

# 2/2-Wege-Magnetventil

2/2-Wege-Ausführung

Artikel Nr. 148615

Typen Nr. MVB.MS.230V.G14.0-20B



Beispielhafte Darstellung

Die Standardbaureihe in den Ausführungen

- direktgesteuert

- vorgesteuert

Gerätesteckdose nach ISO 4400

Mediumtemperatur max. 80 °C

## Technische Informationen

|                        |                                    |
|------------------------|------------------------------------|
| Gewinde                | G 1/4 IG                           |
| Betriebsdruck          | 0 - 20 bar                         |
| Spannung               | 230 V AC                           |
| Gehäuse                | Messing                            |
| Ventilsitz             | Edelstahl / Messing                |
| Innenteile             | Edelstahl / Messing                |
| Dichtmaterial          | FKM                                |
| Mediumtemperatur       | -10 bis 160 °C                     |
| Umgebungstemperatur    | -10 bis 60 °C                      |
| Bauform                | 2                                  |
| Schutzart              | IP 65                              |
| Elektrischer Anschluss | ISO 4400 / EN 175301-803 Bauform A |
| Gewindenorm            | DIN EN ISO 228-1                   |
| Öffnung                | 1,8 mm                             |
| A                      | 78,0 mm                            |
| B                      | 40,0 mm                            |
| C                      | 90,0 mm                            |

## Kaufmännische Daten

|                         |                 |
|-------------------------|-----------------|
| Zolltarifnummer         | 84812090        |
| Ursprungsland           | TR              |
| eCl@ss 5.1.4            | 27220601        |
| eCl@ss 9.0              | 27220601        |
| UNSPSC_Code_v190501     | 40141605        |
| UNSPSC_CodeDesc_v190501 | Solenoid valves |

## Material Informationen

|                        |                         |
|------------------------|-------------------------|
| REACH SVHC1 Stoff Name | lead                    |
| CAS-Nr. SVHC 1         | 7439-92-1               |
| RoHS Werkstoff-Hinweis | RoHS compliant          |
| REACH Info             | contains SVHC substance |

# S1011 HP Series General Purpose Solenoid Valves

G1/8", G1/4"

## GENERAL FEATURES

- Wide pressure range, flow rate and orifices options.
- Solenoid valves are used with filters.
- Solenoid valves can be mounted in any position without affecting its operation.
- Coil to be used in a vertical position.

## 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 (DIN 43650)  
Connector Specification : ISO 4400 / EN 175301-803 Form A, Spade Plug (Cable Ø6-8 mm)  
Electrical Safety : IEC 335  
Standard Voltages : 230V 15VA, 230V 20VA, 230V 24VA

On request other voltages

Voltages Tolerance : AC -15%, +10% DC -5%, +10%

Frequency : 50 Hz (60 Hz...)

On request; Connector with LED, PWM Socket Specify coil voltage with order

## MATERIALS IN CONTACT WITH FLUID

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

## 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 (-37°CST veya mm²/s)

Response Time : Opening time : 30 ms

Closing Time : 30 ms

## SEALS FEATURES

NBR : -10°C...+80°C

EPDM : -10°C...+130°C

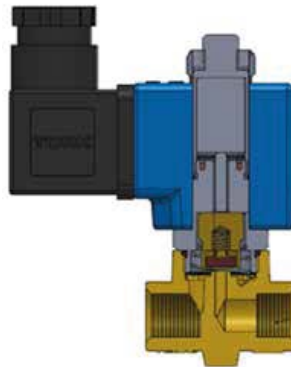
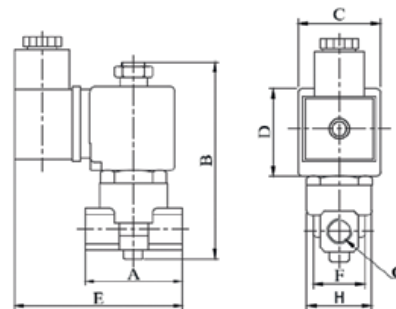
VITON : -10°C...+160°C

PTFE : -10°C...+160°C

RUBY : -10°C...+160°C

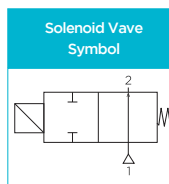


NORMALLY OPEN  
2/2 OPERATED  
DIRECT ACTING  
 $\Delta P=0$



Dimensions (mm)

| G    | A  | B  | C  | D  | E  | F    | H    |
|------|----|----|----|----|----|------|------|
| 1/8" | 40 | 90 | 32 | 39 | 78 | 22.3 | 25.6 |
| 1/4" | 40 | 90 | 32 | 39 | 78 | 22.3 | 25.6 |

| Solenoid Valve Symbol                                                               | Valve Type/Order No | Connection Size | Orifice Size | Pressure min/max |     | Kv    | Seal | Weight kg |
|-------------------------------------------------------------------------------------|---------------------|-----------------|--------------|------------------|-----|-------|------|-----------|
|  | S1011HP             | G               | mm           | Bar              | Bar | l/min |      |           |
|                                                                                     | S1011.01018HP       | 1/4"            | 1.8          | 0                | 20  | 1.6   | ✓    | 0,35      |
|                                                                                     | S1011.00018HP       | 1/8"            | 1.8          | 0                | 20  | 1.6   | ✓    | 0,36      |

## STANDARDS

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

• TORK solenoid valves 97/23/EC, are available for pressure equipment directive (PED) and 2006/95/ECC low voltage directive (

Not: Please look catalogues for more details

SMS Sanayi Malzemeleri Üretim & Satış A.Ş.

www.smstork.com

## Fuel Oil Solenoid Valve S4011 Series (G1/8", G1/4")

### GENERAL FEATURES

- Wide pressure range, flow rate and orifis options.
- Solenoid valves are used with filters.
- Solenoid valves can be mounted in any position without affecting its operation.
- Coil to be used in a vertical position.

### 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 (DIN 43650)                                                         |
| Connector Specification  | : ISO 4400 / EN 175301-803 Form A, Spade Plug (Cable Ø6-8 mm)                                     |
| Electrical Safety        | : IEC 335                                                                                         |
| Standard Voltages        | : AC 12V 15VA, 24V 15VA, 48V 15VA, 230V 15VA, 230V 24VA<br>DC 12V 18W, 24V 18W, 48V 18W, 110V 18W |

On request other voltages

Voltages Tolerance : AC -15%, +10% DC -5%, +10%

Frequency : 50 Hz (60 Hz...)

On request; Connector with LED, PWM Socket Specify coil voltage with order

### MATERIALS IN CONTACT WITH FLUID

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

### OPTIONS

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

### TECHNICAL FEATURES

Max. Viscosity : 5°E (-37cST or mm²/s)

Response Time : Opening time : 30 ms  
Closing Time : 30 ms

### SEALS FEATURES

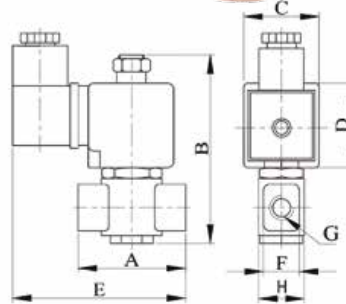
NBR : -10°C...+80°C

EPDM : -10°C...+130°C

VITON : -10°C...+160°C

PTFE : -10°C...+160°C

RUBY : -10°C...+160°C



NORMALLY OPEN

2/2 WAY

DIRECT ACTING

ΔP=0

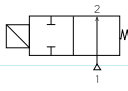


FUEL

### Dimensions (mm)

| G    | A  | B  | C  | D  | E  | F  | H    |
|------|----|----|----|----|----|----|------|
| 1/8" | 40 | 82 | 32 | 39 | 74 | 18 | 25.6 |
| 1/4" | 40 | 82 | 32 | 39 | 74 | 18 | 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                      |
| C40110VDC18W  | 110VDC 18W     | COLD     | 19.96  | 19.96   | 0.18        | 23                       |
|               |                | HOT      | 13.56  | 13.56   | 0.123       | 115                      |
| C40012VAC15VA | 12VAC 15VA     | COLD     | 23.81  | 16.43   | 1.3         | 25                       |
|               |                | HOT      | -      | 15.86   | 1.262       | 79                       |
| C40024VAC15VA | 24VAC 15VA     | COLD     | 25.82  | 15.02   | 0.62        | 22                       |
|               |                | HOT      | -      | 13.91   | 0.57        | 81                       |
| C40110VAC15VA | 110VAC 15VA    | COLD     | 30.65  | 15.17   | 0.137       | 24                       |
|               |                | HOT      | -      | 13.96   | 0.126       | 80                       |
| C40230VAC15VA | 230VAC 15VA    | COLD     | 31.4   | 15.64   | 0.068       | 25                       |
|               |                | HOT      | -      | 14.41   | 0.063       | 80                       |
| C40230VAC24VA | 230VAC 24VA    | COLD     | 45.1   | 23.92   | 0.0154      | 23                       |
|               |                | HOT      | -      | 21.62   | 0.0154      | 100                      |

| Solenoid Vave Symbol                                                                | Valve Type/<br>Order No | Connection<br>Size | Orifice<br>Size | Pressure<br>min/max |     | Kv    | Seal | Weight |
|-------------------------------------------------------------------------------------|-------------------------|--------------------|-----------------|---------------------|-----|-------|------|--------|
|                                                                                     | S4011                   | G                  | mm              | Bar                 | Bar | Lt/dk | Ruby | kg     |
|  | S4011.00.025            | 1/8"               | 2.5             | 0                   | 30  | 3.2   | ✓    | 0.38   |
|                                                                                     | S4011.00.030            | 1/8"               | 3               | 0                   | 30  | 4.6   | ✓    | 0.38   |
|                                                                                     | S4011.00.032            | 1/8"               | 3.2             | 0                   | 30  | 5     | ✓    | 0.38   |
|                                                                                     | S4011.01.025            | 1/4"               | 2.5             | 0                   | 30  | 3.2   | ✓    | 0.37   |
|                                                                                     | S4011.01.030            | 1/4"               | 3               | 0                   | 22  | 4.6   | ✓    | 0.37   |
|                                                                                     | S4011.01.032            | 1/4"               | 3.2             | 0                   | 20  | 5     | ✓    | 0.37   |

### STANDARDS

- Standard tube connection G (BSP) (ISO 228-1) and other tube connections (NPT (ANSI 1.20.3)) are available on request.

- TORK 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

## Fuel Oil Solenoid Valve S4011 Series (G3/8", G3/4", G1", G1 1/4", G1 1/2", G2")

### GENERAL FEATURES

- Suitable for non-aggressive liquids (fuel oil, hydraulic oil, light oil (2E), overheated water and steam etc...)
- Working Temperature -10°C / +160°C
- Not suitable for use with dangerous fluids listed in Group 1
- Minimum operating differential pressure 0,5 bar
- 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; burners
- 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))



NORMALLY OPEN

2/2 WAY

PILOT OPERATED

ΔP=0,5

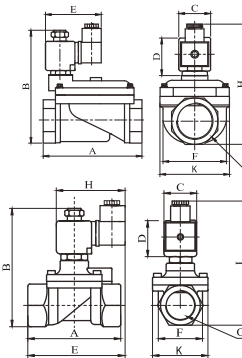


FUEL

### 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 (DIN 43650)                                                                  |
| Connector Specification  | : ISO 4400 / EN 175301-803 Form A, Spade Plug (Cable Ø6-8 mm)                                              |
| Electrical Safety        | : IEC 335                                                                                                  |
| Standard Voltages        | : AC 12V 15VA, 24V 15VA, 48V 15VA, 110V 15VA, 230V 15VA, 230V 24VA, DC 12V 18W, 24V 18W, 48V 18W, 110V 18W |

On request other voltages  
 Voltages Tolerance : AC -15%, +10% DC -5%, +10%  
 Frequency : 50 Hz (60 Hz...)  
 On request; Connector with LED, PWM Socket Specify coil voltage with order



| Dimensions (mm) |       |       |    |    |      |    |       |       |
|-----------------|-------|-------|----|----|------|----|-------|-------|
| G               | A     | B     | C  | D  | E    | H  | I     | K     |
| 3/8"            | 72    | 97.7  | 32 | 45 | 94.8 | 76 | 109   | 52.5  |
| 1/2"            | 80    | 99.2  | 32 | 45 | 96.2 | 76 | 110.5 | 52.5  |
| 3/4"            | 78    | 106   | 32 | 45 | 97.2 | 76 | 117.3 | 52.5  |
| 1"              | 85    | 112.5 | 32 | 45 | 98.7 | 76 | 123.8 | 52.5  |
| 1 1/4"          | 106.5 | 124.5 | 32 | 45 | -    | 76 | 135.8 | 72    |
| 1 1/2"          | 128.5 | 137   | 32 | 45 | -    | 76 | 148.3 | 95    |
| 2"              | 149   | 149   | 32 | 45 | -    | 76 | 160.3 | 109.7 |

### MATERIALS IN CONTACT WITH FLUID

|                           |                          |
|---------------------------|--------------------------|
| Body                      | : Brass                  |
| Internal Parts            | : Stainless Steel, Brass |
| Sealing                   | : Viton                  |
| Shading Ring              | : Copper (EN 12735-1)    |
| Seats, Core Tube, 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 or mm²/s)                                                      |
| Response Time              | : Opening time : 400 ms to - 1600 ms,<br>Closing Time : 1000 ms to - 2000 ms |
| Maximum Allowable Pressure | : 18 bar                                                                     |

### SEALS FEATURES

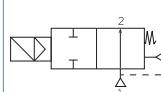
|       |                  |
|-------|------------------|
| NBR   | : -10°C...+80°C  |
| EPDM  | : -10°C...+130°C |
| VITON | : -10°C...+160°C |
| PTFE  | : -10°C...+160°C |
| RUBY  | : -10°C...+160°C |

### STANDARDS

- Standard tube connection G (BSP) (ISO 228-1) and other tube connections (NPT (ANSI 1.20.3)) are available on request.

- TORK solenoid valves 97/23/EC, are available for pressure equipment directive (PED) and 2006/95/ECC low voltage directive (LVD).

| 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                      |
| C40110VDC18W  | 110VDC 18W     | COLD      | 19.96  | 19.96   | 0.18        | 23                       |
|               |                | HOT       | 13.56  | 13.56   | 0.123       | 115                      |
| C40012VAC15VA | 12VAC 15VA     | COLD      | 23.81  | 16.43   | 1.3         | 25                       |
|               |                | HOT       | -      | 15.86   | 1.262       | 79                       |
| C40024VAC15VA | 24VAC 15VA     | COLD      | 25.82  | 15.02   | 0.62        | 22                       |
|               |                | HOT       | -      | 13.91   | 0.57        | 81                       |
| C40110VAC15VA | 110VAC 15VA    | COLD      | 30.65  | 15.17   | 0.137       | 24                       |
|               |                | HOT       | -      | 13.96   | 0.126       | 80                       |
| C40230VAC15VA | 230VAC 15VA    | COLD      | 31.4   | 15.64   | 0.068       | 25                       |
|               |                | HOT       | -      | 14.41   | 0.063       | 80                       |
| C40230VAC24VA | 230VAC 24VA    | COLD      | 45.1   | 23.92   | 0.0154      | 23                       |
|               |                | HOT       | -      | 21.62   | 0.0154      | 100                      |

| Solenoid Vave<br>Symbol                                                             | Valve Type/<br>Order No | Connection<br>Size | Orifice<br>Size | Pressure<br>min/max |     | Kv    | Seal  | Weight |
|-------------------------------------------------------------------------------------|-------------------------|--------------------|-----------------|---------------------|-----|-------|-------|--------|
|                                                                                     | S4011                   | G                  | mm              | Bar                 | Bar | l/min | Viton | kg     |
|  | S4011.02.125            | 3/8"               | 12.5            | 0.5                 | 12  | 48    | ✓     | 0.69   |
|                                                                                     | S4011.03.145            | 1/2"               | 14.5            | 0.5                 | 12  | 70    | ✓     | 0.73   |
|                                                                                     | S4011.04.170            | 3/4"               | 17              | 0.5                 | 12  | 90    | ✓     | 0.81   |
|                                                                                     | S4011.05.170            | 1"                 | 17              | 0.5                 | 12  | 90    | ✓     | 0.98   |
|                                                                                     | S4011.06.460            | 1 1/4"             | 30              | 0.5                 | 12  | 250   | ✓     | 2.65   |
|                                                                                     | S4011.07.460            | 1 1/2"             | 39              | 0.5                 | 12  | 370   | ✓     | 2.55   |
|                                                                                     | S4011.08.460            | 2"                 | 46              | 0.5                 | 12  | 450   | ✓     | 2.98   |