

Proportional Solenoid Valve SP Series (Manifold Mount, G1/8" , G1/4")

GENERAL FEATURES

- Proportional Valves have the ability to change the flow rate according to energy given to the coils.
- SP series proportional valves can be used in customer specific wide pressure ranges and flow rates.
- Like any other solenoid valves Sp series should also be used with filters.
- Solenoid valves can be mounted in any position without affecting its operation.
- Coils are advised to be used in a vertical position.
- SP Series proportional valves can be controlled with a voltage or current but to achieve maximum efficiency in hysteresis and repeatability, it is highly recommended to be used with a PWM signal and a sensor for a feedback circuit.

ELECTRICAL CHARACTERISTICS

Continuous Duty	: ED %100
Coil Insulation Class	: H (180°C)(IEC 85)
Coil Impregnation	: Polyester Fiber Glass
Ambient Temperature	: -10°C, +60°C
Protection Degree	: IP65 (ISO 60529) On request; IP68
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	: DC 24V 18W (On request DC 12V 18W)
Voltages Tolerance	: DC -5%, +10%

MATERIALS IN CONTACT WITH FLUID

Body	: Brass or Stainless Steel
Internal Parts	: Stainless Steel
Sealing	: NBR(On request; EPDM, VITON)
Shading Ring	: Copper (EN 12735-1)
Seats, Core Tube, Springs:	Stainless Steel

OPTIONS

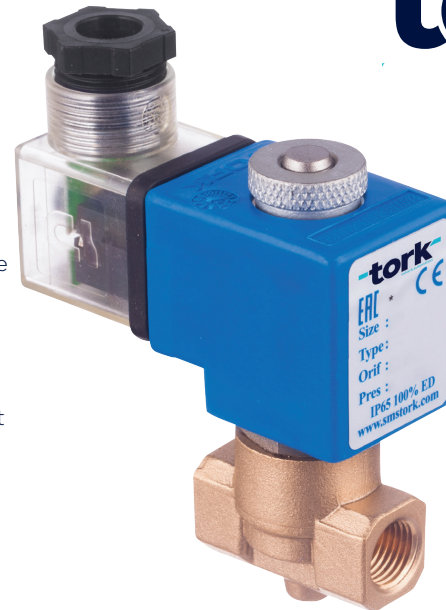
- Female connection: BSP; (On request NPT or Manifold Connection)
- On request CR-Ni plated, PTFE coated done
- On request Atex (exproof) coil.

TECHNICAL FEATURES

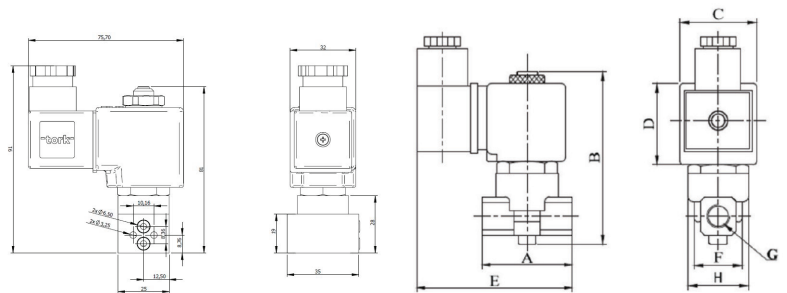
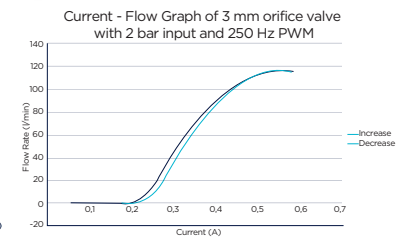
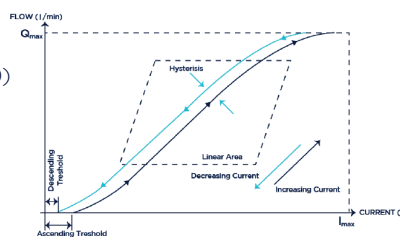
Max. Viscosity	: 5°E (-37cST veya mm ² /s)
Hysteresis	: Max. %4 (with 250 Hz PWM)
Repeatability	: Max. %3 (with 250 Hz PWM)
Response Time	: 15 ms

SEALS FEATURES

NBR	: -10°C...+80°C
EPDM	: -10°C...+130°C
VITON	: -10°C...+160°C
PTFE	: -10°C...+160°C
RUBY	: -10°C...+160°C



NORMALLY CLOSED
2/2 WAY
DIRECT ACTING
PROPORTIONAL



Dimensions of the valve with the manifold connection

Dimensions (mm)

	G	A	B	C	D	E	F	H
1/8"	40	83	32	39	78	22.3	25.6	
1/4"	40	83	32	39	78	22.3	25.6	

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

*Specific Pressures and flow rates can be done on request.

STANDARDS

- Standard tube connection G (BSP) (ISO 228-1) and other tube connections (NPT (ANSI 120.3)) are available on request.
- TORQ 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.

Solenoid Valve Symbol	Valve Type/Order No	Connection Size	Orifice Size	Pressure min/max		Kv	Seal				Weight
				Bar	Bar		NBR	Viton	EPDM	PTFE	
	SP Series	G	mm	Bar	Bar	l/min	Option				kg
	SP1010.00.010	1/8"	1	0*	10*	0.6	✓	✓	✓	✓	0,36
	SP1010.00.018	1/8"	1.8	0*	8*	1.6	✓	✓	✓	✓	0,36
	SP1010.00.020	1/8"	2	0*	6*	2.2	✓	✓	✓	✓	0,36
	SP1010.00.025	1/8"	2.5	0*	4*	3.2	✓	✓	✓	✓	0,36
	SP1010.00.030	1/8"	3	0*	3*	4.6	✓	✓	✓	✓	0,36
	SP1010.00.040	1/8"	4	0*	2*	6.4	✓	✓	✓	✓	0,36
	SP1010.01.010	1/4"	1	0*	10*	0.6	✓	✓	✓	✓	0,35
	SP1010.01.018	1/4"	1.8	0*	8*	1.6	✓	✓	✓	✓	0,35
	SP1010.01.020	1/4"	2	0*	6*	2.2	✓	✓	✓	✓	0,35
	SP1010.01.025	1/4"	2.5	0*	4*	3.2	✓	✓	✓	✓	0,35
	SP1010.01.030	1/4"	3	0*	3*	4.6	✓	✓	✓	✓	0,35
	SP1010.01.040	1/4"	4	0*	2	6.4	✓	✓	✓	✓	0,35