

# Proportional Pressure Control Valve

## PPCD08–NG PPRV HF (preliminary May 2021)



### PRODUCT CLASSIFICATION

Proportional valves

Directional valves

Smart products

Special designs

Name Max volume flow @ 6 bar dp

Name	Max volume flow @ 6 bar dp	Control Type
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	
<b>PPCD 08</b>	<b>20 l/min</b>	
PPCD 09	30 l/min	Pilot operated
PPCP 09	35 l/min	
PPCP 13	72 l/min	

### HYDRAULIC DATA

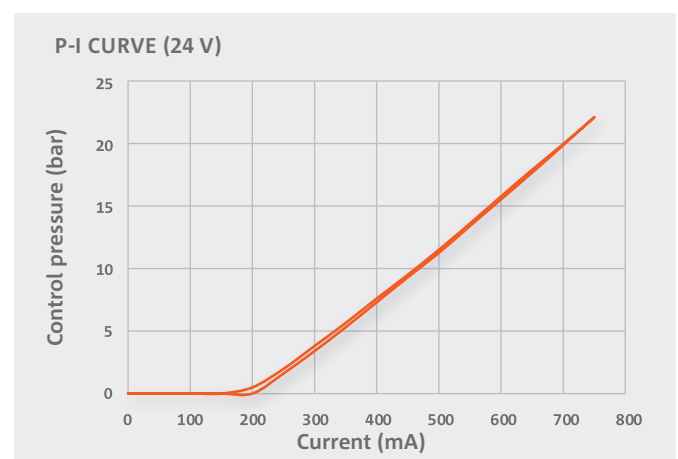
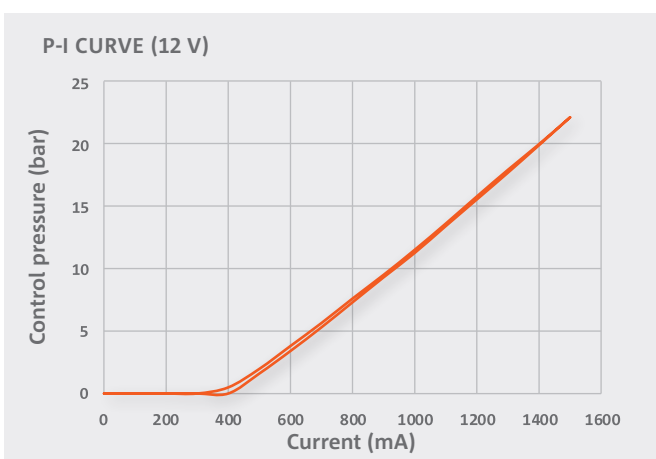
Max pressure pump	$P_p = 50$ bar
Max pressure tank	$P_T = 30$ bar
Max pressure work	$P_A = 20$ bar
Hysteresis	< 3 % of the nominal pressure at recommended type of control
Contamination level	Min Filtration: 20/18/13 According to ISO 4406
Fluid	Mineral Oil According to DIN 51524
Temperature range fluid	-30°C to +105°C
Leakage (internal)	< 0,05l/min (de-energized) < 0,30l/min (energized)
Filterscreen size	140 $\mu$ m (P-Port)

### ELECTRICAL DATA

Voltage	12 V	24 V
Max current	1500 mA	750 mA
Resistance	4,72 $\Omega \pm 5\%$	20,8 $\Omega \pm 5\%$
Type of control	Current control PWM 150 Hz recommended	
Connector	AMP Junior timer Deutsch Connector DT04-2P	
Protection class	up to IP6K6 / IPX9K	
Switching time	$t_{on} < 40$ ms (pA = 0% to 90%) $t_{off} < 40$ ms (pA = 100% to 10%)	

\* The reported data are measured @  $P_p = 50$  bar and an oil viscosity of 32 cSt

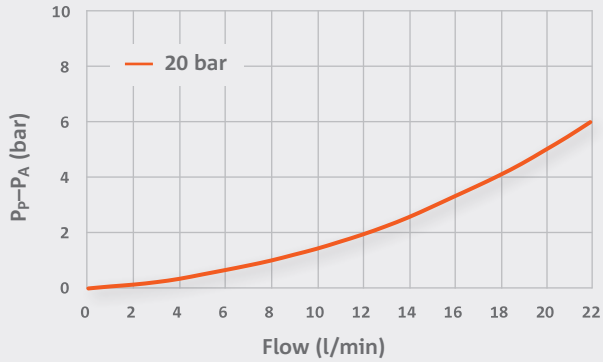
### CURRENT VS. PRESSURE (AVERAGE CHARACTERISTIC)



## FLOW CHARACTERISTICS (AVERAGE CHARACTERISTIC)

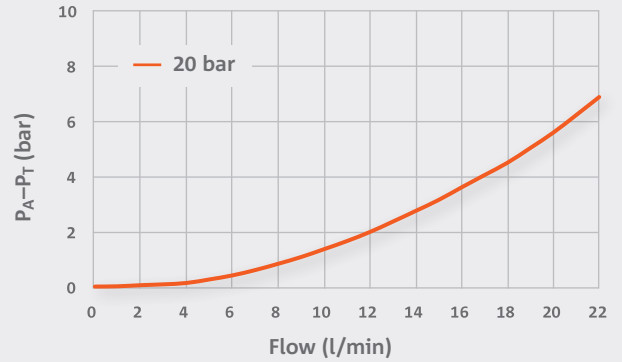
PRESSURE DROP PUMP TO CONTROL PORT (P→A)

Valve only

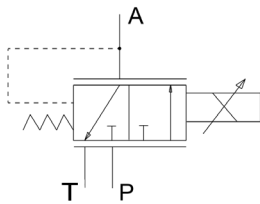


PRESSURE DROP CONTROL PORT TO TANK (A→T)

Valve only



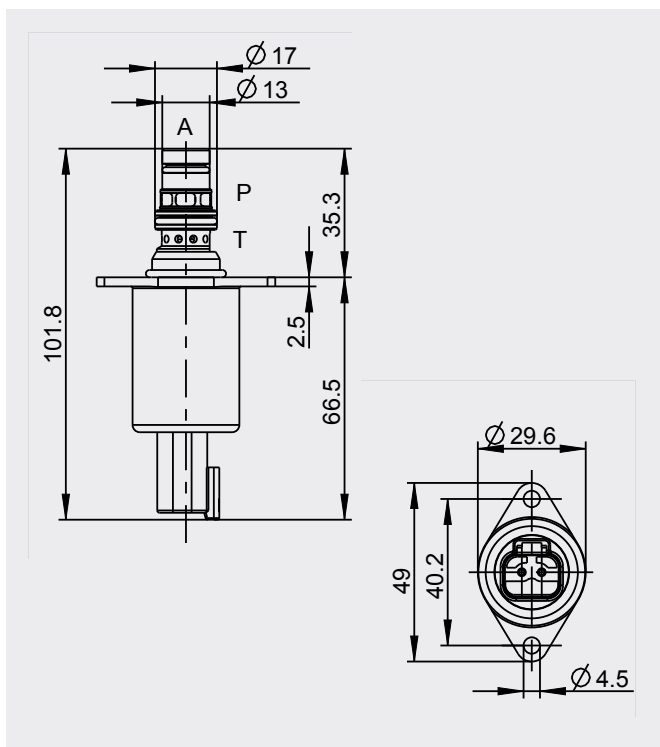
## HYDRAULIC SCHEMATIC



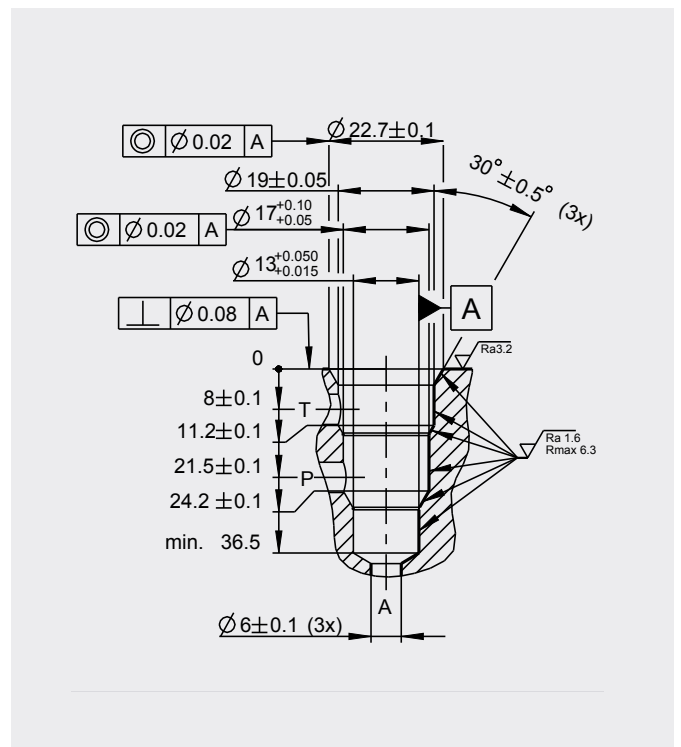
## ADDITIONAL DATA

<b>Weight</b>	approx. 235 g
<b>Mounting position (recommended)</b>	any
<b>MTTF<sub>d</sub>-value</b>	150 years
<b>Reference</b>	Valve specifications according to Thomas LHP 94

## DIMENSIONS WITH DEUTSCH CONNECTOR\* (All dimensions in mm)



## CAVITY DIMENSIONS (All dimensions in mm)



### MODEL CODE

PPCD 08	-001	-b	-c	-20	-12	-J	-N	-0
					-24	-D		

Valve Style

Version

Solenoid type

Cavity type

Control pressure range: 20 bar

Voltage: 12 V or 24 V

Connector:  
 J AMP Jr Power Timer or  
 D Deutsch DT04-2P

Seal material: N NBR

Manual override: 0 without

- Defined by Thomas
- Customers choice

### CONTACT DETAILS

**Michael Lutz**

Thomas Magnete GmbH

- Innomotion Park 3  
57562 Herdorf, Germany
- Tel. +49 2744 929-220
- michael.lutz@thomas-magnete.com  
www.thomas-group.com

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