

### GENERAL FEATURES

- **New design**
- **Full orifice solenoid valves**
- 21/2" and 3" connection option
- **TORK series S7030, S7033 and S7090 diaphragm explosion proof 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 (water, light oil (2E) etc...), gaseous fluids (air, inert gases etc...)** that are compatible with the construction materials used in the valves.(for S7030 and S7033)
- **Suitable for irrigation systems (S7090)**
- **On request Atex coil**
- Working Temperature:-10°C / +80°C .(for S7030 and S7033) and maximum +50°C .(for S7090)
- Not suitable for use with dangerous fluids listed in Group 1
- Minimum operating differential pressure 0,35, 0,5, 1 and 1,5 bar
- High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
- **On request; manual override .(for S7030)**
- **On request; flanged types**
- 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))

### ELECTRICAL CHARACTERISTICS

- Continuous Duty : ED %100
- Coil Insulation Class : H (180°C)
- Coil Impregnation : Fiber Glass Reinforced or PP-V0 (Self-Extinguishing Polypropylene)
- Coil Encapsulation Material : Fiber Glass Reinforced or PP-V0 (Self-Extinguishing Polypropylene)
- Explosion proof 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

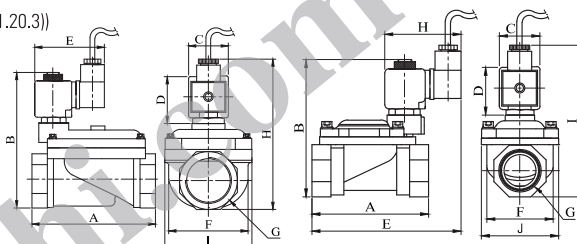
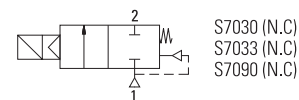
### MATERIALS IN CONTACT WITH FLUID

- Body : Brass and cast iron .(for S7030 and S7033) and Reinforced Nylon (for S7090)
- Internal Parts : Stainless Steel and brass
- Sealing : NBR
- Shading Ring : Copper
- Seats : Brass
- Core Tube : Stainless Steel
- Springs : Stainless Steel
- On request; nickel plated body (for S7030)
- On request; sealing can be FPM (VITON),EPDM

### TECHNICAL FEATURES

- Max Viscosity : 5°F (-37°CSt or mm<sup>2</sup>/s)
- Response Time : Opening Time:400 ms to ~ 1600 ms,  
Closing Time :1000 ms to ~ 2000 ms
- Maximum Allowable Pressure:25 bar (for S7030 and S7033), 15 bar (for S7090)
- Fluid Temperature for FPM (VITON) from -10°C; +160°C, for EPDM from -10°C; +140°C

### Normally Closed



Dimensions (mm)

	G	A	B	C	D	E	F	I	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	J	H	I
3/8"	69	101	32	45	106.5	38	52	76	112	
1/2"	69	104	32	45	106.5	40	52	76	112	
3/4"	81.3	112	32	45	115.8	42.1	51.9	76	121	
1"	87.9	119	32	45	122.4	51.5	60.9	76	127.5	

Valve Type / Order no	Connection Size	Orifice size	Pressure		KV	Fluid Temperature		Seal	Weight
			min	max		min	max		
<b>S7030 / S7033 / S7090</b>	<b>G</b>	<b>mm</b>	<b>bar</b>	<b>bar</b>	<b>lt/min</b>	<b>min</b>	<b>max</b>		<b>(kg)</b>
S 7 0 3 0 . 0 2	3/8"	12.5	0.35	16	45	-10	80	NBR	0.9
S 7 0 3 0 . 0 3	1/2"	12.5	0.35	16	65	-10	80	NBR	0.86
S 7 0 3 0 . 0 4	3/4"	20	0.5	16	120	-10	80	NBR	0.88
S 7 0 3 0 . 0 5	1"	25	0.5	16	170	-10	80	NBR	1.02
S 7 0 3 0 . 0 6	11/4"	46	0.5	12	390	-10	80	NBR	2.87
S 7 0 3 0 . 0 7	11/2"	46	0.5	12	460	-10	80	NBR	2.77
S 7 0 3 0 . 0 8	2"	46	0.5	12	580	-10	80	NBR	3.2
S 7 0 3 0 . 0 9	21/2"	72.8	1	6	1266	-10	80	NBR	6.2
S 7 0 3 0 . 1 0	3"	85.4	1	6	2333	-10	80	NBR	10.4
S 7 0 3 3 . 0 9	21/2"	72.8	1.5	16	1266	-10	80	NBR	6.2
S 7 0 3 3 . 1 0	3"	85.4	1.5	16	2333	-10	80	NBR	10.4
S 7 0 9 0 . 0 5	1"	31	1	10	300	-10	50	NBR	1.15
S 7 0 9 0 . 0 7	11/2"	45	1	10	433	-10	50	NBR	1.35
S 7 0 9 0 . 0 8	2"	57	1	10	1066	-10	50	NBR	2.3
S 7 0 9 0 . 0 9	21/2"	74	1	10	1150	-10	50	NBR	2.5
S 7 0 9 0 . 1 0	3"	86	1	10	1733	-10	50	NBR	2.75

### Useful Informations

1 bar:14.5 PSI:10 mH<sub>2</sub>O:10 N/cm<sup>2</sup>:1 kg/cm<sup>2</sup>:100000 Pa, 1 PSI:69 mbar,1 m<sup>3</sup>/h:4,405 GPM:16,7 L/d 1 Gallon / minute:0,227 m<sup>3</sup>/h, 0°C:89,6 F  
Sealings:NBR:Nitrile-Butylene Elastomer, FPM (VITON):Fluoro-Carbon Elastomer, EPDM:Ethylene-Propylene 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