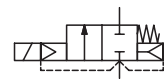




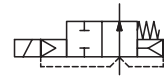
SOLENOID VALVES

pilot operated, built-in pilot
stainless steel body, floating diaphragm
3/8 to 1

NC



NO



2/2
Series
238

FEATURES

- Minimum operating pressure differential ΔP 0,35 bar
- Two way valves for automatic control of water, air and inert gas and other gases/liquids compatible with the sealing materials used
- Stainless steel body for wide compatibility with environments and fluids
- Interchangeability of magnetic heads, AC and DC
- The solenoid valves satisfy all relevant EU Directives

GENERAL

| | |
|----------------------------------|--|
| Differential pressure | See «SPECIFICATIONS» [1 bar = 100 kPa] |
| Ambient temperature range | -10°C to +60°C |
| Maximum viscosity | 37 cSt (mm ² /s) |
| Response time | 3/8 1/2 3/4 1 |
| opening time (ms) | 300 300 300 1500 |
| closing time (ms) | 1000 1000 1000 2000 |

| fluids (*) | temperature range (TS) | seal materials (*) |
|--------------------------|------------------------|-----------------------|
| air, inert gas and water | 0°C to +130°C | FPM (fluoroelastomer) |

MATERIALS IN CONTACT WITH FLUID

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

| | |
|-----------------------------------|----------------------------|
| Body | Stainless steel, AISI 316L |
| Core tube | Stainless steel |
| Core and plugnut | Stainless steel |
| Springs | Stainless steel |
| Seat | Stainless steel, AISI 316L |
| Diaphragm & disc valve | FPM |
| Seals & disc pilot | FPM |
| Shading coil | Copper |

ELECTRICAL CHARACTERISTICS

| | |
|--|--|
| Coil insulation class | F |
| Connector | Spade plug (cable Ø 6-8 mm or Ø 6-10 mm) |
| Connector specification | |
| for power coil: 4 W/6,9 W | DIN 43650, 11 mm, industry standard B |
| for power coil: 6,9 W DC | ISO 4400 / EN 175301-803, form A |
| Electrical safety | IEC 335 |
| Electrical enclosure protection | Moulded IP65 (EN 60529) |
| Standard voltages | DC (=) : 24V - 48V |
| (Other voltages and 60 Hz on request) | AC (-) : 24V - 48V - 115V - 230V / 50 Hz |

| prefix option | power ratings | | | | operator ambient temperature range f (TS) (C°) | replacement coil | | type ⁽¹⁾ |
|---------------|---------------|-----------|------------|------------------|--|------------------|--------------------------|-------------------------|
| | inrush ~ | holding ~ | hot/cold = | ~ | | = | | |
| | (VA) | (VA) | (W) | | | | (W) | |
| SC | 12 - | 6 - | 4 - | 4 / 6,9 4 / 5 | -10 to +60 -10 to +60 | 230 V/50 Hz - | 400127-142 400727-185 | 01 ⁽²⁾ 02 |

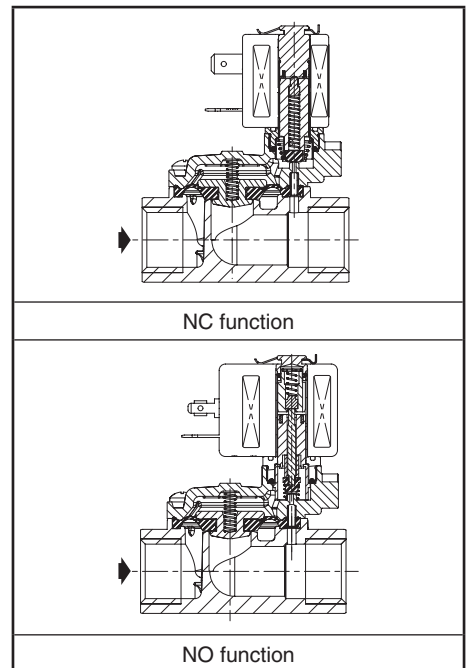
⁽¹⁾ Refer to the dimensional drawings on the following page.

⁽²⁾ UL/CSA certified.

SPECIFICATIONS

| pipe size | orifice size | flow coefficient Kv | | operating pressure differential (bar) | | | | power coil (W) | | catalogue number | options | | | |
|-----------------------------|--------------|---------------------|---------|---------------------------------------|-----------------|----|---|------------------|---|------------------|---------|--------------------------|------|--|
| | | | | min. | max. (PS) | | ~ | | | | = | maintained man. operator | EPDM | |
| | | | | | air / water (*) | | | | | | | | | |
| G | (mm) | (m ³ /h) | (l/min) | | ~ | = | | ~ | = | ~/= | | | | |
| NC - Normally closed | | | | | | | | | | | | | | |
| 3/8 | 13,5 | 2,5 | 41,7 | 0,35 | 12 | 12 | 4 | 6,9 | | SCG238D101V | MO | E | - | |
| 1/2 | 13,5 | 3,8 | 63,3 | 0,35 | 12 | 12 | 4 | 6,9 | | SCG238D102V | MO | E | - | |
| 3/4 | 18 | 5 | 83,3 | 0,35 | 10 | 10 | 4 | 6,9 | | SCG238D103V | MO | E | - | |
| 1 | 24 | 12 | 200 | 0,35 | 10 | 10 | 4 | 6,9 | | SCG238D104V | MO | E | - | |
| NO - Normally open | | | | | | | | | | | | | | |
| 3/8 | 13,5 | 2,5 | 41,7 | 0,35 | 12 | 12 | 4 | 5 ⁽²⁾ | | SCG238D105V | - | E | - | |
| 1/2 | 13,5 | 3,8 | 63,3 | 0,35 | 12 | 12 | 4 | 5 ⁽²⁾ | | SCG238D106V | - | E | - | |
| 3/4 | 18 | 5 | 83,3 | 0,35 | 10 | 10 | 4 | 5 ⁽²⁾ | | SCG238D107V | - | E | - | |
| 1 | 24 | 12 | 200 | 0,35 | 10 | 10 | 4 | 5 ⁽²⁾ | | SCG238D108V | - | E | - | |

⁽²⁾ Type 02.




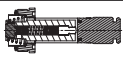
OPTIONS

- Valves can also be supplied with EPDM (ethylene-propylene) seals, diaphragm and disc. Use the appropriate optional suffix letter for identification
- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU (see "Explosionproof solenoids" section)
- Oxygen service, suffix NV, example: SCG238D102NV
- 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
- Threaded pipe connection is standard: G = G (ISO 228/1)
- Installation/maintenance instructions are included with each valve

SPARE PARTS KIT

| catalogue number | spare parts kit no. ⁽¹⁾ | |
|------------------|--|--|
| |  ⁽¹⁾ |  ⁽¹⁾ |
| | ~/= | ~/= |
| SCG238D101V/102V | C131038V | C140267V |
| SCG238D103V | C131039V | C140267V |
| SCG238D104V | C131040V | C140267V |
| SCG238D105V/106V | C131041V | C140508V |
| SCG238D107V | C131042V | C140508V |
| SCG238D108V | C131043V | C140508V |

⁽¹⁾ For EPDM version, replace "V" with "E".

ORDERING EXAMPLES:

| | | | | | | |
|----|---|-----|---|-----|-----|--------------|
| SC | G | 238 | D | 101 | V | 230V / 50 Hz |
| SC | G | 238 | D | 104 | E | 24V / DC |
| SC | G | 238 | D | 102 | VMO | 230V / 50 Hz |

prefix — pipe thread — basic number — voltage — suffix

ORDERING EXAMPLES KITS:

| | |
|---------|---|
| C140267 | V |
| C131038 | E |

basic number — suffix

DIMENSIONS (mm), WEIGHT (kg)



TYPE 01
Prefix "SC" Solenoid
Epoxy moulded
IEC 335 / DIN 43650
IP65

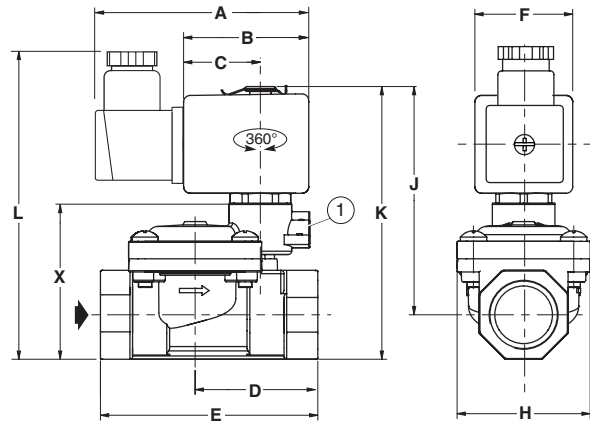
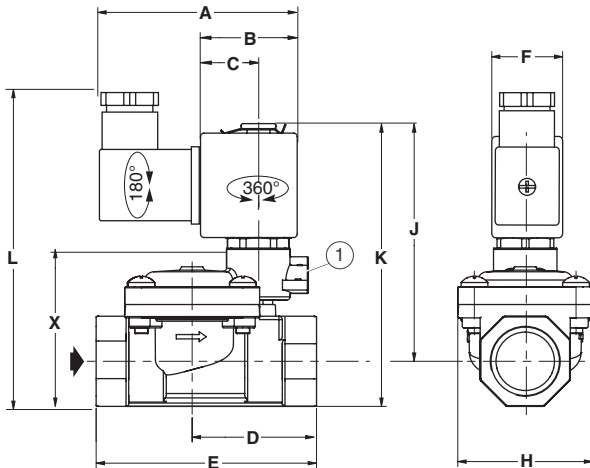
SCG238D101/102/103/104

AC (-): SCG238D105/106/107/108



TYPE 02
Prefix "SC" Solenoid
Epoxy moulded
IEC 335 / ISO 4400
IP65

DC (-): SCG238D105/106/107/108



¹ Manual operator location.

| type | prefix option | catalogue number | A | B | C | D | E | F | H | J | K | L | X | weight ⁽²⁾ | |
|------|---------------|-----------------------------|------|------|----|------|-----|----|----|------|-----|-----|----|-----------------------|------|
| | | | | | | | | | | | | | | NC | NO |
| 01 | SC | SCG238D101 / SCG238D105 (-) | 60,5 | 27,5 | 17 | 34,5 | 60 | 22 | 40 | 67 | 78 | 95 | 42 | 0,33 | 0,35 |
| | | SCG238D102 / SCG238D106 (-) | 60,5 | 27,5 | 17 | 37 | 66 | 22 | 40 | 69 | 83 | 100 | 47 | 0,45 | 0,41 |
| | | SCG238D103 / SCG238D107 (-) | 60,5 | 27,5 | 17 | 43,5 | 79 | 22 | 50 | 73,5 | 90 | 107 | 54 | 0,52 | 0,55 |
| | | SCG238D104 / SCG238D108 (-) | 60,5 | 27,5 | 17 | 59 | 105 | 22 | 71 | 85 | 106 | 123 | 70 | 1,08 | 1,11 |
| 02 | SC | SCG238D105 (=) | 76 | 38 | 23 | 34,5 | 60 | 30 | 40 | 67 | 78 | 95 | 42 | - | 0,35 |
| | | SCG238D106 (=) | 76 | 38 | 23 | 37 | 66 | 30 | 40 | 69 | 83 | 83 | 47 | - | 0,41 |
| | | SCG238D107 (=) | 76 | 38 | 23 | 43,5 | 79 | 30 | 50 | 73,5 | 90 | 90 | 54 | - | 0,55 |
| | | SCG238D108 (=) | 76 | 38 | 23 | 59 | 105 | 30 | 71 | 85 | 106 | 106 | 70 | - | 1,11 |

⁽²⁾ Incl. coil(s) and connector(s).

All leaflets are available on: www.asconumatics.eu