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**GENERAL FEATURES**

- **TORK serie S8610 / S8680 diaphragm ship whistle solenoid valves are 2/2 way normally closed and pilot operated**
- **New designed product**
- **Suitable for non-aggressive liquids (water, light oil (2E) etc...), gaseous fluids (air, inert gases etc...)**
- Working Temperature: -10°C / +80°C
- Not suitable for use with dangerous fluids listed in Group 1
- **Minimum operating differential pressure 0,5 and 1 bar**
- High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
- 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 : 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 Ø6-8 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

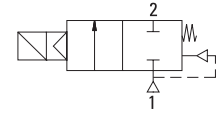
**MATERIALS IN CONTACT WITH FLUID**

- Body : Brass
- Internal Parts : Stainless Steel and brass
- Sealing : NBR (for S8610) , PTFE + FPM (VITON) (for S8680)
- Shading Ring : Copper
- Seats : Brass
- Core Tube : Stainless Steel
- Springs : Stainless Steel

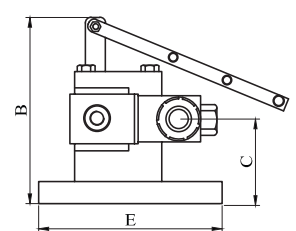
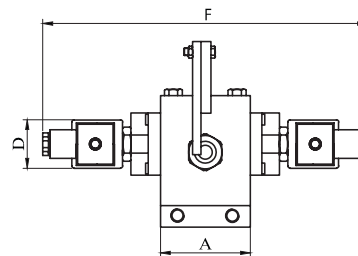
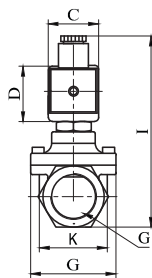
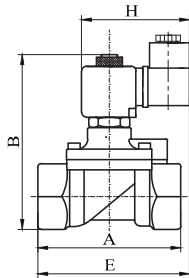
**TECHNICAL FEATURES**

- Max Viscosity : 5°E (-37cSt or mm²/s)
- Response Time : Opening Time:400 ms to ~ 1600 ms, Closing Time :1000 ms to ~ 2000 ms
- Maximum Allowable Pressure:60 bar
- Fluid Temperature for FPM (VITON) from -10°C; +160°C

**Normally Closed**



S8680/ S8610 (N.C.)



Dimensions (mm) S8680

G	A	B	C	D	E	F	K	H	I
1/2"	79	100	32	45	92	39,5	52	76	110

Dimensions (mm) S8610

G	A	B	C	D	E	F
1/2"	50	123	25,5	32	105	208

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size	Pressure min / max	KV	Fluid Temperature	Seal	Weight	
T-DV	S8610 / S8680	G	mm	bar	bar	lit/min	min °C max	(kg)	
T-DV 9	S8610.03.100	1/2"	10	1	30		-10 80	NBR	2.92
T-DV 9.1	S8680.03.145	1/2"	14.5	0.5	40		-10 160	PTFE + VITON	0.73

**Useful Informations**

1 bar:14,5 PSI:10 mH2O:10 N/cm2:1 kg/cm2:100000 Pa , 1 PSI:69 mbar,1 m3/h:4,405 GPM:16,7 L/d 1 Gallon / minute:0,227 m3/h, 0°C:89,6 F  
Sealings:NBR:Nitrile-Butylene Elastomer , FPM (VITON):Fluoro-Carbon Elastomer