TORK valve & automation high quality

LATCHING SOLENOID VALVES

2/2 Way
Pilot Operated
G 3/8", G1/2", G3/4", G1", G11/4", G11/2", G2"

S8310 SERIES

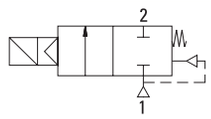
B

GENERAL FEATURES

Normally Closed

- **New design**
- **No continious energy required.**
- **Low coil power (4.5 to 5 W for DC) and current**
- **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 0,35, 0,5**
- 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))

Low Coil Power



S8310 (N.C)

TSE-HYB CERT CE ROHS GOST

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)
Electrical Safety	: IEC 335
Standard Voltages	: For DC 6V, 9V, 12V Latching (Polarity (+, -), Change (-, +)
Other voltages on request;	
Voltage Tolerances	: For DC %-5; %+10
Frequency	: 50 Hz, other frequencies on request; (60 Hz ....)
On request; connector with LED	
Specify coil voltage with order	

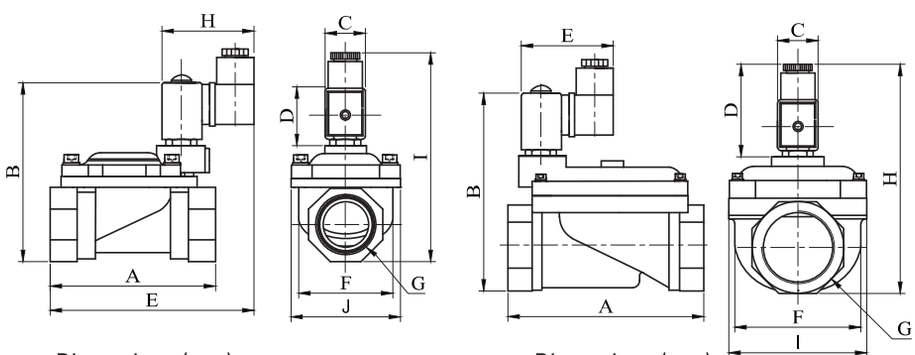
MATERIALS IN CONTACT WITH FLUIDS

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 mm^2/s)
Response Time : Opening Time :400 ms to ~ 1600 ms,
Closing Time :1000 ms to ~ 2000 ms
Maximum Allowable Pressure :20 bar
Fluid Temperature for FPM (VITON)
from -10°C; +160°C, for EPDM from -10°C; +140°

Latching solenoid valves work from 6 to 9 V DC voltages. The coils' on and off position is provided by changing the cables' +/- ends over the coil.Battery or a proper voltage source is used for feeding. The valve's position is changed by giving an instantaneous energy. The coil is not under a constant energy



Dimensions (mm)

G	A	B	C	D	E	F	J	H	I
3/8"	69	92	22	34	97.5	38	52	57	105
1/2"	75	95	22	34	100	40	52	57	108
3/4"	81.3	103	22	34	106.5	42.1	51.9	57	114
1"	87.9	110	22	34	111	51.5	60.9	57	120.5

Dimensions (mm)

G	A	B	C	D	E	F	I	H
11/4"	141	139	22	34	57	96.5	110.7	149
11/2"	139	139	22	34	57	96.5	110.7	149
2"	145.6	139	22	34	57	96.5	110.7	149

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size	Pressure min / max		KV	Fluid Temperature °C		Seal	Weight
T-LAC1	S8310	G	mm	bar	bar	lt/min	min	max		(kg)
T-LAC1 102	S8310.02	3/8"	12.5	0.35	12	45	-10	80	NBR	0.5
T-LAC1 103	S8310.03	1/2"	12.5	0.35	12	65	-10	80	NBR	0.49
T-LAC1 104	S8310.04	3/4"	20	0.5	12	120	-10	80	NBR	0.51
T-LAC1 105	S8310.05	1"	25	0.5	12	170	-10	80	NBR	0.64
T-LAC1 106	S8310.06	11/4"	46	0.5	8	390	-10	80	NBR	2.2
T-LAC1 107	S8310.07	11/2"	46	0.5	8	460	-10	80	NBR	2.1
T-LAC1 108	S8310.08	2"	46	0.5	8	580	-10	80	NBR	2.45

Useful Informations

1 bar:14,5 PSI:10 mH_2O:10 N/cm^2:1 kg/cm^2:100000 Pa, 1 PSI:69 mbar,1 m^3/h:4,405 GPM:16,7 L/d 1 Gallon / minute:0,227 m^3/h, 0°C:89,6 F
Sealings:NBR:Nitrile-Butylene Elastomer, FPM (VITON):Fluoro-Carbon Elastomer, EPDM:Ethylene-Propylene Elastomer

TORK valve & automation high quality

LATCHING SOLENOID VALVES

2/2 Way
Pilot Operated
G1/8", G1/4", G3/8", G1/2", G3/4", G1"

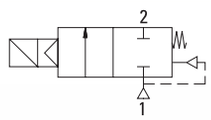
S8380 SERIES

B

GENERAL FEATURES

- **Suitable for non-aggressive liquids (water, light oil (2E) etc…), gaseous fluids (air, inert gases etc...)**
- **No continious energy required.**
- They work in a wide range of pressure
- **On request; manual override**
- Working Temperature:-10°C / +80°C
- Not suitable for use with dangerous fluids listed in Group 1
- **Minimum operating differential pressure 0 and 0.35 bar**
- 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



S8380 (N.C)

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
Standard Voltages : For DC 6V, 9V, 12V Latching (Polarity (+, -), Change (-, +)
Other voltages on request;
Voltage Tolerances For DC %-5; %+10
Specify coil voltage with order

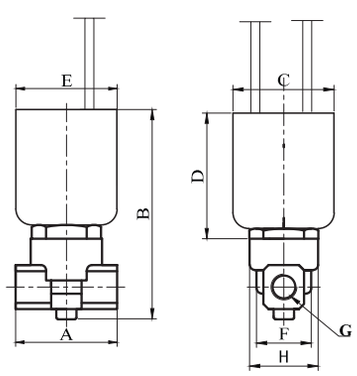
MATERIALS IN CONTACT WITH FLUIDS

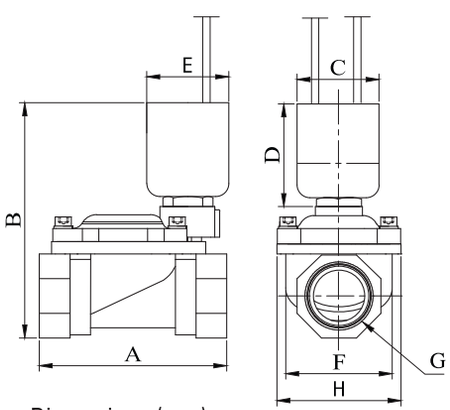
Body : Brass
Internal Parts : Stainless Steel
Sealing : NBR (3/8" to 1")
VITON (1/8" and 1/4")
Shading Ring : Copper
Seats : Brass
Core Tube : Stainless Steel
Springs : Stainless Steel

TECHNICAL FEATURES

Max Viscosity : 5°E (~37cSt or mm^2/s)
esponse 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 NBR from -10°C; +80°

Latching solenoid valves work from 6 to 9 V DC voltages. The coils' on and off position is provided by changing the cables' +/- ends over the coil.Battery or a proper voltage source is used for feeding. The valve's position is changed by giving an instantaneous energy. The coil is not under a constant energy





Dimensions (mm)

G	A	B	C	D	E	F	H
1/8"	40	94	40	45	40	22.3	25.6
1/4"	40	94	40	45	40	22.3	27.7

Dimensions (mm)

G	A	B	C	D	E	F	H
3/8"	69	101	40	45	40	38	52
1/2"	75	104	40	45	40	40	52
3/4"	81.3	112	40	45	40	42.1	51.9
1"	87.9	119	40	45	40	51.5	60.9

Valve Type / Order no	New Valve Type / Order no	Connection Size	Orifice size	Pressure min / max		KV	Fluid Temperature °C		Seal	Weight
T-LAC2	S8380	G	mm	bar	bar	lt/min	min	max		(kg)
T-LAC2 100	S8380.00.018	1/8"	1.8	0	16	1.6	-10	160	VITON	0.2
T-LAC2 101	S8380.01.018	1/4"	1.8	0	16	1.6	-10	160	VITON	0.19
T-LAC2 102	S8380.02	3/8"	12	0.35	12	40	-10	80	NBR	0.42
T-LAC2 103	S8380.03	1/2"	12	0.35	12	58	-10	80	NBR	0.4
T-LAC2 104	S8380.04	3/4"	15	0.35	12	75	-10	80	NBR	0.6
T-LAC2 105	S8380.05	1"	15	0.35	12	90	-10	80	NBR	0.8

Useful Informations

1 bar:14,5 PSI:10 mH_2O:10 N/cm^2:1 kg/cm^2:100000 Pa, 1 PSI:69 mbar,1 m^3/h:4,405 GPM:16,7 L/d 1 Gallon / minute:0,227 m^3/h, 0°C:89,6 F
Sealings:NBR:Nitrile-Butylene Elastomer, FPM (VITON):Fluoro-Carbon Elastomer