

# ASCO™ Solenoid Valves

For Vacuum Service, Pilot Operated, Hung Diaphragm, 3/8" to 3/4" Tapped

**Series  
210  
2/2**

## 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

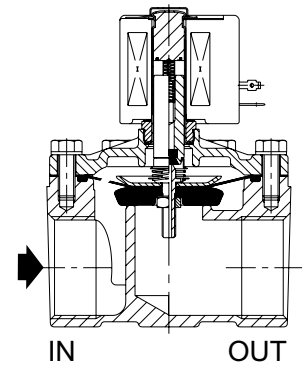
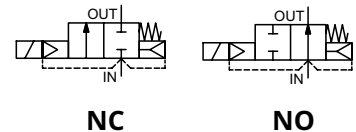
Fluids (*)	Temperature Range (TS)	Seal Material (*)
air, inert gas	-20 to +85°C	NBR (nitrile)
	0 to +90°C	FPM (fluoroelastomer)



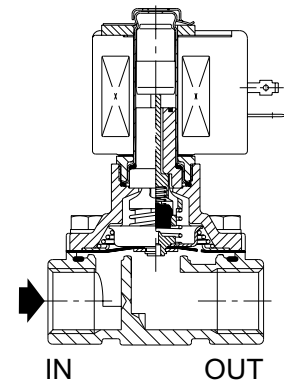
## Materials in Contact with Fluid

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

<b>Body</b>	Brass
<b>Core tube</b>	Stainless steel
<b>Core and plugnut</b>	Stainless steel
<b>Springs</b>	Stainless steel
<b>Seat</b>	Brass
<b>Seals, diaphragm and disc</b>	NBR or FPM
<b>Disc holder (NO function)</b>	PA
<b>Shading coil</b>	Copper



NC function



NO function

## Electrical Characteristics

<b>Coil insulation class</b>	F
<b>Connector</b>	Spade plug (cable Ø 6-10 mm)
<b>Connector specification</b>	ISO 4400 / EN 175301-803, form A
<b>Electrical safety</b>	IEC 335
<b>Electrical enclosure protection</b>	Moulded IP65 (EN 60529)
<b>Standard voltages</b>	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 ~ (VA)	Holding ~ (VA) (W)		Hot/ Cold = (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.

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## 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)	(m <sup>3</sup> /h)	(l/min)	mbar (Torr)	~	~	
<b>NC - Normally closed. medium vacuum range to 10<sup>-3</sup> Torr. NBR seals</b>							
3/8"	16	2.6	43	1.33.10 <sup>-3</sup> (10 <sup>-3</sup> )	10.5	SCE210C493VM	MO
1/2"	16	3.4	57	1.33.10 <sup>-3</sup> (10 <sup>-3</sup> )	10.5	SCE210C494VM	MO
3/4"	19	4.3	72	1.33.10 <sup>-3</sup> (10 <sup>-3</sup> )	10.5	SCE210D495VM	MO
<b>NC - Normally closed. high vacuum range to 10<sup>-6</sup> Torr. FPM seals</b>							
3/8"	16	2.6	43	1.33.10 <sup>-6</sup> (10 <sup>-6</sup> )	10.5	SCE210C493VH	MO
1/2"	16	3.4	57	1.33.10 <sup>-6</sup> (10 <sup>-6</sup> )	10.5	SCE210C494VH	MO
3/4"	19	4.3	72	1.33.10 <sup>-6</sup> (10 <sup>-6</sup> )	10.5	SCE210D495VH	MO
<b>NO - Normally open. medium vacuum range to 10<sup>-3</sup> Torr. NBR seals</b>							
3/8"	16	2.6	43	1.33.10 <sup>-3</sup> (10 <sup>-3</sup> )	10.5	SCE210C433VM	-
1/2"	16	3.4	57	1.33.10 <sup>-3</sup> (10 <sup>-3</sup> )	10.5	SCE210C434VM	-
3/4"	19	4.7	79	1.33.10 <sup>-3</sup> (10 <sup>-3</sup> )	10.5	SCE210C435VM	-
<b>NO - Normally open. high vacuum range to 10<sup>-6</sup> Torr. FPM seals</b>							
3/8"	16	2.6	43	1.33.10 <sup>-6</sup> (10 <sup>-6</sup> )	10.5	SCE210C433VH	-
1/2"	16	3.4	57	1.33.10 <sup>-6</sup> (10 <sup>-6</sup> )	10.5	SCE210C434VH	-
3/4"	19	4.7	79	1.33.10 <sup>-6</sup> (10 <sup>-6</sup> )	10.5	SCE210C435VH	-

(\*) 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

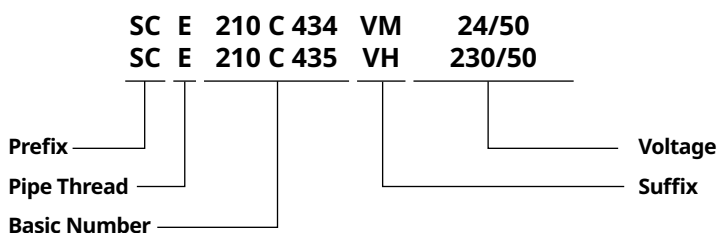
- The solenoid valves can be mounted in any position without affecting operation
- Pipe connection identifier is E = Rp (ISO 7/1)
- Installation/maintenance instructions are included with each valve

## Spare Parts Kit and Accessories

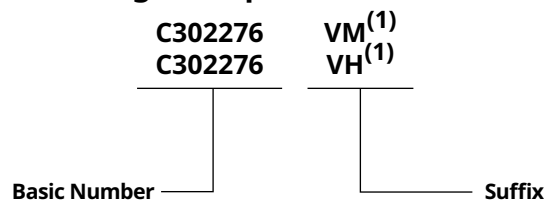
Catalogue Number	Spare Parts Kits No.	Mounting Bracket No.
	~	
SCE210C493/C494	C302272	038713-000
SCE210D495	C302276	038713-000
SCE210C433/C434	C326551	038713-000
SCE210C435	C326552	038713-000

(1) Standard prefixes/suffixes are also applicable to kits

## Ordering Examples Valves



## Ordering Examples Kits



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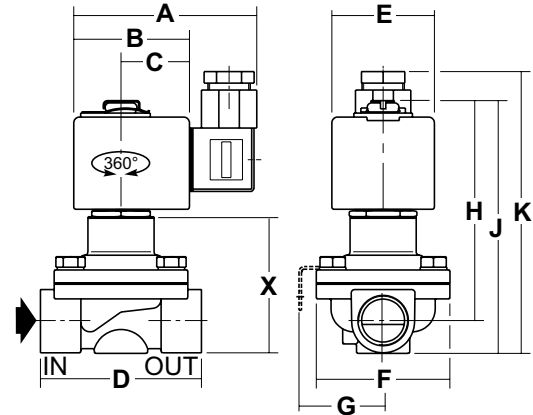
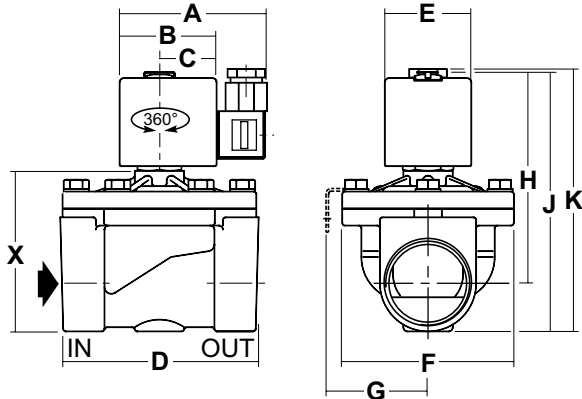
**Dimensions: mm, Weight: kg** 



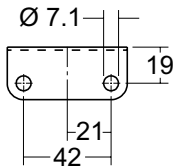
**TYPE 01**  
Prefix "SC" Solenoid  
Epoxy moulded  
IEC 335 / ISO 4400  
IP65

**SCE210C493/C494/D495 (NC)**

**SCE210C433/C434/C435 (NO)**



## Mounting Brackets



Type	Prefix Option	Catalog Number	A	B	C	D	E	F	G	H	J	K	X	Weight (1)
01	SC	SCE210C493/C494	86	51	30	70	45	58	41	83	98	112	46	0.9
		SCE210D495	86	51	30	71	45	58	41	87	105	119	54	1.0
		SCE210C433/C434	86	51	30	70	45	58	41	95	109	120	60	0.9
		SCE210C435	86	51	30	71	45	58	41	99	117	127	68	1.0

(1) Including coil and connector.

00169GB-2024/R02  
Availability, design and specifications are subject to change without notice.  
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