

# Proportional Pressure Control Valve PPCD06–PPRV MF



## PRODUCT CLASSIFICATION

Proportional valves

Directional valves

Smart products

Special designs

Name Max volume flow @ 6 bar dp

| 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                   |                   |
| <b>PPCD 06</b> | <b>15 l/min</b>            |                   |
| PPCD 08        | 20 l/min                   |                   |
| PPCD 09        | 30 l/min                   | Pilot operated    |
| PPCP 09        | 35 l/min                   |                   |
| PPCP 13        | 72 l/min                   |                   |

## HYDRAULIC DATA

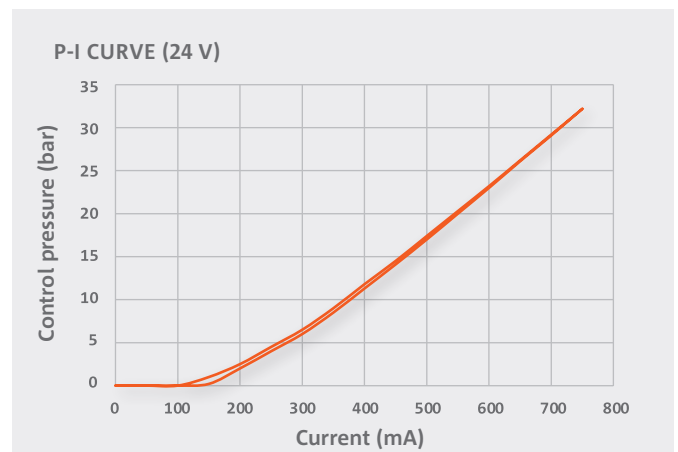
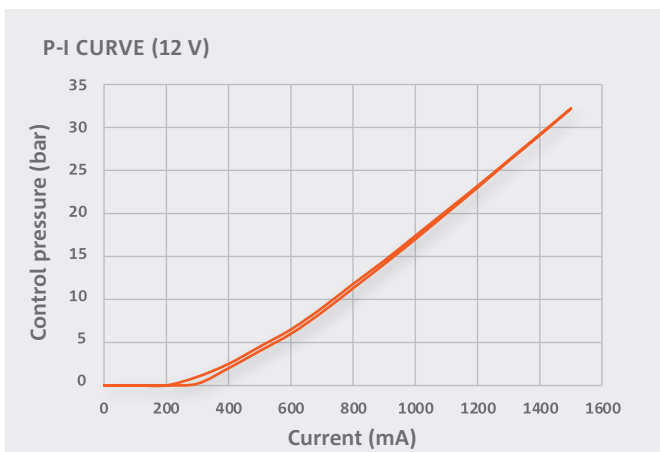
|                         |   |
|-------------------------|---|
| Max pressure pump       | $P_p = 50$ bar  |
| Max pressure tank       | $P_T = 30$ bar  |
| Max pressure work       | $P_A = 32$ and 45 bar                                   |
| Hysteresis              | < 4 % of the nominal pressure at 100 Hz PWM signal      |
| Contamination level     | Min Filtration: X/18/15<br>According to ISO 4406        |
| Fluid                   | Mineral Oil According to DIN 51524                      |
| Temperature range fluid | -30°C to +105°C   |
| Leakage (internal)      | < 0,06 l/min (de-energized)<br>< 0,25 l/min (energized) |
| Filterscreen size       | 140 $\mu$ m (P-Port)                                    |

## ELECTRICAL DATA

|                  |  |                       |
|------------------|--|-----------------------|
| Voltage          | 12 V   | 24 V                  |
| Max current      | 1500 mA  | 750 mA                |
| Resistance       | 5,3 $\Omega \pm 5\%$   | 21,2 $\Omega \pm 5\%$ |
| Type of control  | Current control<br>PWM 100 Hz recommended                                      |                       |
| Connector        | AMP Junior timer<br>Deutsch Connector DT04-2P<br>90° Deutsch Connector DT04-2P |                       |
| Protection class | up to IP6K6 / IPX9K  |                       |
| Switching time   | $t_{on} < 50$ ms (pA = 0% to 90%)<br>$t_{off} < 50$ ms (pA = 100% to 10%)      |                       |

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

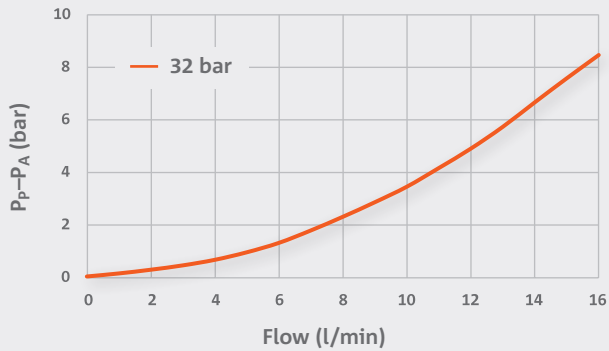
## CURRENT VS. PRESSURE (AVERAGE CHARACTERISTIC)



## FLOW CHARACTERISTICS (AVERAGE CHARACTERISTIC)

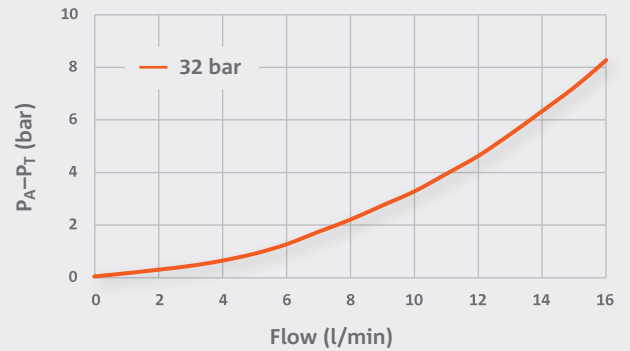
### PRESSURE DROP PUMP TO CONTROL PORT (P→A)

Valve only

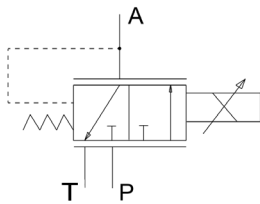


### PRESSURE DROP CONTROL PORT TO TANK (A→T)

Valve only



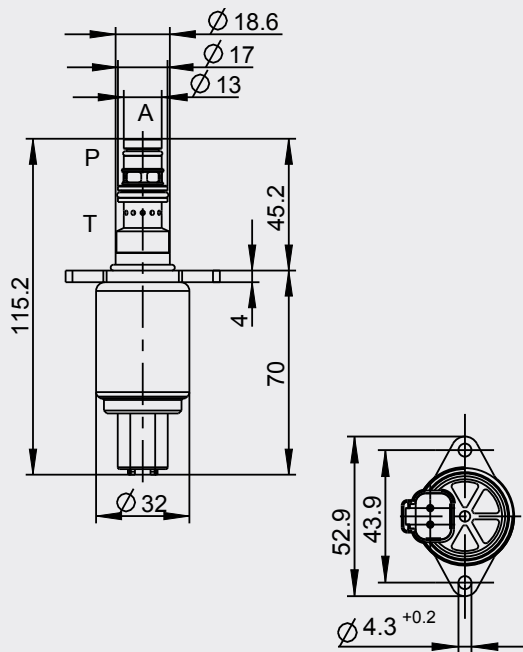
## HYDRAULIC SCHEMATIC



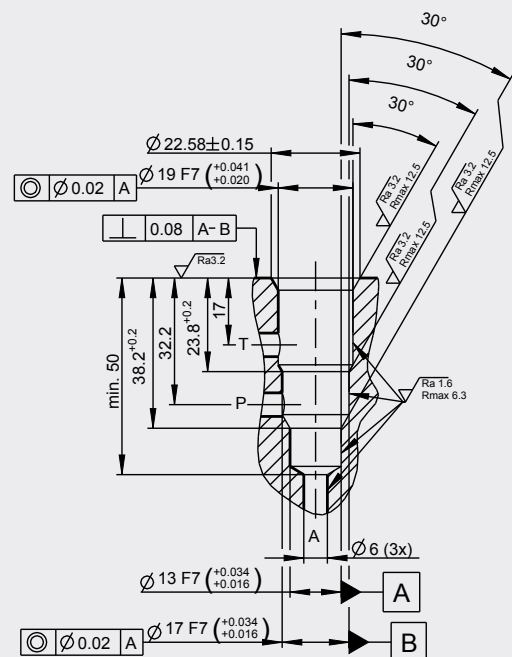
## ADDITIONAL DATA

|  |   |
|--|---|
| <b>Weight</b>                          | approx. 250 g                                   |
| <b>Mounting position (recommended)</b> | Valve sleeve vertically downward                |
| <b>MTTF<sub>d</sub>-value</b>          | 150 years                                       |
| <b>Reference</b>                       | Valve specifications according to Thomas LHP 40 |

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



## CAVITY DIMENSIONS (All dimensions in mm)



\* Dimensions for AMP Jr. Connector available on request.

**MODEL CODE**

|         |      |    |    |     |     |     |    |    |
|---------|------|----|----|-----|-----|-----|----|----|
| PPCD 06 | -001 | -b | -f | -32 | -12 | -J  | -H | -0 |
|         |      |    |    | -45 | -24 | -D  |    |    |
|         |      |    |    |     |     | -DH |    |    |

Valve Style

Version

Solenoid type

Cavity type

Control pressure range:  
32 or 45 bar

Voltage: 12 V or 24 V

Connector:  
J AMP Jr Power Timer or  
D Deutsch DT04-2P  
DH 90° Deutsch DT04-2P

Seal material: H HNBR

Manual override: 0 without

● Defined by Thomas

● Customers choice

**CONTACT DETAILS**

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