

# ASCO™ Solenoid Valves

Pilot Operated, Floating Diaphragm/Piston, 3/8" to 1" 1/2

## Features

- Two way shut-off valves for automatic control of air, inert gas, water, oil and other gases/liquids compatible with the seal materials used
- Heavy duty piston design for severe applications
- 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** 40 - 120 ms

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas, water, oil	-20°C to +90°C	NBR (nitrile) / PTFE

## Materials in contact with fluid

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

	Brass body	Stainless steel body
<b>Body</b>	Brass	AISI 304 SS
<b>Shading coil</b>	Copper	Silver
<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 and core disc</b>	NBR	NBR
<b>Piston</b>	PPS / brass	PPS or brass
<b>Piston disc</b>	NBR or PTFE	NBR
<b>Piston rings</b>	PTFE (carbon filled)	PTFE (carbon filled)

## Electrical characteristics

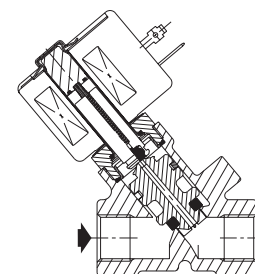
**Coil insulation class** F or H F  
**Connector** Spade plug (cable Ø 6-10 mm) or cable leads, 0,35 m length (EF)  
**Connector specification** ISO 4400 / EN 175301-803, form A  
**Electrical safety** IEC 335  
**Electrical enclosure protection** Moulded IP65 (EN 60529) or NEMA 3, 7, 9 (EF)  
**Standard 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) (C°)	replacement coil		type <sup>(1)</sup>
	inrush ~	holding ~	hot/cold =	=		~	=	
	(VA)	(VA)	(W)			(W)	230 V/50 Hz	
SC	34	15,6	6	-	-20 to +75	400325-117	-	01
	-	-	-	9/11,2	-20 to +75	-	400425-142	02
	78	35	16,7	-	-20 to +50	400425-217	-	02
	110	33,6	15,4	12/16,8	-20 to +75	400525-117	400625-142	03
	240	43	20	-	-20 to +50	400525-217	-	03
EF	-	-	-	21/30,6	-20 to +25	-	074073-005D	04

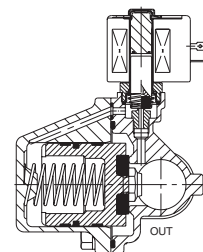
<sup>(1)</sup> Refer to the dimensional drawings on the following page.

## 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 man. operator	FPM	EPDM	CR	PTFE
					air (*)	water (*)	oil (*)	~													
	(mm)	(m <sup>3</sup> /h)	(l/min)		~	=	~	=	~	=											
<b>NC - Normally closed, PPS piston, NBR seals and discs</b>																					
Rp 3/8	9	1,3	21,7	0,35	9	3	-	-	-	-	6	11,2	SCE210C073	-	MO	V	E	J	-		
NPT 3/8				0,07	9	3	9	3	-	-	-	-	-	-	-	SCB210A036	MO	V	E	J	-
Rp 1/2	11	1,9	31,6	0,35	9	3	-	-	-	-	6	11,2	SCE210A015	-	MO	V	E	J	-		
NPT 1/2				0,07	9	3	9	3	-	-	-	-	-	-	-	SCB210A037	MO	V	E	J	-



3/8 to 1



1 1/4 to 1 1/2

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**Specifications**

pipe size	orifice size (mm)	flow coefficient Kv (m³/h) (l/min)		operating pressure differential (bar)						power coil (W)		Catalog number		options					
				min.	max. (PS)			brass	stainless steel					maintained man. operator	FPM	EPDM	CR	PTFE	
					air (*)	water (*)	oil (*)												
<b>NC - Normally closed, brass piston, NBR seals and PTFE disc</b>																			
Rp 3/4	19	5,2	86,7	0	24	14	14	12	14	12	15,4	-	SCE210B026	-	MO	V	E	J	T
											-	30,6	EFE210B026 <sup>(1)</sup>	-	MO	V	E	J	T
Rp 1	25	11,6	193	0,7	20	16	20	14	20	14	16,7	16,8	SCE210B078	-	MO	-	-	-	-
Rp 1 1/4	28	12,8	214	0,7	20	16	20	14	20	14	16,7	16,8	SCE210B080	-	MO	-	-	-	-
Rp 1 1/2	32	19,3	322	0,7	20	16	20	14	20	14	16,7	16,8	SCE210B082	-	MO	-	-	-	-
<b>NC - Normally closed, brass piston, NBR seals and discs</b>																			
Rp 1	25	11,6	193	0	20	-	8	-	8	-	20	-	SCE210B027	-	MO	V	E	J	T

<sup>(1)</sup> Valve to be mounted with solenoid vertical and upright for DC.

**Options**

- Valves can also be supplied with FPM (fluoroelastomer), EPDM (ethylene-propylene), CR (chloroprene) and PTFE 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 <sup>(2)</sup>
- Electrical enclosures according to “NEMA” standards are available
- Compliance with “UL”, “CSA” and other local approvals available on request
- Mounting brackets, suffix MB (Except for: SCE210B078/B080/B082/B027)
- Other pipe connections are available on request
- Connector with visual indication and peak voltage suppression or with cable length of 2 m

<sup>(2)</sup> Please consult the quick selection guide on potentially explosive atmospheres on Emerson.com/asco

**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 identifier is E = Rp (ISO 7/1) or B = NPT (ANSI 1.20.3)
- Installation/maintenance instructions are included with each valve

**Spare parts kit & Accessories**

Catalog number	spare parts kit no.		mounting bracket no.
	~	=	
SCE210C073	C302271	C302371	093200-001
SCB210A036	C302327	C302421	093200-001
SCE210A015	C302275	C302374	100835-001
SCB210A037	C302326	C302422	100835-001
SCE210B026	C302278	-	038713-000
EFE210B026	-	C302377	038713-000
SCE210B078	C302281	C302380	-
SCE210B080	C302281	C302380	-
SCE210B082	C302285	C302384	-
SCE210B027	C302282	-	-

- Not available

**Ordering examples:**

SC	E	210	A015	230V / 50 Hz
SC	E	210	B026	MO 115V / 50 Hz
SC	B	210	A037	V 24V / DC
SC	E	210	B027	230V / 50 Hz

prefix — pipe thread — basic number — voltage — suffix

**Ordering examples kits:**

C302271 <sup>(3)</sup>	
C302374	V
C302278	E

basic number — suffix

<sup>(3)</sup> Standard prefixes/suffixes are also applicable to kits.

## Dimensions (mm), Weight (kg)



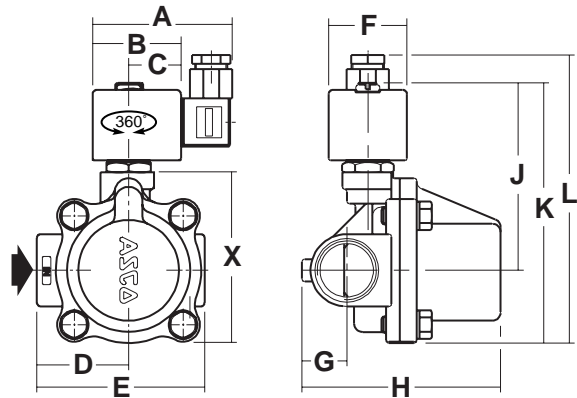
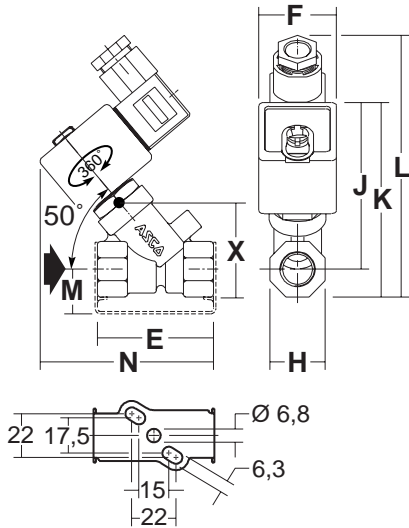
**TYPE 01-02**  
Prefix "SC" Solenoid  
Epoxy moulded  
IEC 335 / ISO 4400  
IP65

Type 01, AC: SCE210C073/A015 - SCB210A036/037  
Type 02, DC: SCE210C073/A015 - SCB210A036/037



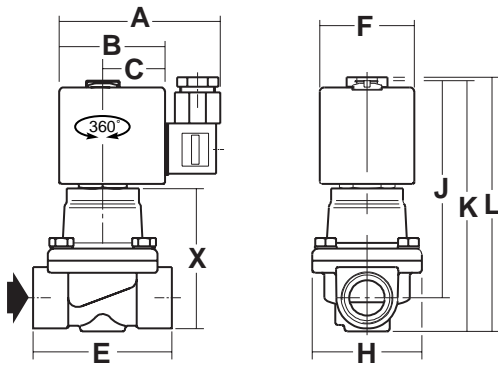
**TYPE 02-03**  
Prefix "SC" Solenoid  
Epoxy moulded  
IEC 335 / ISO 4400  
IP65

Type 02, AC: SCE210B078/B080/B082  
Type 03, DC: SCE210B078/B080/B082



**TYPE 03**  
Prefix "SC" Solenoid  
Epoxy moulded  
IEC 335 / ISO 4400  
IP65

AC: SCE210B026/027



type	prefix option	Catalog number	A	B	C	D	E	F	G	H	J	K	L	M	N	X	weight <sup>(1)</sup>
01	SC	SCE210C073/A036	-	-	-	-	48	39	-	22	74	85	124	22	72	41	0,6
		SCE210A015/A037	-	-	-	-	58	39	-	28	82	95	128	22	89	47	0,6
02	SC	SCE210C073/A036	-	-	-	-	48	45	-	22	80	91	130	22	80	41	0,6
		SCE210A015/A037	-	-	-	-	58	45	-	28	82	95	128	22	93	47	0,6
		SCE210B078	80	50	30	55	95	45	45	108	55	154	149	-	-	95	2,8
		SCE210B080	80	50	30	52	95	45	30	119	108	149	166	-	-	117	3,0
03	SC	SCE210B082	80	50	30	52	111	45	33	148	112	162	179	-	-	108	4,2
		SCE210B078	86	56	33	55	95	50	50	108	55	154	152	-	-	95	2,8
		SCE210B080	86	56	33	52	95	50	30	119	114	156	156	-	-	97	3,0
		SCE210B082	86	56	33	52	111	50	33	148	118	165	165	-	-	110	4,2
		SCE210B026	86	56	33	-	74	50	-	59	117	133	135	-	-	76	1,3
		SCE210B027	86	56	33	-	100	50	-	33	50	83	143	-	-	84	2,5

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

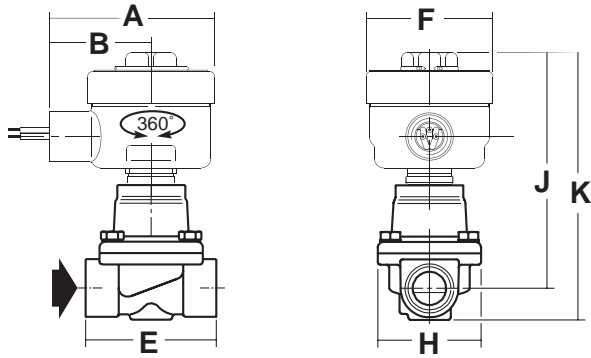
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Dimensions (mm), Weight (kg)



**TYPE 04**  
Prefix "EF" Solenoid  
Epoxy encapsulated  
ICS-6 ANSI  
NEMA type 3, 7, 9

DC: EFE210B026



type	prefix option	Catalog number	A	B	C	D	E	F	G	H	J	K	weight <sup>(1)</sup>
04	EF	EFE210B026	83	51	-	-	74	64	-	59	117	133	1,3

<sup>(1)</sup> Incl. coil

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