

ASCO™ Solenoid Valves

For Vacuum Service

Pilot Operated, hung diaphragm, 3/8" to 3/4" Tapped

2/2
Series
210

Features and Benefits

- Special materials and handling procedures are used in the high vacuum valves to avoid molecular contamination
- The medium and high vacuum valves are mass spectrometer tested
- Two way shut-off pilot operated valves for air and inert gas compatible with the seal materials used
- The solenoid valves satisfy all relevant EU Directives

General

Differential pressure

1 bar absolute [1 bar = 100 kPa]

Response time

15 - 120 ms

Fluids (*)	Temperature range (TS)	Seal materials (*)
air, inert gas	-20°C to +85°C	NBR (nitrile)
	0°C to + 90°C	FPM (fluoroelastomer)

Materials in contact with fluid

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

Body	Brass
Core tube	Stainless steel
Core and plugnut	Stainless steel
Springs	Stainless steel
Seat	Brass
Seals, diaphragm and disc	NBR or FPM
Disc holder (NO function)	PA
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

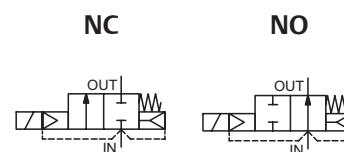
DC (=) : -

(Other voltages and 60 Hz on request)

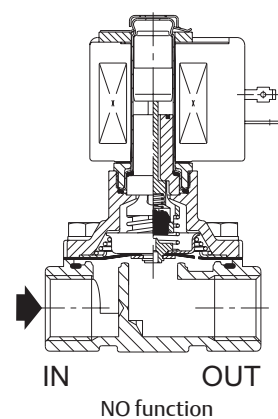
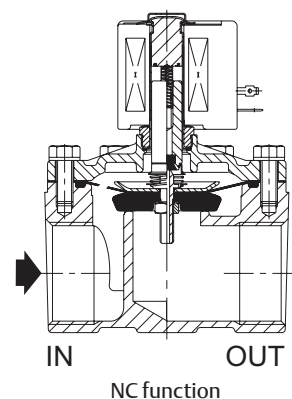
AC (~) : 24V - 48V - 115V - 230V / 50 Hz

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	55	23	10.5	-	-20 to +75	400425-117	-	01

⁽¹⁾ Refer to the dimensional drawings on the following page.



CE



Specifications

Pipe size	Orifice size	Flow coefficient Kv		Minimum absolute vacuum pressure (PS)	Power coil (W)	Catalog number	Options
				Air (*)			Maintained manual operator
Rp	(mm)	(m³/h)	(l/min)	mbar (Torr)	~	~	
NC - Normally closed. low vacuum range to 25 Torr. NBR seals							
3/4"	19	4.3	72	33.3 (25)	10.5	SCE210D095	MO
NC - Normally closed. medium vacuum range to 10⁻³ Torr. NBR seals							
3/4"	19	4.3	72	1.33.10 ⁻³ (10 ⁻³)	10.5	SCE210D095VM	MO
NC - Normally closed. high vacuum range to 10⁻⁶ Torr. FPM seals							
3/4"	19	4.3	72	1.33.10 ⁻⁶ (10 ⁻⁶)	10.5	SCE210D095VH	MO
NO - Normally open. low vacuum range to 25 Torr. NBR seals							
3/8"	16	2.6	43	33.3 (25)	10.5	SCE210C033	MO
1/2"	16	3.4	57	33.3 (25)	10.5	SCE210C034	MO
3/4"	19	4.7	79	33.3 (25)	10.5	SCE210C035	MO
NO - Normally open. medium vacuum range to 10⁻³ Torr. NBR seals							
3/8"	16	2.6	43	1.33.10 ⁻³ (10 ⁻³)	10.5	SCE210C033VM	MO
1/2"	16	3.4	57	1.33.10 ⁻³ (10 ⁻³)	10.5	SCE210C034VM	MO
3/4"	19	4.7	79	1.33.10 ⁻³ (10 ⁻³)	10.5	SCE210C035VM	MO
NO - Normally open. high vacuum range to 10⁻⁶ Torr. FPM seals							
3/8"	16	2.6	43	1.33.10 ⁻⁶ (10 ⁻⁶)	10.5	SCE210C033VH	MO
1/2"	16	3.4	57	1.33.10 ⁻⁶ (10 ⁻⁶)	10.5	SCE210C034VH	MO
3/4"	19	4.7	79	1.33.10 ⁻⁶ (10 ⁻⁶)	10.5	SCE210C035VH	MO

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

Options

- Waterproof enclosure with embedded screw terminal coil according to protection class IP67, CEE-10
- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU
- Electrical enclosures according to "NEMA" standards are available
- Compliance with "UL", "CSA" and other local approvals available on request
- Mounting brackets, suffix MB
- Other pipe connections are available on request
- Connector with visual indication and peak voltage suppression or with cable length of 2 m

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 and accessories

Catalogue number	Spare parts kits no.	Mounting bracket no.
	~	
SCE210D095	C302276	038713-000
SCE210C033/C034	C302334	038713-000
SCE210C035	C302335	038713-000

(1) Standard suffixes are also applicable to kits.

Ordering Examples Valves:

SC	E	210 D 095	230V / 50 Hz
SC	E	210 C 033	MO 115V / 50 Hz
SC	E	210 C 034	VM 24V / 50 Hz
SC	E	210 C 035	VH 230V / 50 Hz

prefix — pipe thread — basic number — voltage — suffix

Ordering Examples Kits:

C302276 ⁽¹⁾	VM
C302276	VH
C302276	

basic number — suffix

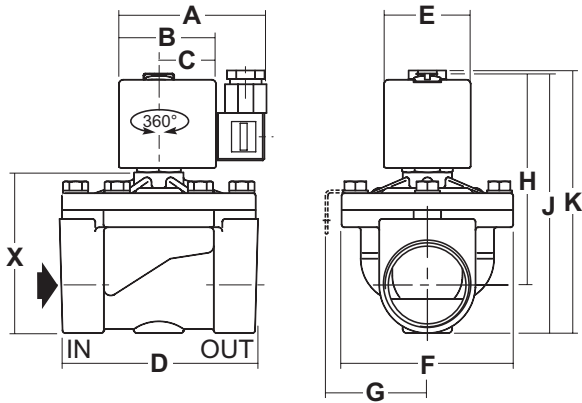
ASCO™ Solenoid Valves

Dimensions (mm), Weight (kg)

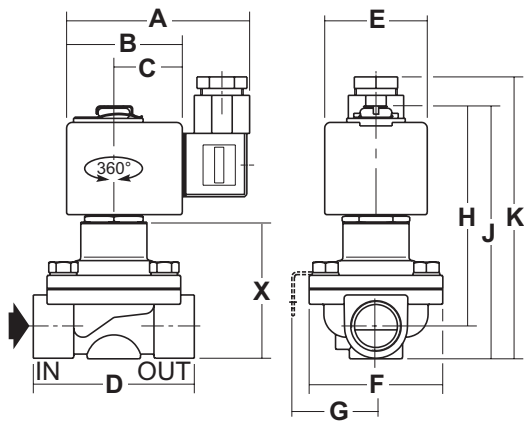


TYPE 01
Prefix “SC” Solenoid
Epoxy moulded
IEC 335 / ISO 4400
IP65

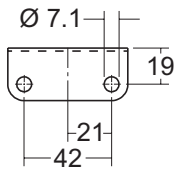
SCE210D095 (NC)



SCE210C033/C034/C035 (NO)



Mounting brackets



Type	Prefix option	Catalog number	A	B	C	D	E	F	G	H	J	K	X	Weight ⁽¹⁾
01	SC	SCE210D095	80	50	30	73	45	58	41	89	103	121	54	1
		SCE210C033/C034	80	50	30	70	45	58	41	98	108	127	60	0.9
		SCE210C035	80	50	30	70	45	58	41	102	117	132	68	1

⁽¹⁾ including coil and connector.