

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 (mm²/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
Shading coil	Copper / Silver
Core tube	Stainless steel
Core and plugnut	Stainless steel
Springs	Stainless steel
Seat	Brass
Seal, diaphragm & disc	NBR
Piston	Brass
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 ~	Holding ~	Hot/cold =		~	=	
	(VA)	(VA) (W)	(W)		230 V/50 Hz	24 V DC	
SC	34	15.6	6	-20 to +75	400325-117	-	01
	-	-	-	9/11.2	-	400425-142	02
	78	35	16.7	-20 to +50	400425-217	-	02
	110	33.6	15.4	12/16.8	400525-117	400625-142	03

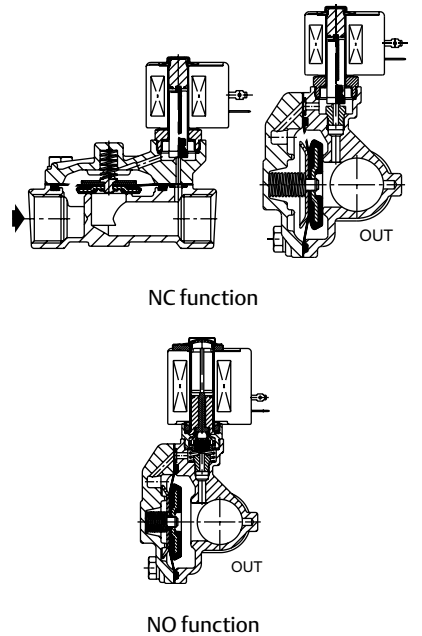
⁽¹⁾ For dimensions, see drawing(s) for each construction type on the following page(s).

Specifications

Pipe size	Orifice size	Flow coefficient Kv		Min.	Operating pressure differential (bar)						Power coil (W)		Catalog number	Options			
					Max. (PS)									Maintained manual operator	FPM	EPDM	CR
					Air (*)		Water (*)		Oil (*)								
Rp	(mm)	(m ³ /h)	(l/min)	~	=	~	=	~	=	~	=	~	=	~	=		
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
1 1/4"	28	12.8	213	0.35	9	9	9	9	9	9	6	11.2	SCE210D008	MO	V	E	J
1 1/2"	32	19.3	322	0.35	9	9	9	9	9	9	6	11.2	SCE210D022	MO	V	E	J
2"	44	37	617	0.35	9	3	9	3	6	3	6	11.2	SCE210-100 ⁽³⁾	MO	V	E	J

⁽²⁾ Max. operator ambient temperature range (TS) 60°C, DC only

⁽³⁾ Floating piston construction



Specifications

Pipe size	Orifice size	Flow coefficient Kv		Operating pressure differential (bar)						Power coil (W)		Catalog number		Options		
				Min.	Max. (PS)			Brass	FPM					EPDM	CR	
					Air (*)	Water (*)	Oil (*)									
Rp	(mm)	(m ³ /h)	(l/min)		~	=	~	=	~	=	~	=	Brass			
NO - Normally open																
3/4"	19	5.7	95	0.35	17	17	14	14	14	14	15.4	16.8	SCE210C013	V	E	J
1"	25	11.1	185	0.35	16	16	16	16	16	16	15.4	16.8	SCE210D414 ⁽¹⁾	V	E	J
1 1/4"	28	12.8	213	0.35	9	9	9	9	9	9	15.4	16.8	SCE210D018	V	E	J
1 1/2"	32	19.3	322	0.35	9	9	9	9	9	9	15.4	16.8	SCE210D032	V	E	J
2"	44	37	617	0.35	9	9	9	9	9	9	15.4	16.8	SCE210-103 ⁽²⁾	V	E	J

(*) Ensure that compatibility of materials in contact with fluids is verified, DC only should be left out at Floating piston construction

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

⁽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, pipe identifier 8 = NPT
- 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
	~	=	
SCE210D401/D402	C302273	C302373	038713
SCE210D409	C302277	C302376	038713
SCE210C006/C007	C302274	-	038713
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.

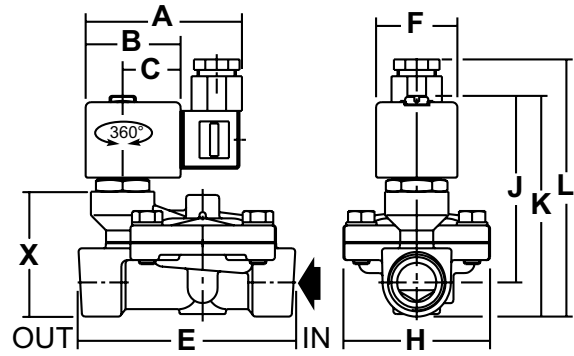
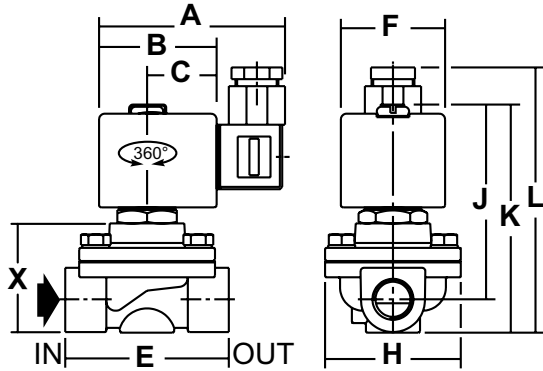
00042GB-2024/R02 Availability, design and specifications are subject to change without notice. All rights reserved.

Dimensions (mm), Weight (kg)

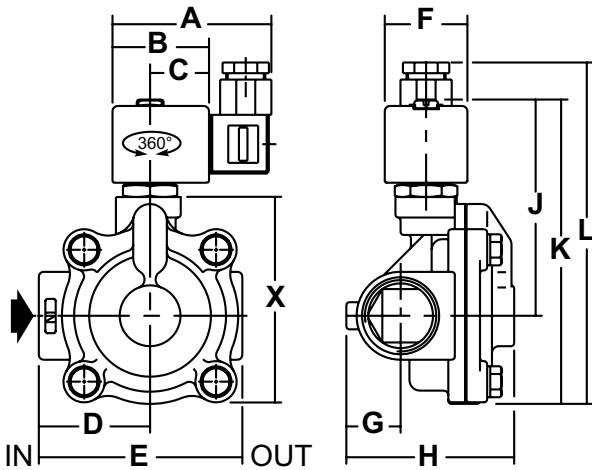


TYPE 01-02
Prefix "SC" Solenoid
Epoxy moulded
IEC 335 / ISO 4400
IP65

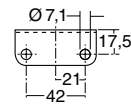
Type 01 (AC): SCE210D401/D402/D409
Type 02 (DC): SCE210D401/D402/D409
(AC): SCE210C006/C007



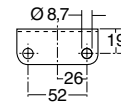
Type 01 (AC): SCE210D404/D008
Type 02 (DC): SCE210D404/D008



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	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).

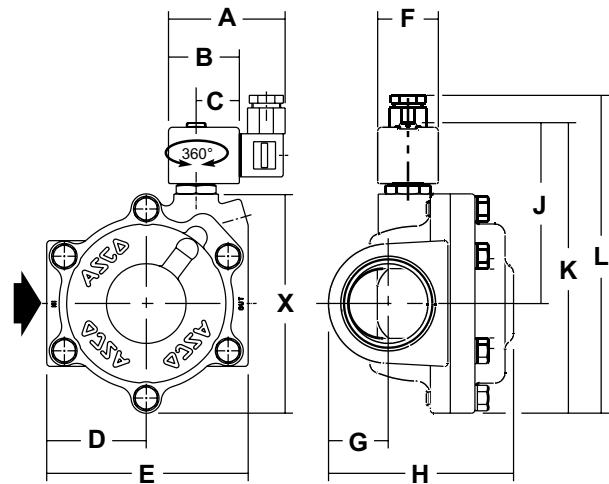
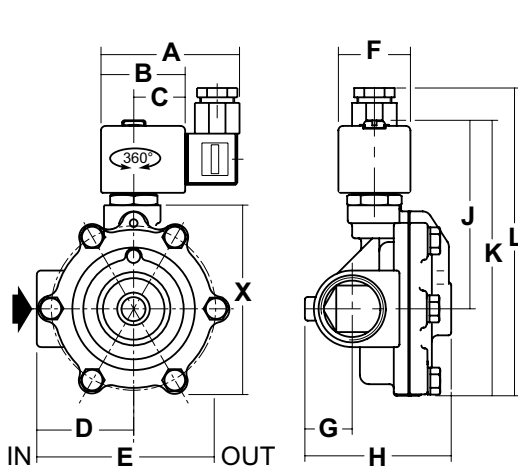
Dimensions (mm), Weight (kg)



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	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	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	140	5.5

⁽¹⁾ Incl. coil(s) and connector(s).

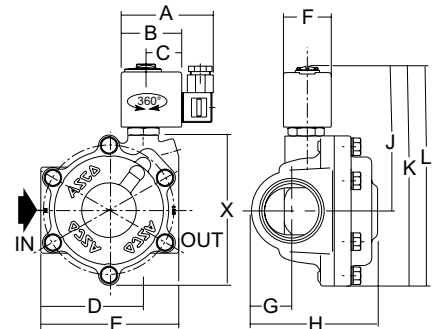
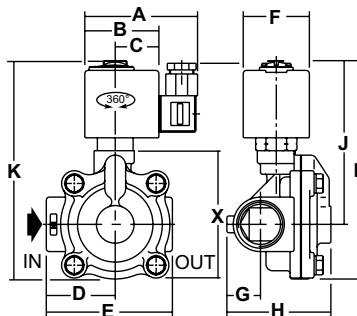
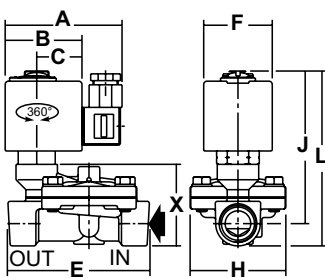


TYPE 03
Prefix "SC" Solenoid
Epoxy moulded
IEC 335 / ISO 4400
IP65

SCE210C013

SCE210D414/D018/D032

SCE210-103



Type	Prefix option	Catalog number	A	B	C	D	E	F	G	H	J	K	L	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
		SCE210-103	91	56	33	64	129	50	39	117	120	208	205	140	4.6

⁽²⁾ Incl. coil(s) and connector(s).

Mounting brackets for valves:

