

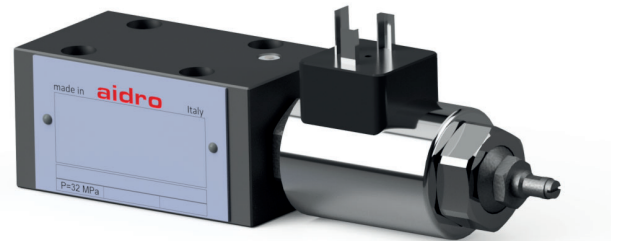
## PRESSURE CONTROL VALVE WITH PROPORTIONAL CONTROL HD3-PMO

1,5 l/min – 35 Mpa (350 bar)

### 1 DESCRIPTION

The HD3-PMO is a direct operated pressure control valve with electric proportional control. Its typical use is as pilot control of two-stages valves or for pressure control in hydraulic circuits.

Air bleeding is necessary prior valve usage. Cartridge is zinc plated and the body is phosphate coated. Optional Zinc-Nickel coating (720h) is available.



### 2 ORDERING CODE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
HD3	-	PMO	-	34	/	-	-	/	10

(1) Stackable pressure control valve CETOP 03 - Pressure 350 bar

(2) PMO: proportional pressure relief

(3) Cavity:

34: SAE 08 (3/4" 16 UNF)

(4) Pressure range:

- 3: up to 3,0 Mpa (30 bar)
- 6,3: up to 6,0 Mpa (60 bar)
- 12: up to 12 Mpa (120 bar)
- 20: up to 20 Mpa (200 bar)
- 35: up to 35 Mpa (350 bar)

(5) Code reserved for option and variants:

- V: Viton seals
- ZN: Zinc-nickel coating (720h)

(6) Electric voltage and solenoid coil

- 012C: coil for V12DC
- 024C: coil for V24DC

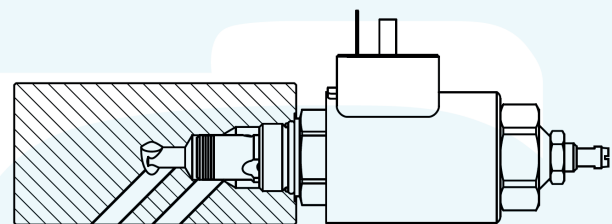
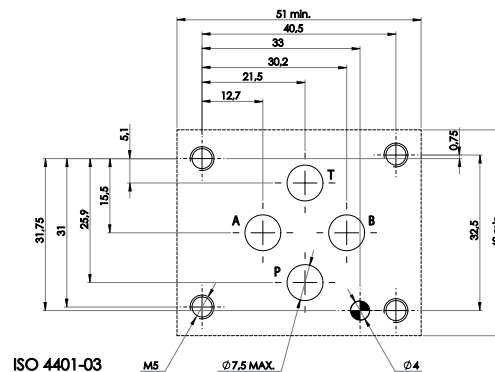
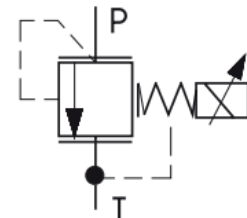
(7) Coil connection (see )

- No designation: DIN 43650-A ISO 4400
- AMP: Amp Junior Timer (vertical configuration)
- AMPX: Amp Junior Timer (axial configuration)
- D: Deutsch

(8) Quenching diode option

- no designation (standard): no quenching diode
- DR: quenching diode

(9) Design number (progressive) of the valve



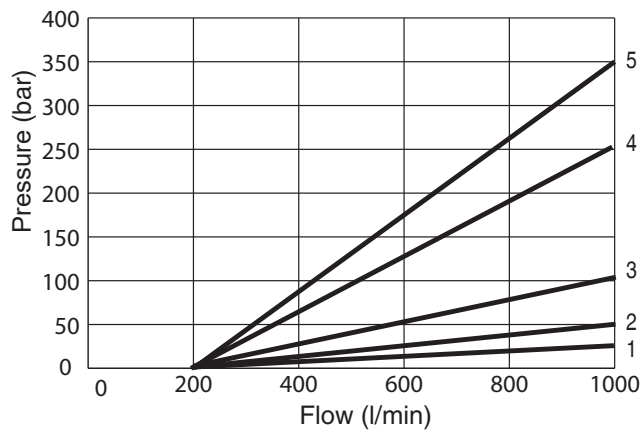
### 3 TECHNICAL DATA

Maximum rec. Flow rate	1.5l/min	Electric characters:
Maximum nominal pressure	35 MPa (350 bar)	Valve type HD3-PMO are operated by a solenoid that is energized from a DC voltage supply: V12DC = 012C V24DC = 024C
Optimal diither control	250 Hz	
Valve Hysteresis	<5 %	
Protection	IP65/IP67/IP69K (depending on connector used)	
Duty cycle	100%	
Installation and dimension	(see [5] )	
Valve Body	Steel	
Cartridge body	Steel	
Weight	Approx. 1,7 kg	

Note: back pressure in T-channel automatically increases the set cracking pressure of the valve in a ratio of 1:1

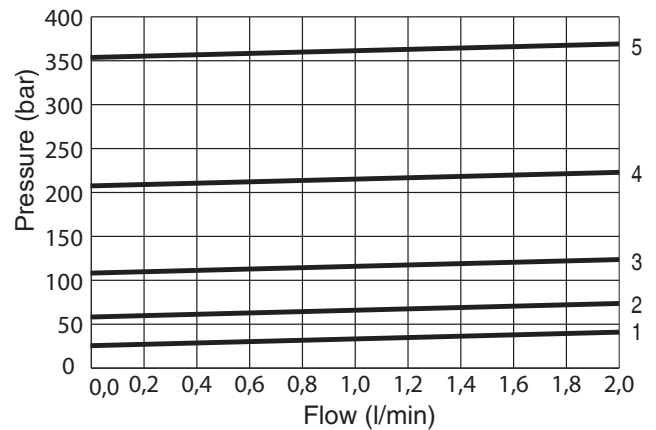
### 4 TYPICAL DIAGRAMS

Relief pressure related to control signal  
Q=0,2 l/min (0,05 GPM), pressure in port T=0 bar, PWM 160Hz



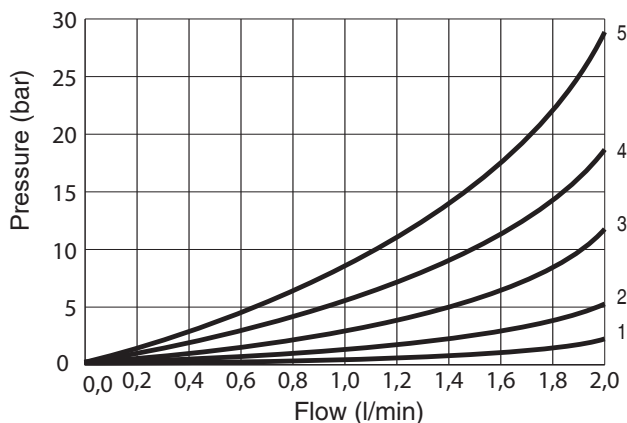
PRESSURE RANGE	3	6	12	21	35
	1	2	3	4	5

Relief pressure related to flow rate

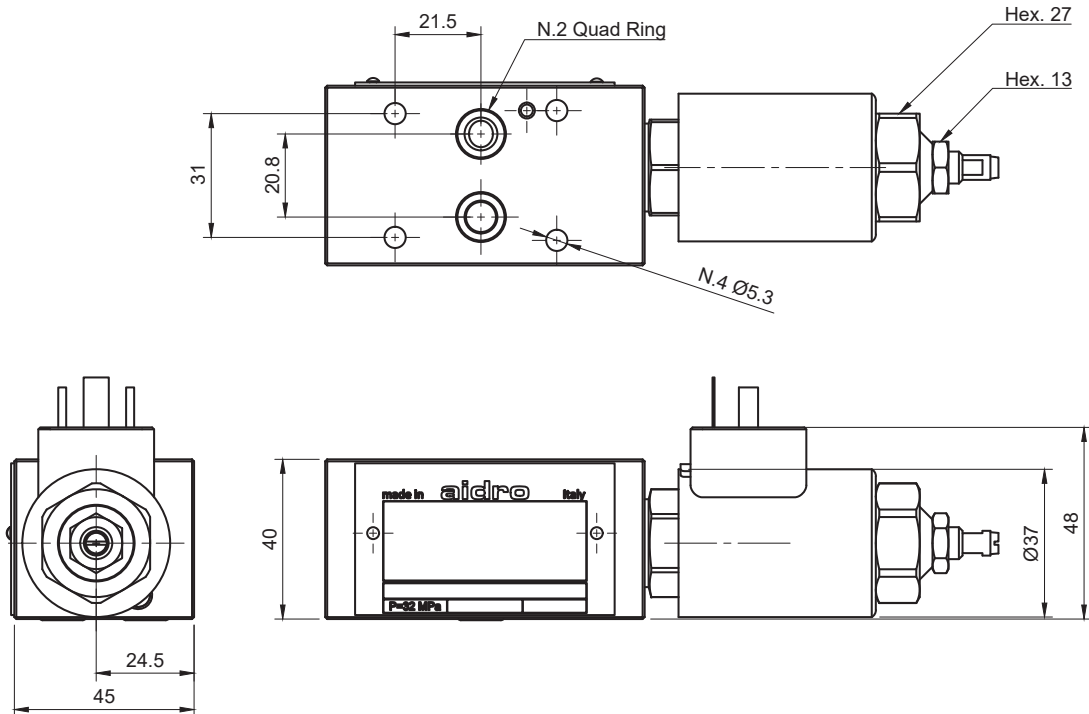


PRESSURE RANGE	3	6	12	21	35
	1	2	3	4	5

Pressure drop related to flow rate  
0% of control current, P-T direction



## 5 INSTALLATION DIMENSIONS



## 6 HYDRAULIC FLUIDS

Seals and materials used on standard valves HD3-PMO are fully compatible with hydraulics fluids of mineral base, upgraded with antifoaming and anti oxidizing agents. The hydraulic fluid must be kept clean and filtered to ISO 4406 class 19/17/14, or better, and used in a recommended viscosity range from 10 cSt to 60 cSt.