

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

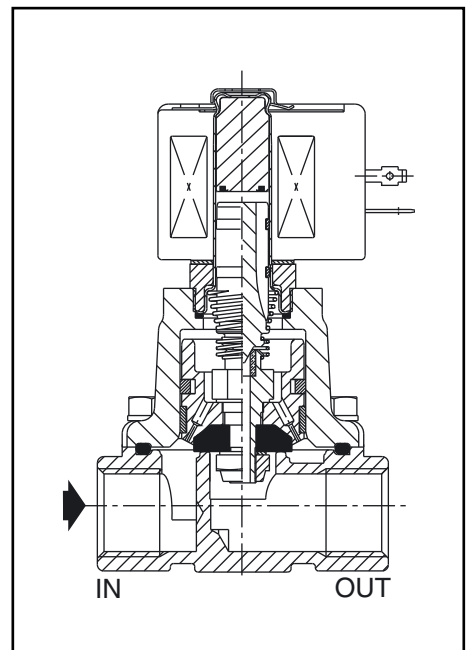
| | |
|---------------------------------------|------------------------------------------|
| Coil insulation class | F |
| Connector | Spade plug (cable Ø 6-10 mm) |
| Connector specification | ISO 4400 / EN 175301-803, form A |
| Electrical safety | IEC 335 |
| Electrical enclosure protection | Moulded 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 ⁽¹⁾ |
|---------------|---------------|-----------|------|------------|----------------------------------------------|------------------|---|---------------------|
| | inrush ~ | holding ~ | | hot/cold = | | ~ | = | |
| | (VA) | (VA) | (W) | (W) | | 230 V/50 Hz | - | |
| SC | 78 | 35 | 16,7 | - | -20 to + 50 | 400425-217 | - | 01 |

⁽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 | | | |
|-----------------------------|--------------|---------------------|---------|---------------------------------------|----------------------|---|----------------|---|------------------|---------|---|---|---|
| | | | | min. | max. (PS) | | | | | - | - | - | - |
| | | | | | cryogenic fluids (*) | | | | | | | | |
| Rp | (mm) | (m³/h) | (l/min) | | | | ~ | = | ~ | | | | |
| NC - Normally closed | | | | | | | | | | | | | |
| 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 | C304065LT | - |
| SCE222F003LT | C304065LT | - |

- 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 |

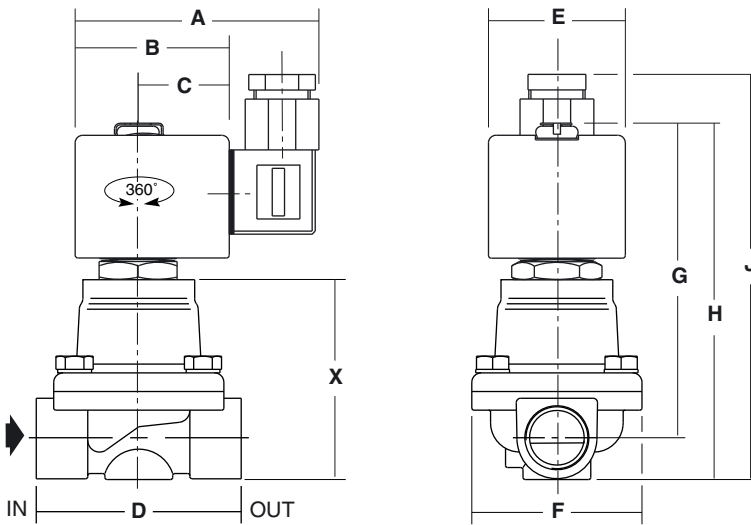
ORDERING EXAMPLES KITS:

| | |
|--------------|---------|
| | 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 ⁽¹⁾ |
|------|---------------|------------------|----|----|----|----|----|----|-----|-----|-----|----|-----------------------|
| 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 |

⁽¹⁾ including coil and connector.

All leaflets are available on: www.aplisensor.com.ua