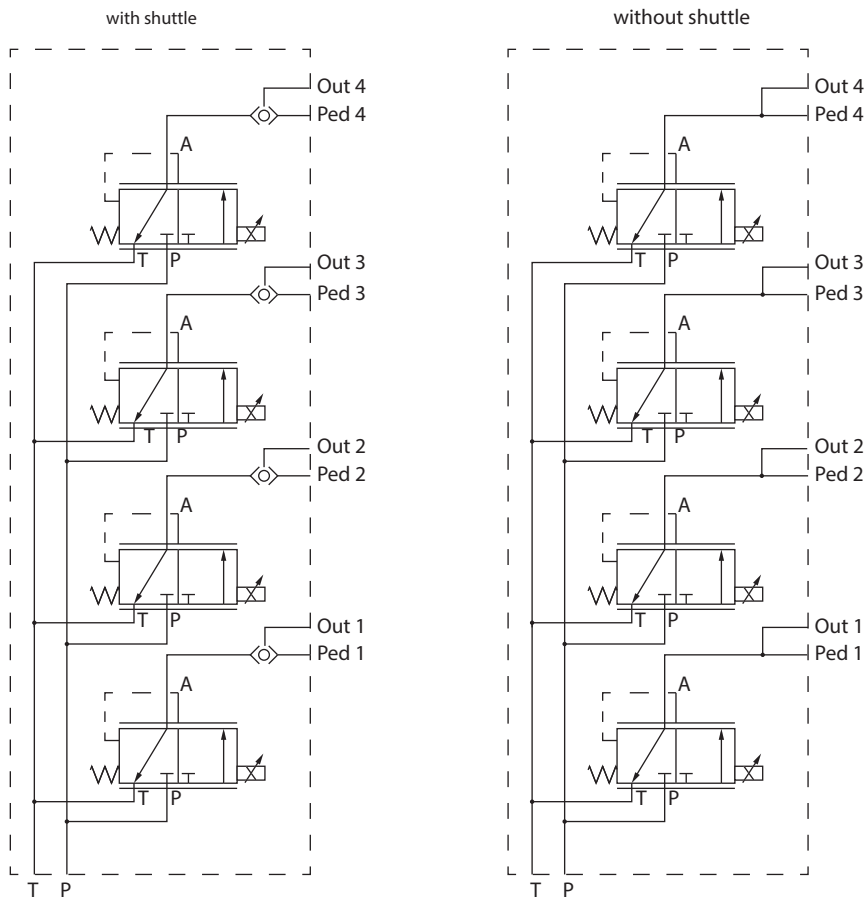
DOUBLE PPR VALVES WITH MEASURING POINT
with shuttle



without shuttle



QUADRUPLE PPR VALVES



Ordering code

PPCD 04	-20	-12	-J	-2	-1	
Valve Style	Control Pressure Range: 20 bar, 25 bar, 32 bar	Voltage: 12V, 24V	Termination: D Deutsch DT04-2P, J AMP Jr Power Timer	Housing: 1, 2, 2MP, 4	Shuttle: 1(yes), 0(no)	

If you need other configuration please contact us.

