

ASCO™ Solenoid Valves

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

Features and Benefits

- Two way shut-off valves for automatic control of air, inert gas, water, oil and other gases/liquids compatible with the seal materials used
- Valves require a minimum ΔP of 0.35 bar
- 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 ² /s)
Response time	15 - 60 ms (3/8" to 3/4"); 40 - 120 ms (1" to 2")

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

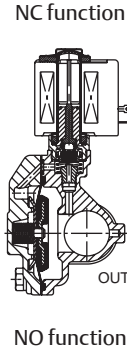
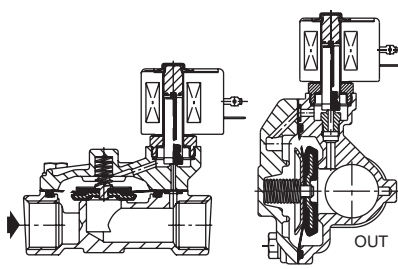
Materials of components in contact with fluid

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

Body	Brass / 316L Stainless steel
Shading coil	Copper / Silver
Core tube	Stainless steel
Core and plugnut	Stainless steel
Springs	Stainless steel
Seat	Brass / 316L Stainless steel
Seal, diaphragm & disc	NBR
Piston	Brass / st. steel
Piston disc	NBR
Disc holder (NO function)	PA

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 (=) : 24V - 48V
(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 ~ (W)		Hot/cold = (W)		~ 230 V/50 Hz	= 24 V DC	
		(VA)	(W)					
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
	30	16	8.1	-	-25 to +55	238213-059	-	04
	-	-	-	8.5/ 11.6	-25 to +55	-	238913-006	05

⁽¹⁾ 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
				Air (*)	Water (*)	Oil (*)	~	=	~		=	~	=					
NC - Normally closed																		
3/8"	16	2.6	43	0.35	16	10	16	10	16	10	6	11.2	SCE210D401 ⁽²⁾	-	MO	V	E	J
					20	-	20	-	20	-	16.7	-	SCE210C006	-	MO	V	E	J
1/2"	16	3.4	57	0.35	16	10	16	10	16	10	6	11.2	SCE210D402 ⁽²⁾	-	MO	V	E	J
					20	-	20	-	20	-	16.7	-	SCE210C007	-	MO	V	E	J
3/4"	19	4.3	72	0.35	16	10	16	10	16	10	6	11.2	SCE210D409 ⁽²⁾	-	MO	V	E	J
		5.6	93	0.35	17	9	10	9	10	9	6	11.2	SCE210D003	-	MO	V	E	J
1"	25	11.1	185	0.35	16	16	16	16	16	16	6	16.8	SCE210D404 ⁽²⁾	-	MO	V	E	J
		28	12.8	213	0.35	9	9	9	9	9	9	6	11.2	SCE210D008	-	MO	V	E
1 1/4"	32	19.3	322	0.35	9	9	9	9	9	9	8.1	11.6	-	SCE210G125	MO	V	E	J
		6	11.2	SCE210D022	-	MO	V	E	J									
1 1/2"	32	19.3	322	0.35	9	9	9	9	9	9	8.1	11.6	-	SCE210G127	MO	V	E	J
											6	11.2	SCE210-100 ⁽³⁾	-	MO	V	E	J
2"	44	37	617	0.35	9	3	9	3	6	3	8.1	11.6	-	SCE210G129 ⁽³⁾	MO	V	E	J
											6	11.2	-	MO	V	E	J	

⁽²⁾ Max. operator ambient temperature range (TS) 60°C.
⁽³⁾ Floating piston construction.

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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 (*)											
Rp	(mm)	(m ³ /h)	(l/min)		~	=	~	=	~	=	~	=						
NO - Normally open																		
3/4"	19	5.7	95	0.35	17	17	14	14	14	14	15.4	16.8	SCE210C013	-	MO	V	E	J
1"	25	11.1	185	0.35	16	16	16	16	16	16	15.4	16.8	SCE210D414 ⁽¹⁾	-	MO	V	E	J
1 1/4"	28	12.8	213	0.35	9	9	9	9	9	9	15.4	16.8	SCE210D018	-	MO	V	E	J
	32	19.3	322										-	SCE210A131	MO	V	E	J
1 1/2"	32	19.3	322	0.35	9	9	9	9	9	9	15.4	16.8	SCE210D032	SCE210A132	-	V	E	J
	44	37	617										0.35	9	9	9	9	9

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

⁽¹⁾ Max. operator ambient temperature range (TS) 60°C.

⁽²⁾ Floating piston construction.

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 ⁽³⁾
- Electrical enclosures according to "NEMA" standards are available
- Compliance with "UL", "CSA" and other local approvals available on request
- For protection against corrosion caused by the environment or the fluid, contact us
- Mounting brackets (3/8" to 3/4" solenoid valves)
- Other pipe connections are available on request
- Connector with visual indication and peak voltage suppression or with cable length of 2 m

⁽³⁾ 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
- Pipe connection identifier 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
	~	=	
SCE210G125/G127	C325338	C325365	-
SCE210G129/A131	C325366	C325367	-
SCE210A132	C325368	C325368	-
SCE210A133	C325369	C325369	-
SCE210D401/D402	C302273	C302373	038713-000
SCE210D409	C302277	C302376	038713-000
SCE210C006/C007	C302274	-	038713-000
SCE210D003	C302279	C302378	038914
SCE210D404	C302280	C326545	-
SCE210D008	C302280	C302379	-
SCE210D022	C302284	C302383	-
SCE210C013	C302336	C302451	038914
SCE210D414	C326546	C326547	-
SCE210D018	C302338	C302452	-
SCE210D032	C302341	C302453	-
SCE210-100	C304355	C304359	-
SCE210-103	C304361	C304361	-

- Not available

Ordering Examples Valves:

SC	E	210	D	401	230V / 50 Hz
SC	E	210	C	007	MO 115V / 50 Hz
SC	E	210	D	022	V 24V / DC
SC	E	210	-	103	230V / 50 Hz

prefix — pipe thread — basic number — voltage — suffix

Ordering Examples Kits:

C302277 ⁽⁴⁾	
C302373	V
C302451	E

basic number — suffix

⁽⁴⁾ Standard prefixes/suffixes are also applicable to kits.

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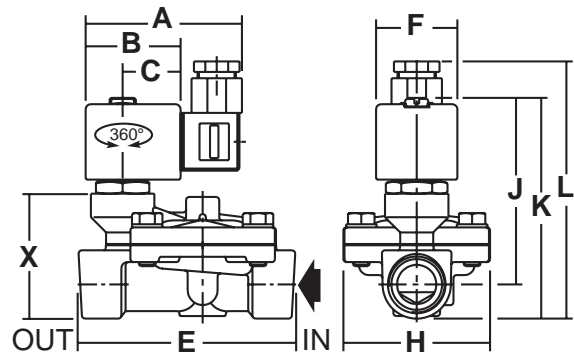
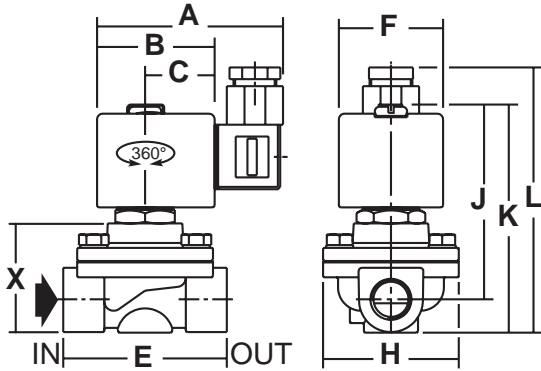
Dimensions (mm), Weight (kg)



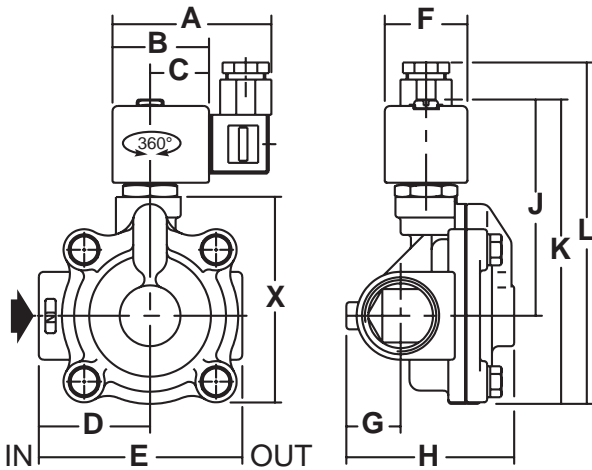
TYPE 01-02
Prefix "SC" Solenoid
Epoxy moulded
IEC 335 / ISO 4400
IP65

Type 01 (AC): SCE210D401/D402/D409
Type 02 (DC): SCE210D401/D402/D409
(AC): SCE210C006/C007

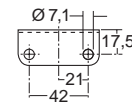
Type 01 (AC): SCE210D403
Type 02 (DC): SCE210D403



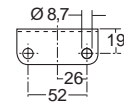
Type 01 (AC): SCE210D404/D008
Type 02 (DC): SCE210D404/D008



Mounting brackets for valves:



SCE210D401
SCE210D402
SCE210D409
SCE210C006
SCE210C007



SCE210D403

Type	Prefix option	Catalog number	A	B	C	D	E	F	G	H	J	K	L	M	X	Weight ⁽¹⁾
01	SC	SCE210D401/D402	80	45	28	-	70	39	-	58	72	86	101	-	46	0.8
		SCE210D409	80	45	28	-	71	39	-	58	75	93	109	-	47	0.8
		SCE210D003	75	45	27	-	100	39	-	70	90	105	122	-	60	1.3
		SCE210D404	80	45	28	52	95	39	25	79	101	143	158	-	98	1.8
		SCE210D008	75	45	27	58	115	39	33	99	105	155	172	-	109	2.0
02	SC	SCE210D401/D402	86	50	30	-	70	45	-	58	83	97	111	-	46	0.9
		SCE210D409	86	51	30	-	71	45	-	58	87	105	119	-	57	0.9
		SCE210D003	80	50	30	-	100	45	-	70	94	109	126	-	60	1.4
		SCE210C006/C007	80	50	30	-	70	45	-	58	85	99	116	-	50	0.9
		SCE210D404	91	56	33	25	95	50	25	79	116	158	154	-	98	2.0
SCE210D008	80	50	30	58	115	45	33	99	110	159	175	-	98	2.0		

⁽¹⁾ Incl. coil(s) and connector(s).

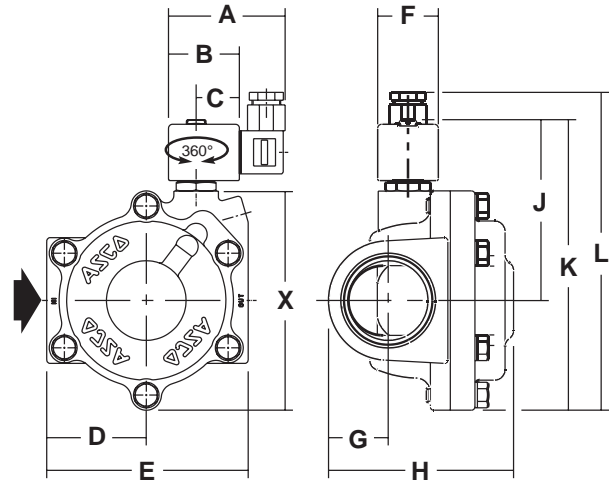
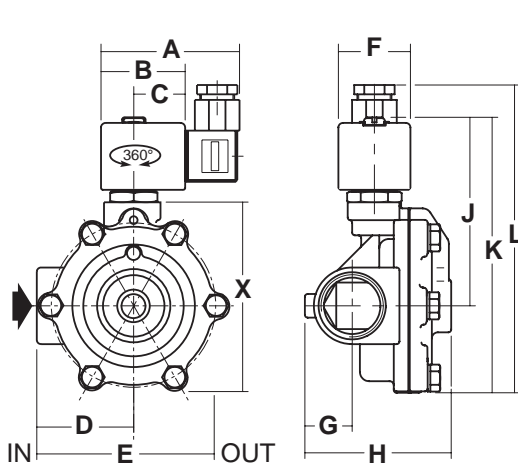
Dimensions (mm), Weight (kg)



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

Type 01 (AC): SCE210D022
Type 02 (DC): SCE210D022

Type 01, AC: SCE210-100
Type 02, DC: SCE210-100



Type	Prefix option	Catalog number	A	B	C	D	E	F	G	H	J	K	L	M	X	Weight ⁽¹⁾
01	SC	SCE210D022	75	45	27	58	115	39	33	99	105	155	172	-	109	2.5
		SCE210-100	75	45	27	64	129	39	39	117	116	186	203	32	140	5.5
02	SC	SCE210D022	80	50	30	58	115	45	33	99	110	159	175	-	109	2.6
		SCE210-100	80	50	30	64	129	45	39	117	120	190	206	32	140	5.5

⁽¹⁾ Incl. coil(s) and connector(s).

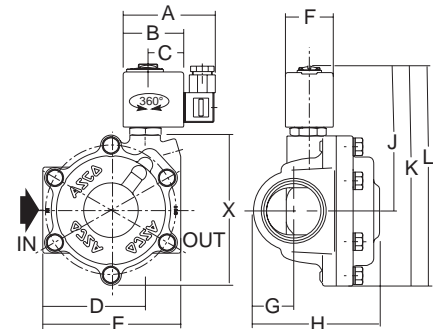
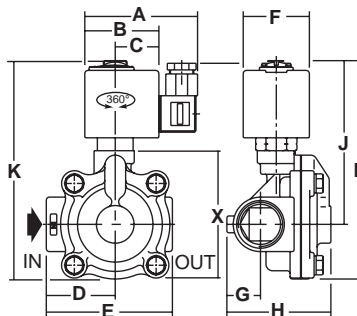
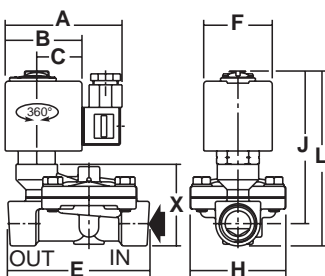


TYPE 03
Prefix "SC" Solenoid
Epoxy moulded
IEC 335 / ISO 4400
IP65

SCE210C013

SCE210A131/A132/D414/D018/D032

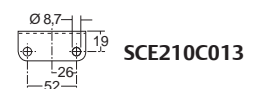
SCE210-103 / SCE210A133



Type	Prefix option	Catalog number	A	B	C	D	E	F	G	H	J	K	L	M	X	Weight ⁽²⁾
03	SC	SCE210C013	91	56	33	-	96	50	-	70	112	-	120	-	81	1.6
		SCE210D414	91	56	33	52	95	50	25	79	124	161	165	-	97	2.1
		SCE210D018	91	56	33	52	95	50	30	85	124	161	165	-	108	2.1
		SCE210D032	91	56	33	56	111	50	33	95	128	-	178	-	121	2.5
		SCE210A131/A132	91	56	33	58	115	50	33	99	128	177	174	-	109	2.7
		SCE210-103	91	56	33	64	129	50	39	117	120	208	205	32	140	4.6
		SCE210A133	91	56	33	64	129	50	39	117	138	208	205	32	140	4.3

⁽²⁾ Incl. coil(s) and connector(s).

Mounting brackets for valves:



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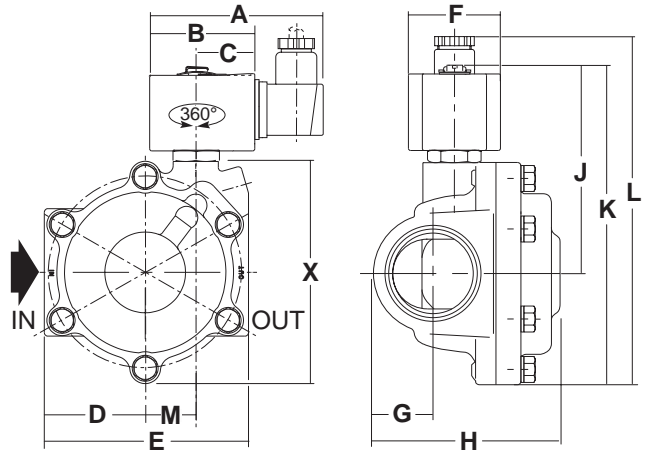
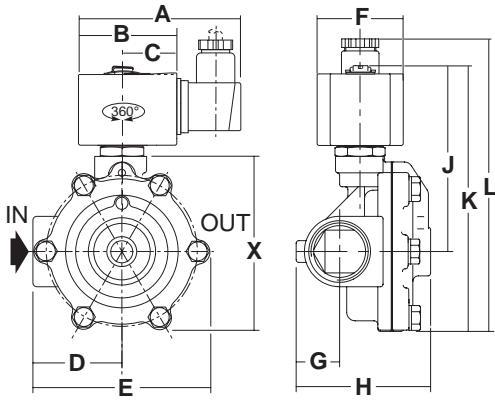
Dimensions (mm), Weight (kg)



TYPE 04-05
Prefix "SC" Solenoid
Epoxy moulded
IEC 335 / ISO 4400
IP65

Type 04 (AC): SCE210G125/127
Type 05 (DC): SCE210G125/127

Type 04 (AC): SCE210G129
Type 05 (DC): SCE210G129



Type	Prefix option	Catalog number	A	B	C	D	E	F	G	H	J	K	L	M	X	Weight ⁽¹⁾
04	SC	SCE210G125 / G127	80	45	28	58	115	39	33	99	105	155	172	-	109	2.4
		SCE210G129	80	45	28	64	129	39	39	117	116	186	203	32	140	4.0
05	SC	SCE210G125 / G127	85	50	30	58	115	45	33	99	110	159	175	-	109	2.6
		SCE210G129	85	50	30	64	129	45	39	117	120	190	206	32	140	4.2

⁽¹⁾ Incl. coil(s) and connector(s)