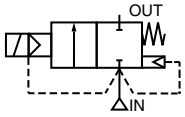
SOLENOID VALVES

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

NC



2/2
Series
222LT



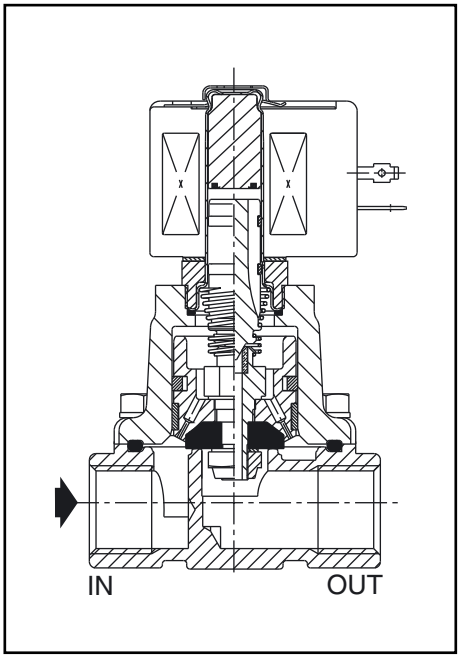
FEATURES

- *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*

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
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)
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 inrush ~	holding ~		hot/cold =	operator ambient temperature range (TS)	replacement coil ~	replacement coil =	type (1)
	(VA)	(VA)	(W)	(W)	(C°)	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.

H

SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar) min.	operating pressure differential (bar) max. (PS) cryogenic fluids (✳)	power coil (W) ~	power coil (W) =	catalogue number	options			
Rp	(mm)	(m^3/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**	-	-	-	-

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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

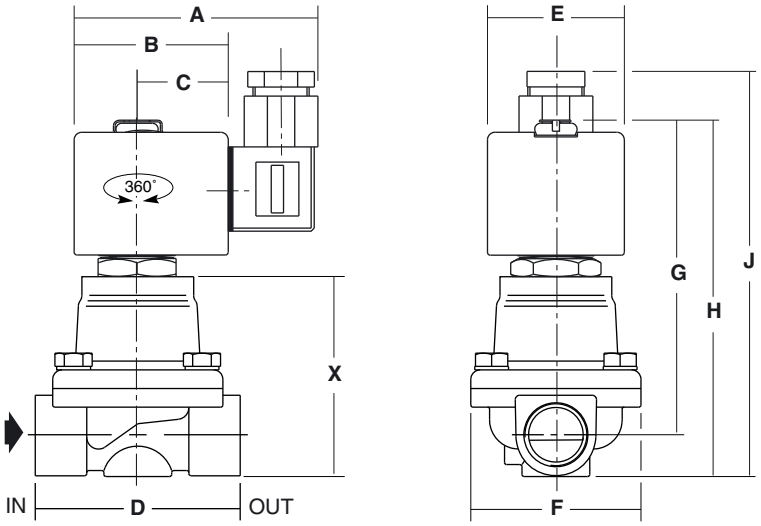
ORDERING EXAMPLES KITS:

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.

00118GB-2007/R03
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