# DRAIN SOLENOID VALVES
# Pilot Operated G3/8", G1/2", G3/4", G1"

**NORMALLY CLOSED**
**2/2 WAY**

WATER AİR GAS

## GENERAL FEATURES

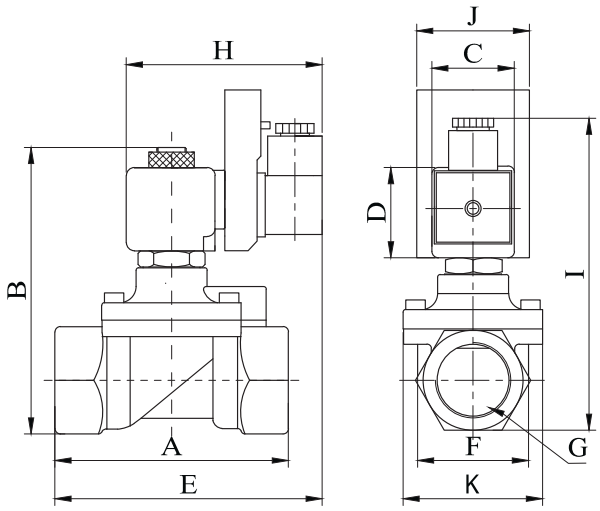
• TORK series S8180 (N.C) diaphragm drain solenoid valves are 2/2 way normally closed pilot operated
• The standby and drainage periods can be regulated by the timer on itself. It is attached to the part of the valve which it is drained. The valve is opened to drain on time which the timer is programmed.
• On request; normally open types
• Suitable for non-aggressive liquids (water, light oil (2E) etc ... ), gaseous fluids (air, inert gases etc ... )
• Working Temperature:-20 C / +80 C
• Not suitable for use with dangerous fluids listed in Group 1
• Don't require differential pressure (for 3/8", 1/2", 3/4", 1")
• Internal exhaust system for normally open solenoid valves
• 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).
• Some applications; separator main drainage
• 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 |
| Ambient Temperature | : -from -20°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) |
| Connector Specification | : ISO 4400 / EN 175301-803, Form A, Spade plug (Cable 06-8 mm) |
| Electrical Safety | : IEC 335 |
| Standard Voltages | : For AC 12V, 24V, 48V, 11DV, 230V<br>For DC 12V, 24V, 48V, 11 D V |
| Other voltages on request; | |
| Voltage Tolerances | : For AC -15%; + 10%, For DC -5%; + 10% |
| Voltage Tolerances | : 50 Hz, other frequencies on request; (60 Hz) |

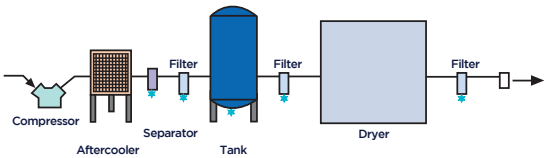
On request; connector with LED Specify coil voltage with order




## MATERIALS IN CONTACT WITH FLUID

| | |
|---|---|
| Body | : Brass |
| Internal Parts | : Stainless Steel |
| Sealing | : NBR |
| Shading Ring | : Copper |
| Seats | : Brass |
| Core Tube | : Brass |
| Springs | : Stainless Steel |
| Shading Ring | : Stainless Steel |

**On request;** sealing can be FPM (VITON),EPDM

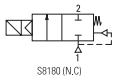



* Application areas for drain valves

| Dimensions (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| G | A | B | C | D | E | F | K | H | I | J |
| 3/8" | 74 | 97 | 32 | 45 | 109.3 | 37.5 | 52 | 76 | 108 | 42.3 |
| 1/2" | 79 | 100 | 32 | 45 | 110 | 39.8 | 52 | 76 | 110 | 42.3 |
| 3/4" | 79 | 107.3 | 32 | 45 | 112 | 39.8 | 52 | 76 | 118 | 42.3 |
| 1" | 85 | 115 | 32 | 45 | 115 | 42.5 | 52 | 76 | 124 | 42.3 |

## TECHNICAL FEATURES

| | |
|---|---|
| Continuous Duty | : 5°E (-37cSt or mm2/s) |
| Response Time | : Opening Time: 400 ms to - 1600 ms,<br>Closing Time :1000 ms to - 2000 ms |

| Solenoid Valve Symbol | Valve Type/ Order No | Connection Size | Orifice Size | Pressure min/max | | Kv | Fluid Temperature °C | | Seal | Weight |
|---|---|---|---|---|---|---|---|---|---|---|
| | S8180 | G | mm | Bar | Bar | lt/min | min | max | | kg |
|  S8180 (N.C) | S8180.02 | 3/8" | 12.5 | 0,15 | 16 | 48 | -20 | 80 | NBR | 0.69 |
| | S8180.03 | 1/2" | 14 .5 | 0,15 | 16 | 70 | -20 | 80 | NBR | 0.72 |
| | S8180.04 | 3/4" | 17 | 0,15 | 16 | 85 | -20 | 80 | NBR | 0.8 |
| | S8180.05 | 1" | 17 | 0,15 | 16 | 90 | -20 | 80 | NBR | 0.98 |

TS8180EN260925

**Useful Informations**
1 bar:14,5 PSI:10 mH20:10 N/cm2:1 kg/cm2:100000 Pa , 1 PSI:69 mbar,1 m3/h:4,405 GPM:16,7 L/d 1 Gallon / minute:0,227 m3/h, 0°C:89,6 F Sealings:NBR:Nitrile-Butylene Elastomer , FPM (VITON):Fluoro Carbon Elastomer, EPDM:Ethylene-Propylene Elastomer