

GENERAL FEATURES

- 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 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))

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

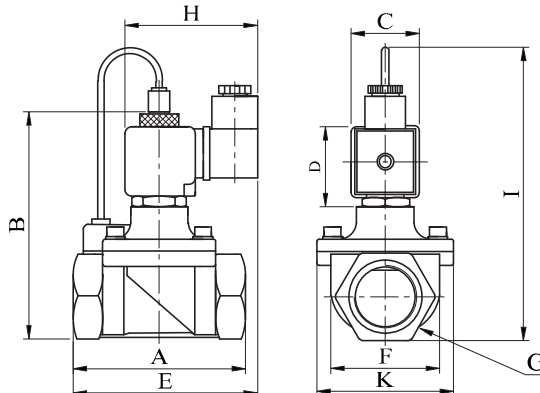
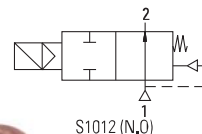
MATERIALS IN CONTACT WITH FLUID

- Body : Brass
 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
 On request; sealing can be FPM (VITON), EPDM

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 : 25 bar
 Fluid Temperature for FPM (VITON) from -10°C; +160°C, for EPDM from -10°C; +140°C

Normally Open



Dimensions (mm)

	G	A	B	C	D	E	F	K	H	I
3/8"	75	97	32	45	91.3	37.5	52	76	124	
1/2"	79	100	32	45	92	39.5	52	76	128	
3/4"	79	107.5	32	45	94	41.5	52	76	134	
1"	85	115	32	45	101	42.5	52	76	143.5	

Valve Type / Order no	Connection Size	Orifice size	Pressure		KV	Fluid Temperature		Seal	Weight
			min	max		min	max		
S1012	G	mm	bar	bar	lt/min	°C			(kg)
S 1 0 1 2 . 0 2	3/8"	12.5	0.5	16	48	-10	80	NBR	0.7
S 1 0 1 2 . 0 3	1/2"	14.5	0.5	16	70	-10	80	NBR	0.73
S 1 0 1 2 . 0 4	3/4"	17	0.5	16	85	-10	80	NBR	0.81
S 1 0 1 2 . 0 5	1"	17	0.5	16	90	-10	80	NBR	0.99

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, EPDM : Ethylene-Propylene Elastomer