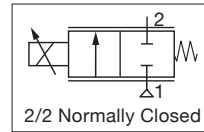


ASCO™ MINIATURE SOLENOID VALVES

PROPORTIONAL VALVES, PRECIFLOW 15 mm

- Preciflow solenoid valves are designed to proportionally control the flow of air and inert gases by varying the electrical input signal to the coil
- Low hysteresis (typ. < 3%), excellent repeatability (typ. < 1%), and high sensitivity (typ. < 1%) make these valves ideal for high precision flow control
- Compact frictionless architecture saves valuable space in analytical and medical instrumentation
- Valves do not require a minimum operating pressure, and are well-suited for vacuum operation
- Power consumption as low as 1 W to meet the most stringent instrument power requirements
- Meets all relevant CE directives, and is RoHS compliant
- Typical applications include:
 - Respiratory Therapy
 - Gas Chromatography
 - Blood Pressure Monitoring
 - Anesthesia Delivery



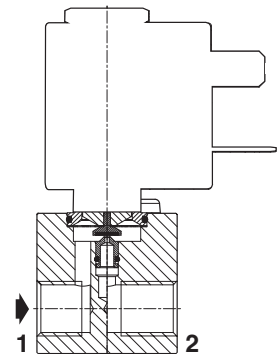
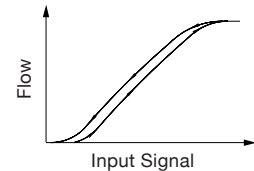
| Fluids* | Temperature Range | Seal Materials* |
|-----------------------------|---------------------------------|-----------------|
| Air, Inert Gas ¹ | 0 °C to 50 °C (32 °F to 122 °F) | FKM |

* Ensure that the compatibility of the materials in contact with the fluids is verified.
¹ Filtration - M5 or pad mount version: 5µm - 1/8 : 50µm

| General Valve Information | |
|---------------------------|------------------------|
| Body | Brass or PVDF |
| Others | Brass, Stainless Steel |

| Electrical Characteristics | |
|---------------------------------|---|
| Coil Insulation Class | F |
| Connector | Spade plug; cable Ø4-6mm (0.157 - 0.236in), Ø6-8mm (0.236 - 0.315in), Ø6-10mm (0.236 - 0.394in) |
| Connector Specification | DIN 43650, 9.4mm (0.370in), industry standard C (type 01) DIN 43650, 11mm (0.433in), industry standard B (type 02) ISO 4400/EN 175301-803, form A (type 03) |
| Electrical Safety | IEC 335 |
| Electrical Enclosure Protection | Molded IP65 (EN 60529) |
| Standard Voltages ² | 12 VDC, 24 VDC |
| Voltage Regulation | 0-12 VDC, 0-24 VDC; Pulse-width Modulation (1000Hz) |
| Flow Regulation Characteristics | Hysteresis typ. < 3%; Repeatability typ. < 1%; Sensitivity typ. < 1% |

² Other voltages on request



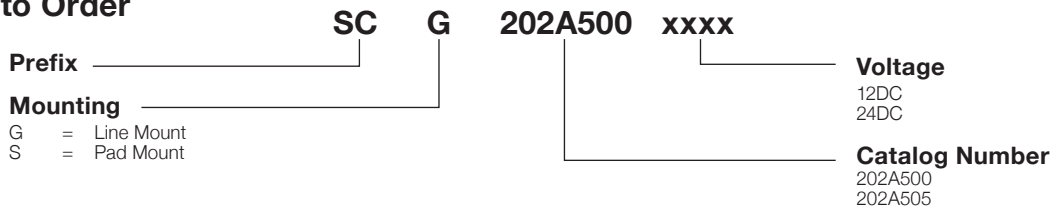
| Voltage | Max. Operating Current | Power Ratings | | | | Ambient Temperature Ranges | Type ³ |
|---------|------------------------|---------------|---------|---|----------|----------------------------|-------------------|
| | | Inrush | Holding | | Hot/Cold | | |
| V | mA | VA | VA | W | W | °C (°F) | |
| 12 | 85 | - | - | - | 1 | 0 to 50 (32 to 122) | 01 |
| | 340 | | | | 4 | | 02 |
| | 400 | | | | 5 | | 03 |
| 24 | 40 | - | - | - | 1 | 0 to 50 (32 to 122) | 01 |
| | 170 | | | | 4 | | 02 |
| | 230 | | | | 5 | | 03 |
| | 380 | | | | 9 | | |

³ Refer to the dimensional drawings on the following page

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| Specifications | | | | | | | | | |
|-----------------------|--------------|------------------|---------|---------------------------------|----------|------------------------|----------------|------------|--|
| Connection | Orifice Size | Flow Coefficient | | Operating Pressure bar (psi) | | Power Rating | Catalog Number | | |
| | | | | min. | max. | | Threaded Body | | ISO 15218 (CNOMO, size 15) Interface |
| | | | | | | | air, inert gas | W | |
| M5 or Pad Mount | 0.1 (0.0040) | 0.0003 | 0.00035 | -0.9 (-13) | 10 (145) | 1 | SCG202A500 | - | SCS202A505 |
| | 0.2 (0.0079) | 0.0012 | 0.0014 | | | 1 | - | SCG202A501 | SCS202A506 |
| | 0.4 (0.0157) | 0.0048 | 0.0055 | | | 4 | - | SCG202A502 | SCS202A507 |
| | 0.6 (0.0236) | 0.0096 | 0.0111 | | | 4 | - | SCG202A503 | SCS202A508 |
| | 0.8 (0.0315) | 0.018 | 0.021 | | | 4 | - | SCG202A504 | SCS202A509 |
| G1/8 | 0.8 (0.0315) | 0.018 | 0.021 | -0.9 (-13) | 10 (145) | 5 | SCG202A510 | - | - |
| | 1.2 (0.0472) | 0.041 | 0.047 | | | 5 | SCG202A511 | - | - |
| | 1.6 (0.0630) | 0.071 | 0.082 | | 8 (116) | 5 | SCG202A512 | - | - |
| | 2.0 (0.0787) | 0.096 | 0.111 | | 6 (87) | 5W (12V) / 9W (24V) | SCG202A513 | - | - |

How to Order



Options

- Digital control module ControlD for DIN EN 50022 rail mounting (for more information see specifications on page 185)
- Electronic control units for proportional control
- Other materials, connections, and coils available on request
- Plug with visual indication and peak voltage suppression or with cable length of 2m (78.7in)

Installation

- The valves can be mounted in any position without affecting operation
- Pipe connection identifier is: G = G (ISO 228/1)

ASCO™ MINIATURE SOLENOID VALVES

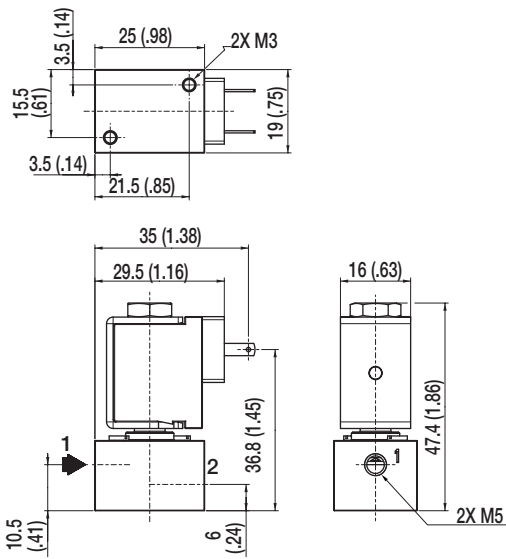
PROPORTIONAL VALVES, PRECIFLOW 15 mm

Dimensions: mm (inches)

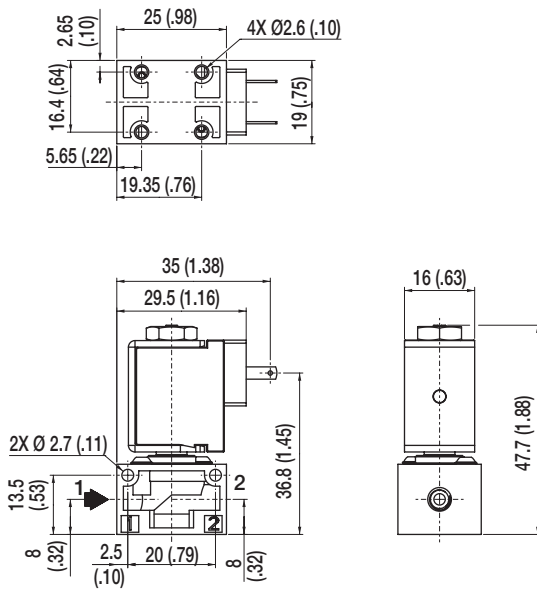
Type 01 Prefix "SC" solenoid, epoxy molded
IEC 335/DIN 43650, 9.4mm (0.37in)
IP65



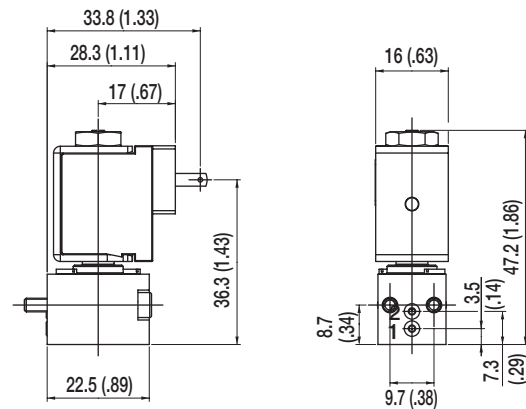
SCG202A500



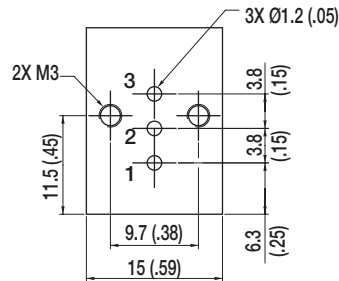
SCG202A501/A502/A503/A504



SCS202A505/A506/A507/A508/A509
(Version with ISO 15218 interface for installation on single subbase M5)



ISO 15218 Mounting Pattern



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Dimensions: mm (inches)

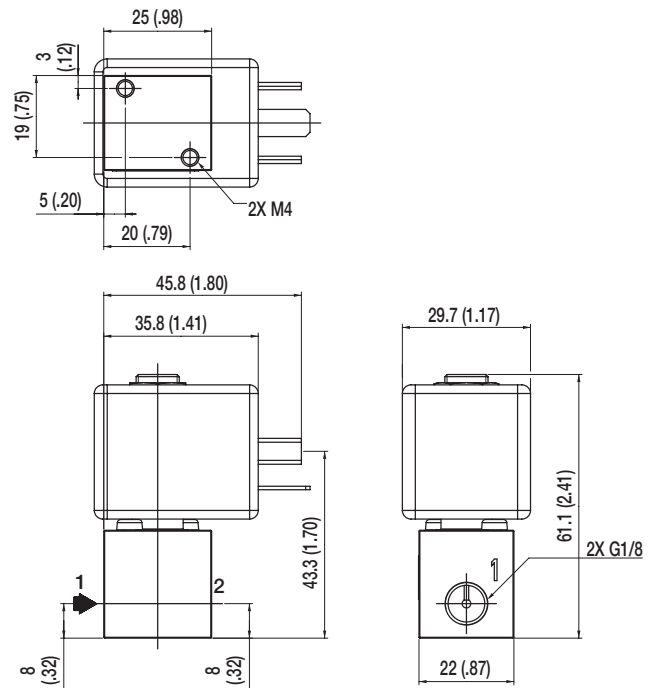
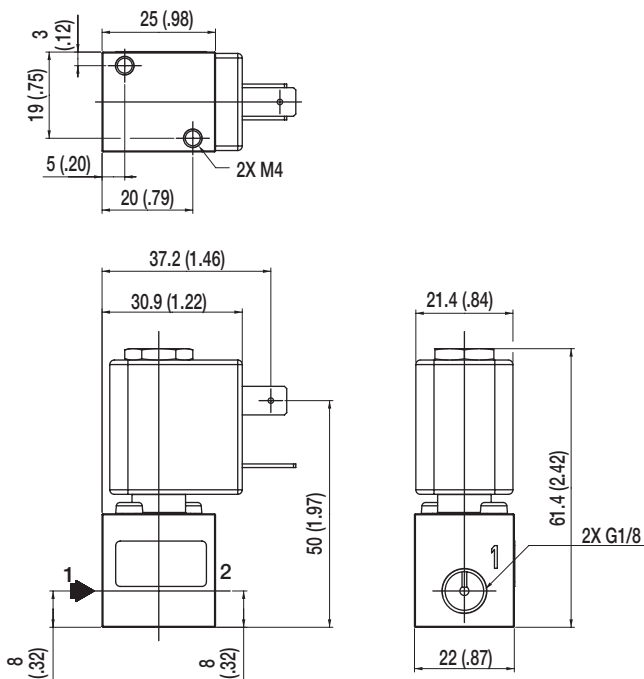
Type 02-03

Prefix "SC" solenoid, epoxy molded
IEC 335/DIN 43650 or ISO 4400
IP65



Type 02 : SCG202A510/A511/A512
Type 03 : SCG202A513
With 22 mm Coil Version

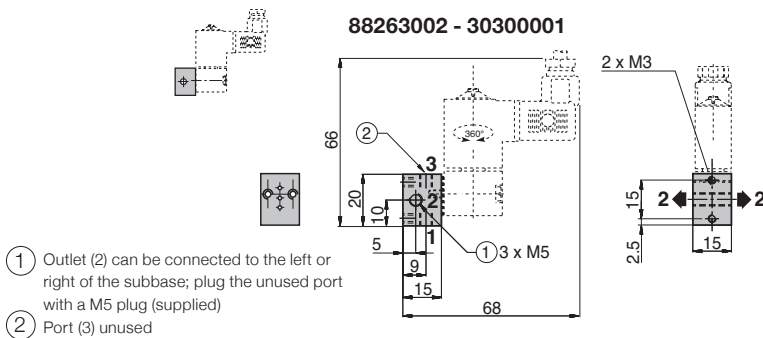
Type 03 : SCG202A513_24V
With 30 mm Coil Version



Single Subbase M5

Aluminum or brass

88263002 - 30300001



- ① Outlet (2) can be connected to the left or right of the subbase; plug the unused port with a M5 plug (supplied)
- ② Port (3) unused