

Directional Poppet Valves

FT 01 04 ... DL

Explosion-proofed solenoids & II2 GD Ex d IIC T6

The solenoid valves FT 01 04 ... DL are directional poppet valves with solenoid operation. They start, stop and control the direction of a flow of oil. Poppet type valves ensure a leak free seal between inhibited channels. The valves are suitable for subplate mounting according to CETOP 03. The solenoids are build in a safety case which is explosion-proof according to IEC/EN 60079-0 and IEC/EN 60079-1 standards with classification Ex d IIC T6/T4 Gb.

Mechanical protection is according to I.E.C. recommendation. Protection degree IP66.

Symbol		Max Flow Rate / Pressure	
2A	T M P	2/2 NO	Rest pos.: P connected to T Operated: P,T blocked leakage free
2C	T M O P	2/2 NC	Rest pos.: P,T blocked leakage free Operated: P connected to T
3A	A M P T	3/2 NC	Rest pos.: P blocked leakage free, A connected to T Operated: T blocked leakage free, P connected to A
3C	B M O O O	3/2 NO	Rest pos.: T blocked leakage free, P connected to B Operated: P blocked leakage free, B connected to T



- Explosion protection Ex d II CT6
- Connection dimensions to DIN 24340, form A6
- Hermetically sealed, in closed flow direction
- No sticking, even when under pressure for long periods
- Manual override pin



Technical data:

hydraulic data:

hydraulic medium: Mineral oils to

DIN 51524, class ISO 18/15

Fluid temp. range: -20°C to 70°C

viscosity range:

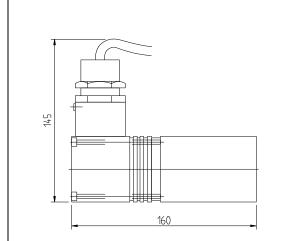
15 to 100 mm²/s at 40°C

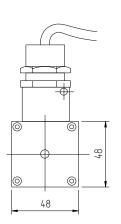
recommended filtration: ≤25 µm in feed line

weight: 2,6 kg

Max. flow: 20 l/min

max. recommended pressure P,A,B: 250 bar; T: 50 bar





Electrical data (Solenoid):

ATOS, type OA-...

supply voltages DC: 24 V / 110 V % ±10% (i.e. 24 V: 21.,6 ... 26,4 V)

supply voltages AC 50/60 Hz: 24 V / 110 V / 230 V ±10%

Max. nominal power: 8 W

duty cycle: 100%

ambient temperature: -40°C to 45°C (T6) -40°C to 70°C (T4)

insulation class H

IP66/IP67 with relevant cable gland

explosion-proof:

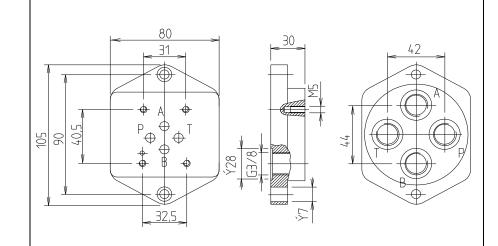
€ II 2G

Ex d IIC T6 (45°C) Ex d IIC T4 (70°C)

Class I, Div.I, *Groups* C&D ATEX: CESI 02 ATEX 014 IECEx: CES 10.0010x UL 1203 / E366100

cable gland: 20S16A2F1RA5

Subplate (DIN 24340-A6 3/8")



Order code: Type: FT01 04 ... DL / xxVDC Tx

This valves are optionally available with:

- latched manual override /HAND
- sensor for the spool position /IND

Recommended level of purity according to ISO4406:1999 is Kl. 20/18/15.(I.e. per 1ml fluid max. 5.000 to 10.000 particles > 4μ , 1300 to 2500 particles > 6μ and 160 to 320 particles > 14μ diameter are allowed) or at pressures above 200 bar Kl. 19/17/14 (max. 2.500 to 5.000 particles > 4μ , 640 to 1300 particles > 6μ and 80 to 160 particles with > 14μ)