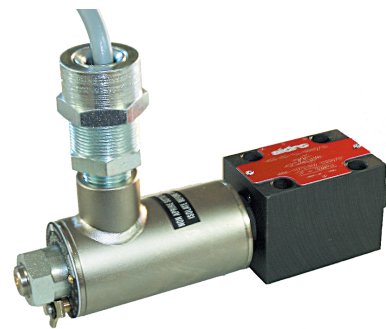


### ISO 03 PROPORTIONAL HYDRAULIC VALVES type HD3-PX

#### EX-PROOF SOLENOID OPERATED – ATEX

- 4-way Ex-proof solenoid valves, proportional electric control
- ISO 03 interface, directional control
- Solenoids according to ATEX 94/9/CE
- ATEX code/class: CE 0722 / Ex II 2 G EEx d II CT5
- Certificate: CESI 03 ATEX 212 (on request)
- Nominal flow rate: 32 l/min with  $\Delta p=10\text{bar}$
- Maximum pressure (all ports): 250bar
- Hysteresis  $\leq 6\%$
- Emergency pin for manual override
- Mineral oil according to ISO 16/14/12 filtration class or better.  
Recommended viscosity range: 10 to 60cSt

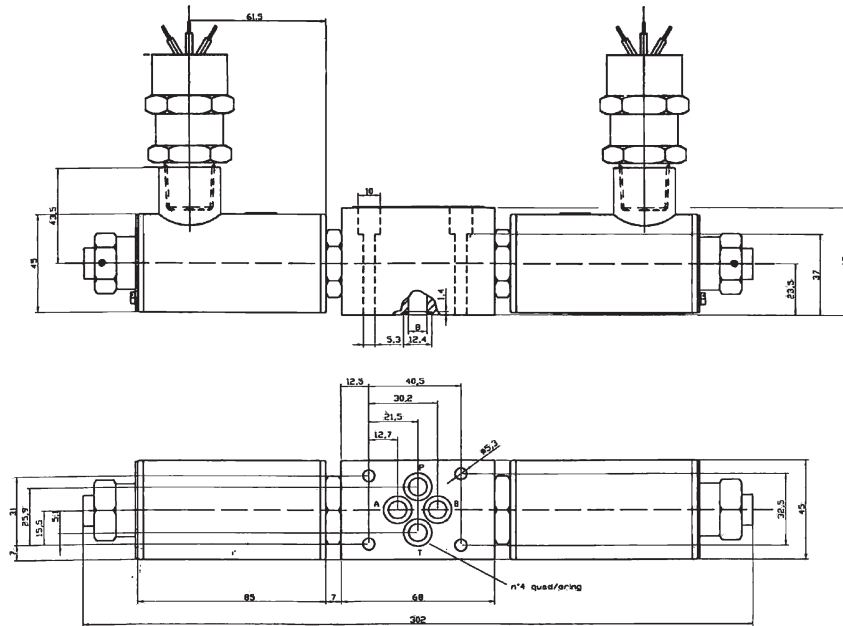


ORDERING CODE	
<b>HD3 – PX – 1PC – R4 / 10</b>	
<b>HD3</b>	ISO 03 4-way directional control valve
<b>PX</b>	Proportional electric control, Ex-proof solenoids
<b>1PC</b>	Spool type and drive arrangement
<b>R4</b>	24 DC proportional solenoid - $R(20^\circ\text{C})=13,4 \ \Omega$ – $I_{\text{MAX}}=1,0\text{A}$ - The solenoid must be energized by an electronic driver capable of full control of min and max current value. We recommend UED-M15 type (see table ED-M15)
<b>10</b>	Drawing

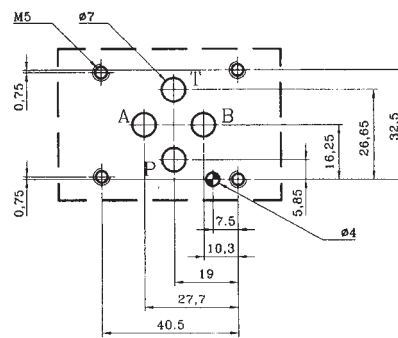
SPOOL TYPE	
<b>1PML</b>	
<b>1PC</b>	
<b>3PC</b>	

TYPICAL DIAGRAM	
<p>Flow characteristics in relation to exciting current for valves HD3-PX in standard configuration, with mineral oil at 35cSt and 50°C with <math>\Delta p=10\text{bar}</math></p> <p>The coil current which initialise the flow through the proportional directional valve can differ with a tolerance range of <math>\pm 6\%</math></p>	<p>Typical p-Q curves of operating limits for HD3-PX valves at different solenoid current values, with mineral oil at 35cSt and 50°C</p> <p>1) 40% solenoid current value    2) 60% solenoid current value 3) 80% solenoid current value    4) 100% solenoid current value</p>

**OVERALL DIMENSIONS**



**ISO 03 Interface**



Fixing bolts: n.4 M5 x 45 (not included)  
Tightening torque: 8Nm  
Valve mass: 2,60kg (with 1 coil) – 3,70kg (with 2 coils)

Subject to technical and dimensional changes without notice

**LINE ASSEMBLY BODY**

<b>1-2</b>	Solenoids according to ATEX 94/9/CE	<b>5</b>	Spool
<b>3</b>	Springs	<b>6</b>	Ring nut
<b>4</b>	Body	<b>7</b>	Emergency pin

