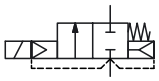
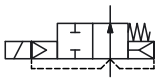
JOHNSON valves
ASCO™

SOLENOID VALVES

pilot operated, built-in pilot
stainless steel body, floating diaphragm
3/8 to 1

NC 

NO 

2/2
Series
238

C

FEATURES

- *Minimum operating pressure differential ΔP 0,35 bar*
- *Two way valves for automatic control of water, air and inert gas and other gases/liquids compatible with the sealing materials used*
- *Stainless steel body for wide compatibility with environments and fluids*
- *Interchangeability of magnetic heads, AC and DC*
- *The solenoid valves satisfy all relevant EC Directives*

GENERAL

Differential pressure	See «SPECIFICATIONS» [1 bar =100 kPa]
Ambient temperature range	-10°C to +60°C
Maximum viscosity	37 cSt (mm²/s)
Response time	3/8 1/2 3/4 1
opening time (ms)	300 300 300 1500
closing time (ms)	1000 1000 1000 2000

fluids (✳)	temperature range (TS)	seal materials (✳)
air, inert gas and water	0°C to + 130°C	FPM (fluoroelastomer)

MATERIALS IN CONTACT WITH FLUID

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

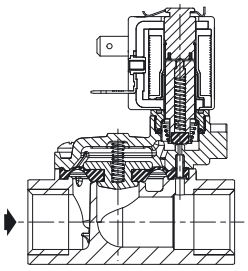
Body	Stainless steel, AISI 316L
Core tube	Stainless steel
Core and plugnut	Stainless steel
Springs	Stainless steel
Seat	Stainless steel, AISI 316L
Diaphragm & disc valve	FPM
Seals & disc pilot	FPM
Shading coil	Copper

ELECTRICAL CHARACTERISTICS

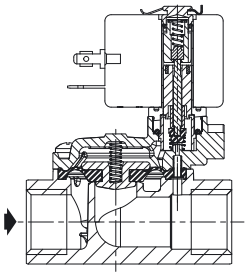
Coil insulation class	F
Connector	Spade plug (cable Ø 6-8 mm or Ø 6-10 mm)
Connector specification	
for power coil 4W/5,5W	EN 175301-803 industry standard form B (11 mm)
for power coil 7W DC	ISO 4400 / EN 175301-803, form A
Electrical safety	IEC 335
Electrical enclosure protection	Moulded IP65 (EN 60529)
Standard voltages	DC (=) : 24V - 48V
(Other voltages and 60 Hz on request)	AC (~) : 24V - 48V - 115V - 230V / 50 Hz

prefix option	power ratings inrush ~ (VA)	holding ~ (VA)	holding ~ (W)	hot/cold = (W)	operator ambient temperature range (TS) (C°)	replacement coil ~ 230 V/50 Hz	replacement coil = 24 V DC	type (1)
SC	12	6	4	4,5/5,5	-10 to + 60	43005429	43005413	01 (2)
	-	-	-	5/7	-10 to + 60	-	43005533	02

(1) Refer to the dimensional drawings on the following page.
(2) UL/CSA certified.



NC function



NO function

SPECIFICATIONS

pipe size G	orifice size (mm)	flow coefficient Kv (m³/h)	flow coefficient Kv (l/min)	operating pressure differential (bar) min.	operating pressure differential (bar) max. (PS) air / water (✳) ~	operating pressure differential (bar) max. (PS) air / water (✳) =	power coil (W) ~	power coil (W) =	catalogue number ~/=	options maintained man. operator	options EPDM	options
NC - Normally closed												
3/8	13,5	2,5	41,7	0,35	12	12	4	5,5	**SCG238C101V**	MO	E	-
1/2	13,5	3,8	63,3	0,35	12	12	4	5,5	**SCG238C102V**	MO	E	-
3/4	18	5	83,3	0,35	10	10	4	5,5	**SCG238C103V**	MO	E	-
1	24	12	200	0,35	10	10	4	5,5	**SCG238C104V**	MO	E	-
NO - Normally open												
3/8	13,5	2,5	41,7	0,35	12	12	4	7	**SCG238C105V**	-	E	-
1/2	13,5	3,8	63,3	0,35	12	12	4	7	**SCG238C106V**	-	E	-
3/4	18	5	83,3	0,35	10	10	4	7	**SCG238C107V**	-	E	-
1	24	12	200	0,35	10	10	4	7	**SCG238C108V**	-	E	-

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OPTIONS

- Valves can also be supplied with EPDM (ethylene-propylene) seals, diaphragm and disc. Use the appropriate optional suffix letter for identification
- Explosionproof enclosures for use in zones 1/21-2/22, categories 2-3 to ATEX Directive 94/9/EC (see "Explosionproof solenoids" section)
- Oxygen service, suffix NV, example: SCG238C102NV
- Plug with visual indication and peak voltage suppression or with cable length of 2 m (see Solenoids, Coils & Accessories section)

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- Threaded pipe connection is standard: G = G (ISO 228/1)
- Installation/maintenance instructions are included with each valve

SPARE PARTS KIT

catalogue number	spare parts kit no. (1)	
	(1)	
	~/=	~/=
SCG238C101V/102V	**C131038V**	**C140267V**
SCG238C103V	**C131039V**	**C140267V**
SCG238C104V	**C131040V**	**C140267V**
SCG238C105V/106V	**C131041V**	**C140508V**
SCG238C107V	**C131042V**	**C140508V**
SCG238C108V	**C131043V**	**C140508V**

(1) For EPDM version, replace "V" with "E".

ORDERING EXAMPLES:

SC G 238 **C** 101 **V** 230V / 50 Hz
SC G 238 **C** 104 **E** 24V / DC
SC G 238 **C** 102 **VMO** 230V / 50 Hz

prefix
pipe thread
basic number
voltage
suffix

ORDERING EXAMPLES KITS:

C140267 **V**
C131038 **E**

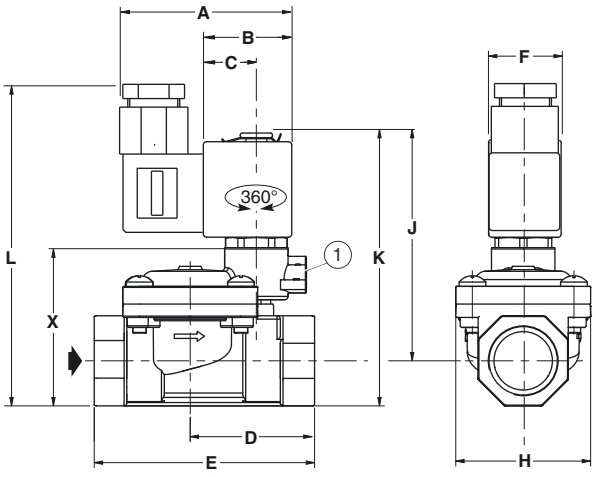
basic number
suffix

DIMENSIONS (mm), WEIGHT (kg)

TYPE 01

Prefix "SC" Solenoid
IEC 335 / EN 175301-803
IP65

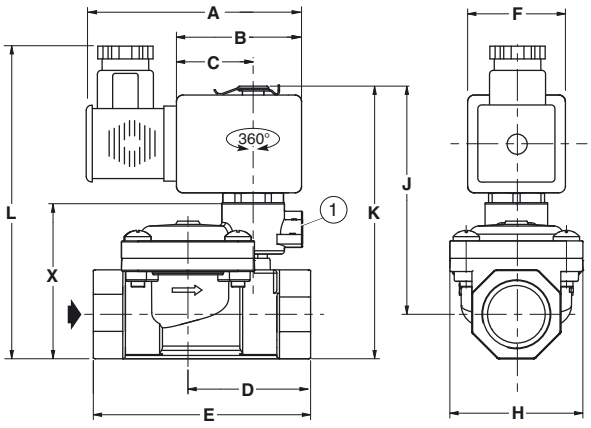
SCG238C101/102/103/104
AC (~): SCG238C105/106/107/108



TYPE 02

Prefix "SC" Solenoid
IEC 335 / ISO 4400
IP65

DC (~): SCG238C105/106/107/108



(1) Manual operator location.

type	prefix option	catalogue number	A	B	C	D	E	F	H	J	K	L	X	weight (2) NC	weight (2) NO
01	SC	SCG238C101 / SCG238C105 (~)	57,5	27,5	17	34,5	60	22	40	67	78	95	42	0,33	0,35
		SCG238C102 / SCG238C106 (~)	57,5	27,5	17	37	66	22	40	69	83	100	47	0,38	0,41
		SCG238C103 / SCG238C107 (~)	57,5	27,5	17	43,5	79	22	50	73,5	90	107	54	0,52	0,55
		SCG238C104 / SCG238C108 (~)	57,5	27,5	17	59	105	22	71	85	106	123	70	1,08	1,11
02	SC	SCG238C105 (=)	73	38	23	34,5	60	30	40	67	78	95	42	-	0,35
		SCG238C106 (=)	73	38	23	37	66	30	40	69	83	83	47	-	0,41
		SCG238C107 (=)	73	38	23	43,5	79	30	50	73,5	90	90	54	-	0,55
		SCG238C108 (=)	73	38	23	59	105	30	71	85	106	106	70	-	1,11

(2) Incl. coil(s) and connector(s).

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