

Pilot valve MEDIUM FLOW PPCD06-MFPPRV

DATA SHEET

Description

SVAB pilot valve is a small and smooth valve based on Thomas Magnete proportional pressure reduction valve. Most typical use for the valve is to control and piloting a high pressure and/or high flow feed on a machines main valve.

SVAB pilot valves strength is to easily control a high pressure feed with a small force.

Technical data

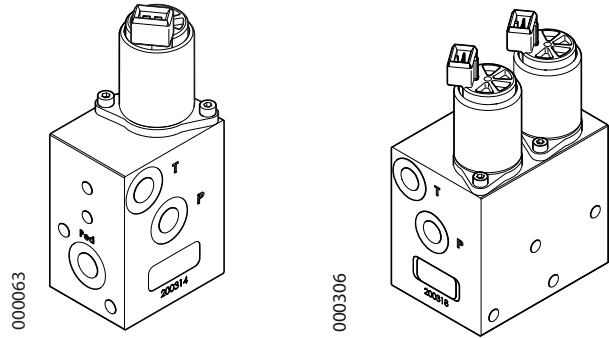
Port size housing	R 1/4"
Material housing	EN AW-6082
Total weight singel ppr valve	571,0g
Total weight singel ppr valve with shuttle	576,0g
Total weight dubble ppr valves	1136,5g
Total weight dubble ppr valves with shuttle	1146,5g

Hydraulic PPCD06-MFPPRV

Max pressure (P, T)	pP = 50 bar, pT = 30 bar
Hysteresis (w/ PWM)	< 0.7 bar (pA=30 bar)
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	HNBR
Valve specifications according to Thomas LHP-40	

Electrical PPCD04-PPRV

Voltage	12V	24V
Current	1500 mA	750 mA
Resistance	5.3 Ω ± 5%	21.2 Ω ± 5%
Type of control	Current control PWM 100 Hz recommended	
Connector	AMP Junior timer Deutsch connector DT04-2P	
Protection class	Up to IP6K6 / IPX9K	



Features

Stackable housing with measuring point.

Valve with shuttle.

Integrated relief function.

Compact dimensions.

Low leakage.

Precise current vs pressure control.

Teflon coated bronze bearings.

Excellent Repeatability.

Highest quality standard.

Small valve to valve variance.

Flexibility.

Benefits

Easy to expand the valve to add functions and socket for a pressure sensor.

Easy to install on existing installation.

Protection against pressure spikes.

Easy to fit in small spaces.

Lower energy losses.

Excellent controllability.

Small hysteresis, improved resolution.

No calibration over the lifetime of the machine.

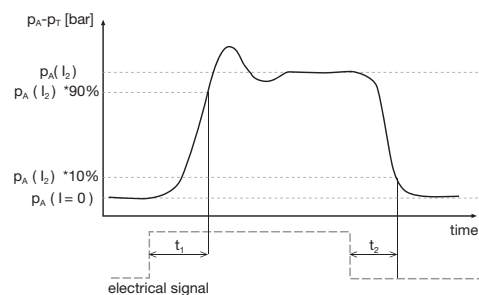
No maintenance, no downtime.

Easy replacement, no service calibration.

Modular.

Step Response

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



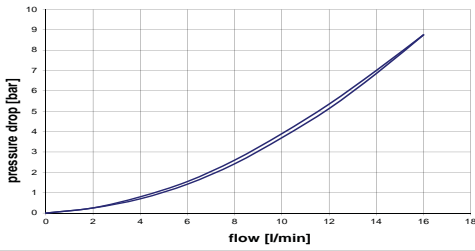
Shuttle valve

Rated flow	5 l/m
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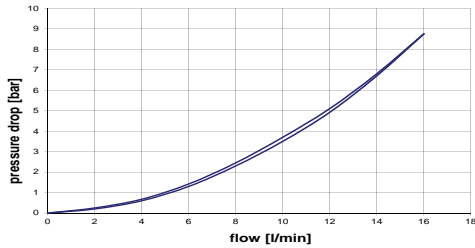
Name	Authorized	Date	Revision no
DOC-000270_Data sheet Pilot valve_Medium flow	DAPE	2015-11-27	A

Flow Characteristics

Pressure Drop Pump to Control Port (P → A)



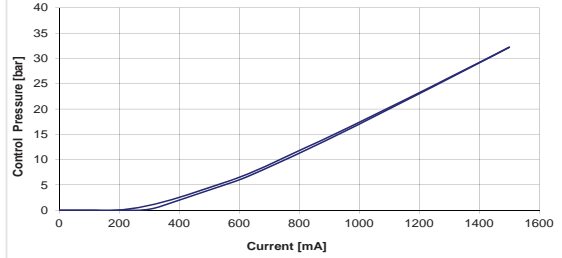
Pressure Drop Control Port to Tank (A → T)



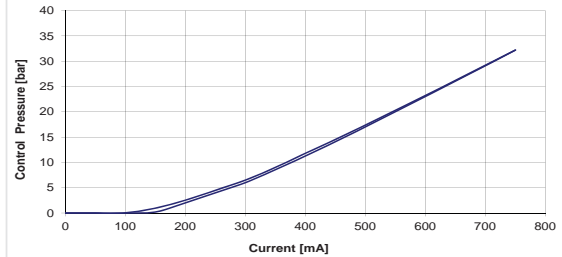
Medium Flow Proportional Pressure Reducing Valve PPCD06-MFPPRV

Current vs. Pressure
Less than 2% Hysteresis

p- I curve, 12 V



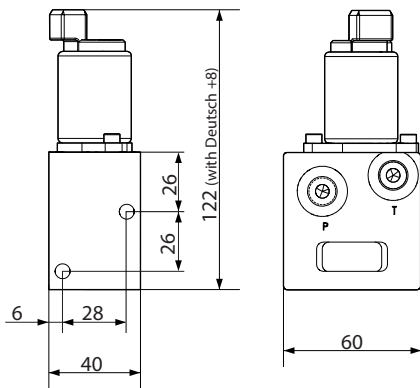
p- I curve, 24 V



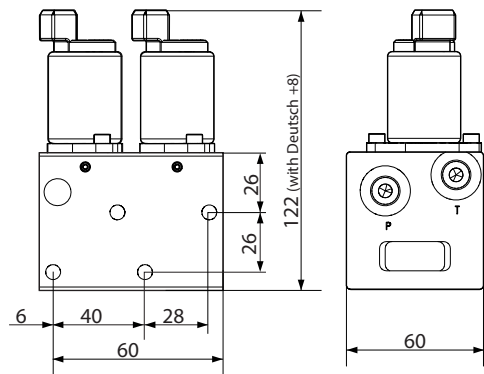
Dimensions

complete valve (AMP Jr)

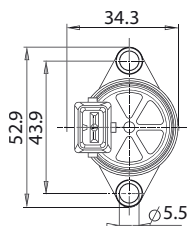
(1) - single housing



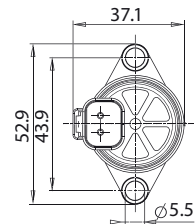
(2) - double housing



Dimensions with AMP Jr. Connector

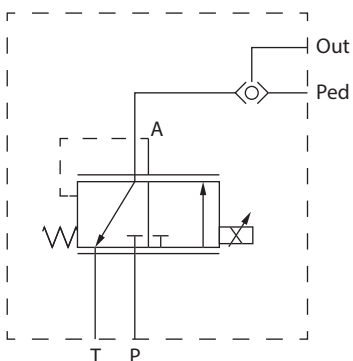


Dimensions with Deutsch Connector

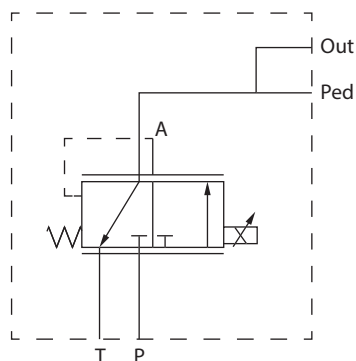


Hydraulic schematics

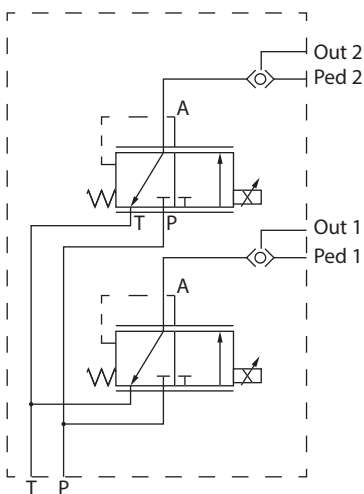
SINGLE PPR VALVE
with shuttle



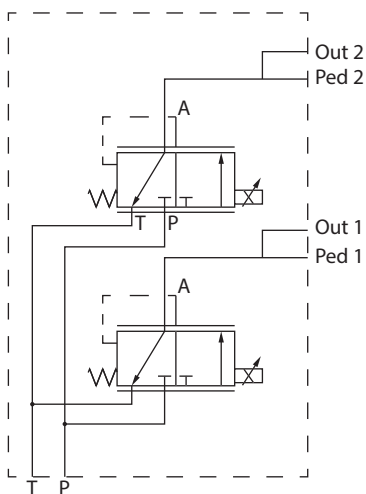
without shuttle



DOUBLE PPR VALVES
with shuttle



without shuttle



Ordering code

PPCD 06	-20	-12	-J	-2	-1	
Valve Style	Control Pressure Range: 20 bar, 30 bar	Voltage: 12V, 24V	Termination: D Deutsch DT04-2P, J AMP Jr Power Timer, L Leadwires	Housing: 1, 2	Shuttle: 1 (Yes), 0 (no)	

If you need other configuration please contact us.

