

FEATURES

- Compact design for the control of single-acting actuators or filling and draining cycles
- Wide range of flow and pressure ratings
- Quick disassembly of core tube for easy maintenance of internal parts
- Standard disc seal made of FPM suitable for a wide range of operating temperatures and compatible with many fluids
- Standard manual operator allows an easy installation
- AC/DC interchangeability of the solenoid without disassembly of the valve
- Compliance with UL and CSA standards (coil 4/5,5 W)
- Compact and low weight valve
- The solenoid valves satisfy all relevant EC directives

GENERAL

Differential pressure See «SPECIFICATIONS» [1 bar = 100 kPa]
Maximum viscosity 40 cSt (mm²/s)
Response time 5 - 10 ms

| fluids (*) | temperature range (TS) | seal materials (*) |
|----------------------------|------------------------|-----------------------|
| air, inert gas, water, oil | - 10°C to + 100°C | FPM (fluoroelastomer) |

MATERIALS IN CONTACT WITH FLUID

(*) Ensure that the compatibility of the fluids in contact with the materials is verified

| | Brass body | Stainless steel body |
|-------------------------|-----------------|----------------------|
| Body | Brass | AISI 316 |
| Core tube | Stainless steel | Stainless steel |
| Core and plugnut | Stainless steel | Stainless steel |
| Springs | Stainless steel | Stainless steel |
| Seat | Brass | Stainless steel |
| Seals | FPM | FPM |
| Disc | FPM | FPM |
| Shading coil | Copper | Copper |

ELECTRICAL CHARACTERISTICS

Coil insulation class F
Connector Spade plug (cable Ø 6-7 mm or Ø 6-10 mm)
Connector specification DIN 43650, 11 mm, industry standard B (type 01) or ISO 4400 / EN 175301-803, form A (type 02)
Electrical safety IEC 335
Electrical enclosure protection Moulded IP65 (EN 60529)
Standard voltages DC (=) : 24V - 48V
 AC (~) : 24V - 48V - 115V - 230V / 50 Hz
 (Other voltages and 60 Hz on request)

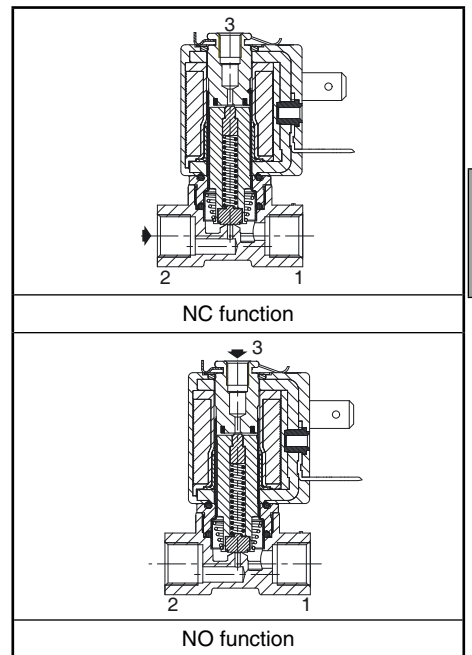
| prefix option | power ratings | | | | operator ambient temperature range (TS) (C°) | replacement coil | | type ⁽¹⁾ |
|---------------|---------------|------|-----------|-----------|--|------------------|----------|---------------------|
| | inrush ~ | | holding ~ | | | ~ | = | |
| | (VA) | (VA) | (W) | (W) | | 230 V/50 Hz | 24 V DC | |
| SC | 12 | 6 | 4 | 4,5 / 5,5 | -10 to + 60 | 43005429 | 43005413 | 01 |
| | 10,4 | 6 | 3,5 | 5 / 7 | -10 to + 60 | 43005539 | 43005533 | 02 |

⁽¹⁾ Refer to the dimensional drawings on the following page.

SPECIFICATIONS

| pipe size | orifice size | flow coefficient Kv | | | | operating pressure differential (bar) | | | | power coil (W) | | catalogue number | | options | |
|-----------------------------|--------------|---------------------|---------|---------------------|---------|---------------------------------------|---------------------|-----|-----|----------------|---------------|------------------|------|---------|-----|
| | | 2→1 | | 3→1 | | min. | max. (PS) | | ~ | = | brass | stainless steel | EPDM | | |
| | | (m ³ /h) | (l/min) | (m ³ /h) | (l/min) | | air, water, oil (*) | = | | | | | | | ~/= |
| G | (mm) | (m ³ /h) | (l/min) | (m ³ /h) | (l/min) | | ~ | = | ~ | = | ~/= | ~/= | | | |
| NC - Normally closed | | | | | | | | | | | | | | | |
| 1/8 ⁽²⁾ | 1,2 | 0,05 | 0,8 | 0,05 | 0,8 | 0 | 15 | 15 | 4 | 5,5 | SCG356A001VMS | SCG356A013VMS | E | - | - |
| | 1,6 | 0,08 | 1,33 | 0,05 | 0,8 | 0 | 10 | 10 | 4 | 5,5 | SCG356A002VMS | SCG356A014VMS | E | - | - |
| | 2,0 | 0,1 | 1,66 | 0,05 | 0,8 | 0 | 5 | 5 | 4 | 5,5 | SCG356A003VMS | SCG356A015VMS | E | - | - |
| | 2,4 | 0,13 | 2,1 | 0,05 | 0,8 | 0 | 4 | 4 | 4 | 5,5 | SCG356A004VMS | SCG356A016VMS | E | - | - |
| 1/4 ⁽²⁾ | 1,6 | 0,08 | 1,33 | 0,05 | 0,8 | 0 | 10 | 10 | 3,5 | 7 | SCG356A466VMS | SCG356A434VMS | - | - | - |
| | 2,4 | 0,16 | 2,67 | 0,05 | 0,8 | 0 | 4 | 4 | 3,5 | 7 | SCG356A470VMS | SCG356A436VMS | - | - | - |
| U - Universal | | | | | | | | | | | | | | | |
| 1/8 ⁽²⁾ | 1,6 | 0,06 | 1 | 0,05 | 0,8 | 0 | 4,5 | 4,5 | 4 | 5,5 | SCG356A010VMS | SCG356A022VMS | E | - | - |
| | 2,0 | 0,08 | 1,33 | 0,05 | 0,8 | 0 | 3 | 3 | 4 | 5,5 | SCG356A011VMS | SCG356A023VMS | E | - | - |
| | 2,4 | 0,09 | 1,5 | 0,05 | 0,8 | 0 | 2 | 2 | 4 | 5,5 | SCG356A012VMS | SCG356A024VMS | E | - | - |
| NO - Normally open | | | | | | | | | | | | | | | |
| 1/8 ⁽²⁾ | 1,6 | 0,096 | 1,6 | 0,05 | 0,8 | 0 | 8,5 | 8,5 | 4 | 5,5 | SCG356A006VMS | SCG356A018VMS | E | - | - |

⁽²⁾ Pipe size port 3: M5 (Orifice size = 1,2 mm).



E

OPTIONS

- Valves can also be supplied with EPDM (ethylene-propylene) seals and discs. Use the appropriate optional suffix letter for identification (1/8 version only)
- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 94/9/EC (see "Explosionproof solenoids" section)
- Flying leads coil, use prefix L (e.g.: LG356A001VMS) (4 W/5,5 W coil only)
- Oxygen service with seals and disc in FPM, suffix NV, example: SCG356A001NVMS
- Solenoid valves integrated on manifold, orifice sizes 1,2 - 1,6 - 2 - 2,4 mm (See V591)
- Without manual operator, on request
- Other pipe connections are available on request
- Plug with visual indication and peak voltage suppression or with cable length of 2 m (see Solenoids, Coils & Accessories section)

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valves have 2 mounting holes in body
- Pipe connection identifier is G = G (ISO 228/1)
- Installation/maintenance instructions are included with each valve

ORDERING EXAMPLES:

| | | | | | |
|----|---|-----|-------|------|--------------|
| SC | G | 356 | A 001 | VMS | 230V / 50 Hz |
| SC | G | 356 | A 002 | EMS | 115V / 50 Hz |
| SC | G | 356 | A 014 | NVMS | 24V / DC |
| SC | G | 356 | A 456 | VMS | 230V / 50 Hz |
| SC | G | 356 | A 006 | VMS | 230V / 50 Hz |

prefix: SC
 pipe thread: G
 basic number: 356
 voltage: 230V / 50 Hz
 suffix: VMS

DIMENSIONS (mm), WEIGHT (kg)



TYPE 01

Prefix "SC" Solenoid
IEC 335 / DIN 43650
IP65

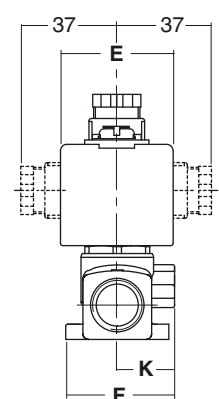
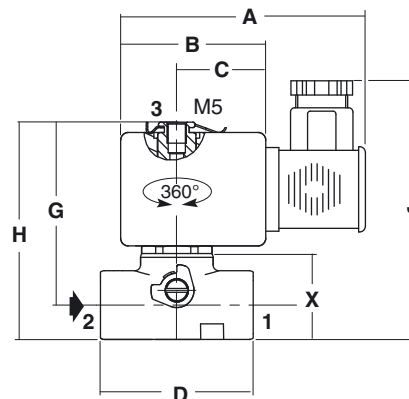
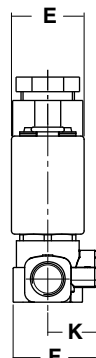
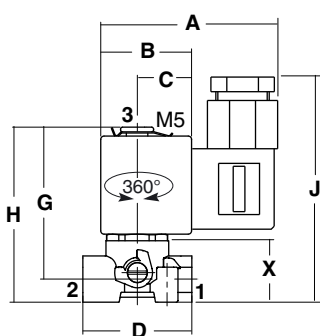
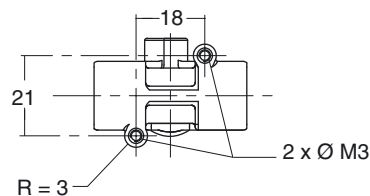
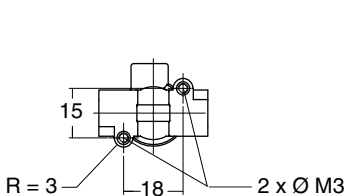
NC/NO/U (1/8): All 1/8 catalogue numbers



TYPE 02

Prefix "SC" Solenoid
IEC 335 / ISO 4400
IP65

NC (1/4): SCG356A434VMS/436VMS/
466VMS/470VMS/471V/472V



| type | prefix option | pipe size | A | B | C | D | E | F | G | H | J | K | X | weight ⁽¹⁾ | |
|------|---------------|-----------|------|------|------|----|------|------|----|----|----|----|------|-----------------------|-----------------|
| | | | | | | | | | | | | | | brass | stainless steel |
| 01 | SC | 1/8 | 57,5 | 27,5 | 16,5 | 33 | 22 | 25,5 | 46 | 53 | 69 | 15 | 18,6 | 0,156 | 0,138 |
| 02 | SC | 1/4 | 73 | 38 | 23,3 | 40 | 29,7 | 28,5 | 48 | 57 | 79 | 15 | 23,4 | 0,232 | 0,229 |

⁽¹⁾ including coil and connector.