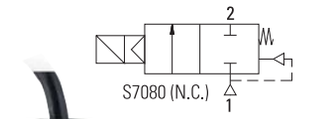
EXPLOSION PROOF FUEL OIL SOLENOID VALVES

2/2 Way
Pilot Operated
G3/8", G1/2", G3/4", G1" , G11/4", G11/2", G2"

S7080 SERIES

Normally Closed



GENERAL FEATURES

- **TORK series S7080 diaphragm explosion proof fuel oil solenoid valves are 2/2 way normally closed and pilot operated**
- **Explosion proof solenoid valves for use in zone 1 and zone 2**
- **Suitable for non-aggressive liquids fuel oil, hydraulic oil, light oil (2E), overheated water and steam fluids**
- **On request Atex coil**
- Working Temperature:-10°C / +160°C
- Not suitable for use with dangerous fluids listed in Group 1
- Minimum operating differential pressure 0,5 bar
- High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
- Ideal for the automatic control of media in a wide range of applications.
- TORK solenoid valves satisfy relevant 97/23/EC, Pressure Equipment Directive (PED) and 2006/95/EEC Low Voltage Directive (LVD).
- Coils interchangeable
- Flow factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Solenoid valves must be used with filtered fluids.
- Solenoid valve is mounted in any position without affecting operation; vertical with coil upwards preferred.
- Standard pipe connection is G (BSP) (ISO 228-1) and on request; other pipe connections are available (NPT (ANSI 1.20.3))

ELECTRICAL CHARACTERISTICS

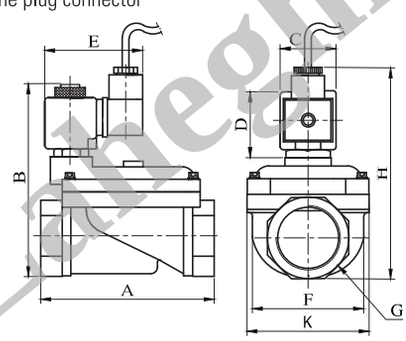
Continuous Duty : ED %100
Coil Insulation Class : H (180°C)
Coil Impregnation : Fiber Glass Reinforced or PP-V0 (Self-Exitinguishing Polypropylene)
Coil Encapsulation Material : Fiber Glass Reinforced or PP-V0 (Self-Exitinguishing Polypropylene)
Explosionproof operator, intended for use in potentially explosive atmospheres
Easy electrical installation by means of the cable, standard length 3 meters
Safety mode : EEx em II T4/T5 (Max Surface Temperature:100°C -135°C,
em:encapsulation increased safety, II:Equipment group)
Protection Degree : IP 65 (EN 60529) with coil duly fitted with the plug connector
Electrical Safety : IEC 335
Standard Voltages : For AC 12V, 24V, 48V, 110V, 230V
For DC 12V, 24V, 48V, 110 V
Other voltages on request;
Voltage Tolerances : For AC -15%; +10%, For DC -5%; +10%
Frequency : 50 Hz, other frequencies on request; (60 Hz)
Specify coil voltage with order

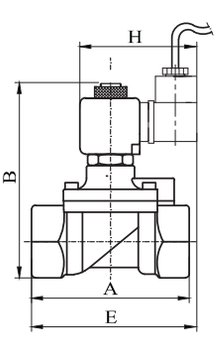
MATERIALS IN CONTACT WITH FLUID

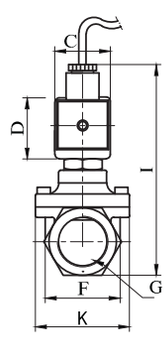
Body : Brass
Internal Parts : Stainless Steel and brass
Sealing : FPM (VITON
Shading Ring : Copper
Seats : Brass
Core Tube: Stainless Steel
Springs : Stainless Steel
On request; nickel plated body

TECHNICAL FEATURES

Max Viscosity : 5°E (~37cSt or mm^2/s)
Response Time : Opening Time : 400 ms to ~ 1600 ms,
Closing Time : 1000 ms to ~ 2000 ms
Maximum Allowable Pressure : 25 bar







Dimensions (mm)

G	A	B	C	D	E	F	K	H
11/4"	141	147	32	45	76	96.5	110.7	156
11/2"	139	147	32	45	76	96.5	110.7	156
2"	145.6	157	32	45	76	96.5	110.7	165.5

Dimensions (mm)

G	A	B	C	D	E	F	K	H	I
3/8"	75	102.5	32	45	91.3	37.5	52	76	108
1/2"	79	104.5	32	45	92	39.5	52	76	110
3/4"	79	112.5	32	45	94	41.5	52	76	118
1"	85	120.5	32	45	101	42.5	52	76	124

Valve Type / Order no	Connection Size	Orifice size	Pressure min	Pressure max	KV	Fluid Temperature °C min	Fluid Temperature °C max	Seal	Weight
S7080	G	mm	bar	bar	lt/min				(kg)
S7080.02	3/8"	12.5	0.5	16	48	-10	160	VITON	0.9
S7080.03	1/2"	14.5	0.5	16	70	-10	160	VITON	0.93
S7080.04	3/4"	17	0.5	16	85	-10	160	VITON	1.02
S7080.05	1"	17	0.5	16	90	-10	160	VITON	1.19
S7080.06	11/4"	46	0.5	12	390	-10	160	VITON	2.87
S7080.07	11/2"	46	0.5	12	460	-10	160	VITON	2.77
S7080.08	2"	46	0.5	12	580	-10	160	VITON	3.2

Useful Informations

1 bar:14,5 PSI:10 mH_2O:10 N/cm^2:1 kg/cm^2:100000 Pa, 1 PSI:69 mbar,1 m^3/h:4,405 GPM:16,7 L/d 1 Gallon / minute:0,227 m^3/h, 0°C:89,6 F
Sealings:FPM (VITON):Fluoro-Carbon Elastomer

SMS INDUSTRIAL CONTROL VALVES & AUTOMATION SYSTEMS CO.
Head Office: Bostancı Yolu Cad. Kuru Sok. No:16 Y. Dudullu, 34776 Ümraniye - İstanbul / Turkey
Tel: +90 (216) 364 34 05 (pbx) Fax: +90 (216) 364 37 57 export@sms-tork.com www.sms-tork.com
Factory: Çerkeşli OSB Mah. İmes 5.Cad. No:6 Dilovası İMES OSB - Kocaeli / Turkey
Tel: +90 (262) 290 20 20 Fax: +90 (262) 290 20 21