

# ASCO™ Solenoid Valves

Pilot Operated, Hung Diaphragm, 3/8" to 1 1/2"

## Features and Benefits

- Two way shut-off valves for the control air, inert gas, water, oil and other gases/liquids compatible with the sealing material used
- Valves do not require a minimum operating pressure
- All products are covered by Pressure Equipment Directive 2014/68/EU and are suitable for group 1 and 2 fluids
- The solenoid valves satisfy all relevant EU directives

## General

**Differential pressure** See «SPECIFICATIONS» [1 bar = 100 kPa]  
**Maximum viscosity** 65 cSt (mm<sup>2</sup>/s)  
**Response time** 15 - 120 ms

Fluids (*)	Temperature range (TS)	Seal materials (*)
air, inert gas, water, oil	-20°C to +85°C	NBR (nitrile)

## Materials of components in contact with fluid

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

	Brass body	Stainless steel body
<b>Body</b>	Brass	AISI 304 SS (AISI 316 SS on request)
<b>Core tube</b>	Stainless steel	Stainless steel
<b>Core and plugnut</b>	Stainless steel	Stainless steel
<b>Springs</b>	Stainless steel	Stainless steel
<b>Seat</b>	Brass	Stainless steel
<b>Seals, diaphragm and disc</b>	NBR	NBR
<b>Disc holder (NO function)</b>	PA	PA
<b>Shading coil</b>	Copper	Silver

## Electrical characteristics

**Coil insulation class** F or H  
**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 (=): 24V - 48V  
 AC (~): 24V - 48V - 115V - 230V / 50 Hz  
 (Other voltages and 60 Hz on request)

Prefix option	Power ratings				Operator ambient temperature range (TS) <sup>(1)</sup> (°C)	Replacement coil		Type <sup>(2)</sup>
	Inrush ~	Holding ~		Hot/cold =		~	=	
	(VA)	(VA)	(W)	(W)		230 V/50 Hz	24 V DC	
SC	55	23	10.5	-	-20 to +75	400425-117	-	01
	78	35	16.7	-	-20 to +50	400425-217	-	01
	110	33.6	15.4	12/16.8	-20 to +75	400525-117	400625-142	02
	240	43	20	16.8/23	-20 to +50	400525-217	400625-242	02

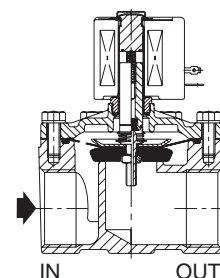
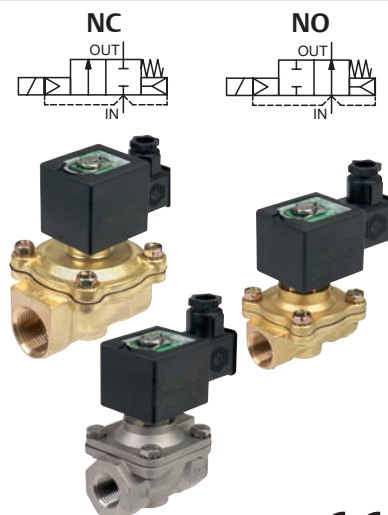
<sup>(1)</sup> 3/8" up to 1" max. operator ambient temperature range (TS) 60°C.

<sup>(2)</sup> For dimensions, see drawing(s) for each construction type on the following page(s).

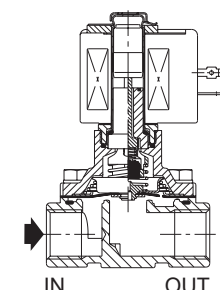
## Specifications

Pipe size	Orifice size	Flow coefficient Kv		Operating pressure differential (bar)							Power coil (W)		Catalog number		Options					
				Min.	Max. (PS)										Brass	Stainless steel	Maintained manual operator	FPM	EPDM	CR
					Air (*)	Water (*)		Oil (*)												
	(mm)	(m <sup>3</sup> /h)	(l/min)		~	=	~	=	~	=	~	=								
<b>NC - Normally closed</b>																				
Rp 3/8"	16	2.6	43	0	16	16	16	16	-	-	10.5	16.8	SCE210C493	-	MO	V	E	J		
Rp 1/2"	16	3.4	57	0	16	16	16	16	-	-	10.5	16.8	SCE210C494	-	MO	V	E	J		
					16	16	16	16	16	-	-	16.7	16.8	-	SCE210C487	MO	V	E	J	
Rp 3/4"	19	4.3	72	0	16	16	16	16	-	-	10.5	16.8	SCE210D495	-	MO	V	E	J		
					16	16	16	16	16	-	-	16.7	16.8	-	SCE210C488	MO	V	E	J	
Rp 1"	25	9.6	160	0	16	16	16	16	10	15.4	23	23	SCE210B454 <sup>(3)</sup>	-	MO	V	E	J		
													-	SCE210D489	-	V	E	J		
Rp 1 1/4"	28	12.8	213	0	9	6	9	6	9	4	15.4	23	SCE210B155 <sup>(3)</sup>	-	MO	V	E	J		
Rp 1 1/2"	32	19.3	322	0	9	5	9	5	9	3	15.4	23	SCE210B156 <sup>(3)</sup>	-	MO	V	E	J		

<sup>(3)</sup> Mounting position, DC only: piping horizontal, solenoid upright.



NC function



NO function



**Specifications**

Pipe size	Orifice size (mm)	Flow coefficient Kv (m <sup>3</sup> /h) (l/min)		Operating pressure differential (bar)						Power coil (W)		Catalog number		Options							
				Min.	Max. (PS)			Brass	Stainless steel			Maintained manual operator	FPM	EPDM	CR						
					Air (*)	Water (*)	Oil (*)														
<b>NO - Normally open</b>																					
Rp 3/8"	16	2.6	43	0	16	16	16	16	16	10	10.5	23	<b>SCE210C433</b>	-	-	V	E	J			
Rp 1/2"	16	3.4	57	0	16	16	16	16	16	10	10.5	23	<b>SCE210C434</b>	-	-	V	E	J			
		2.6	43	0	16	16	16	16	16	10	10.5	23	-	<b>SCE210B430</b>	-	V	E	J			
Rp 3/4"	19	4.7	79	0	16	16	16	16	16	10	10.5	23	<b>SCE210C435</b>	-	-	V	E	J			
	16	2.6	43	0	16	16	16	16	10	10.5	23	-	<b>SCE210B438</b>	-	V	E	J				
Rp 1"	25	11.2	185	0	16	-	16	-	16	-	20	-	<b>SCE210B457</b> <sup>(1)</sup>	-	-	V	E	J			
Rp 1 1/4"	28	12.8	213	0	9	-	9	-	9	-	20	-	<b>SCE210B058</b> <sup>(1)</sup>	-	-	V	E	J			
Rp 1 1/2"	32	19.3	322	0	9	-	9	-	9	-	20	-	<b>SCE210B059</b> <sup>(1)</sup>	-	-	V	E	J			

(\*) Ensure that compatibility of materials in contact with fluids is verified.  
<sup>(1)</sup> Mounting position: piping horizontal, solenoid upright.

**Options**

- Valves can also be supplied with FPM (fluoroelastomer), EPDM (ethylene-propylene) and CR (chloroprene) diaphragms, seals and discs. Use the appropriate optional suffix letter for identification
- 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 for brass bodied valves, suffix MB (Except pipe size Rp 1, 1 1/4 and 1 1/2)
- For protection against corrosion caused by the environment or the fluid, contact us
- 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, unless indicated otherwise in the specifications table.
- Stainless steel valves are standard supplied with mounting brackets
- Pipe connection is E = Rp (ISO 7/1)
- Installation/maintenance instructions are included with each valve

**Spare parts kit and accessories**

Catalog number	Spare parts kits no.		Mounting bracket
	~	=	
SCE210C493/C494	<b>C302272</b>	<b>C326540</b>	<b>038713-000</b>
SCE210D495	<b>C302276</b>	<b>C326541</b>	<b>038713-000</b>
SCE210B454	<b>C302283</b>	<b>C326542</b>	-
SCE210B155	<b>C302283</b>	<b>C133801</b>	-
SCE210B156	<b>C302286</b>	<b>C133802</b>	-
SCE210C433/C434	<b>C326551</b>	<b>C326543</b>	<b>038713-000</b>
SCE210C435	<b>C326552</b>	<b>C326544</b>	<b>038713-000</b>
SCE210B457	<b>C302337</b>	-	-
SCE210B058	<b>C302339</b>	-	-
SCE210B059	<b>C302340</b>	-	-
SCE210C487/C488	<b>C302328</b>	<b>C326548</b>	<b>standard</b>
SCE210B430/B438	<b>C326553</b>	<b>C326550</b>	<b>standard</b>
SCE210D489	<b>C302329</b>	<b>C326549</b>	-

- Not available

**Ordering Examples Valves:**

SC	E	210	C 493	230V / 50 Hz
SC	E	210	C 494	MO 115V / 50 Hz
SC	E	210	C 487	V 24V / DC
SC	E	210	D 489	230V / 50 Hz

prefix — pipe thread — basic number — voltage — suffix

**Ordering Examples Kits:**

C302272 <sup>(2)</sup>	
C302276	V
C302280	E

basic number — suffix

<sup>(2)</sup> Standard prefixes/suffixes are also applicable to kits.

## Dimensions (mm), Weight (kg)

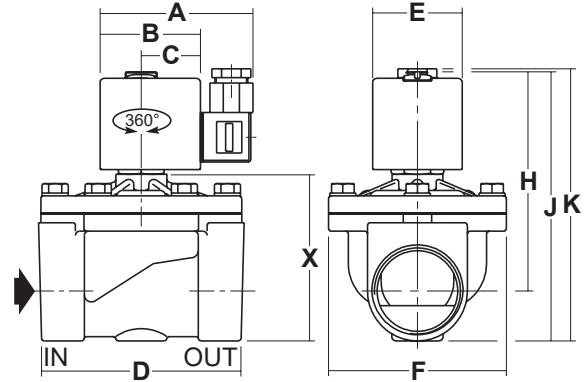
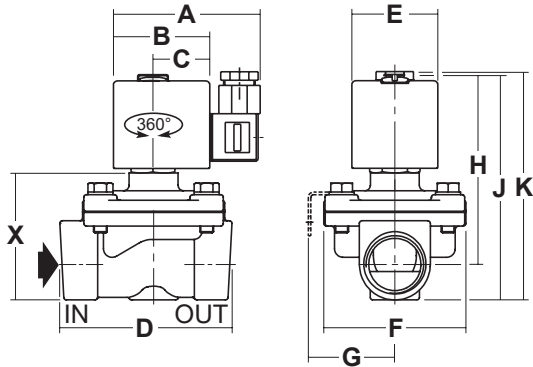


**TYPE 01-02**  
Prefix "SC" Solenoid  
Epoxy moulded  
IEC 335 / ISO 4400  
IP65

Type 01: SCE210C493/C494/D495 (AC)  
SCE210C487/C488 (AC)

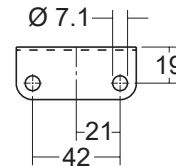
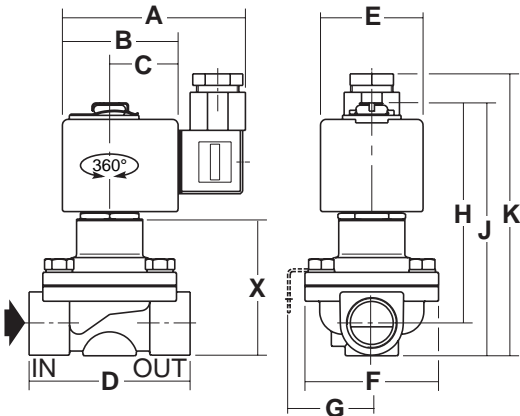
Type 02: SCE210C493/C494/D495/C487/C488 (DC)  
SCE210D489/B454/B155 (AC/DC)

Type 02: SCE210B156 (AC/DC)



Type 01: SCE210C433/C434/C435 (AC)  
SCE210B430/B438 (AC)

Type 02: SCE210B457/B058/B059 (AC/DC)



Mounting brackets for valves: (0.3 kg)  
SCE210C493/C494/D495  
SCE210C487/C488/D489  
SCE210C433/C434/C435

Type	Prefix option	Catalog number	A	B	C	D	E	F	G	H	J	K	X	Weight <sup>(1)</sup>
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
		SCE210C487/C488	86	51	30	71	45	58	41	87	105	119	55	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
02	SC	SCE210B430/B438	86	51	30	71	45	58	41	98	116	127	67	1.0
		SCE210C493/C494	91	56	33	70	50	58	41	93	107	104	46	1.0
		SCE210D495	91	56	33	71	50	58	41	97	115	111	54	1.1
		SCE210C487/C488	91	56	33	71	50	58	41	97	116	112	55	1.1
		SCE210D489	91	56	33	95	50	98	41	112	134	134	75	2.2
		SCE210C433/C434	91	56	33	70	50	58	41	101	116	112	60	1.1
		SCE210C435	91	56	33	71	50	58	41	105	123	119	68	1.2
		SCE210B430/B438	91	56	33	71	50	58	41	105	123	119	67	1.1
		SCE210B454	91	56	33	95	50	83	-	114	134	131	75	2.0
		SCE210B457	91	56	33	95	50	83	-	155	176	160	98	2.1
		SCE210B155	86	56	33	95	50	83	-	112	143	148	86	2.0
		SCE210B156	86	56	33	111	50	99	-	125	153	158	96	2.8
		SCE210B058	86	56	33	95	50	83	-	161	187	187	130	2.0
		SCE210B059	86	56	33	111	50	99	-	167	194	194	137	2.5

<sup>(1)</sup> Incl. coil(s) and connector(s)