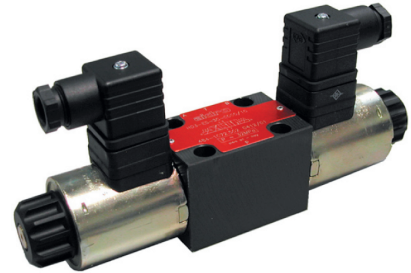


## ISO 03 PROPORTIONAL HYDRAULIC VALVES type HD3-PS DIRECTIONAL CONTROL - SOLENOID CONTROLLED

- 4-way directional valves, proportional electric control
- ISO 03 interface
- Oil immersed solenoids for DC current
- Emergency pin for manual override
- Nominal flow rate: 32 l/min with  $\Delta p=10\text{bar}$
- Maximum pressure (port P-A-B): 320bar
- Maximum pressure (port T): 160bar
- Hysteresis  $\leq 6\%$
- Suitable for mineral oil according to ISO 16/14/12 filtration class or better.  
Recommended viscosity range: 10 to 60cSt

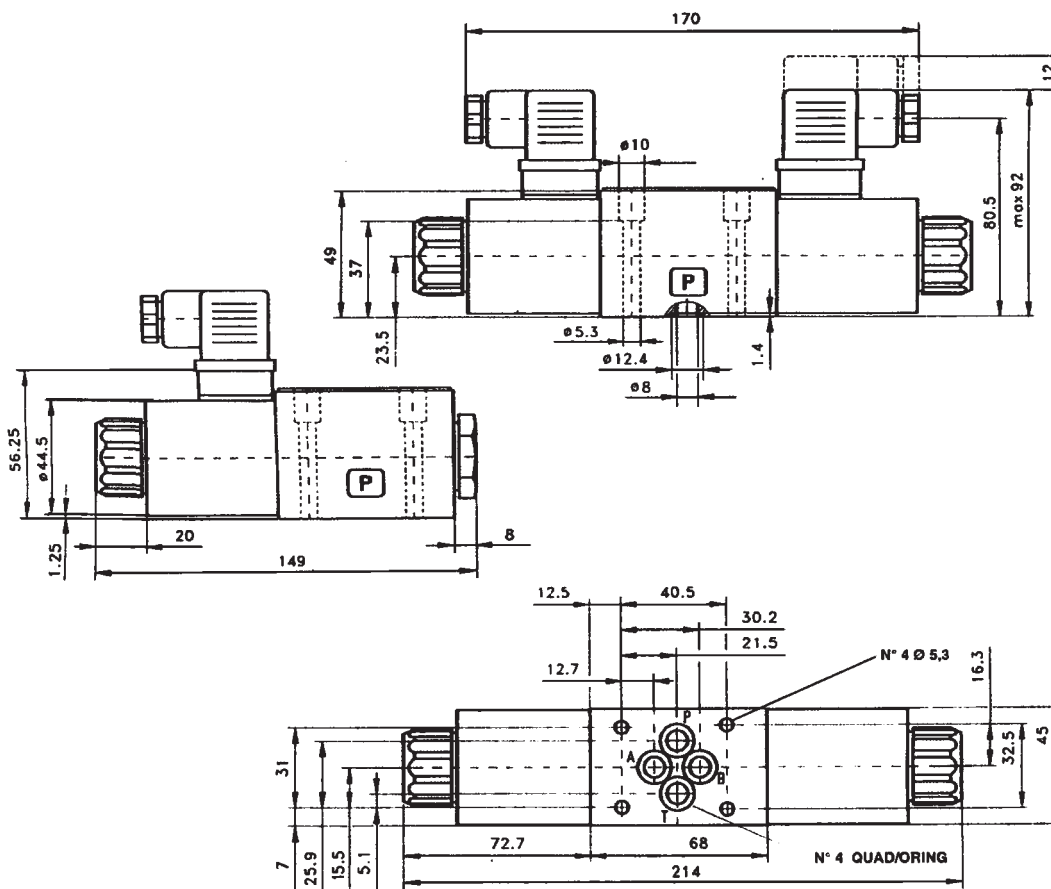


ORDERING CODE	
<b>HD3 – PS – 1PC – R4 / 10</b>	
<b>HD3</b>	ISO 03 4-way directional control valve
<b>PS</b>	Proportional electric control
<b>1PC</b>	Spool type and drive arrangement (see table)
<b>R4</b>	24 DC proportional solenoid - $R(20^\circ\text{C})=13,4 \ \Omega$ – $I_{\text{MAX}}=1,0\text{A}$ - 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-PS 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-PS 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



Fixing bolts: n.4 M5 x 45 (not included) – Tightening torque 8Nm

Valve mass: 1,60kg (with 1 coil) – 2,10kg (with 2 coils)

Subject to technical and dimensional changes without notice

### TYPICAL SECTION

1	Body	5	Locking nut
2	Spool	6	Emergency pin
3	ISO 4400 plugs (not included)	7	Spring
4	Solenoid		

