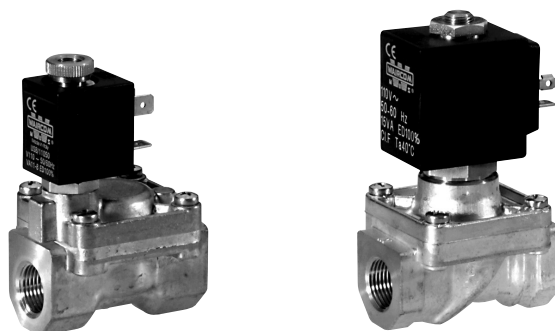


DESCRIPTION

The solenoid valves series "W" can be directly actuated, servo-assisted or with mixed actuation. These solenoid valves, produced in the 2/2 N.C. pneumatic function, are used in several industrial fields, thanks to their compatibility with a large range of fluids.

TECHNICAL DATA

| | |
|---------------------------|---|
| Operating pressure | (See tables below) |
| Working temperature range | NBR -10 ÷ +90 °C EPDM < +140 °C FPM -10 ÷ +130 °C |
| Fluid | See technical information on page 0.5 |
| Port size | G 1/8 ÷ G 2 |
| Coils | WE3A - see on page 2.109 WE2A - see on page 2.109 WE5A - see on page 2.109 |
| Electric connectors | USR102/N9 - see chapter connectors on page 2.18 ULR1B - see chapter connectors on page 2.18 |
| Seal type | Duty field |
| NBR | Water max. 70 °C, air max. 90 °C, mineral oils and derivatives - hydrocarbons (methane, ethane, propane, butane, kerosene and gas oil) |
| EPDM | Hot water and steam max. 140 °C, detergents, solutions of sodium and potassium, hydraulic fluids and polar solvents (not to be used with mineral oils and grease) |
| FPM (Viton®) | For general purpose max. 130 °C |

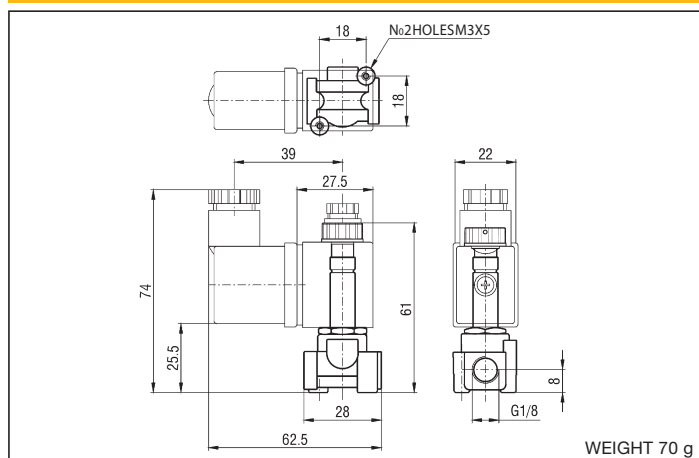


2

MATERIALS

| | |
|-------------|--------------------|
| Body | Brass |
| Sleeve | Brass |
| Moving core | Stainless steel |
| Springs | Stainless steel |
| Seals | NBR EPDM FPM |

2 PORT G 1/8 - DIRECTLY ACTUATED

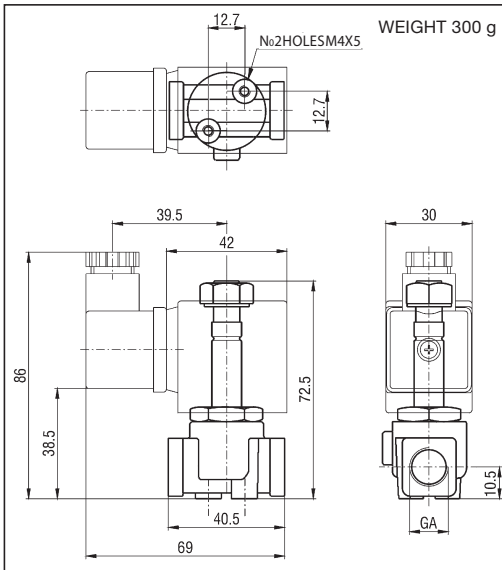


| Symbol | Function | Differential pressure (bar) | | Kv | Nominal orifice (mm) | Port size | TYPE | |
|--------|----------|-----------------------------|------|-----|----------------------|-----------|-------|---------------|
| | | MIN. | MAX. | | | | | |
| | | | AC | | | | | DC |
| | 2/2 N.C. | 0 | 25 | 25 | 0,04 | 1,2 | G 1/8 | W 105 1 * E3A |
| | | 0 | 16 | 16 | 0,06 | 1,5 | G 1/8 | W 105 2 * E3A |
| | | 0 | 12 | 10 | 0,09 | 2 | G 1/8 | W 105 3 * E3A |
| | | 0 | 8 | 5,5 | 0,14 | 2,5 | G 1/8 | W 105 4 * E3A |
| | | 0 | 5 | 2 | 0,19 | 3,1 | G 1/8 | W 105 5 * E3A |

* SPECIFY THE SEALING TYPE: B = NBR; V = FPM; E = EPDM

P.S.: THE TYPES OF THE SOLENOID VALVES DO NOT INCLUDE COILS (SEE "WE3A" ON PAGE 2.109)

2 PORT G 1/8 - G 1/4 DIRECTLY ACTUATED

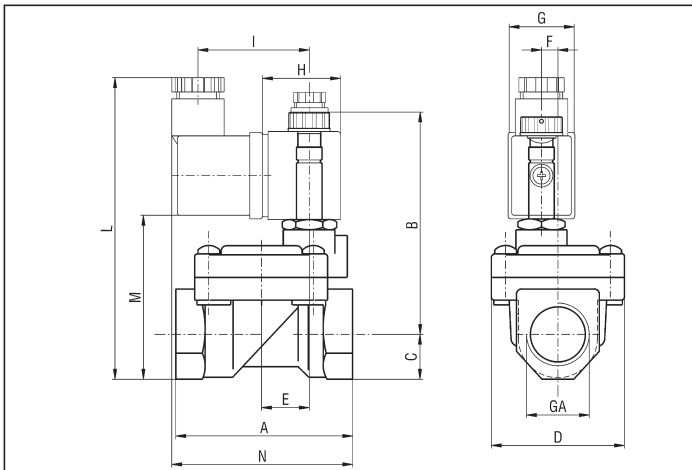


| Symbol | Function | Differential pressure (bar) | | Kv | Nominal orifice (mm) | Port size (GA) | TYPE | |
|--------|----------|-----------------------------|------|-----|----------------------|----------------|-------|----------------|
| | | MIN. | MAX. | | | | | |
| | | | AC | | | | | DC |
| | 2/2 N.C. | 0 | 30 | 26 | 0,07 | 1,5 | G 1/8 | W106 1 * E2A |
| | | 0 | 22 | 20 | 0,1 | 2 | G 1/8 | W106 2 * E2A |
| | | 0 | 16 | 14 | 0,15 | 2,5 | G 1/8 | W 106 3 * E2A |
| | | 0 | 10 | 8 | 0,32 | 3,5 | G 1/8 | W 106 4 * E2A |
| | | 0 | 30 | 26 | 0,07 | 1,5 | G 1/4 | W 106 5 * E2A |
| | | 0 | 22 | 20 | 0,1 | 2 | G 1/4 | W 106 6 * E2A |
| | | 0 | 16 | 14 | 0,15 | 2,5 | G 1/4 | W 106 7 * E2A |
| | | 0 | 10 | 8 | 0,32 | 3,5 | G 1/4 | W 106 8 * E2A |
| | | 0 | 6,5 | 3,5 | 0,41 | 4,5 | G 1/4 | W 106 9 * E2A |
| | | 0 | 4 | 1,8 | 0,47 | 5,2 | G 1/4 | W 106 10 * E2A |
| | | 0 | - | 1 | 0,64 | 6,4 | G 1/4 | W 106 11 * E2A |

* SPECIFY THE SEALING TYPE: B = NBR; V = FPM; E = EPDM

P.S.: THE TYPES OF THE SOLENOID VALVES DO NOT INCLUDE COILS (SEE "WE2A" ON PAGE 2.109)

2 PORT G 3/8 - G 2 SERVO ASSISTED



| Symbol | Function | Differential pressure (bar) | | Kv | Nominal orifice (mm) | Port size (GA) | TYPE | |
|--------|----------|-----------------------------|------|----|----------------------|----------------|---------|---------------|
| | | MIN. | MAX. | | | | | |
| | | | AC | | | | | DC |
| | 2/2 N.C. | 0,15 | 15 | 15 | 2 | 12 | G 3/8 | W 107 1 * E3A |
| | | 0,15 | 15 | 15 | 2,2 | 12 | G 1/2 | W 107 2 * E3A |
| | | 0,15 | 13 | 13 | 5,2 | 18 | G 3/4 | W 107 3 * E3A |
| | | 0,15 | 10 | 10 | 10,2 | 24 | G 1 | W 107 4 * E3A |
| | | 0,15 | 10 | 10 | 18 | 37 | G 1 1/4 | W 107 5 * E2A |
| | | 0,15 | 10 | 10 | 21 | 37 | G 1 1/2 | W 107 6 * E2A |
| | | 0,15 | 10 | 10 | 36 | 50 | G 2 | W 107 7 * E2A |

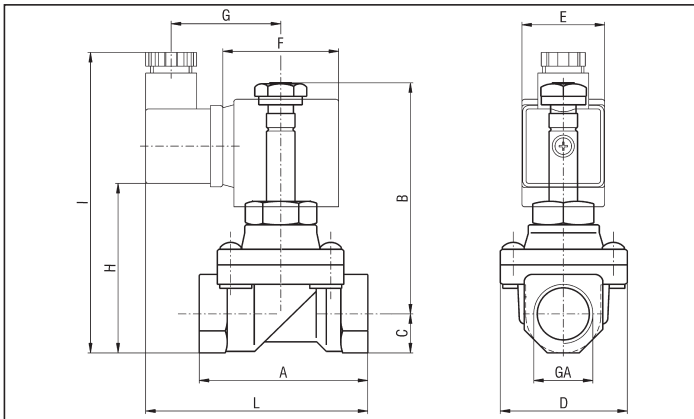
* SPECIFY THE SEALING TYPE: B = NBR, V = FPM, E = EPDM

P.S.: THE TYPES OF THE SOLENOID VALVES DO NOT INCLUDE COILS (SEE "WE2A" AND "WE3A" ON PAGE 2.109)

THAT HAVE PREFERABLY TO BE MOUNTED TOWARD THE HIGH

| GA | A | B | C | D | E | F | G | H | I | L | M | N | WEIGHT (g) |
|---------|-----|-------|----|-----|----|-----|----|------|------|-----|-------|------|------------|
| G 3/8 | 60 | 70 | 14 | 45 | 16 | 6 | 22 | 27,5 | 39 | 102 | 53,5 | 62,5 | 450 |
| G 1/2 | 60 | 70 | 14 | 45 | 16 | 6 | 22 | 27,5 | 39 | 102 | 53,5 | 62,5 | 450 |
| G 3/4 | 75 | 74 | 18 | 55 | 20 | 8,5 | 22 | 27,5 | 39 | 108 | 59,5 | 66 | 660 |
| G 1 | 96 | 85 | 20 | 72 | 32 | - | 22 | 27,5 | 39 | 120 | 71,5 | 64,5 | 1200 |
| G 1 1/4 | 144 | 107 | 28 | 102 | 45 | - | 30 | 42 | 39,5 | 128 | 79,5 | 75,5 | 3200 |
| G 1 1/2 | 144 | 107 | 28 | 102 | 45 | - | 30 | 42 | 39,5 | 128 | 79,5 | 75,5 | 2900 |
| G 2 | 152 | 116,5 | 35 | 119 | 48 | - | 30 | 42 | 39,5 | 159 | 110,5 | 76,5 | 4500 |

2 PORT G 3/8 - G 1 WITH MIXED ACTUATION



| GA | A | B | C | D | E | E | F | F |
|-------|----|-----|----|----|------|------|------|------|
| | | | | | WE2A | WE5A | WE2A | WE5A |
| G 3/8 | 59 | 83 | 14 | 45 | 30 | 36 | 42 | 47,5 |
| G 1/2 | 59 | 83 | 14 | 45 | 30 | 36 | 42 | 47,5 |
| G 3/4 | 79 | 90 | 18 | 55 | - | 36 | - | 47,5 |
| G 1 | 96 | 101 | 20 | 72 | - | 36 | - | 47,5 |

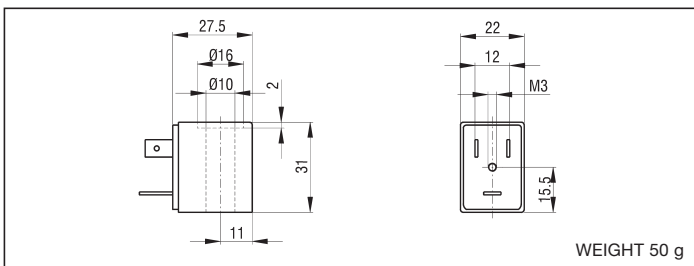
| G | G | H | H | I | I | L | L | WEIGHT |
|------|------|------|------|------|-------|------|------|--------|
| WE2A | WE5A | WE2A | WE5A | WE2A | WE5A | WE2A | WE5A | (g) |
| 39,5 | 42,5 | 58,5 | 58 | 106 | 105,5 | 79 | 82 | 580 |
| 39,5 | 42,5 | 58,5 | 58 | 106 | 105,5 | 79 | 82 | 530 |
| - | 42,5 | - | 69 | - | 116,5 | - | 89,5 | 750 |
| - | 42,5 | - | 82 | - | 129,5 | - | 100 | 1200 |

| Symbol | Function | Differential pressure (bar) | | | Kv | Nominal orifice (mm) | Port size (GA) | TYPE |
|--------|----------|-----------------------------|------|----|-----|----------------------|----------------|---------------|
| | | MIN. | MAX. | | | | | |
| | | | AC | DC | | | | |
| | 2/2 N.C. | 0 | 10 | - | 2 | 12 | G 3/8 | W 108 1 V E2A |
| | | 0 | 10 | - | 2,2 | 12 | G 1/2 | W 108 2 V E2A |
| | | 0 | 12 | 10 | 2 | 12 | G 3/8 | W 108 1 V E5A |
| | | 0 | 12 | 10 | 2,2 | 12 | G 1/2 | W 108 2 V E5A |
| | | 0 | 9 | - | 4,5 | 18 | G 3/4 | W 108 3 V E5A |
| | | 0 | 7 | - | 8,5 | 24 | G 1 | W 108 4 V E5A |

SEAL ONLY FPM

P.S.: THE TYPES OF THE SOLENOID VALVES DO NOT INCLUDE COILS (SEE "WE2A" AND "WE3A") THAT HAVE PREFERABLY TO BE MOUNTED TOWARD THE HIGH

COIL TYPE WE3A

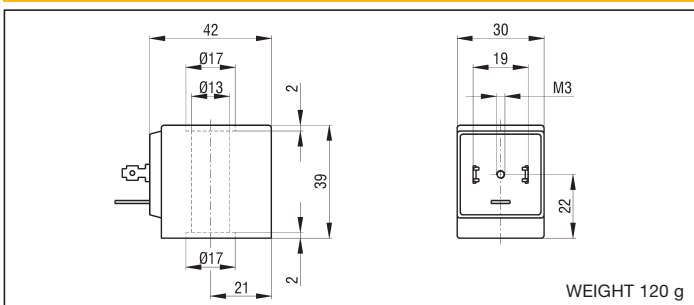


| | |
|-------------------|--|
| Power consumption | DC: 6,5 W AC: 8 VA holding - 12 VA inrush |
|-------------------|--|

| DESCRIPTION | TYPE |
|---------------------|---------------|
| COIL 22 mm 24 V DC | WE3A/02400 |
| COIL 22 mm 24 V AC | WE3A/02450-60 |
| COIL 22 mm 110 V AC | WE3A/11050-60 |
| COIL 22 mm 220 V AC | WE3A/22050-60 |

ELECTRIC CONNECTOR USR 102/N9 (see on page 2.18)

COIL TYPE WE2A

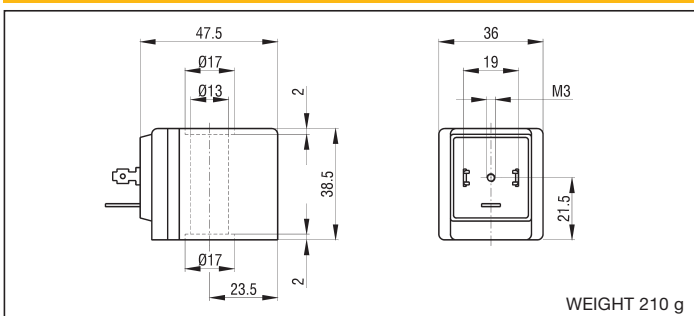


| | |
|-------------------|--|
| Power consumption | DC: 10 W AC: 15 VA holding - 20 VA inrush |
|-------------------|--|

| DESCRIPTION | TYPE |
|---------------------|---------------|
| COIL 30 mm 24 V DC | WE2A/02400 |
| COIL 30 mm 24 V AC | WE2A/02450-60 |
| COIL 30 mm 110 V AC | WE2A/11050-60 |
| COIL 30 mm 220 V AC | WE2A/22050-60 |

ELECTRIC CONNECTOR ULR 1B (see on page 2.18)

COIL TYPE WE5A



| | |
|-------------------|--|
| Power consumption | DC: 27 W AC: 30 VA holding - 40 VA inrush |
|-------------------|--|

| DESCRIPTION | TYPE |
|---------------------|---------------|
| COIL 36 mm 24 V DC | WE5A/02400 |
| COIL 36 mm 24 V AC | WE5A/02450-60 |
| COIL 36 mm 110 V AC | WE5A/11050-60 |
| COIL 36 mm 220 V AC | WE5A/22050-60 |

ELECTRIC CONNECTOR ULR 1B (see on page 2.18)