SOLENOID VALVES

pilot operated hung piston, for cryogenic service 1/2 - 3/4 NC

2/2 Series 222LT

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



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 tubeStainless steelCore and plugnutStainless steelSpringsStainless steelPistonBrass

Seat Brass
Seals PTFE

Pïston rings PTFE carbon filled
Core disc PTFE reinforced

Piston disc PTFE Shading coil Copper

ELECTRICAL CHARACTERISTICS

Coil insulation class F

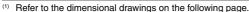
Connector Spade plug (cable Ø 6-10 mm) ISO 4400 / EN 175301-803, form A

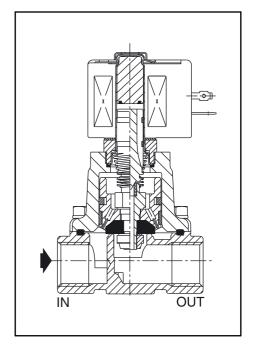
Electrical safety IEC 335

Electrical enclosure protection Moulded IP65 (EN 60529)
Standard voltages DC (=): Contact us

(Other voltages and 60 Hz on request) AC (\sim) : 24V - 48V - 115V - 230V / 50 Hz

| prefix | | power | ratings | | operator | replacer | | | | |
|--------|--------|-------|---------|----------|------------------------|-------------|----------|----------|--|--|
| | inrush | hold | ling | hot/cold | ambient temperature | Teplacei | tupo (1) | | | |
| option | ~ | _ | ~ = | | range (TS) | ~ | = | type (1) | | |
| | (VA) | (VA) | (W) | (W) | (C°) | 230 V/50 Hz | - | | | |
| SC | 78 | 35 | 16,7 | - | -20 to + 50 | 400425-217 | - | 01 | | |







SPECIFICATIONS

| | | | £1.4 | | | operating pressure | | | catalogue | | opti | ons | |
|----------------------|------|---------|----------------------|---------|--------------------|----------------------|------------|----|--------------|---|------|-----|---|
| pipe | pipe | orifice | ice flow coefficient | | differential (bar) | | power coil | | number | | | | |
| ١ | size | size | Kv | | | max. (PS) | | V) | | | | | |
| İ | | | | | min. | cryogenic fluids (*) | | | | | | | |
| ı | Rp | (mm) | (m³/h) | (l/min) | | ~ | ~ | = | ~ | | | | |
| NC - Normally closed | | | | | | | | | | | | | |
| ı | 1/2 | 16 | 3,3 | 55 | 0 | 9 | 16,7 | - | SCE222E002LT | - | - | - | - |
| ١ | 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

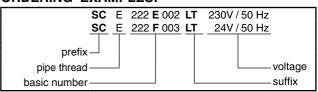
- The solenoid valves must be mounted vertical and upright
- Pipe connection identifier is E = Rp (ISO 7/1)
- Installation/maintenance instructions are included with each valve

SPARE PARTS KITS

| catalogue number | spare pa | rts kit no. |
|------------------|-----------|-------------|
| Catalogue number | ~ | = |
| SCE222E002LT | C304065LT | - |
| SCE222F003LT | C304065LT | - |

⁻ Not available

ORDERING EXAMPLES:



ORDERING EXAMPLES KITS:

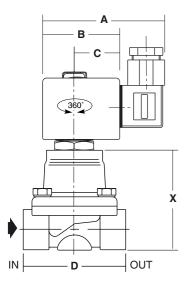
| | C304065 |
|-----------------|---------|
| | |
| basic number——— | |

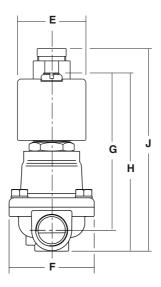
DIMENSIONS (mm), **WEIGHT** (kg)





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





| type | prefix option | catalogue number | A | В | С | D | E | F | G | Н | L | X | weight (1) |
|------|---------------|---------------------|----|----|----|----|----|----|-----|-----|-----|----|------------|
| 01 | 01 SC | SCE222E002LT | 80 | 50 | 30 | 70 | 45 | 59 | 104 | 119 | 131 | 69 | 1,1 |
| 01 | 30 | SCE222F003LT | 80 | 50 | 30 | 73 | 45 | 58 | 108 | 125 | 137 | 75 | 1,2 |

⁽¹⁾ including coil and connector.