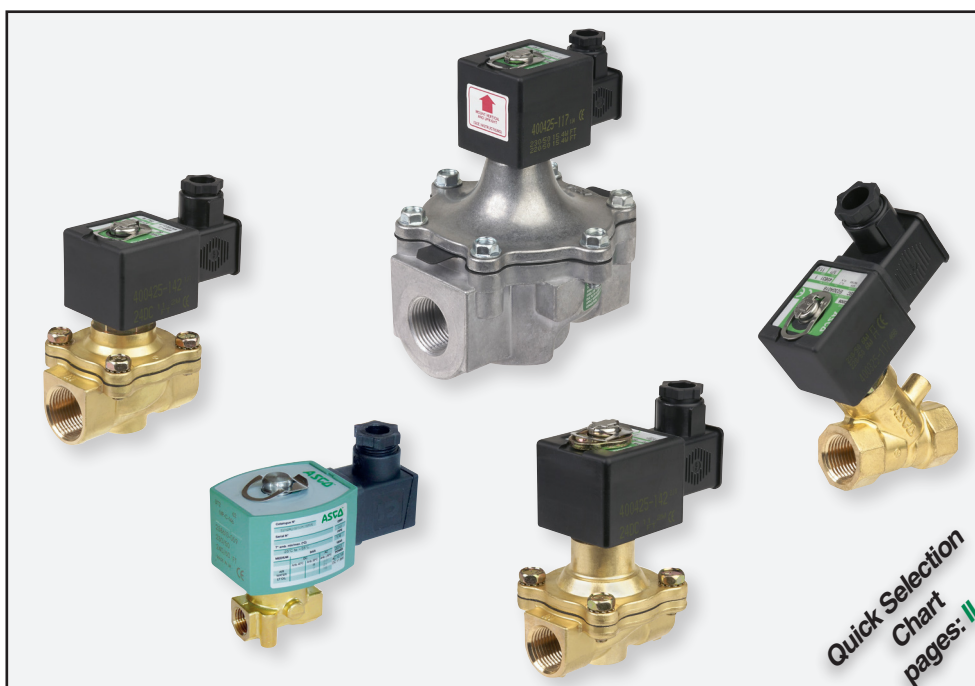


# SPECIAL FLUIDS VACUUM SERVICE

## Product Index



Fonction	Abs. pressure		Temperature		Pipe connections	Series	page
	min. (mbar)	min. (Torr)	min. (°C)	max. (°C)			
<b>SOLENOID VALVES, BRASS BODY</b>							
NC	1,33.10 <sup>-6</sup>	10 <sup>-6</sup>	-25	+80	1/4	<a href="#">262</a>	<b>1</b>
	1,33.10 <sup>-6</sup>	10 <sup>-6</sup>	-20	+90	3/8 - 1/2	<a href="#">030</a>	<b>5</b>
NC-NO	1,33.10 <sup>-6</sup>	10 <sup>-6</sup>	-20	+90	3/8 .. 3/4	<a href="#">210</a>	<b>7</b>
2/2 NC-NO	10 <sup>-4</sup>	7,5.10 <sup>-5</sup>	-20	+100	Coaxial	3/8 .. 1	<a href="#">287</a> <sup>(1)</sup>
3/2 NC-NO	10 <sup>-4</sup>	7,5.10 <sup>-5</sup>	-20	+100	Coaxial	3/8 .. 1	<a href="#">387</a> <sup>(3)</sup>
<b>SOLENOID VALVES, ALUMINIUM BODY</b>							
NC	1,33.10 <sup>-6</sup>	10 <sup>-6</sup>	-20	+90	1 .. 2	<a href="#">215</a>	<b>9</b>
<b>SOLENOID VALVES, STAINLESS STEEL BODY</b>							
2/2 NC-NO	10 <sup>-4</sup>	7,5.10 <sup>-5</sup>	-20	+100	Coaxial	3/8 .. 1	<a href="#">287</a> <sup>(1)</sup>
<b>VALVES, BRASS BODY</b>							
2/2 NC-NO	10 <sup>-4</sup>	7,5.10 <sup>-5</sup>	-20	+100	Coaxial	3/8 .. 1	<a href="#">287</a> <sup>(2)</sup>
3/2 NC-NO	10 <sup>-4</sup>	7,5.10 <sup>-5</sup>	-20	+100	Coaxial	3/8 .. 1	<a href="#">387</a> <sup>(4)</sup>
<b>VALVES, BRONZE BODY</b>							
2/2 NC-NO	1,33.10 <sup>-3</sup>	10 <sup>-3</sup>	-10	+184	Threaded ports <sup>(1)</sup>	3/8 .. 2 1/2	<a href="#">E290</a> <sup>(2)</sup>
					Flanged <sup>(1)</sup>	DN 25..50	<a href="#">T290</a> <sup>(2)</sup>
3/2 NC-NO	1,33.10 <sup>-3</sup>	10 <sup>-3</sup>	-10	+184	Threaded ports <sup>(1)</sup>	1/2 .. 2	<a href="#">E390</a> <sup>(4)</sup>
<b>VALVES, STAINLESS STEEL BODY</b>							
2/2 NC-NO	10 <sup>-4</sup>	7,5.10 <sup>-5</sup>	-20	+100	Coaxial	3/8 .. 1	<a href="#">287</a> <sup>(2)</sup>
					Threaded ports <sup>(1)</sup>	1/2 .. 2 1/2	<a href="#">E290</a> <sup>(2)</sup>
					External thread <sup>(1)</sup>	1/2..1	<a href="#">U290</a> <sup>(2)</sup>
					Ext. thread, foods connections DIN 11851 <sup>(1)</sup>	RD 28x1/8 .. 44x1/6	<a href="#">Y290</a> <sup>(2)</sup>
	1,33.10 <sup>-3</sup>	10 <sup>-3</sup>	-10	+184	Clamp / Butt welding <sup>(1)</sup>	DN 10..65	<a href="#">S290</a> <sup>(2)</sup>
					Threaded ports (PN40)	1/2 .. 2	<a href="#">E298</a> <sup>(2)</sup>
					Flanged (DIN and ANSI Class 300)	DN 15..50	<a href="#">T298</a> <sup>(2)</sup>
					Socket welding ends	DN 15..50	<a href="#">S298</a> <sup>(2)</sup>
3/2 U	10 <sup>-2</sup>	10 <sup>-2</sup>	-25	+250	Threaded ports (PN40)	1/2 .. 2	<a href="#">E398</a> <sup>(4)</sup>
					Flanged (DIN and ANSI Class 300)	DN 15..50	<a href="#">T398</a> <sup>(4)</sup>
	10 <sup>-2</sup>	10 <sup>-2</sup>	-25	+250	Socket welding ends	DN 15..50	<a href="#">S398</a> <sup>(4)</sup>

<sup>(1)</sup> With FPM disc, see: [Pressure Operated Valves \(2/2\)](#), [www.asco.com](http://www.asco.com).

Solenoid Valves (2/2) <sup>(1)</sup>  
 Pressure Operated Valves (2/2) <sup>(2)</sup>  
 Solenoid Valves / Pneumatic Valves (3/2) <sup>(3)</sup>  
 Pressure Operated Valves (3/2) <sup>(4)</sup>

(Potentially explosive atmospheres, see page: II)

All leaflets are available on: [www.asco.com](http://www.asco.com)

00120GB-2018/R01  
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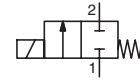
青岛秉诚自动化设备有限公司  
 地址：中国·青岛市重庆南路99号海尔云街甲3号楼7F

服务热线：4006-918-365  
 网址：http://www.asco.store

Vacuum Service - I  
 传真：(86-532)585-10-365  
 Email：sales@bechinas.com

pipe connections ☒ - internal thread				body material		orifice size (mm)	minimum absolute vacuum pressure (mbar)						pipe connections (°C)		power coil (W)		series	page									
M5	1/8	1/4	3/8	1/2	3/4		1	1 1/4	1 1/2	2	2 1/2	3	brass	aluminium	vacuum ≤ 25 Torr	AC (⌋) vacuum ≤ 10 <sup>-3</sup> Torr			DC (⌋) vacuum ≤ 10 <sup>-6</sup> Torr	vacuum ≤ 25 Torr	vacuum ≤ 10 <sup>-3</sup> Torr	vacuum ≤ 10 <sup>-6</sup> Torr	min.	max.	AC (⌋)	DC (⌋)	
<b>NORMALLY CLOSED (NC)</b>																											
												☒			7,1	33,3	-	1,33 10 <sup>-6</sup>	33,3	-	1,33 10 <sup>-6</sup>	-25	+80	8,1	10,6	262	1
												☒			9	33,3	1,33 10 <sup>-3</sup>	1,33 10 <sup>-6</sup>	-	-	-	-20	+90	10,5	-	030	5
												☒			11	33,3	1,33 10 <sup>-3</sup>	1,33 10 <sup>-6</sup>	-	-	-	-20	+90	15,4	-	030	5
												☒			19	33,3	1,33 10 <sup>-3</sup>	1,33 10 <sup>-6</sup>	-	-	-	-20	+85/90	10,5	-	210	7
												☒			41	33,3	1,33 10 <sup>-3</sup>	1,33 10 <sup>-6</sup>	-	-	-	-20	+85/90	15,4	-	215	9
												☒			53	33,3	1,33 10 <sup>-3</sup>	1,33 10 <sup>-6</sup>	-	-	-	-20	+85/90	15,4	-	215	9
<b>NORMALLY OPEN (NO)</b>																											
												☒			16	33,3	1,33 10 <sup>-3</sup>	1,33 10 <sup>-6</sup>	-	-	-	-20	+85/90	10,5	-	210	7
												☒			19	33,3	1,33 10 <sup>-3</sup>	1,33 10 <sup>-6</sup>	-	-	-	-20	+85/90	10,5	-	210	7
												☒			41	33,3	1,33 10 <sup>-3</sup>	1,33 10 <sup>-6</sup>	-	-	-	-20	+85/90	15,4	-	215	9
												☒			53	33,3	1,33 10 <sup>-3</sup>	1,33 10 <sup>-6</sup>	-	-	-	-20	+85/90	15,4	-	215	9

page	series	power coil (W)	operators (See Explosionproof Solenoids section)	group II																								
				dusts					gas / dusts																			
				zone 22					zones 1 - 21					zones 0 - 20														
				3 D Ex tc					2 G Ex db 2 D Ex tb					2 G Ex eb mb 2 D Ex tb					2 G Ex mb 2 D Ex mb									
				IIIC T115°C Dc IP65X																								
				SG (M6-II)																								
									NF (MXX) NF (M12) WSNF (MXX) WSNF (M12)					EM (M6) EM (MXX) EM (M12) WSEM (M6) WSEM (MXX) WSEM (M12)					PV (EM5) PV (EMXX)									
1	262	8,1 10,6																										
5	030	10,5 15,4																										
7	210	10,5																										
9	215	15,4																										



## FEATURES

- Special materials and handling procedures are used in the high vacuum valves to avoid molecular contamination
- The high vacuum valves are mass spectrometer tested
- Valves do not require a minimum operating pressure and are suitable for low, high vacuum
- Valve operation is not affected by mounting position
- Compliance with UL and CSA standards
- 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** 5 - 25 ms

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas	-25°C to +80°C	NBR (nitrile)
		FPM (fluoroelastomer)



## GENERAL

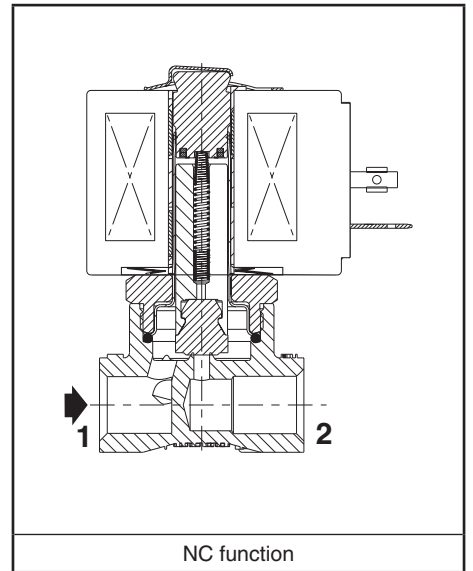
### MATERIALS IN CONTACT WITH FLUID

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

<b>Body</b>	Brass
<b>Shading coil</b>	Copper
<b>Core tube</b>	Stainless steel, AISI 305
<b>Core and pluggnut</b>	Stainless steel, AISI 430F
<b>Springs</b>	Stainless steel, AISI 302
<b>Seal</b>	NBR or FPM
<b>Disc</b>	NBR or FPM

## ELECTRICAL CHARACTERISTICS

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



operator ambient temperature range (TS) (°C)	power ratings			replacement coil <sup>(1)</sup>	
	inrush ~ (VA)	holding ~ (VA)	hot/cold = (W)	~	=
-25 to +55	30	16	8,1	7,7/ 10,6	238213-059 238513-006

<sup>(1)</sup> All 238 basic numbers are UL & CSA approved and marked with the UR (recognised component) & CSA logos.

## OPTIONS

<b>Seals and disc (*) <sup>(2)</sup></b> (fluid temperature range)	FPM (fluoroelastomer): -15°C to +100°C (coil class F) -15°C to +120°C (coil class H)
Connector with visual indication and peak voltage suppression or with cable length of 2 m ( <a href="http://www.asco.com">www.asco.com</a> )	
Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 2014/34/EU (See page 2)	

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

<sup>(2)</sup> The minimum ambient temperature of the solenoid valve is determined by the limitations of minimum temperature indicated.

**SPECIFICATIONS**

										15-DIGIT PRODUCT CODE					
pipe size	orifice size	flow coefficient Kv	minimum absolute vacuum pressure				power coil (W)	thread type	dimensions / type (1)	brass					
			(PS)							voltage code					
			max. (PS)							24 V/50 Hz	48 V/50 Hz	115 V/50 Hz	230 V/50 Hz	24 V/DC	48 V/DC
	(mm)	(m <sup>3</sup> /h)/(l/min)	min.	air (*)	mbar (Torr)	~	=								
WITHOUT MANUAL OPERATOR															
NC - Normally closed, low vacuum range to 25 Torr, NBR seals															
1/4	7,1	0,76	12,7	0	33,3 (25)	8,1	10,6	G*	01	E262K090S1N00					
NC - Normally closed, high vacuum range to 10 <sup>-6</sup> Torr, FPM seals															
1/4	7,1	0,76	12,7	0	1,33.10 <sup>-6</sup> (10 <sup>-6</sup> )	8,1	10,6	G*	01	E262K090S1VA0					

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

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

[Configurator - CAD Files](#)

**15-DIGIT PRODUCT CODE**

**E 262 K 090 S1 VA0 H1**

**Thread connection**

**E** = ISO 228/1 & ISO 7/1 (combination thread, G\*)  
**8** = NPT (SAE 71051) [contact us]

**Product series**  
**262**

**Revision letter**  
**K** = Initial release

**Valves version**
**Voltage - class**

**FL** = 24 V / 50 Hz - class F  
**FR** = 48 V / 50 Hz - class F  
**FT** = 115 V / 50 Hz - class F  
**F8** = 230 V / 50 Hz - class F  
**H1** = 24 V DC - class H  
**H9** = 48 V DC - class H

**Options**

**Without manual operator**  
**Low vacuum:**  
**N00** = NBR disc and seals

**High vacuum:**  
**VA0** = FPM disc and seals

**Electrical interface & explosion proof options**

- S1** = With spade plug connector  
**FN** = Aluminium enclosure, 1/2 NPT conduit, IECEx/ATEX  
 II 2G/D Ex d IIC T6..T4 Gb / Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [NF](#) prefix)<sup>(2)</sup>  
**FT** = Aluminium enclosure, 20 mm conduit, IECEx/ATEX  
 II 2G/D Ex d IIC T6..T4 Gb / Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [NFET](#) prefix)<sup>(2)</sup>  
**FS** = AISI 316L enclosure, 1/2 NPT conduit, IECEx/ATEX  
 II 2G/D Ex d IIC T6..T4 Gb / Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [WSNF](#) prefix)<sup>(2)</sup>  
**FU** = AISI 316L enclosure, 20 mm conduit, IECEx/ATEX  
 II 2G/D Ex d IIC T6..T4 Gb / Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [WSNFET](#) prefix)<sup>(2)</sup>  
**MV** = Steel enclosure, M20 cable gland, IECEx/ATEX  
 II 2G Ex e mb IIC Gb T3, II2D Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [EM](#) prefix)<sup>(2)</sup>  
**MT** = Steel enclosure, 20 mm conduit, IECEx/ATEX  
 II 2G Ex e mb IIC Gb T3, II2D Ex tb IIIC Db, zone 1-21 (equivalent to [EMET](#) prefix)<sup>(2)</sup>  
**MN** = Steel enclosure, 1/2 NPT conduit, IECEx/ATEX  
 II 2G Ex e mb IIC Gb T3, II2D Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [EMT](#) prefix)<sup>(2)</sup>  
**MW** = AISI 316L enclosure, M20 cable gland, IECEx/ATEX  
 II 2G Ex e mb IIC Gb T3, II2D Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [WSEM](#) prefix)<sup>(2)</sup>  
**MU** = AISI 316L enclosure, 20 mm conduit, IECEx/ATEX  
 II 2G Ex e mb IIC Gb T3, II2D Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [WSEMET](#) prefix)<sup>(2)</sup>  
**MS** = AISI 316L enclosure, 1/2 NPT conduit, IECEx/ATEX  
 II 2G Ex e mb IIC Gb T3, II2D Ex tb IIIC Db IP66/IP67, zone 1-21 (equivalent to [WSEMT](#) prefix)<sup>(2)</sup>  
**A7** = Moulded enclosure, epoxy encapsulated, integrated cable, IECEx/ATEX  
 II2G Ex mb IIC Gb T3(~/)T4(~/), II2D Ex mb IIIC Db IP67, zone 1-21 (equivalent to [PV](#) prefix)<sup>(2)</sup>  
**SG** = Moulded coil with connector, epoxy encapsulated, ATEX  
 II 3 D Ex tc IIIC T115°C Dc IP65X, zone 22 (equivalent to [SG](#) prefix)<sup>(2)</sup>

<sup>(2)</sup> Search prefix in [asco.com](http://asco.com) to get detailed technical information.

Please note that the valve pressure ratings with some of the ATEX enclosures will be reduced.

To obtain the correct pressure rating please check the landing pages of the "[2-Way Solenoid Valve DIN Configurator](#)".


All leaflets are available on: [www.asco.com](http://www.asco.com)

		SPARE PARTS KITS CODE (*)					
		AC (~)			DC (=)		
		NBR	FPM		NBR	FPM	
	E262K090S1N00	M200001	N00	-	M200005	N00	-
	E262K090S1VA0	M200001	-	VA0	M200005	-	VA0

		ACCESSORIES CODE
	Mounting bracket Steel version (AISI 1010 / 1.1121)	M200094A00
	Mounting bracket Stainless steel version (AISI 304 / 1.4301)	M200095A00

### INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- Solenoid valves have 2 mounting holes in body
- Thread connection "E" have standard thread according to ISO 228/1 and ISO 7/1
- Thread connection "8" have standard thread = NPT (SAE 71051)
- Installation/maintenance instructions are included with each valve

**DIMENSIONS (mm), WEIGHT (kg)** 

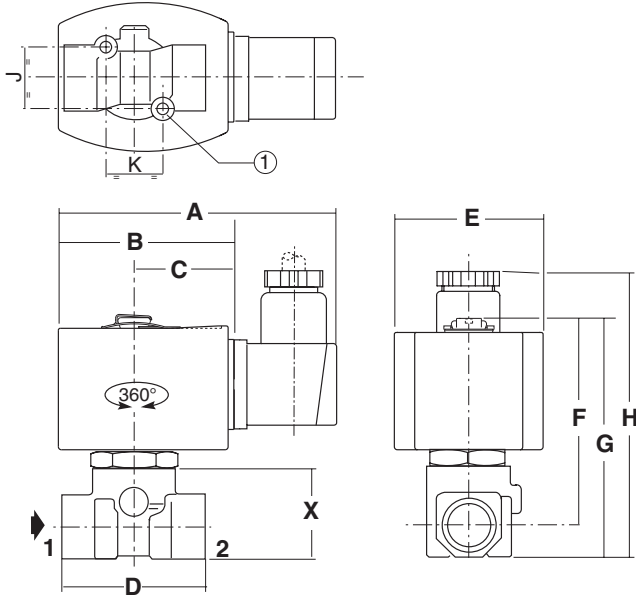
[Configurator - CAD Files](#)



**TYPE 01**

Electrical interface "S1"  
Epoxy moulded  
IEC 335 / ISO 4400  
IP65

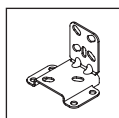
1/4, power coil 8,1 W / 10,6 W



type	pipe size	A	B	C	D	E	F	G	H	X	weight <sup>(1)</sup>
01	1/4	88	51	30	40	43	65	75	92	30	0,42

① 2 mounting holes:  
M5 dia., depth 7,5 mm (1/4)

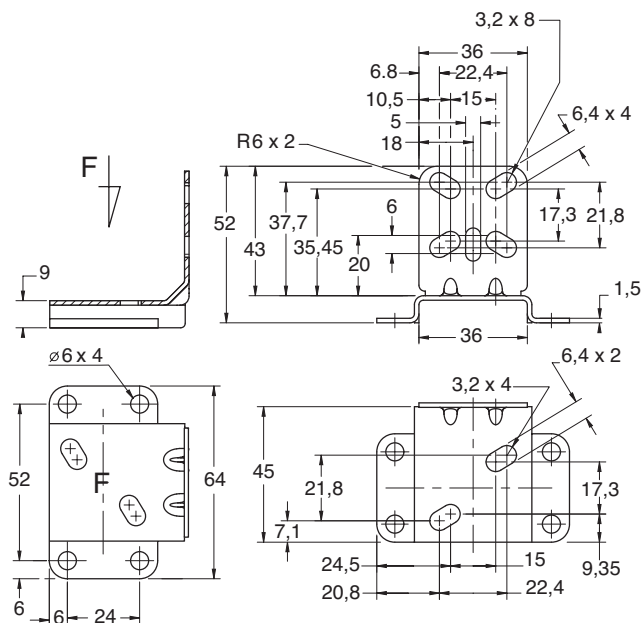
<sup>(1)</sup> Incl. coil(s) and connector(s).

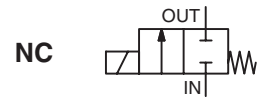


**Mounting bracket**

Steel or stainless steel

M200094A00 / M200095A00





## FEATURES

- 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
- Brass bodied solenoid valves designed to provide maximum flow
- Direct lift solenoid valves have a resilient soft seating for absolute tight shut-off on low pressures
- The solenoid valves do not require a minimum operating pressure
- The solenoid valves satisfy all relevant EU Directives

## GENERAL

Differential pressure 1 bar absolute [1 bar = 100 kPa]  
Response time 5 - 40 ms

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas	- 20°C to + 90°C	NBR (nitrile) FPM (fluoroelastomer)



## MATERIALS IN CONTACT WITH FLUID

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

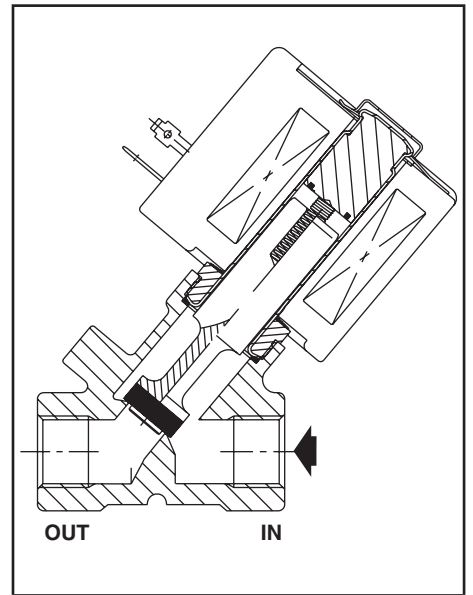
Body	Brass
Core tube	Stainless steel
Core and plugnut	Stainless steel
Spring	Stainless steel
Seat	Brass
Seal	NBR or FPM
Discs	NBR or FPM
Shading coil	Copper

## 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 (=) : -  
(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 <sup>(1)</sup>
	inrush ~	holding ~	hot/cold =		~	=	
	(VA)	(VA) (W)	(W)		230 V/50 Hz	-	
SC	55	23 10,5	-	-20 to + 75	400425-117	-	01
	110	33,6 15,4	-	-20 to + 75	400525-117	-	02

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



## SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		minimum absolute vacuum pressure (PS)	power coil (W)	catalogue number	options		
		(m³/h)	(l/min)	air (*)			maintained	man. operator	
Rp	(mm)	(m³/h)	(l/min)	mbar (Torr)	~	~			
<b>NC - Normally closed, low vacuum range to 25 Torr, NBR seals</b>									
3/8	9	1,5	25	33,3 (25)	10,5 -	SCE030B013	-	-	-
1/2	11	2,4	40	33,3 (25)	15,4 -	SCE030A017	-	-	-
<b>NC - Normally closed, medium vacuum range to 10<sup>-3</sup> Torr, NBR seals</b>									
3/8	9	1,5	25	1,33.10 <sup>-3</sup> (10 <sup>-3</sup> )	10,5 -	SCE030B013VM	-	-	-
1/2	11	2,4	40	1,33.10 <sup>-3</sup> (10 <sup>-3</sup> )	15,4 -	SCE030A017VM	-	-	-
<b>NC - Normally closed, high vacuum range to 10<sup>-6</sup> Torr, FPM seals</b>									
3/8	9	1,5	25	1,33.10 <sup>-6</sup> (10 <sup>-6</sup> )	10,5 -	SCE030B013VH	-	-	-
1/2	11	2,4	40	1,33.10 <sup>-6</sup> (10 <sup>-6</sup> )	15,4 -	SCE030A017VH	-	-	-

### 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 ([www.asco.com](http://www.asco.com))
- 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 ([www.asco.com](http://www.asco.com))

### 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 KITS & ACCESSORIES

catalogue number	spare parts kit no.		mounting bracket no.
	~	=	
SCE030B013	<b>C302788</b>	-	<b>093200-001</b>
SCE030A017	<b>C302790</b>	-	<b>093200-001</b>

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

### ORDERING EXAMPLES:

SC	E	030	B	013	230V / 50 Hz
SC	E	030	B	013	MO 115V / 50 Hz
SC	E	030	A	017	VM 24V / 50 Hz
SC	E	030	A	017	VH 230V / 50 Hz

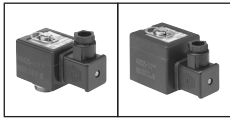
Diagram labels: prefix (SC), pipe thread (E), basic number (030), suffix (B, A, VM, VH), voltage (230V / 50 Hz).

### ORDERING EXAMPLES KITS:

C302788 <sup>(1)</sup>	VM
C302788	VH

Diagram labels: basic number (C302788), suffix (VM, VH).

### DIMENSIONS (mm), WEIGHT (kg)

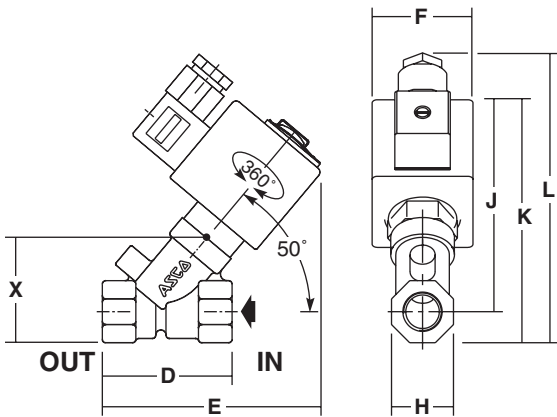


#### TYPE 01-02

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

Type 01: SCE030B013/B013VM/B013VH

Type 02: SCE030A017/A017VM/A017VH



type	prefix option	A	B	C	D	E	F	H	J	K	L	X	weight <sup>(2)</sup>
01	SC	-	-	-	48	80	45	22	84	95	126	36	0,5
02	SC	-	-	-	58	98	50	28	94	108	128	42	0,9

<sup>(2)</sup> including coil and connector.

All leaflets are available on: [www.asco.com](http://www.asco.com)

6 - Vacuum Service (2/2)



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地址：中国·青岛市重庆南路99号海尔云街甲3号楼7F

服务热线：4006-918-365  
网址：http://www.asco.store

传真：(86-532)585-10-365  
Email：sales@bechinas.com

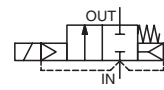




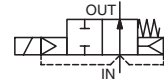
# SOLENOID VALVES

pilot operated, hung diaphragm  
for vacuum service  
3/8 to 3/4

NC



NO



2/2  
Series  
210

## FEATURES

- 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 materials (*)
air, inert gas	- 20°C to + 85°C	NBR (nitrile)
	0°C to + 90°C	FPM (fluoroelastomer)

## MATERIALS IN CONTACT WITH FLUID

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

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

## ELECTRICAL CHARACTERISTICS

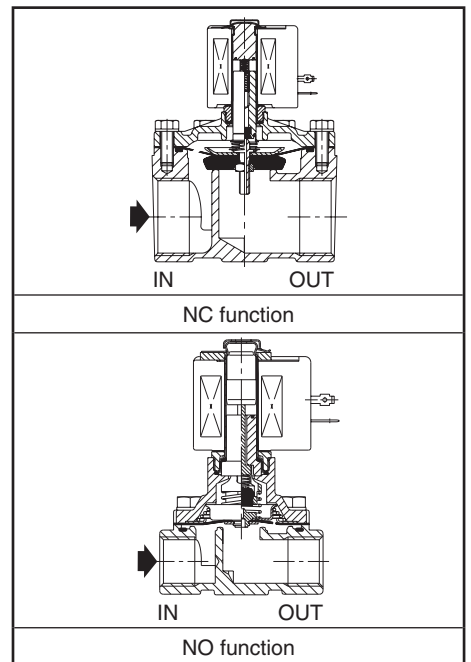
Coil insulation class F  
Connector Spade plug (cable Ø 6-10 mm)  
Connector specification ISO 4400 / EN 175301-803, form A  
Electrical safety IEC 335  
Electrical enclosure protection Moulded IP65 (EN 60529)  
Standard voltages DC (=) : - : -  
(Other voltages and 60 Hz on request) AC (~) : 24V - 48V - 115V - 230V / 50 Hz

prefix option	power ratings				operator ambient temperature range (TS) (C°)	replacement coil		type <sup>(1)</sup>
	inrush ~	holding ~	hot/cold =	~		=		
	(VA)	(VA)	(W)	230 V/50 Hz		-		
SC	55	23	10,5	-	-20 to + 75	400425-117	-	01

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

## SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		minimum absolute vacuum pressure (PS)	power coil (W)	catalogue number	options		
		(m <sup>3</sup> /h)	(l/min)				air (*)	maintained man. operator	
Rp	(mm)	(m <sup>3</sup> /h)	(l/min)	mbar (Torr)	~	~			
<b>NC - Normally closed, low vacuum range to 25 Torr, NBR seals</b>									
3/4	19	5,2	87	33,3 (25)	10,5	-	SCE210D095	MO	- -
<b>NC - Normally closed, medium vacuum range to 10<sup>-3</sup> Torr, NBR seals</b>									
3/4	19	5,2	87	1,33.10 <sup>-3</sup> (10 <sup>-3</sup> )	10,5	-	SCE210D095VM	MO	- -
<b>NC - Normally closed, high vacuum range to 10<sup>-6</sup> Torr, FPM seals</b>									
3/4	19	5,2	87	1,33.10 <sup>-6</sup> (10 <sup>-6</sup> )	10,5	-	SCE210D095VH	MO	- -
<b>NO - Normally open, low vacuum range to 25 Torr, NBR seals</b>									
3/8	16	2,6	43	33,3 (25)	10,5	-	SCE210C033	MO	- -
1/2	16	3,4	57	33,3 (25)	10,5	-	SCE210C034	MO	- -
3/4	19	4,7	79	33,3 (25)	10,5	-	SCE210C035	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	-	SCE210C033VM	MO	- -
1/2	16	3,4	57	1,33.10 <sup>-3</sup> (10 <sup>-3</sup> )	10,5	-	SCE210C034VM	MO	- -
3/4	19	4,7	79	1,33.10 <sup>-3</sup> (10 <sup>-3</sup> )	10,5	-	SCE210C035VM	MO	- -
<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	-	SCE210C033VH	MO	- -
1/2	16	3,4	57	1,33.10 <sup>-6</sup> (10 <sup>-6</sup> )	10,5	-	SCE210C034VH	MO	- -
3/4	19	4,7	79	1,33.10 <sup>-6</sup> (10 <sup>-6</sup> )	10,5	-	SCE210C035VH	MO	- -



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地址：中国·青岛市重庆南路99号海尔云街甲3号楼7F

服务热线：4006-918-365  
网址：http://www.asco.store

Vacuum Service (2/2) - 7  
传真：(86-532)585-10-365  
Email：sales@bechinas.com

### 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 ([www.asco.com](http://www.asco.com))
- 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 ([www.asco.com](http://www.asco.com))

### 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 KITS & ACCESSORIES

catalogue number	spare parts kit no.		mounting bracket no.
	~	=	
SCE210D095	<b>C302276</b>	-	<b>038713-000</b>
SCE210C033/C034	<b>C302334</b>	-	<b>038713-000</b>
SCE210C035	<b>C302335</b>	-	<b>038713-000</b>

(1) Standard suffixes are also applicable to kits.

### ORDERING EXAMPLES:

SC	E	210	D	095	230V / 50 Hz
SC	E	210	C	033	MO 115V / 50 Hz
SC	E	210	C	034	VM 24V / 50 Hz
SC	E	210	C	035	VH 230V / 50 Hz

prefix — pipe thread — basic number — voltage — suffix

### ORDERING EXAMPLES KITS:

C302276 <sup>(1)</sup>	
C302276	VM
C302276	VH

basic number — suffix

### DIMENSIONS (mm), WEIGHT (kg)

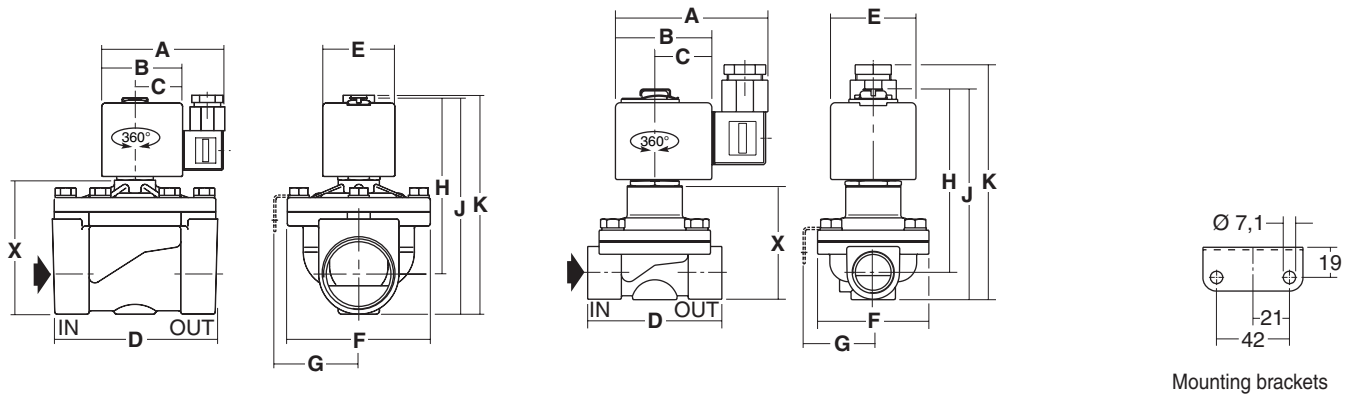


#### TYPE 01

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

SCE210D095 (NC)

SCE210C033/C034/C035 (NO)



type	prefix option	catalogue number	A	B	C	D	E	F	G	H	J	K	X	weight <sup>(2)</sup>
01	SC	SCE210D095	80	50	30	73	45	58	41	89	103	121	54	1
		SCE210C033/C034	80	50	30	70	45	58	41	98	108	127	60	0,9
		SCE210C035	80	50	30	70	45	58	41	102	117	132	68	1

(2) including coil and connector.

All leaflets are available on: [www.asco.com](http://www.asco.com)

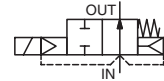
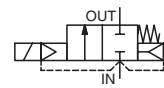
8 - Vacuum Service (2/2)



青岛秉诚自动化设备有限公司  
地址：中国·青岛市重庆南路99号海尔云街甲3号楼7F

服务热线：4006-918-365  
网址：<http://www.asco.store>

传真：(86-532)585-10-365  
Email：[sales@bechinas.com](mailto:sales@bechinas.com)



## FEATURES

- 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
- Aluminium bodied valves designed to provide maximum flow
- The valves are for the control of low pressure air and gases, 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** 25 - 120 ms

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas	- 20°C to + 85°C	NBR (nitrile)
	0°C 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>	Aluminium
<b>Core tube</b>	Stainless steel
<b>Core and plugnut</b>	Stainless steel
<b>Springs</b>	Stainless steel
<b>Seat</b>	Aluminium
<b>Seals, diaphragm &amp; disc</b>	NBR or FPM
<b>Disc holder (NO function)</b>	PA
<b>Core guide</b>	POM
<b>Rider rings</b>	PTFE
<b>Shading coil</b>	Copper

## ELECTRICAL CHARACTERISTICS

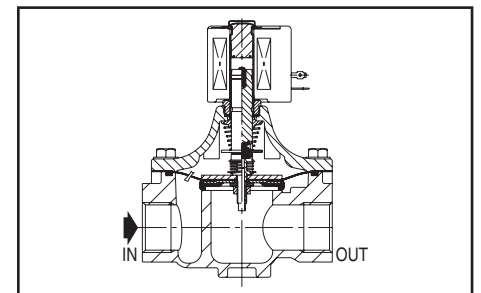
**Coil insulation class** F  
**Connector** Spade plug (cable Ø 6-10 mm)  
**Connector specification** ISO 4400 / EN 175301-803, form A  
**Electrical safety** IEC 335  
**Electrical enclosure protection** Moulded IP65 (EN 60529)  
**Standard voltages** DC (=) :-  
AC (~) : 24V - 48V - 115V - 230V / 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)				
SC	110	33,6	15,4	-	-20 to + 75	400525-117	-	01

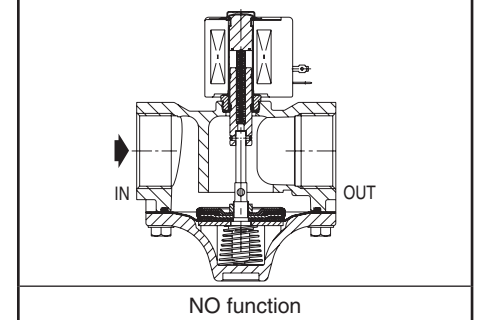
<sup>(1)</sup> Refer to the dimensional drawings on the following page.

## SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		minimum absolute vacuum pressure (PS)	power coil (W)	catalogue number	
						NC Normally closed	NO Normally open
Rp	(mm)	(m³/h)	(l/min)	air (*) mbar (Torr)	~	=	~
<b>Low vacuum range to 25 Torr, NBR seals</b>							
1	41	18	300	33,3 (25)	15,4	-	SCE215B050 SCE215C053
1 1/4	41	27	450	33,3 (25)	15,4	-	SCE215B060 SCE215C063
1 1/2	41	30	500	33,3 (25)	15,4	-	SCE215B070 SCE215C073
2	53	50	833	33,3 (25)	15,4	-	SCE215B080 SCE215C083
<b>Medium vacuum range to 10<sup>-3</sup> Torr, NBR seals</b>							
1	41	18	300	1,33.10 <sup>-3</sup> (10 <sup>-3</sup> )	15,4	-	SCE215B050VM SCE215C053VM
1 1/4	41	27	450	1,33.10 <sup>-3</sup> (10 <sup>-3</sup> )	15,4	-	SCE215B060VM SCE215C063VM
1 1/2	41	30	500	1,33.10 <sup>-3</sup> (10 <sup>-3</sup> )	15,4	-	SCE215B070VM SCE215C073VM
2	53	50	833	1,33.10 <sup>-3</sup> (10 <sup>-3</sup> )	15,4	-	SCE215B080VM SCE215C083VM
<b>High vacuum range to 10<sup>-6</sup> Torr, FPM seals</b>							
1	41	18	300	1,33.10 <sup>-6</sup> (10 <sup>-6</sup> )	15,4	-	SCE215B050VH SCE215C053VH
1 1/4	41	27	450	1,33.10 <sup>-6</sup> (10 <sup>-6</sup> )	15,4	-	SCE215B060VH SCE215C063VH
1 1/2	41	30	500	1,33.10 <sup>-6</sup> (10 <sup>-6</sup> )	15,4	-	SCE215B070VH SCE215C073VH
2	53	50	833	1,33.10 <sup>-6</sup> (10 <sup>-6</sup> )	15,4	-	SCE215B080VH SCE215C083VH



NC function



NO function

**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 ([www.asco.com](http://www.asco.com))
- Electrical enclosures according to "NEMA" standards are available
- Compliance with "UL", "CSA" and other local approvals available on request
- Other pipe connections are available on request
- Connector with visual indication and peak voltage suppression or with cable length of 2 m ([www.asco.com](http://www.asco.com))

**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 KITS & ACCESSORIES**

catalogue number	spare parts kit no.	
	~	-
SCE215B050/B060/B070	<b>C302352</b>	-
SCE215B080	<b>C302353</b>	-
SCE215C053/C063/C073	<b>C304691</b>	-
SCE215C083	<b>C304692</b>	-

<sup>(1)</sup> Standard suffixes are also applicable to kits.

**ORDERING EXAMPLES:**

<b>SC</b>	<b>E</b>	<b>215</b>	<b>B 060</b>	<b>230V / 50 Hz</b>
<b>SC</b>	<b>E</b>	<b>215</b>	<b>B 070</b>	<b>VM 115V / 50 Hz</b>
<b>SC</b>	<b>E</b>	<b>215</b>	<b>C 053</b>	<b>VM 24V / 50 Hz</b>
<b>SC</b>	<b>E</b>	<b>215</b>	<b>C 073</b>	<b>VH 230V / 50 Hz</b>

prefix — pipe thread — basic number — voltage — suffix

**ORDERING EXAMPLES KITS:**

C302352 <sup>(1)</sup>	
C302352	<b>VM</b>
C302352	<b>VH</b>

basic number — suffix

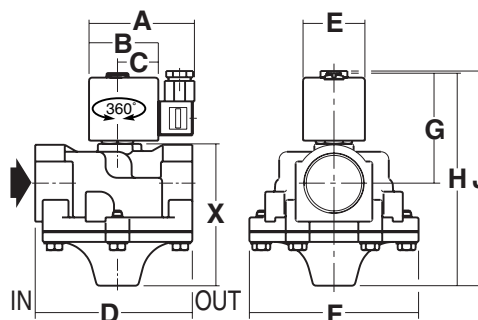
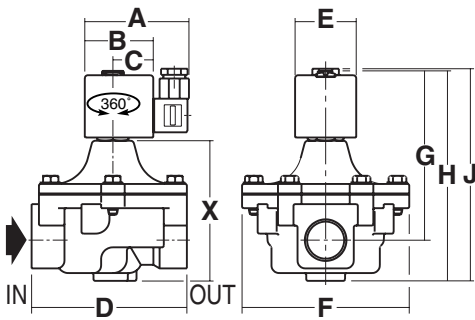
**DIMENSIONS (mm), WEIGHT (kg)**



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

SCE215B050/B060/B070/B080  
SCE215B050VM/B060VM/B070VM/B080VM  
SCE215B050VH/B060VH/B070VH/B080VMH

SCE215C053/C063/C073/C083  
SCE215C053VM/C063VM/C073VM/C083VM  
SCE215C053VH/C063VH/C073VH/C083VH



type	prefix option	catalogue number	A	B	C	D	E	F	G	H	J	X	weight <sup>(2)</sup>
01	SC	SCE215B050/B060/B070 B050VM/B060VM/B070VM/ B050VH/B060VH/B070VH	86	56	33	127	50	137	140	171	172	221	1,8
		SCE215B080/B080VM/B080VH	86	56	33	155	50	160	149	188	188	139	2,1
		SCE215C053/C063/C073/ C053VM/C063VM/C073VM/ C053VH/C063VH/C073VH	86	56	33	127	50	137	90	172	172	123	1,5
		SCE215C083/C083VM/C083VH	86	56	33	155	50	160	95	187	187	132	2,3

<sup>(2)</sup> including coil and connector.

All leaflets are available on: [www.asco.com](http://www.asco.com)