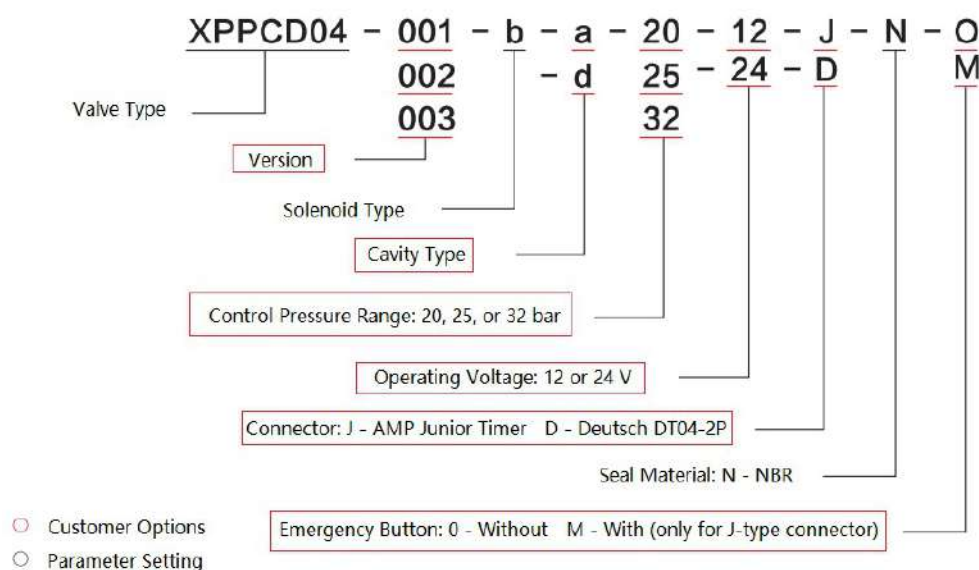




Hydraulic Parameters	
Maximum Supply Pressure	P _p = 50 bar or P _p = 350 bar
Maximum Return Pressure	P _T = 30 bar
Maximum Working Pressure	P _A = 20, 25 or 32 bar
Hysteresis	< 3.5% of rated control pressure @ PWM drive frequency: 100 Hz (Recommended)
Maximum Allowable Fluid Contamination Level	ISO 4406 20/18/15
Working Medium	Mineral oil, compliant with DIN 51524 standard
Operating Fluid Temperature Range	-30 °C to 105 °C
Internal Leakage	< 0.1 l/min (de-energized) < 0.4 l/min (energized) or < 0.5 l/min (de-energized)
Filter Screen Specification	125 μm (Port P)

Electrical Parameters		
Operating Voltage	12 V	24 V
Operating Current	0 – 1500 mA	0 – 750 mA
Coil Resistance at 20 °C	5.3 Ω ±5%	21.2 Ω ±5%
Control Method	Current control PWM drive frequency: 100 Hz (Recommended)	
Connector	AMP Junior Timer, Deutsch DT04-2P	
Protection Rating	Up to IP6K6 / IPX9K	
Response Time (ms)	t _{on} < 50 ms (pA = 0% → 90%) t _{off} < 50 ms (pA = 100% → 10%)	

Test conditions for related data: P_p = 35 bar (for 20 and 25 bar specifications) and P_p = 40 bar (for 32 bar specification), fluid viscosity 32 cSt.

Product Overview

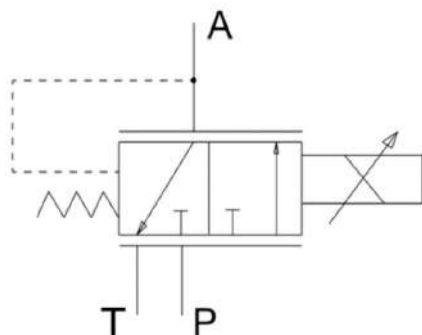
Main Functions and Applications

This valve series features two main models tailored for different application scenarios:

XPPCD04-HP (Classic): Specifically designed for intelligent electro-hydraulic braking systems in off-highway vehicles, such as Power Brake and Brake-by-wire systems. In emergency situations, even if the driver does not depress the brake pedal, the safety system can trigger braking, providing critical safety redundancy for the vehicle.

XPPCD04-NG: Used for the control and regulation of axial piston pumps, particularly for adjusting the swash plate angle in hydrostatic drives. This enables precise control of travel speed and hydraulic flow. For example, in equipment like small thrust bulldozers, it ensures the synchronized action of the left and right drive pumps, preventing deviation during low-speed travel.

Hydraulic schematic

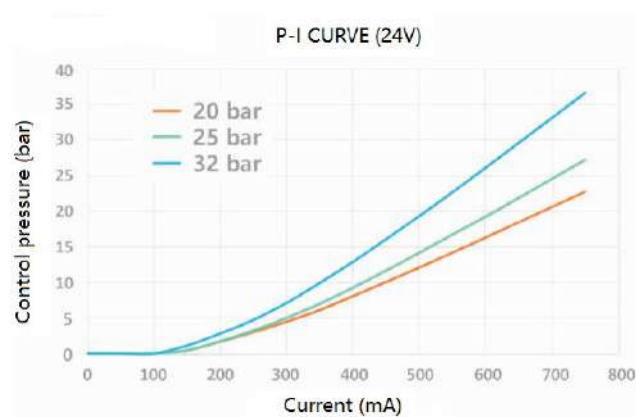
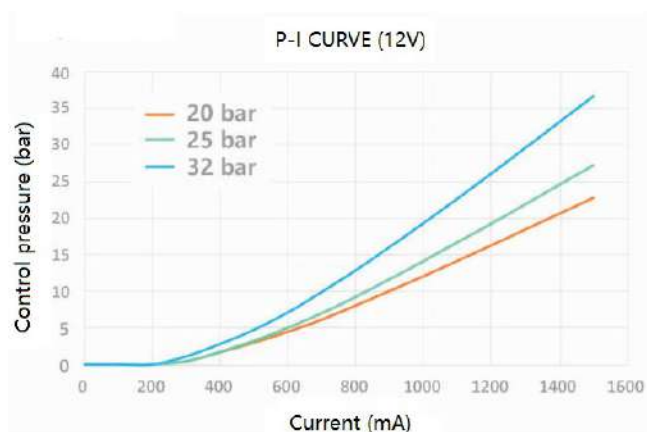


Operating Principle

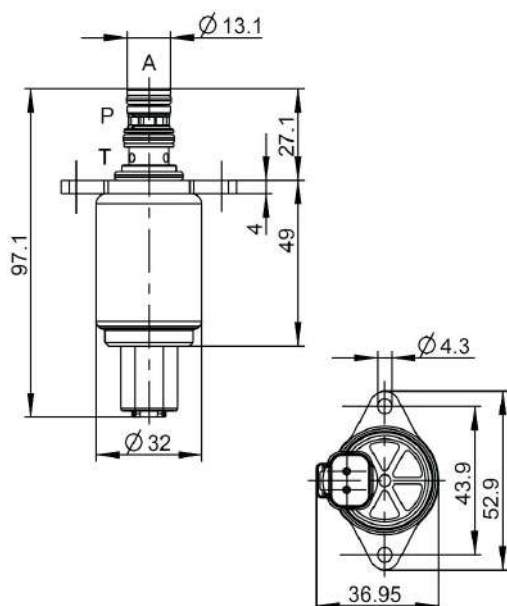
Control Type	2-position, 3-way	
De-energized	Flow from Port A to Port T	
Energized	Flow from Port P to Port A	

When pressure at Port A exceeds the maximum pressure, relief occurs through Port T.

P-I (average characteristic)



Outline dimensions with Deutsch connector (Unit: mm)



Cavity dimensions (Unit: mm)

