GENERAL PURPOSE SOLENOID VALVES

3/2 Way
Direct Operated
G 1/8", G1/4"

S1018
SERIES

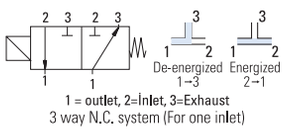
GENERAL FEATURES

- **TORK series S1018 (N.C and N.O) direct acting solenoid valves are 3/2 way normally closed - normally open and have small body size.**
- **Solenoid valves with three ports in body enabling convenient installation**
- **This valves can use especially on exhaust systems and pneumatic control systems**
- **On request; high pressure**
- **Suitable for non-aggressive liquids (water, light oil (2E) etc…), gaseous fluids (air, inert gases etc...)**
- Working Temperature : -10°C / +160°C
- Not suitable for use with dangerous fluids listed in Group 1
- **Don't require any differential pressure**
- Compact and low weight valve enabling and quick installation
- 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 can be 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))

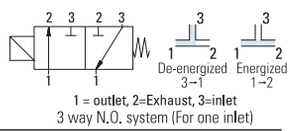
Three Port

Normally Closed

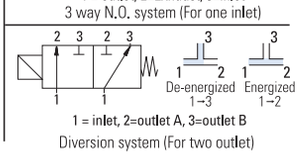
Normally Open



1 = outlet, 2=Inlet, 3=Exhaust
3 way N.C. system (For one inlet)



1 = outlet, 2=Exhaust, 3=inlet
3 way N.O. system (For one inlet)



1 = inlet, 2=outlet A, 3=outlet B
Diversion system (For two outlet)

ELECTRICAL CHARACTERISTICS

Continuous Duty	: ED %100
Coil Insulation Class	: H (180°C)
Coil Impregnation	: Polyester Fiber Glass
Coil Encapsulation Material	: Fiber Glass Reinforced
Ambient Temperature	: from -10°C; +60°C
Protection Degree	: IP 65 (EN 60529) with coil duly fitted with the plug connector
Electric Plug Connection	: DIN 46340 3-poles connectors (DIN 43650)
Connector Specification	: ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)
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)

On request; connector with LED
Specify coil voltage with order

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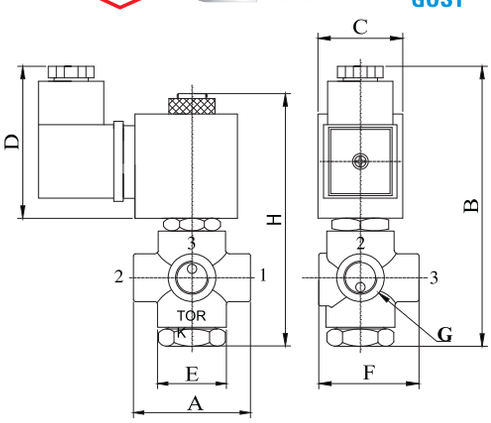

MATERIALS IN CONTACT WITH FLUID

Body	: Brass
Internal Parts	: Stainless Steel
Sealing	: FPM (VITON)
Shading Ring	: Copper
Seats	: Brass
Core Tube	: Stainless Steel
Springs	: Stainless Steel

On request; nickel plated body
On request; sealing can be NBR,EPDM

TECHNICAL FEATURES

Max Viscosity : 5°E (~37cSt or mm^2/s)
Response Time : Opening Time :30 ms,
Closing Time : 30 ms
Maximum Allowable Pressure : 20 bar
Fluid Temperature for NBR from -10°C; +80°C,
for EPDM from -10°C; +140°C

Dimensions (mm)

G	A	B	C	D	E	F	H
1/8"	44.2	105.5	32	57.3	26	37.8	95.2
1/4"	44.2	105.5	32	57.3	26	37.8	95.2

Valve Type / Order no	Connection Size	Orifice size	Pressure (for air)				KV	Fluid Temperature °C		Seal	Weight
				N.C System	N.O System	Diversion System					
S1018	G	mm	Min. Bar	Max. Bar	Max. Bar	Max. Bar	lt/min	min	max		(kg)
S1018.00.018	1/8"	1.8	0	4	7	16	1.5	-10	160	VITON	0.44
S1018.00.025	1/8"	2.5	0	3	4	12	3	-10	160	VITON	0.44
S1018.00.035	1/8"	3.5	0	1	2	10	5	-10	160	VITON	0.44
S1018.01.018	1/4"	1.8	0	4	7	16	1.5	-10	160	VITON	0.43
S1018.01.025	1/4"	2.5	0	3	4	12	3	-10	160	VITON	0.43
S1018.01.035	1/4"	3.5	0	1	2	10	5	-10	160	VITON	0.43

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: NBR : Nitrile-Butylene Elastomer, FPM (VITON) : Fluoro-Carbon Elastomer, EPDM : Ethylene-Propylene Elastomer

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