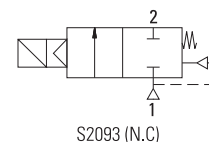


### GENERAL FEATURES

- TORK series S2093 diaphragm nickel plated steam solenoid valves are 2/2 way normally closed and pilot operated
- Especially for overheated water and steam
- With cooling neck. By this way, the effect of the fluids temperature on the coil is reduced
- Suitable for liquids and gaseous fluids
- Working Temperature: -10°C / +160°C
- Not suitable for use with dangerous fluids listed in Group 1
- Minimum operating pressure differential 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 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))

### Normally Closed

High Temperature  
Nickel Coated



### 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

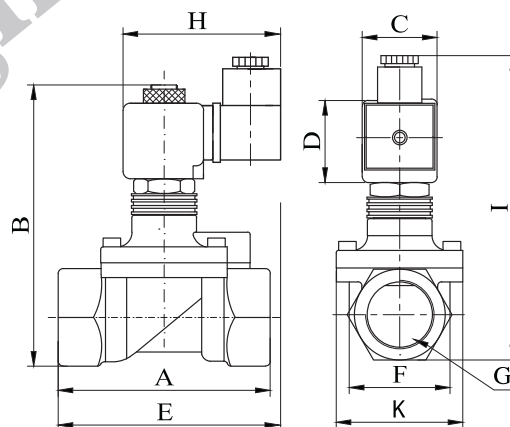
Other voltages on request;  
Voltage Tolerances : For AC -15%; +10%, For DC -5%; +10%  
Frequency : 50 Hz, other frequencies on request; (60 Hz)  
On request; connector with LED  
Specify coil voltage with order

### MATERIALS IN CONTACT WITH FLUID

Body : Nickel Plated Brass  
Internal Parts : Stainless Steel and brass  
Sealing : PTFE  
Shading Ring : Copper  
Seats : Brass  
Core Tube : Stainless Steel  
Springs : Stainless Steel  
On request; body and internal parts can be Stainless Steel.

### TECHNICAL FEATURES

Max Viscosity : 5°E (~37cSt 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 : 6 bar



Dimensions (mm)

	G	A	B	C	D	E	F	K	H	I
3/8"	74	112	32	45	91.3	37.5	52	76	126	
1/2"	79	115	32	45	92	39.8	52	76	112.7	
3/4"	79	122.3	32	45	94	41.5	52	76	135.5	
1"	85	130	32	45	101	42.5	52	76	141.5	

Valve Type / Order no	Connection Size	Orifice size	Pressure		KV	Fluid Temperature		Seal	Weight
			min	max		min	°C max		
<b>S2093</b>	<b>G</b>	<b>mm</b>	<b>bar</b>	<b>bar</b>	<b>lt/min</b>	<b>min</b>	<b>°C max</b>		<b>(kg)</b>
S 2 0 9 3 . 0 2	3/8"	12.5	0.5	6	48	-10	180	PTFE	0.8
S 2 0 9 3 . 0 3	1/2"	14.5	0.5	6	70	-10	180	PTFE	0.82
S 2 0 9 3 . 0 4	3/4"	17	0.5	6	85	-10	180	PTFE	0.82
S 2 0 9 3 . 0 5	1"	17	0.5	6	90	-10	180	PTFE	1.1

### 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, 2 bar steam: 133°C , 3 bar steam: 144 °C, 4 bar steam: 151°C, 5 bar steam: 160°C, 6 bar steam: 165°C  
Sealings: PTFE: Polytetrafluorethylene