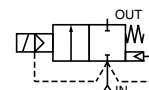


SOLENOID VALVES

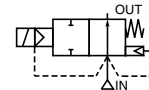
pilot operated

1 1/2 and 2

NC



NO



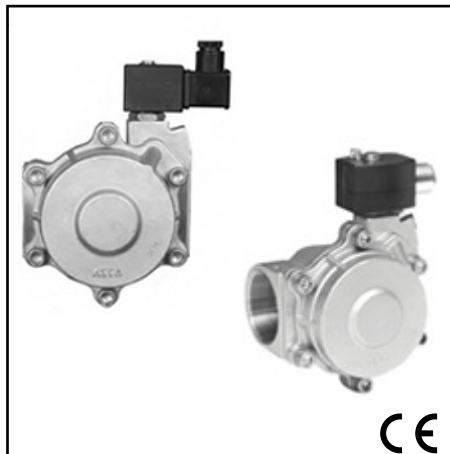
FEATURES

- Two way shut-off valves for the control air, inert gas, water, oil and other gases/liquids compatible with the sealing material used
- Valves require a minimum operating pressure differential of 0.35 bar
- All products are covered by Pressure Equipment Directive 97/23/EC and are suitable for group 1 and 2 fluids
- The solenoid valves satisfy all relevant EC directives

GENERAL

Differential pressure See «SPECIFICATIONS» [1 bar =100 kPa]
 Maximum viscosity 65 cSt (mm²/s)
 Response time 40 - 120 ms

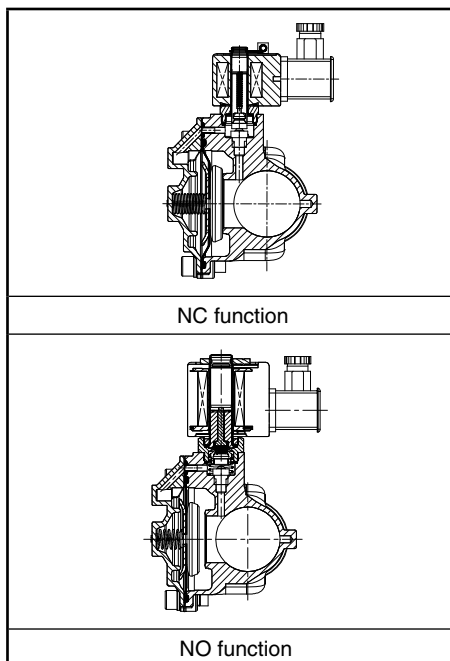
fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas, water, oil	- 20°C to + 85°C	NBR (nitrile)



MATERIALS IN CONTACT WITH FLUID

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

Body	Stainless steel 316L
Core tube	Stainless steel
Core and plugnut	Stainless steel
Springs	Stainless steel
Seat	Stainless steel
Sealings	NBR
Core Disc	NBR
Piston	Stainless steel
Piston Disc	NBR
Shading coil	Silver



SPECIFICATIONS

Pipe Size ❖	Orifice Size (mm)	Flow Coefficient Kv (m ³ /h) (l/min)		Operating Pressure Differential (bar)						Prefix Optional Solenoids				Basic Catalog Number	Options				
				Min.	Max. (PS)						NEMA 7&9	ATEX / IECEx Ex d	NEPSI Ex md		IP65	Maintained Man Operator	FPM	EPDM	CR
					AC	DC	AC	DC	AC	DC									
NC - Normally Closed																			
1 1/2	32	19.3	322	0.35	9	9	9	9	9	9	●	●	●	●	❖ 210A127	MO	V	E	J
2	44	37	617	0.35	9	3	9	3	6	3	●	●	●	●	❖ 210A129	MO	V	E	J
NO - Normally Open																			
1 1/2	32	19.3	322	0.35	9	9	9	9	9	9	○	●	○	●	❖ 210A132	MO	V	E	J
2	44	37	617	0.35	9	9	9	9	9	9	○	●	○	●	❖ 210A133	MO	V	E	J

❖ Select 8 for NPT ANSI 1.20.3 or select E for ISO 7/1.

⁽¹⁾ Prefix EF/EV & VCEF should always be used in conjunction with change letter G in the basic catalog number

● Available feature ○ Available feature for AC voltage only

PREFIX TABLE

Prefix							Description
1	2	3	4	5	6	7	
S	C						Solenoid with spade plug connector (EN 60730)
E	F						Explosionproof - NEMA 3, 4, 6, 7, 9
E	V						Explosionproof - NEMA 3, 4, 6, 7, 9 - 316 SS conduit
N	F						Flameproof - Aluminum ATEX+IECEX (EN/IEC 60079 / 61241) *
W	S	N	F				Flameproof - 316 SS ATEX+IECEX (EN/IEC 60079 / 61241) *
V	C	E	F				Encapsulated - Aluminum NEPSI ⁽²⁾
		T					Threaded conduit (1/2" NPT)
		E	T				Threaded conduit/hole (M20 x 1.5)
				H	T		Class H - High temperature
						X	Other special constructions

* ATEX solenoid are also approved according to EN/IEC 61241 (Dust) and EN13643-1 (non- electrical valves)

⁽²⁾ Prefix VCEF - It comes with 12 combination choices of 4 different conduit directions and 3 conduit entries sizes. Refer to details under dimensions drawings on page 7

SUFFIX TABLE

Suffix					Description
1	2	3	4	5	
E					EPDM (ethylene-propylene)
J					CR (chloroprene)
V					FPM (fluoroelastomer)
			M	O	Manual operator

SPARE PARTS KIT

Catalog Number	Spare Parts Kit No. ⁽³⁾	
	AC	DC
SC❖210A127	C325 260	C325 261
SC❖210A129	C325 262	C325 263
SC❖210A132	C325 266	C325 267
SC❖210A133	C325 268	C325 269

⁽³⁾ Standard prefixes/suffixes are applicable to kits

ORDERING EXAMPLES:

SC	8	210	A	127	230V / 50 Hz
WSNFET	B	210	A	127	MO 115V / 50 Hz
VCEFCM	8	210	G	127	V 220V / 50 Hz
EF	8	210	G	127	220V / 50 Hz

(4) prefix ——— voltage
 pipe thread ——— suffix
 basic number ———

⁽⁴⁾ Prefix EF/EV & VCEF should always be used in conjunction with change letter G in the basic number

ORDERING EXAMPLES KITS:

325260	
325262	V
325266	E

basic number ——— suffix

PRODUCT SELECTION GUIDE

STEP 1

Select basic catalog number, including pipe thread identification letter.

Refer to the specifications table on page 1.

Example: 8210A127

STEP 2

Select prefix (combination).

Refer to the specifications table on page 1 and the prefix table on page 2.

Example: SC

STEP 3

Select voltage. Refer to standard voltages on page 3.

Example: 230V / 50Hz

STEP 4

Final catalog / ordering number.

Example:

SC 8210A127 230V / 50Hz

EXPLANATION OF TEMPERATURE RANGES OF SOLENOID VALVES

Valve temperature range	The valve temperature range is determined by the selected seal material, the temperature range for proper operation of the valve and sometimes by the fluid (e.g.steam)
Operator ambient temperature range	The operator ambient temperature range is determined by the power level and the ATEX safety code
Total temperature range	The temperature range of the complete solenoid valve is determined by the limitations of both temperature range above

ELECTRICAL CHARACTERISTIC

Coil insulation class	F
Electrical safety	IEC 335
Standard voltages	DC (=) 24V - 48V AC (~) 24V - 48V - 115V - 230V/50Hz; Other voltages are available on request For NEMA 7 & 9: 24, 120, 240, 480V/60Hz (or 110, 220V/50Hz)

Prefix Option	Basic Catalog Number	Power Ratings			Operator Ambient Temperature Range (TS) ⁽⁵⁾ °C	Safety Code	Electrical Enclosure Protection (EN 60529)	Replacement Coil		Type ⁽⁶⁾	
		(VA)	(Watt)					Voltage	Part Number		
SC	❖ 210A127, A129	AC	Inrush Holding	34 15.6	6	EN 60730	IP65, moulded	230/50	400325-117	01	
		DC	hot / cold		9 / 11.2			24DC	400425-142		
	❖ 210A132, A133	AC	Inrush Holding	110 33.6	15.4			- 20 to + 75	230/50		400525-117
		DC	hot / cold		12 / 16.8			24DC	400525-142		
NF/ WSNF	❖ 210A127, A129	AC	Inrush Holding	55 23	10.5	ATEX / IEC Ex II2G Exd IIC T6/T5, II2 Ex tD	IP67, alu. / SS	230/50	400405-117	02	
		DC	hot / cold		9 / 11.2			24DC	400405-142		
	❖ 210A132, A133	AC	Inrush Holding	110 33.6	15.4			- 20 to + 75	230/50		400505-117
		DC	hot / cold		12 / 16.8			24DC	400605-142		
EF	❖ 210G127, G129	AC	Inrush Holding	40 16	6.1	NEMA type 7 and 9	4X, moulded	220/50, 240/60	238214-058-D	03	
		DC	hot / cold		9 / 11.6			24DC	238714-006-D		
	❖ 210G132, G133	AC	Inrush Holding	180 35	16.1			- 20 to + 75	220/50		272614-055-D

⁽⁵⁾ Temperature range can be limited by sealings

⁽⁶⁾ Refer to the dimensional drawings on page 4 to 7

ELECTRICAL CONNECTIONS


Prefix	Connection
SC	spade plug connector with cable gland EN175301-803A (ISO 4400) for cables with an outer diameter from 6 to 10 mm
EF	1/2" NPT threaded conduit entry with 18" lead length
NF, WSNF	1/2" NPT threaded cable entry. Enclosures are supplied without cable gland
NFET, WSNFET	M20 x 1,5 threaded cable entry. Enclosures are supplied without cable gland

ADDITIONAL OPTIONS

- Valves can also be supplied with FPM (fluoroelastomer), EPDM (ethylene-propylene) and CR (chloroprene). Use the appropriate optional suffix letter for identification

INSTALLATION

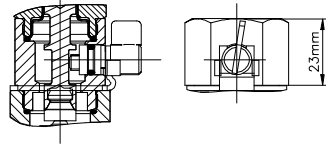
- The solenoid valves can be mounted on any position. For optimum performance, mount the valve with solenoid vertical and upright
- Installation/maintenance instructions are included with each valve

DIMENSIONS (mm), WEIGHT (kg) 



TYPE 01
SC Epoxy moulded
IEC 335; ISO 4400

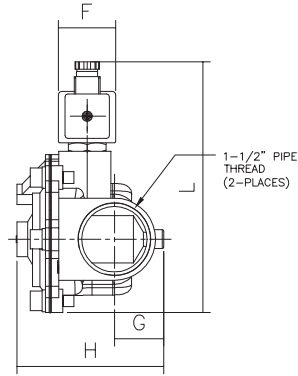
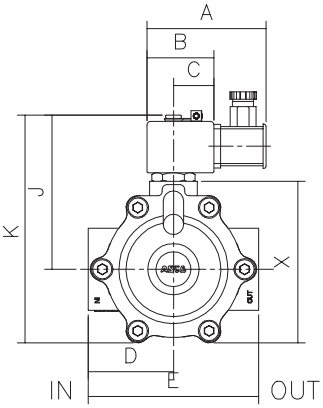
Manual Operator



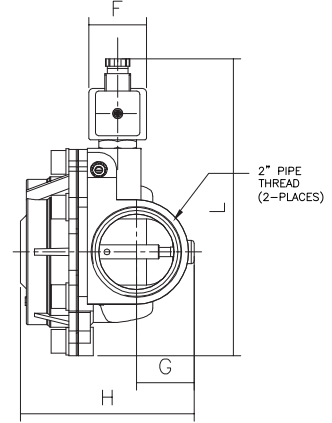
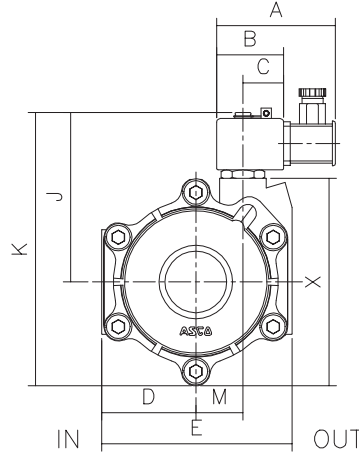
Note: For MO construction add 23mm to these dimensions(J.K.L).

Normally Closed

❖ 210A127

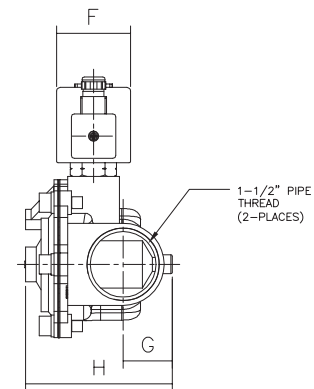
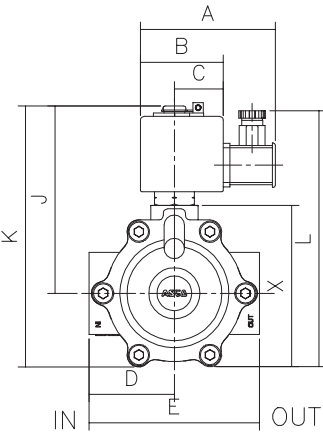


❖ 210A129

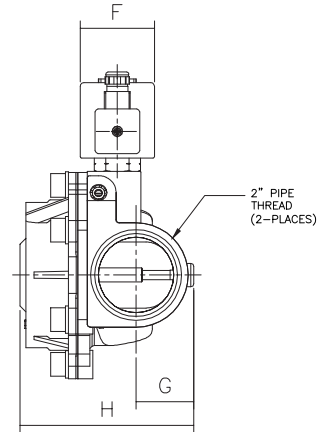
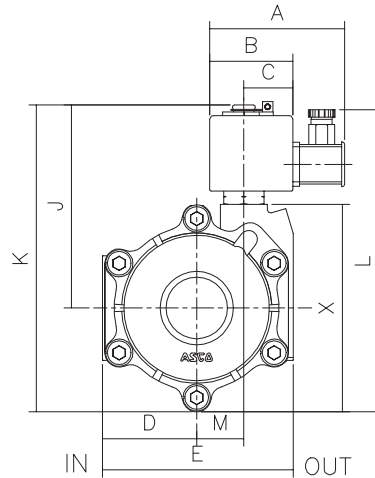


Normally Open


❖ 210A132



❖ 210A133



Catalog Number	Voltage	A	B	C	D	E	F	G	H	J	K	L	M	X	Weight (kg)
SC❖210A127	AC	80	45	28	58	115	39	33	99	105	155	172	-	109	2.4
	DC	85	50	30	58	115	45	33	99	110	159	175	-	109	2.6
SC❖210A129	AC	80	45	28	64	129	39	39	117	116	186	203	32	140	4.0
	DC	85	50	30	64	129	45	39	117	120	190	206	32	140	4.2
SC❖210A132	AC / DC	91	56	33	58	115	50	33	99	128	177	174	-	109	2.7
SC❖210A133	AC / DC	91	56	33	64	129	50	39	117	138	208	205	32	140	4.3

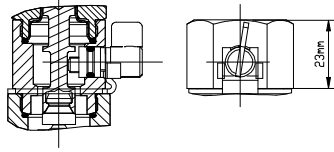
DIMENSIONS (mm), WEIGHT (kg) 



TYPE 02
NF / WSNF

Aluminum; Epoxy coated / AISI 316SS
IEC 60079-1 and 6124-1

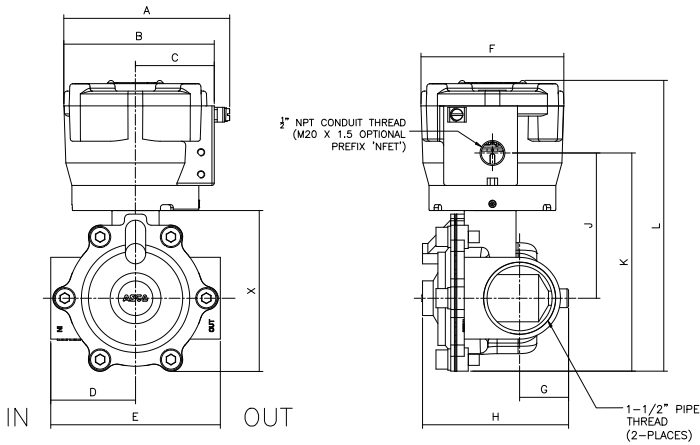
Manual Operator



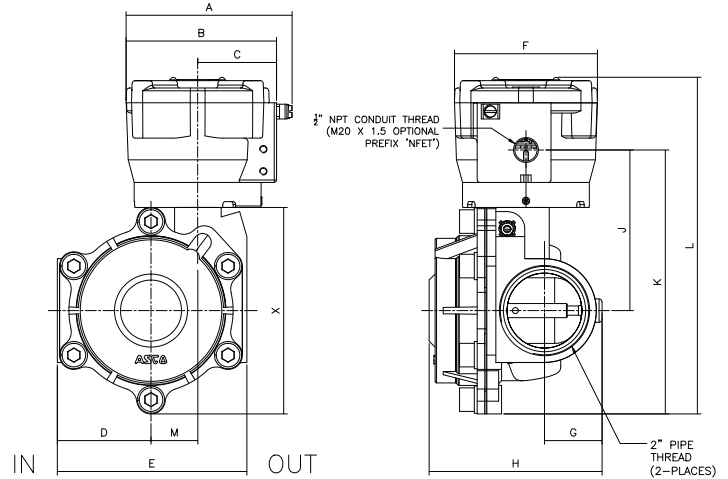
Note: For MO construction add 23mm to these dimensions(J.K.L).

Normally Closed

❖ 210A127

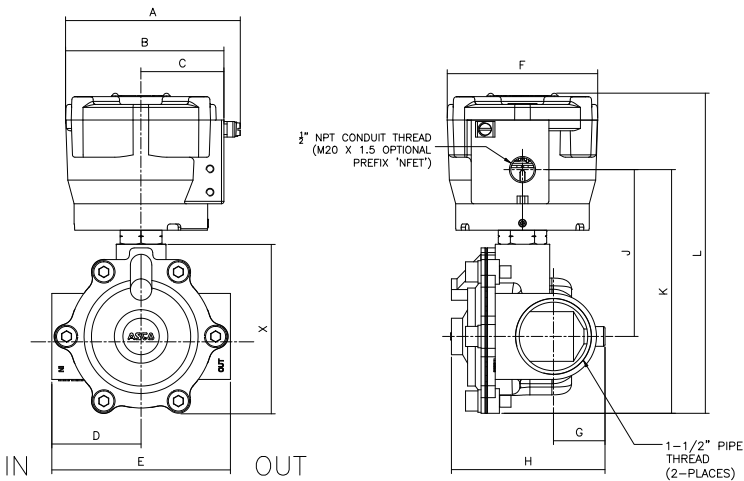


❖ 210A129

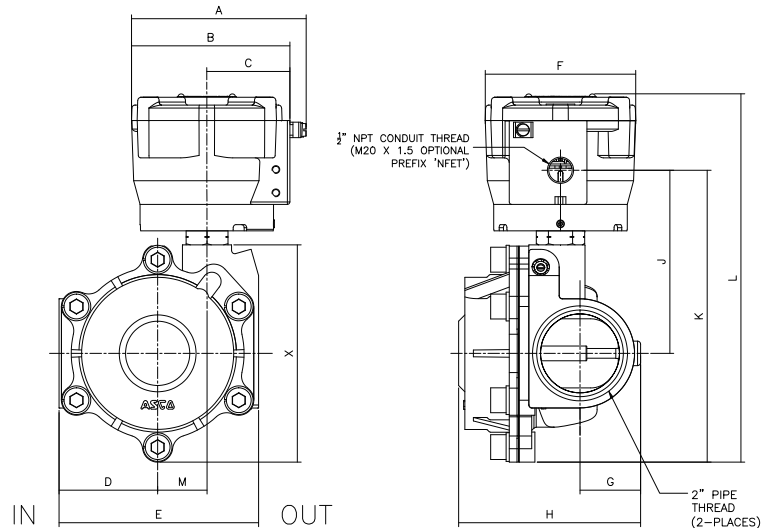


Normally Open


❖ 210A132



❖ 210A133



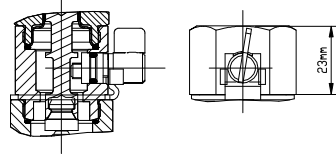
Catalog Number	Voltage	A	B	C	D	E	F	G	H	J	K	L	M	X	Weight (kg)	
															Prefix NF	Prefix WSNF
WSNF/NF❖210A127	AC / DC	115	102	54	58	115	97	33	99	99	148	198	-	109	3.6	4.9
WSNF/NF❖210A129	AC / DC	115	102	54	64	129	97	39	117	109	179	229	32	140	4.5	5.8
WSNF/NF❖210A132	AC / DC	115	102	54	58	115	97	33	99	109	158	208	-	109	3.8	5.1
WSNF/NF❖210A133	AC / DC	115	102	54	64	129	97	39	117	119	189	239	32	140	4.7	6.0

DIMENSIONS (mm), WEIGHT (kg) 



TYPE 03
EF / EV NEMA Epoxy encapsulated
ICS6 - ANSI

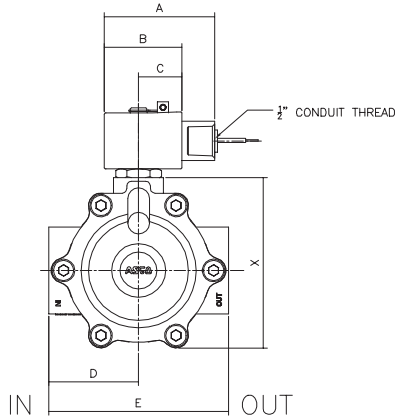
Manual Operator



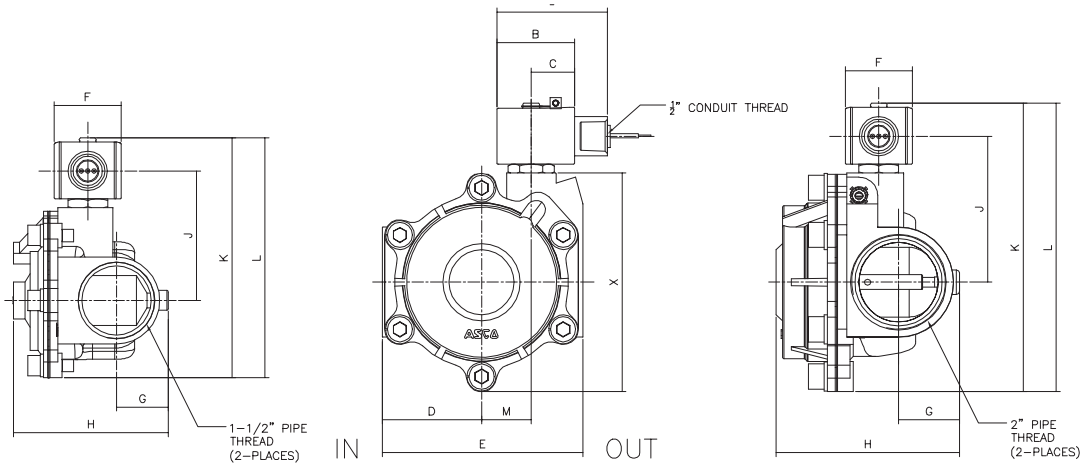
Note: For MO construction add 23mm to these dimensions(J.K.L).

Normally Closed

❖ 210G127

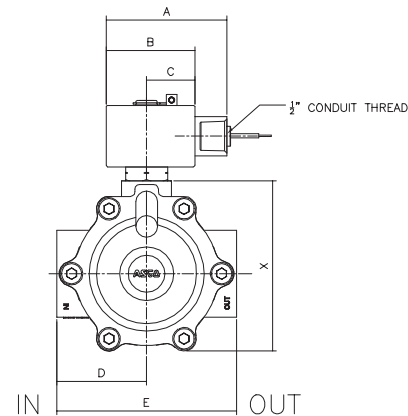


❖ 210G129

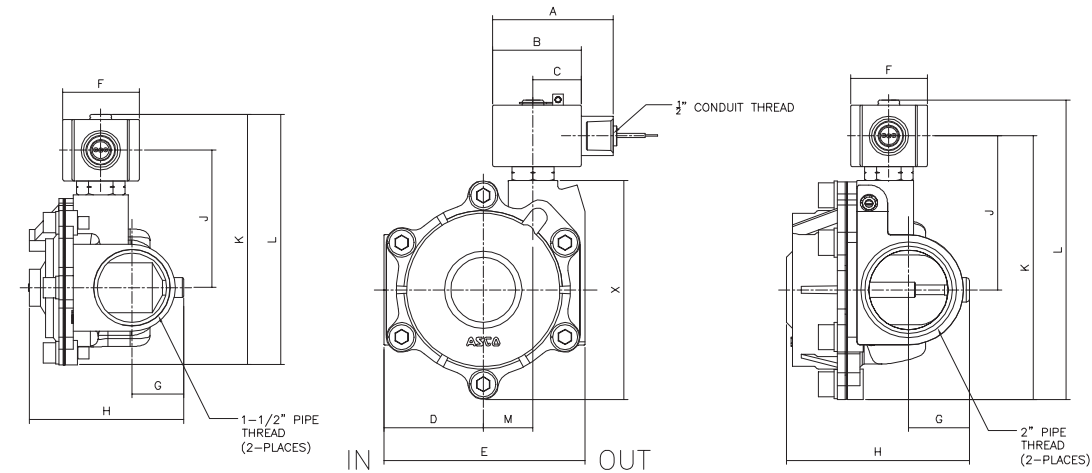


Normally Open

❖ 210G132



❖ 210G133



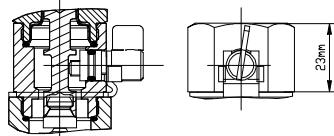
Catalog Number	Voltage	A	B	C	D	E	F	G	H	J	K	L	M	X	Weight (kg)
EF❖210G127	AC	70	44	22	58	115	43	33	99	83	133	155	-	109	2.5
	DC	77	50	25	58	115	50	33	99	85	135	160	-	109	2.7
EF❖210G129	AC	70	44	22	64	129	43	33	117	94	164	186	32	140	4.1
	DC	77	50	25	64	129	50	39	117	96	166	191	32	140	4.3
EF❖210G132	AC	81	54	27	58	115	52	33	99	95	145	176	-	109	2.7
EF❖210G133	AC	81	54	27	64	129	52	39	117	106	176	207	32	140	4.4

DIMENSIONS (mm), WEIGHT (kg)

Manual Operator



TYPE 04
VCEF⁽²⁾ Encapsulated Aluminum
NEPSI

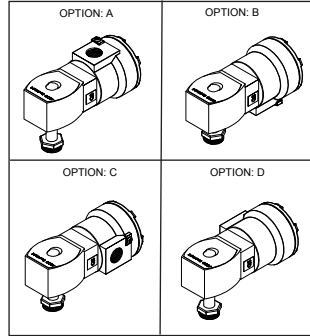


Note: For MO construction add 23mm to these dimensions(J.K.L).

⁽²⁾ Prefix VCEF - Comes with 12 combination choices of 4 different directions and 3 conduit entries sizes as follows-

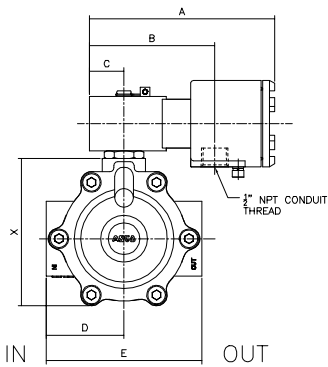
VCEF C M

prefix ————
options: ————
A= option A
B= option B
C= option C
D= option D
conduit sizes ————
M= 1/2" NPT
N= 3/4" NPT
P= M20*1.5

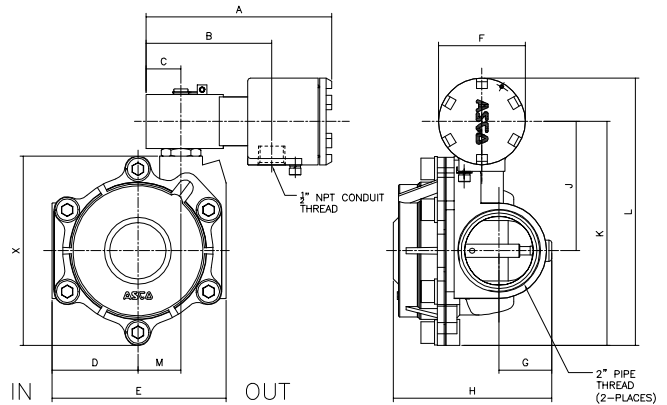


Normally Closed

❖ 210G127

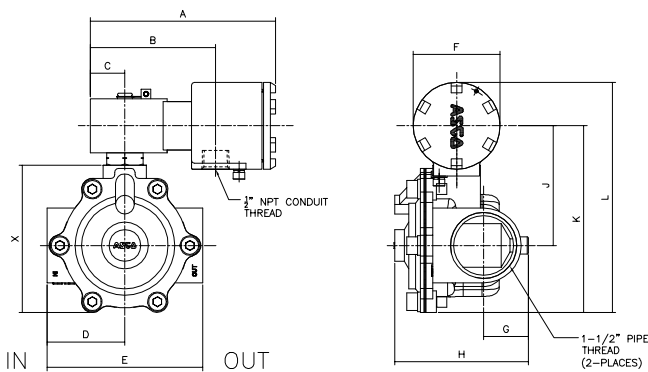


❖ 210G129

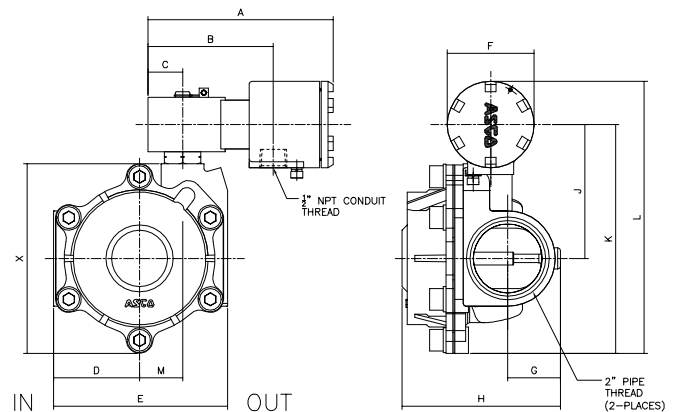


Normally Open

❖ 210G132



❖ 210G133



Catalog Number	Voltage	A	B	C	D	E	ØF	G	H	J	K	L	M	X	Weight (kg)
VCEFBM❖210G127	AC	128	89	22	58	115	66	33	99	83	133	166	-	109	2.8
	DC	135	92	25	58	115	66	33	99	85	135	168	-	109	3.1
VCEFBM❖210G129	AC	128	89	22	64	129	66	33	117	94	164	197	32	140	4.4
	DC	135	92	25	64	129	66	39	117	96	166	199	32	140	4.6
VCEFBM❖210G132	AC	139	94	27	58	115	66	33	99	95	145	178	-	109	3.2
VCEFBM❖210G133	AC	139	94	27	64	129	66	39	117	106	176	209	32	140	4.7