

### FEATURES

- Small compact sized valves particularly designed for hot water and steam, compatible with the seal materials used
- Lightweight stamped steel pistons giving all-round support to resilient, tight seal discs
- Valves require a minimum operating pressure of 0,35 bar
- All products are covered by the Pressure Equipment Directive 97/23/EC and are suitable for group 1 and 2 fluids
- The solenoid valves satisfy all relevant EC Directives

### GENERAL

**Differential pressure** See «SPECIFICATIONS» [1 bar = 100 kPa]  
**Response time** 40 - 120 ms

| fluids (*)       | temperature range (TS) | seal materials (*)        |
|------------------|------------------------|---------------------------|
| hot water, steam | - 20°C to + 150°C      | EPDM (ethylene-propylene) |
| steam            | - 20°C to + 184°C      | PTFE                      |

### MATERIALS IN CONTACT WITH FLUID

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

|                         |                 |
|-------------------------|-----------------|
| <b>Body</b>             | Brass           |
| <b>Core tube</b>        | Stainless steel |
| <b>Core and plugnut</b> | Stainless steel |
| <b>Springs</b>          | Stainless steel |
| <b>Seat</b>             | Brass           |
| <b>Seals</b>            | EPDM            |
| <b>Discs</b>            | EPDM or PTFE    |
| <b>Shading coil</b>     | Copper          |

### ELECTRICAL CHARACTERISTICS

|  |  |
|--|--|
| <b>Coil insulation class</b>           | F (EPDM disc) or H (PTFE disc)                                 |
| <b>Connector</b>                       | Spade plug (cable Ø 6-10 mm)                                   |
| <b>Connector specification</b>         | ISO 4400 / EN 175301-803, form A                               |
| <b>Electrical safety</b>               | IEC 335  |
| <b>Electrical enclosure protection</b> | Moulded IP65 (EN 60529)  |
| <b>Standard voltages</b>               | DC (=) : 24V - 48V<br>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 <sup>(1)</sup> |
|---------------|---------------|-----------|------|------------|--|------------------|------------|---------------------|
|               | inrush ~      | holding ~ |      | hot/cold = |  | ~                | =          |                     |
|               | (VA)          | (VA)      | (W)  | (W)        |  | 230 V/50 Hz      | 24 V DC    |                     |
| SC            | 55            | 23        | 10,5 | -          | -20 to + 40                                  | 400425-117       | -          | 01 (class F)        |
|               | 44            | 20        | 10,5 | -          | -20 to + 40                                  | 400426-117       | -          | 01 (class H)        |
|               | -             | -         | -    | 12/16,8    | -20 to + 40                                  | -                | 400625-142 | 02                  |

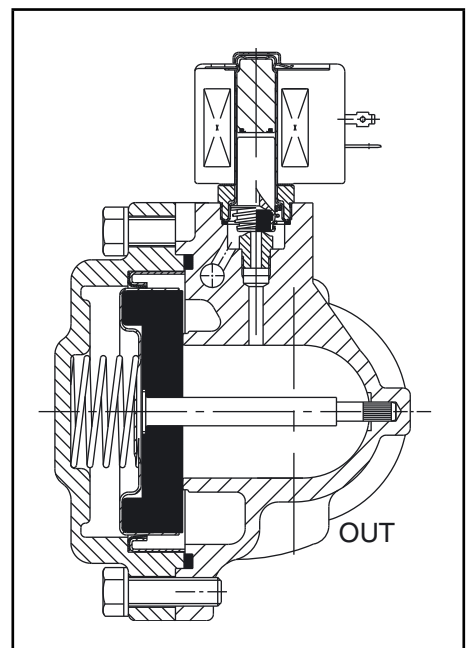
<sup>(1)</sup> Refer to the dimensional drawings on the following page.

### SPECIFICATIONS

| pipe size                              | orifice size | flow coefficient Kv |         | operating pressure differential (bar) |           |                          |      | max. fluid temp. (°C) |     | power coil (W) |      | catalogue number |            |
|--|--------------|---------------------|---------|---------------------------------------|-----------|--------------------------|------|-----------------------|-----|----------------|------|------------------|------------|
|  |              |                     |         | min.                                  | max. (PS) |                          | max. |                       |     |                |      |                  |            |
|  |              |                     |         |                                       | steam (*) | water (*) <sup>(2)</sup> |      |                       |     |                |      |                  |            |
| Rp                                     | (mm)         | (m³/h)              | (l/min) |                                       |           |                          |      |                       |     |                |      |                  |            |
|  |              |                     |         |                                       |           |                          |      |                       |     |                |      |                  |            |
| <b>NC - Normally closed, EPDM disc</b> |              |                     |         |                                       |           |                          |      |                       |     |                |      |                  |            |
| 3/8                                    | 16           | 2,6                 | 43      | 0,35 <sup>(3)</sup>                   | 3,5       | -                        | 10   | -                     | 150 | -              | 10,5 | -                | SCE220A001 |
| 1/2                                    | 16           | 3,5                 | 58      | 0,35 <sup>(3)</sup>                   | 3,5       | -                        | 10   | -                     | 150 | -              | 10,5 | -                | SCE220A003 |
| 3/4                                    | 19           | 4,3                 | 72      | 0,35 <sup>(3)</sup>                   | 3,5       | -                        | 10   | -                     | 150 | -              | 10,5 | -                | SCE220A005 |
| 1                                      | 25           | 11,6                | 193     | 0,35                                  | 3,5       | 3,5                      | 10   | 10                    | 150 | 150            | 10,5 | 16,8             | SCE220-007 |
| 1 1/4                                  | 28           | 12,8                | 213     | 0,35                                  | 3,5       | 3,5                      | 10   | 10                    | 150 | 150            | 10,5 | 16,8             | SCE220-009 |
| 1 1/2                                  | 32           | 19,5                | 325     | 0,35                                  | 3,5       | 3,5                      | 10   | 10                    | 150 | 150            | 10,5 | 16,8             | SCE220-011 |
| 2                                      | 44           | 37                  | 617     | 0,35                                  | 3,5       | 3,5                      | 10   | 10                    | 150 | 150            | 10,5 | 16,8             | SCE220-013 |
| <b>NC - Normally closed, PTFE disc</b> |              |                     |         |                                       |           |                          |      |                       |     |                |      |                  |            |
| 3/8                                    | 16           | 2,6                 | 43      | 0,35 <sup>(3)</sup>                   | 10        | -                        | 10   | -                     | 184 | -              | 10,5 | -                | SCE220A019 |
| 1/2                                    | 16           | 3,5                 | 58      | 0,35 <sup>(3)</sup>                   | 10        | -                        | 10   | -                     | 184 | -              | 10,5 | -                | SCE220A021 |
| 3/4                                    | 19           | 4,3                 | 72      | 0,35 <sup>(3)</sup>                   | 10        | -                        | 10   | -                     | 184 | -              | 10,5 | -                | SCE220A023 |
| 1                                      | 25           | 11,6                | 193     | 0,35                                  | 10        | -                        | 10   | -                     | 184 | -              | 10,5 | -                | SCE220-025 |
| 1 1/4                                  | 28           | 12,8                | 213     | 0,35                                  | 10        | -                        | 10   | -                     | 184 | -              | 10,5 | -                | SCE220-027 |
| 1 1/2                                  | 32           | 19,5                | 325     | 0,35                                  | 10        | -                        | 10   | -                     | 184 | -              | 10,5 | -                | SCE220-029 |
| 2                                      | 44           | 37                  | 617     | 0,35                                  | 10        | -                        | 10   | -                     | 184 | -              | 10,5 | -                | SCE220-031 |

<sup>(2)</sup> Water temperature should not exceed 100°C.

<sup>(3)</sup> Once opened, valve remains open till differential pressure 0 kPa is reached.



### OPTIONS

- Waterproof enclosure with embedded screw terminal coil according to protection class IP67, CEE-10
- Compliance with "UL", "CSA" and other local approvals available on request
- Coils according to "CSA/SA" standards
- Mounting brackets, suffix MB
- 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
- Pipe connection identifier is E = Rp (ISO 7/1)
- Installation/maintenance instructions are included with each valve

### SPARE PARTS KIT & ACCESSORIES

| catalogue number | spare parts kit no. |                | mounting bracket no. |
|------------------|---------------------|----------------|----------------------|
|                  | ~                   | =              |                      |
| SCE220A001/003   | <b>C310635</b>      | -              | <b>038713-000</b>    |
| SCE220A005       | <b>C310716</b>      | -              | <b>038713-000</b>    |
| SCE220-007/-009  | <b>C304394</b>      | <b>C132651</b> | -                    |
| SCE220-011       | <b>C304395</b>      | <b>C132652</b> | -                    |
| SCE220-013       | <b>C304943</b>      | <b>C132652</b> | -                    |
| SCE220A019/021   | <b>C312712</b>      | -              | <b>038713-000</b>    |
| SCE220A023       | <b>C312702</b>      | -              | <b>038713-000</b>    |
| SCE220-025/-027  | <b>C304392</b>      | -              | -                    |
| SCE220-029       | <b>C304393</b>      | -              | -                    |
| SCE220-031       | <b>C306807</b>      | -              | -                    |

- Not available.

### ORDERING EXAMPLES:

|           |          |            |          |            |              |
|-----------|----------|------------|----------|------------|--------------|
| <b>SC</b> | <b>E</b> | <b>220</b> | <b>A</b> | <b>001</b> | 230V / 50 Hz |
| <b>SC</b> | <b>E</b> | <b>220</b> | -        | <b>007</b> | 115V / 50 Hz |
| <b>SC</b> | <b>E</b> | <b>220</b> | -        | <b>009</b> | 24V / DC     |
| <b>SC</b> | <b>E</b> | <b>220</b> | <b>A</b> | <b>023</b> | 230V / 50 Hz |

prefix: SC  
 pipe thread: E  
 basic number: 220  
 suffix: A001, A007, A009, A023  
 voltage: 230V / 50 Hz, 115V / 50 Hz, 24V / DC

### ORDERING EXAMPLES KITS:

|                |  |
|----------------|--|
| <b>C310635</b> |  |
| <b>C132651</b> |  |

basic number: C310635, C132651  
 suffix:

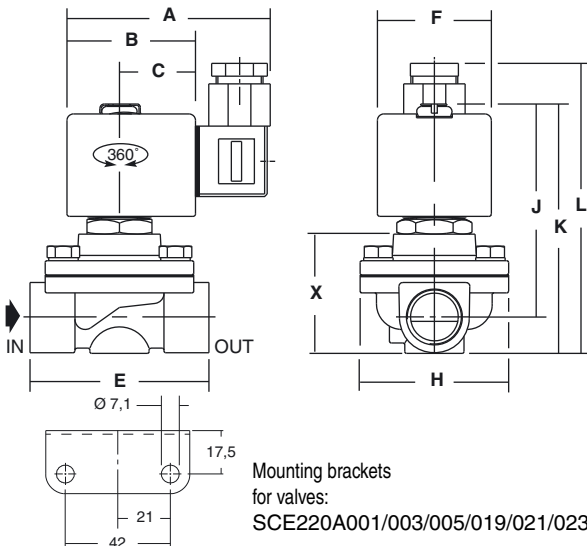
### DIMENSIONS (mm), WEIGHT



#### TYPE 01

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

SCE220A001/003/005/019/021/023

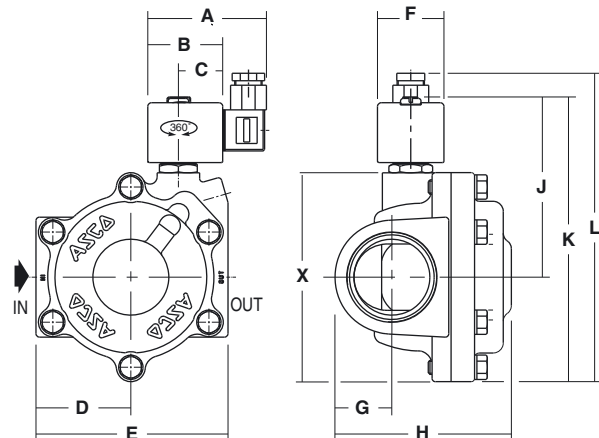


#### TYPE 01-02

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

Type 01 (AC) : SCE220-007/009/011/013/025/027/029/031

Type 02 (DC) : SCE220-007/009/011/013



| type | prefix option | catalogue number       | A  | B  | C  | D  | E   | F  | G  | H   | J   | K   | L   | X   | weight <sup>(1)</sup> |
|------|---------------|------------------------|----|----|----|----|-----|----|----|-----|-----|-----|-----|-----|-----------------------|
| 01   | SC            | SCE220A001/003/019/021 | 80 | 50 | 30 | -  | 70  | 45 | -  | 58  | 88  | 102 | 119 | 53  | 0,9                   |
|      |               | SCE220A005/023         | 80 | 50 | 30 | -  | 73  | 45 | -  | 58  | 92  | 109 | 122 | 59  | 1,0                   |
|      |               | SCE220-007/025         | 80 | 50 | 30 | 47 | 95  | 45 | 25 | 78  | 106 | 147 | 162 | 98  | 1,8                   |
|      |               | SCE220-009/027         | 80 | 50 | 30 | 46 | 93  | 45 | 29 | 89  | 106 | 147 | 162 | 98  | 2,1                   |
|      |               | SCE220-011/029         | 80 | 50 | 30 | 55 | 111 | 45 | 33 | 104 | 110 | 160 | 175 | 111 | 2,8                   |
|      |               | SCE220-013/031         | 80 | 50 | 30 | 64 | 129 | 45 | 38 | 119 | 120 | 190 | 205 | 141 | 4,6                   |
| 02   | SC            | SCE220-007             | 86 | 56 | 33 | 47 | 95  | 50 | 25 | 78  | 96  | 137 | 152 | 98  | 2,1                   |
|      |               | SCE220-009             | 86 | 56 | 33 | 46 | 93  | 50 | 29 | 89  | 96  | 137 | 152 | 80  | 2,2                   |
|      |               | SCE220-011             | 86 | 56 | 33 | 55 | 111 | 50 | 33 | 104 | 100 | 150 | 165 | 93  | 2,9                   |
|      |               | SCE220-013             | 86 | 56 | 33 | 64 | 129 | 50 | 38 | 119 | 110 | 180 | 195 | 123 | 4,7                   |

<sup>(1)</sup> including coil and connector.

All leaflets are available on: [www.asconumatics.eu](http://www.asconumatics.eu)