

## General Purpose Flanged Solenoid Valves S1070 / S1080 Series

### GENERAL FEATURES

- New design
- Full orifice flanged solenoid valves
- 3", 4", 6" and 8" connection
- TORK series S1070 (N.C) and S1080 (N.C) diaphragm solenoid valves are 2/2 way normally closed and pilot operated
- Suitable for water.
- Working Temperature: -10°C / +80°C
- Not suitable for use with dangerous fluids listed in Group 1
- 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
- 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           | : 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<br>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

### SOLENOID MATERIALS

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

### OPTIONS

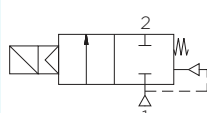
- Female connection: BSP; (On request NPT)
- On request CR-Ni plated, PTFE coated done
  - On request Atex (exproof) coil.

### TECHNICAL FEATURES

Max. Viscosity : 5°E (-37cST veya mm<sup>2</sup>/s)  
 Response Time :  
 Opening time : 400 ms- 1600 ms  
 Closing Time : 1000 ms- 2000 ms

### Useful Informations

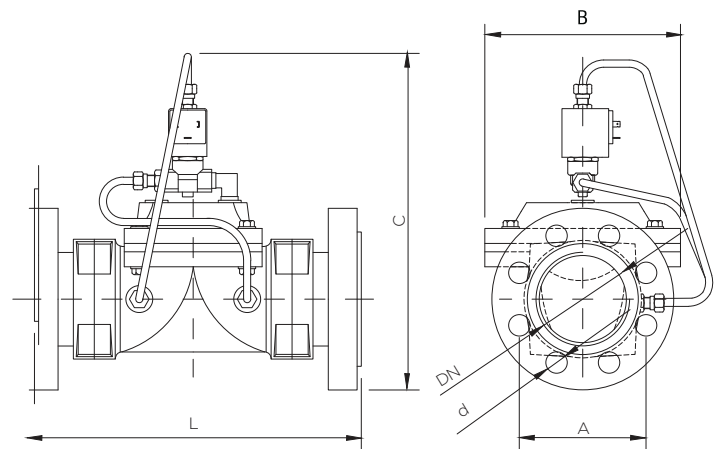
1 bar:14,5 PSI:10 mH2O:10 N/cm<sup>2</sup>:1 kg/ cm  
 2:100000Pa, 1 PSI:69 mbar,1 m3/h:4,405  
 GPM:16,7 L/ d 1 Gallo n / minute:0,227 m3/h,  
 Cv:1,16 Kv, 0°C:89,6F Sealings: NBR:  
 Nitrile-Butylene Elastomer



NORMALLY CLOSED

2/2 WAY

PILOT OPERATED



| DN  | L   | C   | B   | A   | d  |
|-----|-----|-----|-----|-----|----|
| 80  | 300 | 340 | 208 | 160 | 18 |
| 100 | 305 | 365 | 208 | 180 | 18 |
| 150 | 390 | 450 | 300 | 240 | 22 |
| 200 | 475 | 550 | 385 | 295 | 22 |

| Solenoid Valve Symbol | Valve Type/ Order No | Connection Size | Pressure min/max |     | Kv    | Fluid Temperature |     | Seal | Weight |
|-----------------------|----------------------|-----------------|------------------|-----|-------|-------------------|-----|------|--------|
|                       |                      |                 | Bar              | Bar |       | °C                |     |      |        |
|                       | S1070 / S1080        | DN              | Bar              | Bar | Lt/dk | min               | max |      | kg     |
|                       | S1070.10             | 80              | 1                | 6   | 3380  | -10               | 80  | NBR  | 20.7   |
|                       | S1070.12             | 100             | 1                | 6   | 3610  | -10               | 80  | NBR  | 22.3   |
|                       | S1070.18             | 150             | 1                | 6   | 7450  | -10               | 80  | NBR  | 54.2   |
|                       | S1070.20             | 200             | 1                | 6   | 14600 | -10               | 80  | NBR  | 84.9   |
|                       | S1080.10             | 80              | 1.5              | 16  | 3380  | -10               | 80  | NBR  | 20.7   |
|                       | S1080.12             | 100             | 1.5              | 16  | 3610  | -10               | 80  | NBR  | 22.3   |
|                       | S1080.18             | 150             | 1.5              | 16  | 7450  | -10               | 80  | NBR  | 54.2   |
|                       | S1080.20             | 200             | 1.5              | 16  | 14600 | -10               | 80  | NBR  | 84.9   |