

# 2/2-Wege-Magnetventil

2/2-Wege-Ausführung

Artikel Nr. 148568

Typen Nr. MVB.MS.24V.G14.0-5B



Beispielhafte Darstellung

Die Standardbaureihe in den Ausführungen

- direktgesteuert
- vorgesteuert

Gerätesteckdose nach ISO 4400

Mediumtemperatur max. 80 °C

## Technische Informationen

|                        |                                    |
|------------------------|------------------------------------|
| Gehäuse                | Messing                            |
| Ventilsitz             | Edelstahl / Messing                |
| Innenteile             | Edelstahl / Messing                |
| Schutzart              | IP 65                              |
| Bauform                | 2                                  |
| Gewinde                | G 1/4 IG                           |
| Betriebsdruck          | 0 - 5 bar                          |
| Dichtmaterial          | NBR                                |
| Elektrischer Anschluss | ISO 4400 / EN 175301-803 Bauform A |
| Mediumtemperatur       | -10 bis 80 °C                      |
| Umgebungstemperatur    | -10 bis 60 °C                      |
| Gewindenorm            | DIN EN ISO 228-1                   |
| Öffnung                | 3 mm                               |
| A                      | 78 mm                              |
| B                      | 40 mm                              |
| C                      | 90 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 |

## General Purpose Solenoid Valves S1011 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, 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

### MATERIALS IN CONTACT WITH FLUID

|                           |                                |
|---------------------------|--------------------------------|
| Body                      | : Brass                        |
| Internal Parts            | : Stainless Steel, Brass       |
| Sealing                   | : NBR(On request; EPDM, 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 (-37cST veya mm²/s)

Response Time : Opening time : 30 ms

Closing Time : 30 ms

### SEALS FEATURES

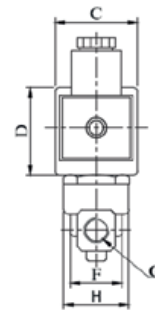
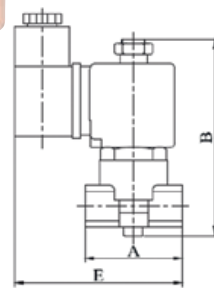
NBR : -10°C...+80°C

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

ΔP=0



WATER



AIR

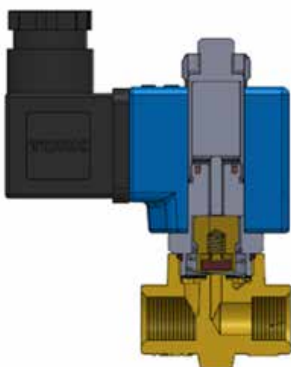


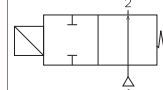
GAS

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 |

| 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 Valve Symbol                                                               | Valve Type/Order No | Connection Size | Orifice Size | Pressure min/max | Kv  | Seal  | Weight |
|-------------------------------------------------------------------------------------|---------------------|-----------------|--------------|------------------|-----|-------|--------|
|  | S1011               | G               | mm           | Bar              | Bar | l/min | kg     |
|                                                                                     | S1011.00.010        | 1/8"            | 1            | 0                | 14  | 0.5   | 0.36   |
|                                                                                     | S1011.00.018        | 1/8"            | 1.8          | 0                | 12  | 1.6   | 0.36   |
|                                                                                     | S1011.00.025        | 1/8"            | 2.5          | 0                | 10  | 3.2   | 0.36   |
|                                                                                     | S1011.00.030        | 1/8"            | 3            | 0                | 5   | 4.6   | 0.36   |
|                                                                                     | S1011.01.010        | 1/4"            | 1            | 0                | 14  | 0.5   | 0.35   |
|                                                                                     | S1011.01.018        | 1/4"            | 1.8          | 0                | 12  | 1.6   | 0.35   |
|                                                                                     | S1011.01.025        | 1/4"            | 2.5          | 0                | 10  | 3.2   | 0.35   |
|                                                                                     | S1011.01.030        | 1/4"            | 3            | 0                | 5   | 4.6   | 0.35   |
|                                                                                     |                     |                 |              |                  |     |       |        |

### 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 (LVD).

Not: Please look catalogues for more details

www.smstork.com

## General Purpose Solenoid Valves S1011 Series (G3/8", G1/2", G3/4", G1", G1 1/4", G1 1/2", G2")

### GENERAL FEATURES

- Wide pressure range, flow rate and orific 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, 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

### MATERIALS IN CONTACT WITH FLUID

|                           |                                |
|---------------------------|--------------------------------|
| Body                      | : Brass                        |
| Internal Parts            | : Stainless Steel, Brass       |
| Sealing                   | : NBR(On request; EPDM, 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 (explosion proof) coil.

### TECHNICAL FEATURES

|                |                                                                       |
|----------------|-----------------------------------------------------------------------|
| Max. Viscosity | : 5°E (-37°CST veya mm²/s)                                            |
| Response Time  | : Opening time : 400 ms - 1600 ms<br>Closing Time : 1000 ms - 2000 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

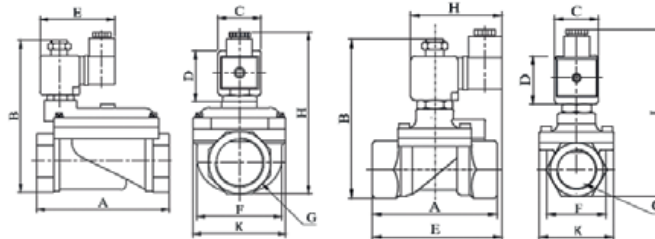
2/2 OPERATED

PILOT OPERATED

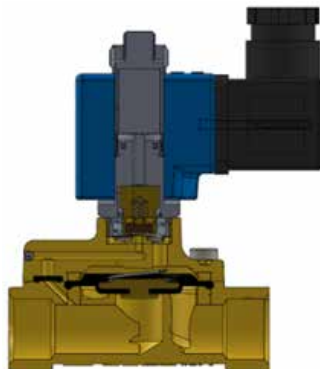
ΔP=0,5

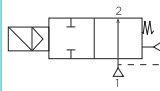


| Dimensions (mm) |       |       |    |    |      |    |       |       |
|-----------------|-------|-------|----|----|------|----|-------|-------|
| G               | A     | B     | C  | D  | E    | H  | I     | K     |
| 3/8"            | 72    | 97.7  | 32 | 45 | 94.8 | 76 | 109   | 52.5  |
| 1/2"            | 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"          | 110   | 133   | 30 | 45 | -    | 76 | 140   | 83    |
| 1 1/2"          | 128.5 | 137   | 32 | 45 | -    | 76 | 148.3 | 95    |
| 2"              | 149   | 149   | 32 | 45 | -    | 76 | 160.3 | 109.7 |



| Coils         | Nominal Values | Cold/ Hot | Inrush | Holding | Current (A) | Surface Temperature (°C) |
|---------------|----------------|-----------|--------|---------|-------------|--------------------------|
| C40012VDC18W  | 12VDC 18W      | COLD      | 19.56  | 19.56   | 1.63        | 20                       |
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|               |                | HOT       | -      | 15.86   | 1.262       | 79                       |
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|               |                | HOT       | -      | 21.62   | 0.0154      | 100                      |



| Solenoid Valve Symbol                                                               | Valve Type/ Order No | Connection Size | Orifice Size | Pressure min/max | Kv  | Seal  | Weight |
|-------------------------------------------------------------------------------------|----------------------|-----------------|--------------|------------------|-----|-------|--------|
|  | S1011                | G               | mm           | Bar              | Bar | l/min | kg     |
|                                                                                     |                      |                 |              |                  |     |       |        |
|                                                                                     | S1011.02.125         | 3/8"            | 12.5         | 0.5              | 12  | 48    | 0.69   |
|                                                                                     | S1011.03.145         | 1/2"            | 14.5         | 0.5              | 12  | 70    | 0.73   |
|                                                                                     | S1011.04.170         | 3/4"            | 17           | 0.5              | 12  | 90    | 0.81   |
|                                                                                     | S1011.05.170         | 1"              | 17           | 0.5              | 12  | 90    | 0.98   |
|                                                                                     | S1011.06.300         | 1 1/4"          | 30           | 0.5              | 12  | 250   | 2.65   |
|                                                                                     | S1011.07.390         | 1 1/2"          | 39           | 0.5              | 12  | 370   | 2.55   |
|                                                                                     | S1011.08.460         | 2"              | 46           | 0.5              | 12  | 450   | 2.98   |

### STANDARDS

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