

# **COMPRESSOR SOLENOID VALVES**

3/2 Way Direct Operated G 1/8", G1/4" **S5080 SERIES** 

### **GENERAL FEATURES**

- TORK seriesS5080 (N.C) direct acting plate mounting compressor solenoid valves are 3/2 way normally closed and have small body size.
  Without manuel override, for small body (1/8" and 1/4"), square type body and easy installation
  This valves use especially exhaust systems

- On request manuel override
- Suitable for non-aggressive liquids (water, light oil (2E) etc...), gaseous fluids (air, inert gases etc...)
- Working Temperature:-10°C / +160°C
- On request; top exhaust with 1 mm, 1,8 mm and 2,5 mm orifice and seals
- Not suitable for use with dangerous fluids listed in Group 1
- Don't require any differential pressure
- Compact and low weight valve enabling and quick installation
- High reliability, quality and performance; long life, corrosion resistance
- Wide pressure ratings, range of flow rate and orifice options

  On request; solenoid valve can have 4 mounting hole at the bottom of the body.
- 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)
- Some applications; compressor tank
- Coils interchangeable
- Fw factor Kv of each valve is indicated, so that the flow Q can be calculated as a function of pressure
- Senoid valves must be used with filtered fluids.
- Solenoid valve can be mounted in any position without affecting operation; vertical with coil upwards
- 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 Coil Insulation Class :ED %100 : H (180°C)

:Polyester Fiber Glass Coil Impregnation 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

:DIN 46340 3-poles connectors (DIN 43650)

Electric Plug Connection Connector Specification :ISO 4400 / EN 175301-803, Form A, Spade plug (Cable Ø 6-8 mm)

Electrical Safety

:For AC 12V, 24V, 48V, 110V, 230V Standard Voltages For DC 12V, 24V, 48V, 110 V

Other voltages on request;

:For AC -15%; +10%, For DC -5%; +10% Voltage Tolerances :50 Hz, other frequencies on request; (60 Hz) Frequency

On request; connector with LED Specify coil voltage with order

### **MATERIALS IN CONTACT WITH FLUID**

Response Time: Opening Time: 30 ms, Closing Time: 30 ms

Body Internal Parts: Stainless Steel Sealing : FPM (VITON)

Shading Ring: Copper Seats Brass Core Tube Stainless Steel **Springs** : Stainless Steel

On request: nickel plated body On request; sealing can be NBR

**TECHNICAL FEATURES** Max Viscosity : 5°E (~37cSt or mm<sup>2</sup>/s)

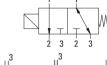
Maximum Allowable Pressure:20 bar Fluid Temperature for NBR from -10° / +80°



Application

## **Normally Closed**











3 = Exhaust / Inlet 2

S5080 (N.C)

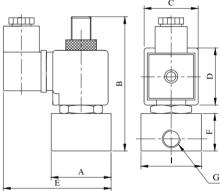




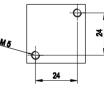








On request; solenoid valve can have 4 mounting holes at the bottom of the body



### Dimensions (mm)

G	Α	В	С	D	Ε	F	1
1/8"	35	90.5	32	39	68	26.5	35
1/4"	35	90.5	32	39	68	26.5	35

Valve Type / Order no	Connection Size	Orifice size	Pressure min max		KV	Fluid Temperature		Seal	Weight	
\$5080	G	mm	bar	ba Liquid	ar Air	lt/min	°( min	; max		(kg)
\$5080.00.018	1/8"	1.8	0	2	14	1-2=1,35 , 2-3=1,35	-10	160	VITON	0.5
\$5080.00.025	1/8"	2.5	0	1	10	1-2=2,5 , 2-3=1,35	-10	160	VITON	0.5
\$5080.01.018	1/4"	1.8	0	2	14	1-2=1,35 , 2-3=1,35	-10	160	VITON	0.49
\$5080.01.025	1/4"	2.5	0	1	10	1-2=2,5 , 2-3=1,35	-10	160	VITON	0.49

### **Useful Informations**

1 bar:14,5 PSI:10 mH<sub>2</sub>0:10 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 Sealings:FPM (VITON):Fluoro-Carbon Elastomer, NBR = Nitrile Butylene Elastomer