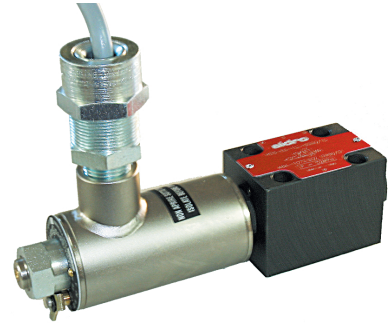


ISO 03 HYDRAULIC VALVES type HD3-EX EX-PROOF SOLENOID OPERATED – ATEX

- 4-way Ex-proof solenoid operated valves
- 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)
- Maximum flow rate: 40 l/min
- Maximum pressure (all ports): 250bar
- 100% duty cycle
- Emergency pin for manual override
- Mineral oil according to ISO 18/16/14 filtration class or better.
Recommended viscosity range: 10 to 60cSt



SPOOL TYPE **	
0	
1	
3	
4	

DRIVE ARRANGEMENT	
C	
N	
LL	
ML	

ORDERING CODE	
HD3 – EX – 1LL – * – 024C	
HD3	ISO 03 4-way directional control valve
EX	Electrically controlled, Ex-proof solenoids
1	Spool type (see table)
LL	Drive arrangement (see table)
*	b: only for versions LL, ML, LM solenoid "b"
COILS	Type GMA-6/HD – Nominal absorption: 11W
Current data	012C: 12V DC-0,92A 024C: 24V DC-0,46A 115A: 115V AC-0,10A 230A: 230V AC-0,05A
Protection	According to IEC144: class IP67 – External surfaces nickel coated (min. thickness 7 micron)
Connection: 3 x 1,5mm ² x 1,5m wire cable (CEI 20-22), already connected to coil. Earth connection internal, with yellow-green wire in the cable, and external with a min. 4mm ² cable fastened to earth screw.	

TYPICAL DIAGRAMS

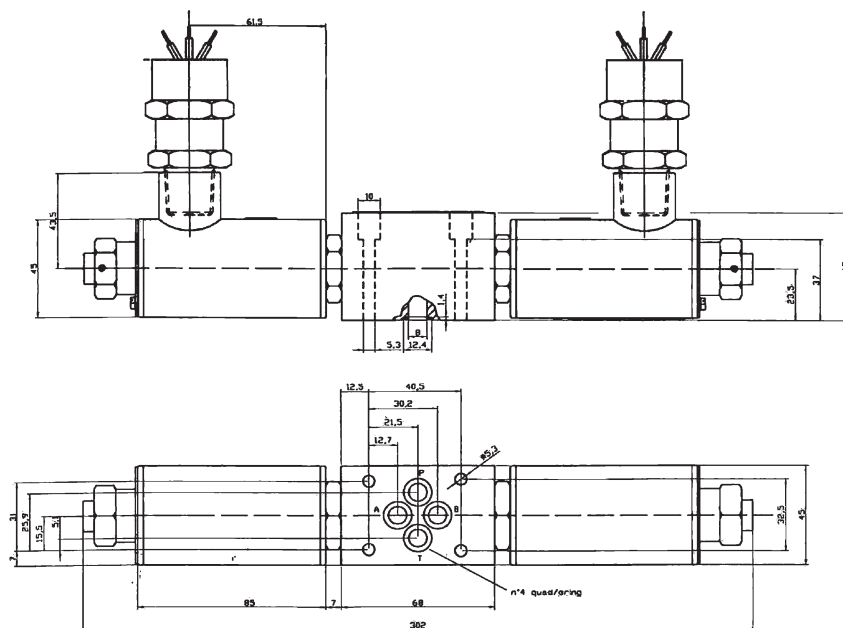
Typical Δp -Q curves for valves HD3-EX in standard configuration, with mineral oil at 36cSt and 50°C for flow P→A,B A,B→T and P→T

0) Spool 0 P→A,B and A,B→T
1) All spools P→A,B and A,B→T. Spool 4 P→T.
2) Spool 4 P→A,B and A,B→T

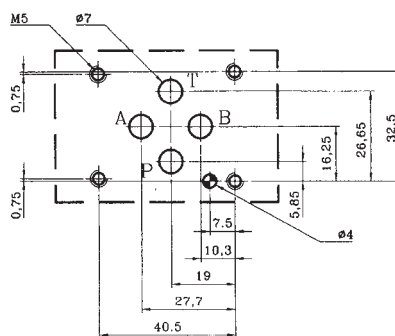
Typical p-Q curves of operating limits for maximum hydraulic power transferred by valves HD3-EX

Input voltage 5% less than nominal rate

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

TYPICAL SECTION

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

