

General Purpose Solenoid Valves S1033 Series (G 2 1/2", G 3")

GENERAL FEATURES

- Full orifice solenoid valves
- 2 1/2" and 3" connection
- TORK series S1030 (N.C) and S1033 (N.C) diaphragm solenoid valves are 2/2 way normally closed and pilot operated
- Suitable for water.
- Working Temperature: -20°C / +80°C
- Minimum operating differential pressure 1 and 1,5 bar
- High reliability, quality and performance; long life. corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options
- Coils interchangeable
- Solenoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards preferred.

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 -20°C, +60°C
Protection Degree	: IP65 (ISO 60529) with coil duly fitted with the plug connector
Electric Plug Connection	: DIN 46340 3 - Poles Connector (DIN43650)
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

On request other voltages
 Voltages Tolerance : For AC -15%; +10%, For DC -5%; +10%
 Frequency : 50 Hz, other frequencies on request; (60 Hz ...)
 On request; connector with LED
 Specify coil volt age with order

MATERIALS IN CONTACT WITH FLUID

Body	: Cast Iron
Internal Parts	: Stainless Steel, Brass
Sealing	: NBR
Shading Ring	: Copper (EN 12735-1)
Seats	: Brass
Core Tube	: Stainless Steel
Springs	: Stainless Steel

OPTIONS

- Female connection: BSP
 • On request Atex (exproof) coil.

TECHNICAL FEATURES

Max. Viscosity : 5°E (-37cST veya mm²/s)
 Response Time :
 Opening time : 400 ms- 1600 ms
 Closing Time : 1000 ms- 2000 ms

STANDARDS

- Standard tube connection G (BSP) (ISO 228-1) and other tube connections (NPT (ANSI 120.3)) are available on request.
- TORK solenoid valves 97/23/EC, are available for pressure equipment directive (PED) and 2006/95/ECC low voltage directive (LVD).

Not: Please look catalogues for more details

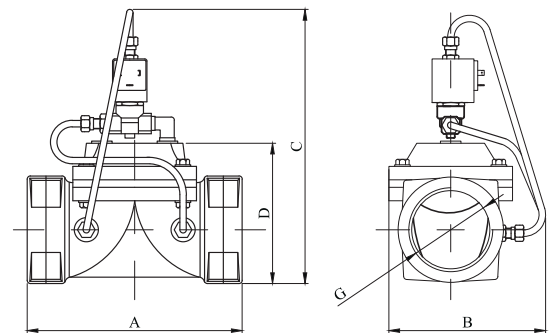
NORMALLY CLOSED

2/2 WAY

PILOT OPERATED



WATER



G	A	D	B	C
2 1/2"	200	125	155	260
3"	210	150	155	285

Coils	Nominal Values	Cold/Hot	Inrush	Holding	Current (A)	Surface Temperature (°C)
C40012VDC18W	12VDC 18W	COLD	19,56	19,56	1,63	20
		HOT	14,52	14,52	1,21	106
C40024VDC18W	24VDC 18W	COLD	20,88	20,88	0,87	25
		HOT	14,64	14,64	0,61	116
C40110VDC18W	110VDC 18W	COLD	19,96	19,96	0,18	23
		HOT	13,56	13,56	0,123	115
C40012VAC15VA	12VAC 15VA	COLD	23,81	16,43	1,3	25
		HOT	-	15,86	1,262	79
C40024VAC15VA	24VAC 15VA	COLD	25,82	15,02	0,62	22
		HOT	-	13,91	0,57	81
C40110VAC15VA	110VAC 15VA	COLD	30,65	15,17	0,137	24
		HOT	-	13,96	0,126	80
C40230VAC15VA	230VAC 15VA	COLD	31,4	15,64	0,068	25
		HOT	-	14,41	0,063	80
C40230VAC24VA	230VAC 24VA	COLD	45,1	23,92	0,0154	23
		HOT	-	21,62	0,0154	100

Solenoid Valve Symbol	Valve Type/ Order No	Connection Size	Orifice Size	Pressure min/max	Kv	Fluid Temperature	Seal	Weight		
	S1030 / S1033	G	mm	Bar	Bar	l/min	NBR	kg		
						°C				
						min			max	
	S1033.09	2 1/2"	72.8	1.5	16	1266	-20	80	✓	6
	S1033.10	3"	85.4	1.5	16	2333	-20	80	✓	10.3

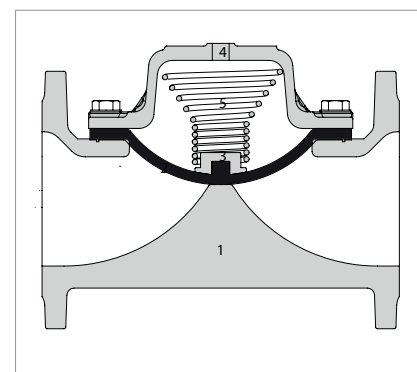
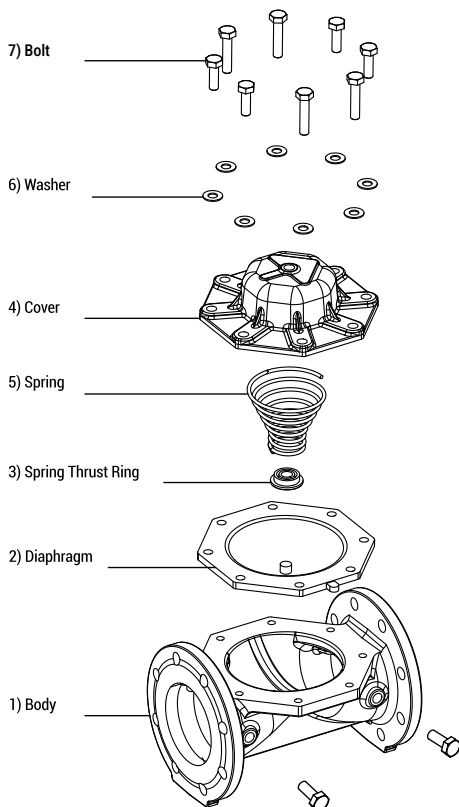
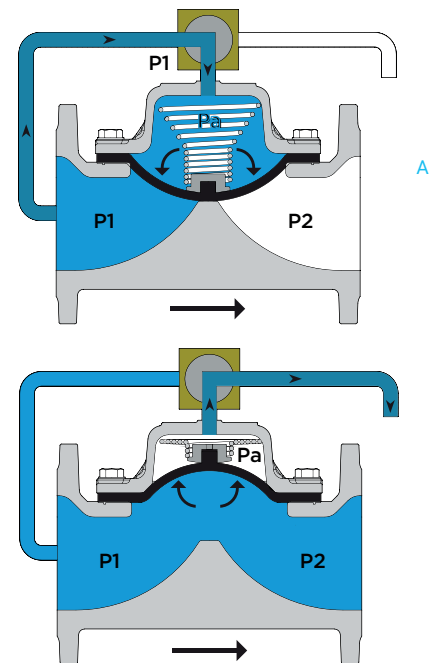
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VALVE CLOSING MODE

When pilot valves connected on main water transport water pressure in valve upstream to valve actuator (control element), water creates a hydraulic power on valve diaphragm. This power formed, by combining with extra power applied by inner spring, ensures that valve will be closed with full tightness.

VALVE OPENING MODE

When way of pilot valve located on main valve being in closed position is brought into relief position, pressurized water within control chamber on main valve diaphragm is released. When line pressure (P1) reaches to the valve which will overcome spring power, water carries valve to fully open position by applying a hydraulic power to valve diaphragm from bottom.



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MAIN PARTS	No	Part Name	Material
	1	Body	GG25 (Cast Iron)
	2	Diaphragm	Nylon Reinforced Natural Rubber
	3	Spring Thrust Ring	Polyamide
	4	Cover	GG25 (Cast Iron)
	5	Spring	SST 302
	6	Washer	Coated Steel
	7	Bolt	Coated Steel
	8	Position Ind. Kit (Optional)	SST+Brass