

### FEATURES

- The solenoid valves will withstand the severe service encountered in controlling cryogenic fluids, such as liquid oxygen (-183°C), liquid argon (-186°C) and liquid nitrogen (-196°C)
- Hung piston construction
- Valves do not require a minimum operating pressure
- Reliable control in low pressure, high flow systems
- All valves are degreased, cleaned, tested and packed to keep them free from moisture. In addition liquid oxygen (LOX) valves are "black light" tested to check for any hydrocarbons
- The solenoid valves satisfy all relevant EC directives

### GENERAL

Differential pressure 0 - 9 bar [1 bar = 100 kPa]  
Response time 75 - 100 ms

| fluids (*)       | temperature range (TS) | seal materials (*) |
|------------------|------------------------|--------------------|
| cryogenic fluids | - 196°C to + 90°C      | PTFE               |

### MATERIALS IN CONTACT WITH FLUID

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

|                  |                    |
|------------------|--------------------|
| Body             | Brass              |
| Core tube        | Stainless steel    |
| Core and plugnut | Stainless steel    |
| Springs          | Stainless steel    |
| Piston           | Brass              |
| Seat             | Brass              |
| Seals            | PTFE               |
| Piston rings     | PTFE carbon filled |
| Core disc        | PTFE reinforced    |
| Piston disc      | PTFE               |
| Shading coil     | Copper             |

### ELECTRICAL CHARACTERISTICS

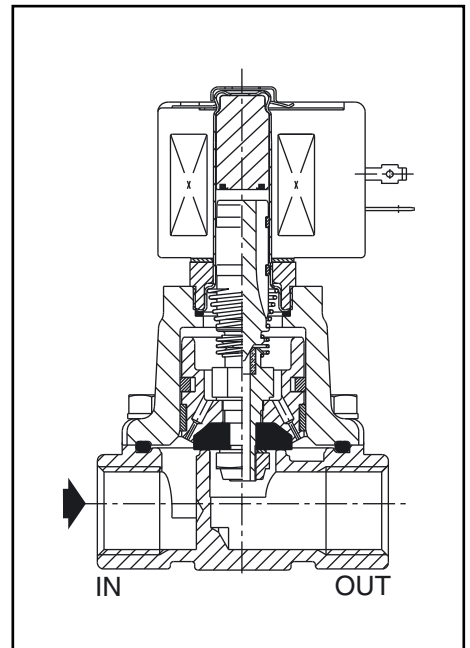
|                                       |  |
|---------------------------------------|--|
| Coil insulation class                 | F  |
| Connector                             | Spade plug (cable Ø 6-10 mm)             |
| Connector specification               | ISO 4400 / EN 175301-803, form A         |
| Electrical safety                     | IEC 335                                  |
| Electrical enclosure protection       | Moulded IP65 (EN 60529)                  |
| Standard voltages                     | DC (=) : Contact us                      |
| (Other voltages and 60 Hz on request) | AC (~) : 24V - 48V - 115V - 230V / 50 Hz |

| 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      | - |                     |
| SC            | 78            | 35        | 16,7 | -          | -20 to + 50                                  | 400425-217       | - | 01                  |

<sup>(1)</sup> 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 |   |   |   |   |   |   |
|-----------------------------|--------------|---------------------|---------|---------------------------------------|----------------------|---|----------------|---|------------------|---------|---|---|---|---|---|---|
|                             |              |                     |         | min.                                  | max. (PS)            |   |                |   |                  | ~       | = | ~ | - | - | - | - |
|                             |              |                     |         |                                       | cryogenic fluids (*) |   |                |   |                  |         |   |   |   |   |   |   |
| Rp                          | (mm)         | (m³/h)              | (l/min) |                                       |                      |   |                |   |                  |         |   |   |   |   |   |   |
| <b>NC - Normally closed</b> |              |                     |         |                                       |                      |   |                |   |                  |         |   |   |   |   |   |   |
| 1/2                         | 16           | 3,3                 | 55      | 0                                     |                      | 9 | 16,7           | - | SCE222E002LT     | -       | - | - | - |   |   |   |
| 3/4                         | 19           | 5,1                 | 85      | 0                                     |                      | 9 | 16,7           | - | SCE222F003LT     | -       | - | - | - |   |   |   |



### 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
- 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 must be mounted vertical and upright
- Pipe connection identifier is E = Rp (ISO 7/1)
- Installation/maintenance instructions are included with each valve

### SPARE PARTS KITS

| catalogue number | spare parts kit no. |   |
|------------------|---------------------|---|
|                  | ~                   | = |
| SCE222E002LT     | <b>C304065LT</b>    | - |
| SCE222F003LT     | <b>C304065LT</b>    | - |

- Not available

### ORDERING EXAMPLES:

|        |             |              |   |     |    |              |
|--------|-------------|--------------|---|-----|----|--------------|
| SC     | E           | 222          | E | 002 | LT | 230V / 50 Hz |
| SC     | E           | 222          | F | 003 | LT | 24V / 50 Hz  |
| prefix | pipe thread | basic number |   |     |    | voltage      |
|        |             |              |   |     |    | suffix       |

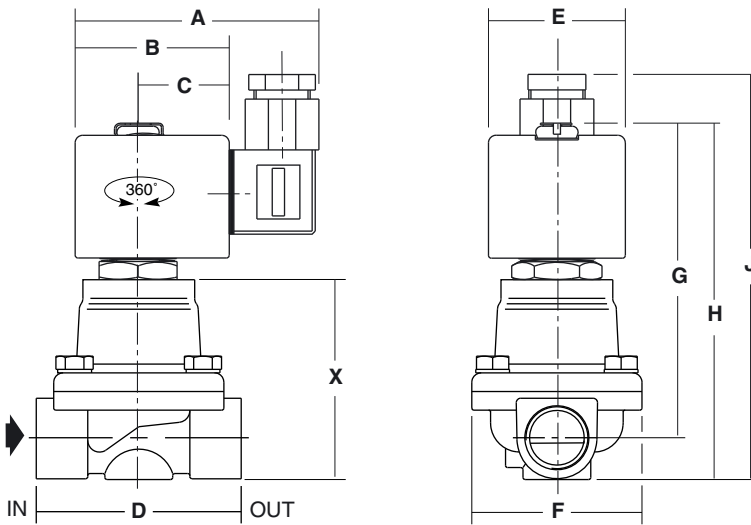
### ORDERING EXAMPLES KITS:

|              |         |
|--------------|---------|
|              | C304065 |
| basic number |         |

### DIMENSIONS (mm), WEIGHT (kg)



**TYPE 01**  
Prefix "SC" Solenoid  
Epoxy moulded  
IEC 335 / ISO 4400  
IP65



| type | prefix option | catalogue number | A  | B  | C  | D  | E  | F  | G   | H   | J   | X  | weight <sup>(1)</sup> |
|------|---------------|------------------|----|----|----|----|----|----|-----|-----|-----|----|-----------------------|
| 01   | SC            | SCE222E002LT     | 80 | 50 | 30 | 70 | 45 | 59 | 104 | 119 | 131 | 69 | 1,1                   |
|      |               | SCE222F003LT     | 80 | 50 | 30 | 73 | 45 | 58 | 108 | 125 | 137 | 75 | 1,2                   |

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

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