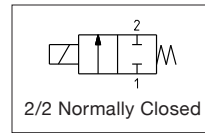


- Diaphragm solenoid isolation valves designed for use with neutral and aggressive liquids and gases in analytical instrumentation
- Compact architecture saves valuable space in instrumentation
- Ultra-low power consumption of 1 W to meet the most stringent OEM requirements
- Excellent self-draining capability and easy-to-flush low-volume internal cavity make these valves ideal in application where cross-contamination must be minimized
- Meets all relevant CE directives, and is RoHS compliant
- Typical applications include:
 - Pipette Dispensing
 - DNA Sequencing
 - POC Instrumentation
 - Water Analyzers



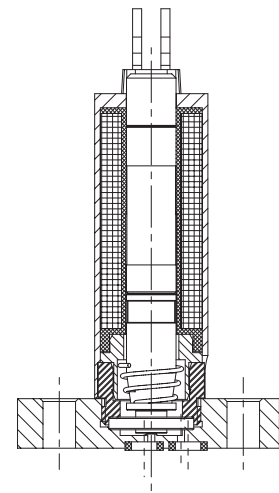
Fluids*	Temperature Range	Seal Materials*
Liquids or Gases ¹	10 °C to 40 °C (50 °F to 104 °F)	FFKM

¹ Filtration: 50µm

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

General Valve Information	
Body	PEEK
Seals	FFKM (FKM/EPDM)
Diaphragm	FFKM (FKM/EPDM)
Others	Stainless Steel
Response Time	< 20ms
Internal Volume	10µl
Max. Viscosity	20 cSt (mm ² /s)

Electrical Characteristics	
Coil Insulation Class	F
Connector	Pin header with 2 contacts
Electrical Safety	IEC 335
Standard Voltages	12 VDC to 24 VDC



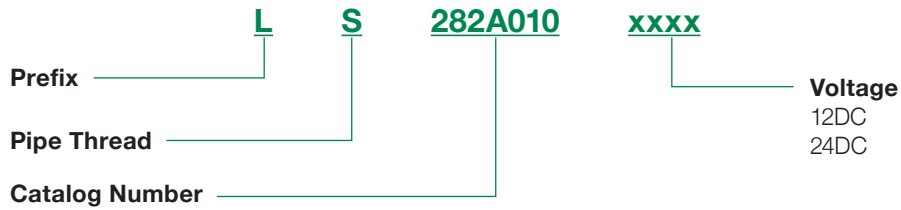
Pad-mounting Body

Prefix Option	Power Ratings				Ambient Temperature Range	Replacement Coil	Type ¹
	Inrush	Holding		Hot/Cold			
	VA	VA	W	W	°C (°F)		
L	-	-	-	1	10 to 40 (50 to 104)	-	01

¹ Refer to the drawings on following page

Specifications							
Connection	Orifice Size	Flow Coefficient		Pressure Differential bar (psi)		Power Coil	Catalog Number
				min.	max.		Lead Wires
Pad Mounting	0.5 (0.02)	Kv (m3/h)	Cv	0	gases, liquids	W	LS282A010
		0.0066	0.0076		0.5 (7.25)	1	

How to Order



Ordering Example: LS282A01012DC = 2-Way normally closed, 0.5mm (0.02in) orifice, FFKM seals, 12 VDC

Dimensions: mm (inches)

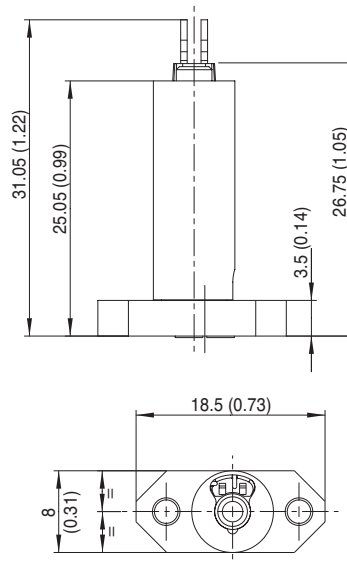
Dimensional Drawing

Type 01

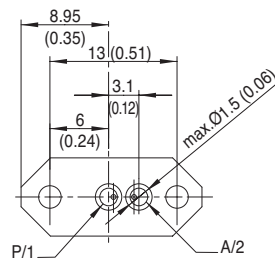
Prefix "L" solenoid
IEC 335/with pin header
with 2 contacts



LS282A010



Pad-mounting Pattern



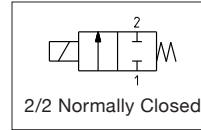
Options

- Other materials available on request

Installation

- The solenoid valves can be mounted in any position without affecting operation

- Diaphragm solenoid isolation valves designed for use with neutral and aggressive liquids and gases in analytical instrumentation
- Larger orifice sizes make these valves ideal for high flow-rate applications
- Good self-draining capability and low-volume internal cavity to minimize cross-contamination
- Removable and rotatable electrical coils allow for easy installation and worry-free maintenance
- Meets all relevant CE directives, and is RoHS compliant
- Typical applications include:
 - In-vitro Diagnostics
 - Spectrometry
 - Hematology
 - Water Analyzers



Fluids*	Temperature Range	Seal Materials*
Air, Inert Gases, Water, Oil or Liquids	10 °C to 100 °C (50 °F to 212 °F)	FFKM

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

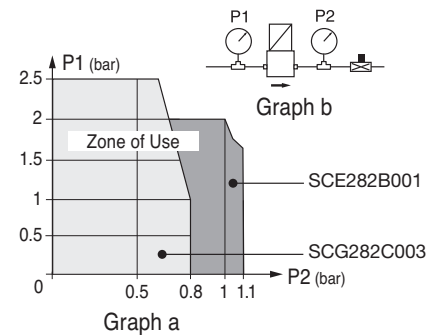
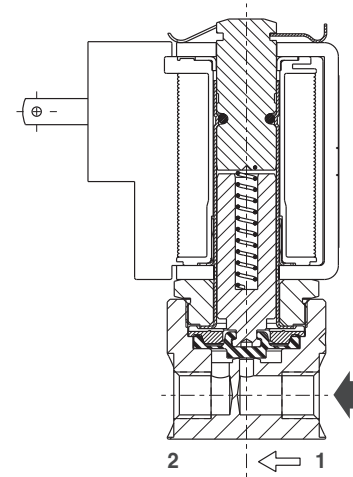
General Valve Information	
Body	Stainless Steel AISI 316 or PVDF (polyvinylidene fluoride)
Diaphragm	VMQ, FKM or EPDM
Others	Stainless Steel
Response Time	< 10ms (SCE282B001) < 20ms (SCG282C003)
Internal Volume	70µl
Max. Viscosity	37 cSt (mm ² /s)

Electrical Characteristics	
Coil Insulation Class	F
Connector	Spade plug (cable Ø4-6mm or Ø6-10mm)
Connector Specification	2.5 W (DMX) 2 spade terminals, 2.8 x 0.5mm (DIN 46340) 8 W/9 W (ANX) ISO 4400/EN 175301-803, form A
Electrical Safety	IEC 335
Electrical Enclosure Protection	Type 01: Molded IP40 (EN 60529), Type 02: PPS (Polyphenylene sulfide) glass-fiber reinforced, IP 67 (EN 60529) with plug connector
Standard Voltages	12 VDC to 24 VDC AC ~: 24 V to 115 V to 230 V/50 Hz

* Other voltages available on request

Prefix Option	Power Ratings				Ambient Temperature Range	Replacement Coil		Type ¹
	Inrush	Holding		Hot/ Cold		230 V/50 Hz	24 VDC	
	VA	VA	W	W				
SC	-	-	-	2.5	-10 to 60 (50 to 140)	-	500701-006	01
	23	14	8	9	-10 to 60 (50 to 140)	511239-009	511239-002	02

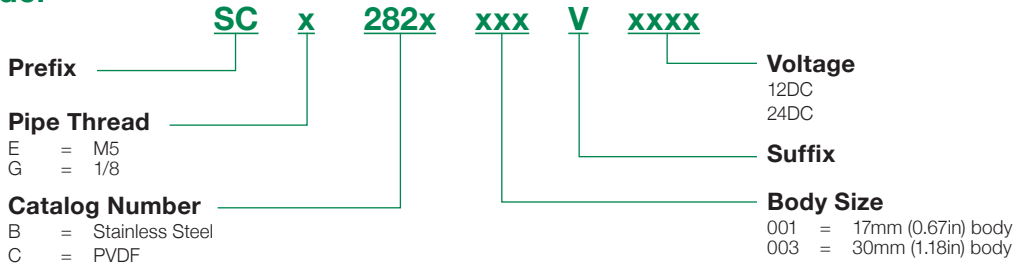
¹ Refer to the dimensional drawings on the following page



Specifications															
Connection	Orifice Size	Flow Coefficient		Pressure Differential bar (psi)				Power Coil		Catalog Number		Options			
		mm (inches)	Kv (m ³ /h)	Cv	min.	max.		W	stainless steel	PVDF	FKM	EPDM			
						air, inert gases	liquids								
2/2 NO - Normally Closed															
M5	1.6 (0.063)	0.04	0.046	0	-	2 (29) ²	-	2 (29) ²	-	2.5	SCE282B001	-	V	E	
G1/8	4 (0.157)	0.32	0.370	0	2.5 (36) ²	2.5 (36) ²	2.5 (36) ²	2.5 (36) ²	8	9	-	SCG282C003	V	E	

² See graphs (a) and (b) variation of inlet pressure (P2) for outlet pressure (P1) maintained

How to Order



Dimensions: mm (inches)

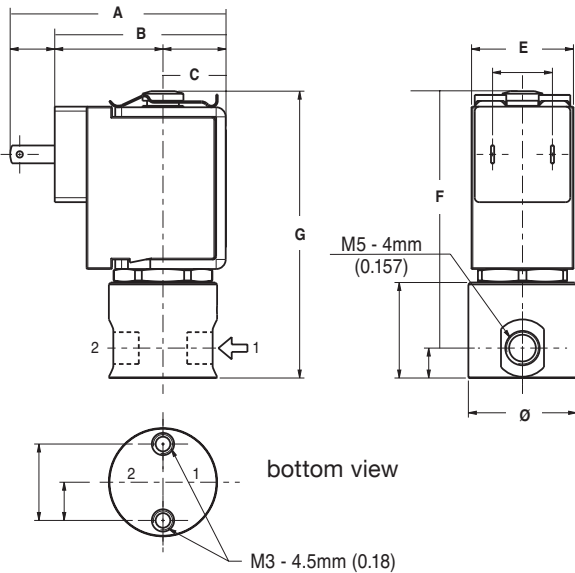
Dimensional Drawings

Type 01

Prefix "SC" solenoid
IEC 335/DIN 46340
IP40



SCE282B001

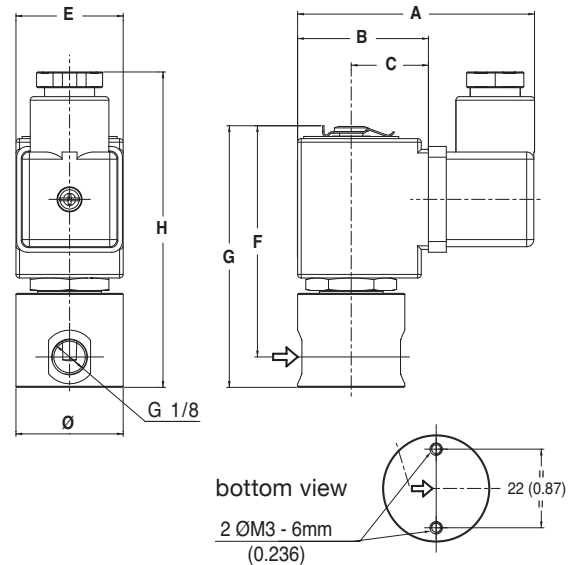


Type 02

Prefix "SC" solenoid
IEC 335/DIN 46340
IP 67 (EN 60529) with plug
connector



SCG282C003



Type	Prefix Option	Catalog Number	Ø	A	B	C	D	E	F	G	H	Weight kg
01	SC	SCE282B001	17 (0.67)	33.9 (1.33)	26.9 (1.06)	9.9 (0.39)	-	16 (0.63)	40.3 (1.59)	45 (1.77)	-	0.06 ¹
02	SC	SCG282C003	30 (1.2)	71.6 (2.82)	36.6 (1.44)	21.6 (0.85)	-	30 (1.18)	64.5 (2.54)	73 (2.87)	89 (3.5)	0.22 ²

¹ Including coil, without connector.

² Including coil(s) and connector(s).

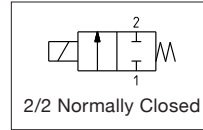
Options

- Other pipe connections available on request
- Plug with visual indication and peak voltage suppression or with lead wire length of 2m (78.7in)

Installation

- The solenoid valves can be mounted in any position without affecting operation. For optimum performance mount solenoid vertical and upright
- Replacement coils are available: 2.5 W (DMX): DC, 12 V, catalog number **500701-005**; AC, 24 V, catalog number **500701-006**
8 W/9 W (ANX): DC, 12 V, catalog number **511239-001**; AC, 24 V, catalog number **511239-002**; 115 V, catalog number **511239-007**

- Diaphragm solenoid isolation valves designed for use with neutral and aggressive liquids and gases in analytical instrumentation
- Larger orifice sizes make these valves ideal for high flow-rate applications
- Good self-draining capability and low-volume internal cavity to minimize cross-contamination
- Removable and rotatable electrical coils allow for easy installation and worry-free maintenance
- Adjustable flow restrictor incorporated into valve body allows for easy adjustment of media flow-rates from 10% – 100%
- Meets all relevant CE directives, and is RoHS compliant
- Typical applications include:
 - In-vitro Diagnostics
 - Hematology
 - Spectrometry
 - Water Analyzers



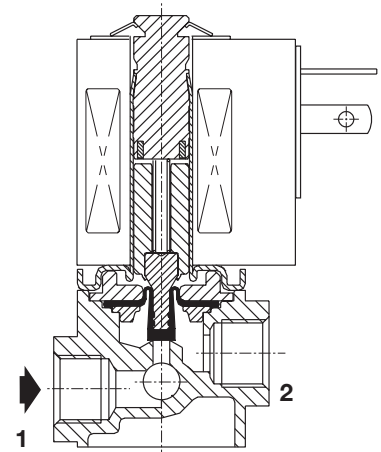
Fluids*	Temperature Range	Media Temperature Range	Seal Materials*
Liquids or gases	-10 °C to 60 °C (14 °F to 140 °F)	-10 °C to 80 °C (14 °F to 176 °F)	FKM

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

General Valve Information*	
Body	PP (Glass Fiber Reinforced)
Seals	FKM
Response Time	< 20ms
Internal Volume	70µl
Max. Viscosity	37 cSt (mm ² /s)

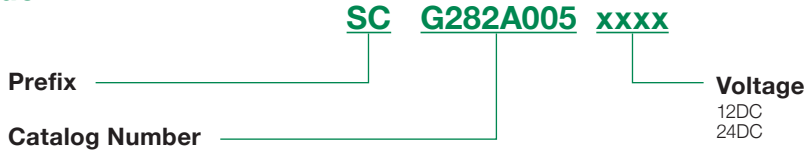
* Ensure that the compatibility of the fluids in contact with the materials is verified

Electrical Characteristics	
Coil Insulation	155 °C (311 °F)
Connector	DIN Spade Terminal
DIN Connectors	Size 18mm, ISO 4400/EN 175301-803 form A
Standard Voltages	12 VDC, 24 VDC
Power Consumption	9 Watts



Specifications								
Prefix Option	Ports	Orifice Size	Flow Coefficient		Pressure Differential bar (psi)		Power Coil	Catalog Number
		mm (inches)	Kv (m ³ /h)	Cv	min.	max.	W	
SC	G1/4	4.5 (0.177)	0.450	0.520	0	1 (14.5)	9.0	G282A005xxxx

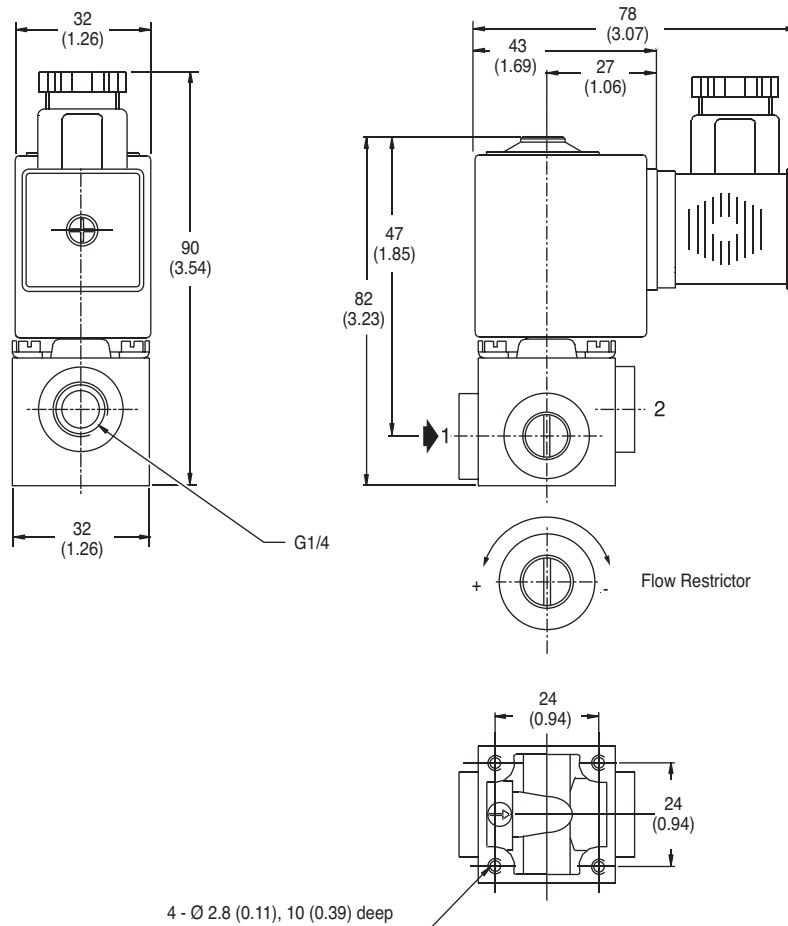
How to Order



Ordering Example: SCG282A00524DC = G1/4 ports, 4.5mm (0.177in) orifice, 24 VDC

Dimensions: mm (inches)

Dimensional Drawings



Options

- Valves can also be supplied with FKM (fluoroelastomer) and EPDM (ethylene-propylene) seals and diaphragm

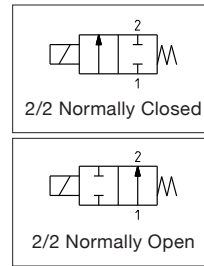
Installation

- The solenoid valves can be mounted in any position without affecting operation

LEVER SOLENOID FLUID ISOLATION VALVES WITH SPIGOTS



- Lever mechanism isolation valves designed for use with aggressive and corrosive liquids and gases in analytical instrumentation and the chemical manufacturing industries
- Large orifice sizes make these valves ideal for high flow-rate and high pressure applications
- Ideally suited for quickly flushing systems of corrosive media and routing aggressive reagents to chemical reaction vessels and waste containers
- Available in both a 2-Way normally closed and normally open versions, as well as 3-Way normally closed, normally open and universal versions; each with multiple connection options
- Meets all relevant CE directives, and is RoHS compliant
- Typical applications include:
 - Raw-material Chemical Manufacturing
 - Chip/Wafer Manufacturing
 - Pharmaceutical
 - Waste Water Treatment



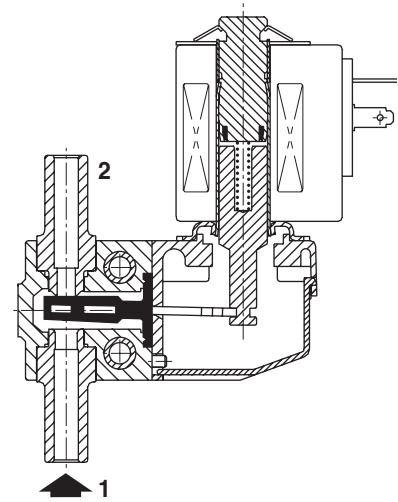
Fluids*	Temperature Range	Seal Materials*
Air, Inert Gases, Filtered Water, Oil or Liquids	10 °C to 100 °C (50 °F to 212 °F)	VMQ (silicone)
		FKM (fluoroelastomer)
		EPDM (ethylene-propylene)

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

General Valve Information	
Body	PEI (polyetherimide)
Seals	VMQ, EPDM or FKM
Response Time	~ 25ms
Max. Viscosity	37 cSt (mm ² /s)

Electrical Characteristics	
Coil Insulation Class	F
Connector	Spade plug (cable Ø6-8mm or Ø6-10mm)
Connector Specification	with coil 6W/6W (BMX) DIN 43650, 11mm, industry standard B, with coil 8W/9W (AMX) ISO 4400/EN 175301-803, form A
Electrical Safety	IEC 335
Electrical Enclosure Protection	Molded IP65 (EN 60529)
Standard Voltages ¹	12 VDC, 24 VDC AC ~: 24 V to 115 V to 230 V/50 Hz (BMX = 50 – 60 Hz)

¹ Other voltages and 60 Hz available on request



NC Function

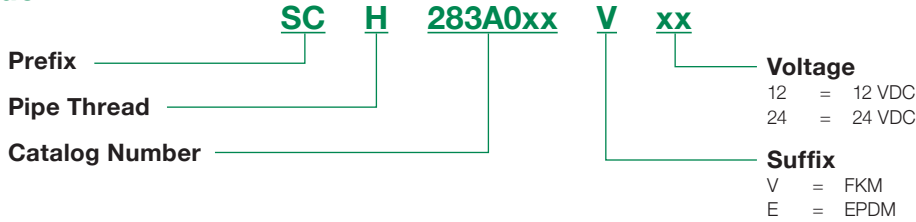
Prefix Option	Power Ratings				Ambient Temperature Range	Replacement Coil		Type ¹	
	Inrush VA	Holding VA	Hot/Cold W	Hot/Cold W		°C (°F)	230 V/50 Hz		24 VDC
							43005164		43005149
SC	16	10	6	6	-10 to 60 (14 to 40)	43005164	43005149	01 (BMX)	
	23	14	8	9	-10 to 60 (14 to 40)	43005149	43005144	02 (AMX)	

¹ Refer to the dimensional drawings on the following page

Specifications												
Spigot O.D.	Spigot I.D.	Flow Coefficient	Pressure Differential bar (psi)				Power Coil	Catalog Number	Options			
			min.	max.		W			FKM	EPDM		
				inert gases	liquids							
mm (inches)	Kv (m ³ /h)	Cv										
2/2 NC - Normally Closed, VMQ Seals												
8 (0.31)	2.7 (0.11)	0.23	0.27	0	5 (72.5) [10/145]	5 (72.5)	6	6	SCH283A003	V	E	
8 (0.31)	3.4 (0.13)	0.30	0.35	0	3 (43.5) [6/87]	3 (43.5)	6	6	SCH283A004	V	E	
11 (0.43)	5.5 (0.22)	0.55	0.64	0	1.5 (21.8)	1 (14.5)	8	9	SCH283A010	-	-	
2/2 NC - Normally Closed, EPDM Seals (Optional: FKM)												
11 (0.43)	5.5 (0.22)	0.55	0.64	0	4.5 (65.3)	1 (14.5)	8	9	SCH283A008E	V	-	
2/2 NO - Normally Open, VMQ Seals												
8 (0.31)	3.4 (0.13)	0.30	0.35	0	3 (43.5)	2.5 (36.3)	6	6	SCH283A016	V	E	
2/2 NO - Normally Open, FKM Seals												
11 (0.43)	5.5 (0.22)	0.55	0.64	0	1.5 (21.8)	1 (14.5)	8	9	SCH283A018V	-	-	

[] Value for differential pressure with FKM and EPDM seals

How to Order



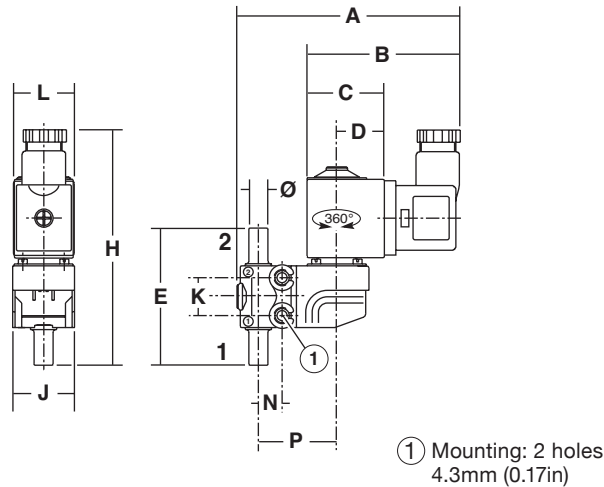
Dimensions: mm (inches)

Dimensional Drawings

Type 01 Prefix "SC" solenoid
 DIN 43650



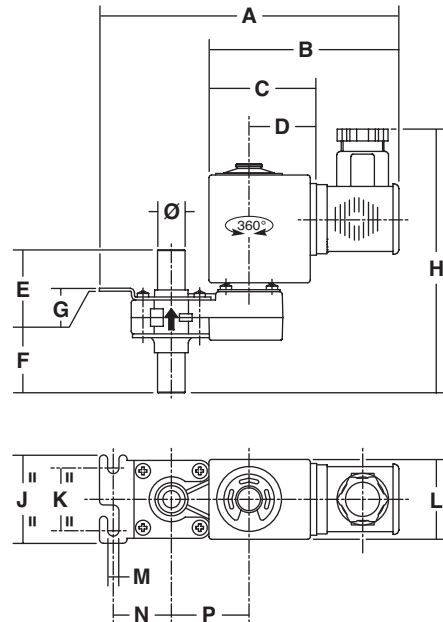
SCH283A003/A004/A016



Type 02 Prefix "SC" solenoid
 ISO 4400



SCH283A010/A008/A018V



Pressure inlet:

- NC function: orifice 1 (type 01) or arrow on body (type 02)
- NO function: orifice 2 (type 01) or arrow on body (type 02)

Type	Prefix Option	Catalog Number	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Weight ²
																	kg
01	SC	SCH283A003/A004	94	64.5	33.5	21	58	-	-	97	26	16	25	-	10	33	0.170
		SCH283A016	(3.7)	(2.54)	(1.32)	(0.83)	(2.28)	-	-	(3.82)	(1.02)	(0.63)	(0.98)	-	(0.39)	(1.30)	0.200
02	SC	SCH283A010/A008E/018V	121.5	78	43	27	16.5	40.5	1.2	105	35	25	32	4.5	23	31	0.285
			(4.78)	(3.07)	(1.69)	(1.06)	(0.65)	(1.59)	(0.047)	(4.13)	(1.38)	(0.98)	(1.26)	(0.18)	(0.91)	(1.22)	

² Including coil(s) and connector(s)

Options

- Valves can also be supplied with FKM (fluoroelastomer) and EPDM (ethylene-propylene) poppet seal
- Plug with visual indication and peak voltage suppression or with cable length of 2m (78.7in)

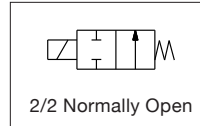
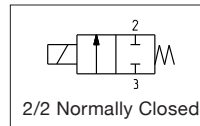
Installation

- The solenoid valves can be mounted in any position without affecting operation. For optimum performance mount solenoid vertical and upright
- Replacement coils are available: BMX: DC: 12 V, cat. no.: **43005158** /AC: 24 V, cat. no.: **43005161**; 115 V, cat. no.: **43005162**
 AMX: DC: 12 V, cat. no.: **43005143**/AC: 24 V, cat. no.: **43005146**; 115 V, cat. no.: **43005147**

LEVER SOLENOID FLUID ISOLATION VALVES WITH THREADED CONNECTIONS



- Lever mechanism isolation valves designed for use with aggressive and corrosive liquids and gases in analytical instrumentation and the chemical manufacturing industries
- Large orifice sizes make these valves ideal for high flow-rate and high pressure applications
- Ideally suited for quickly flushing systems of corrosive media and routing aggressive reagents to chemical reaction vessels and waste containers
- Available in both 3-Way normally closed, normally open and universal versions, as well as 2-Way normally closed and normally open versions; each with multiple connection options
- Meets all relevant CE directives, and is RoHS compliant
- Typical applications include:
 - Raw-material Chemical Manufacturing
 - Chip/Wafer Manufacturing
 - Pharmaceutical
 - Waste Water Treatment



Fluids*	Temperature Range	Seal Materials*
Air, Inert Gases, Filtered Water, Oil or Liquids	-10 °C to 100 °C (14 °F to 212 °F)	VMQ (silicone) EPDM (ethylene-propylene)

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

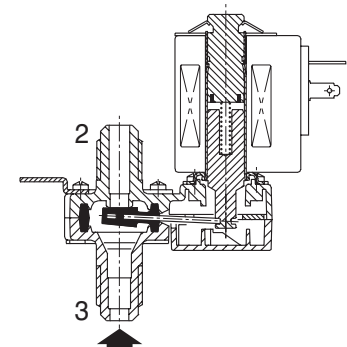
General Valve Information		
Body	G1/4: PEI (polyetherimide)	G1/2: PPS (polyphenylene sulphide)
Seals	VMQ, EPDM or FKM	
Response Time	~ 25ms	
Max. Viscosity	37 cSt (mm ² /s)	

Electrical Characteristics	
Coil Insulation Class	F
Connector	Spade plug (cable Ø6-10mm)
Connector Specification	ISO 4400/EN 175301-803, form A
Electrical Safety	IEC 335
Electrical Enclosure Protection	Molded IP65 (EN 60529)
Standard Voltages ¹	12 VDC, 24 VDC AC ~: 24V to 115V to 230V/50 Hz

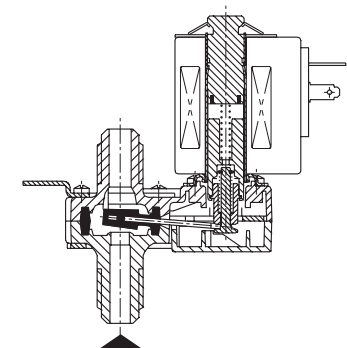
¹ Other voltages and 60 Hz on request

Prefix Option	Power Ratings				Ambient Temperature Range	Replacement Coil		Type ¹
	Inrush	Holding		°C (°F)		230 V/50 Hz	24 VDC	
	VA	VA	W					
SC	23	14	6	9	-10 to 60 (14 to 140)	43005149	43005144	01 (AMX)
	44	24	8	13	-10 to 60 (14 to 140)	43005320	43005317	02 (FNX)

¹ Refer to the dimensional drawings on the following page



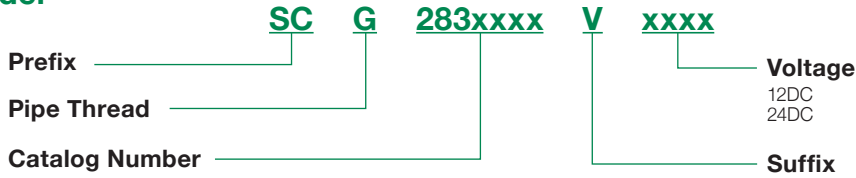
Function 2/2 NC



Function 2/2 NO

Specifications										
Connection	Orifice Size	Flow Coefficient		Pressure Differential bar (psi)			Power Coil		Catalog Number	Options
				min.	max.		W	W		FKM
					inert gases	liquids				
2/2 NC - Normally Closed, VMQ Seals										
1/4	3.2 (0.126)	0.32	0.37	0	1.5 (0.059)	1.5 (0.059)	8	9	SCG283A013	-
	5.5 (0.215)	0.55	0.64	0	1.5 (0.059)	1 (0.039)	8	9	SCG283A014	-
2/2 NC - Normally Closed, EPDM Seals (Optional: FKM)										
1/4	3.2 (0.126)	0.32	0.37	0	10 (0.126)	2.4 (0.094)	8	9	SCG283A011E	V
	5.5 (0.215)	0.55	0.64	0	4.5 (0.177)	1 (0.039)	8	9	SCG283A012E	V
1/2	10 (0.394)	1.6	1.85	0	1.6 (0.063)	0.25 (0.010)	13	13	SCG283C006E	V
2/2 NO - Normally Open, FKM Seals										
1/4	3.2 (0.126)	0.3	0.35	0	3 (0.118)	1 (0.039)	8	9	SCG283A019V	-

How to Order



Dimensions: mm (inches)

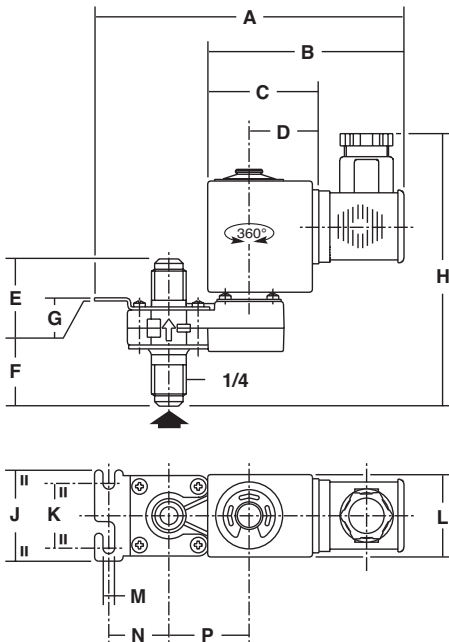
Dimensional Drawings

Type 01

Prefix "SC" solenoid
ISO 4400



**SCG283A011/012/
013/014/019V**

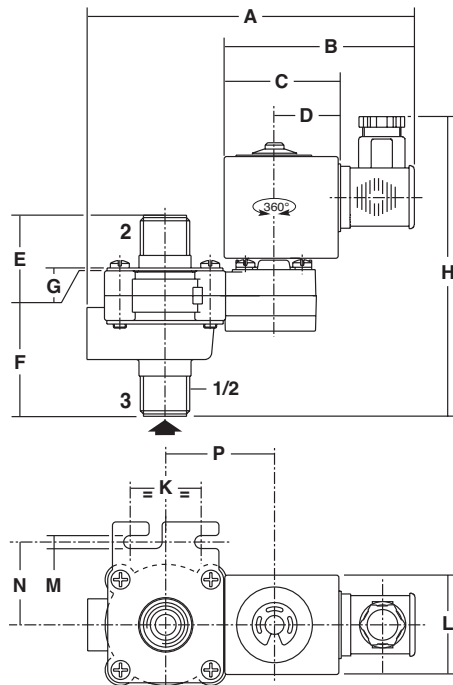


Type 02

Prefix "SC" solenoid
ISO 4400



SCG283C006



Pressure inlet:

NC function: arrow on body (type 01) or orifice 3 (type 02)

NO function: arrow on body (type 01)

Type	Prefix Option	Catalog Number	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Weight ²
																	kg
01	SC	SCG283A011E/012E/013/014/019V	121.5 (4.78)	78 (3.07)	43 (1.69)	27 (1.06)	16.5 (0.65)	40.5 (1.59)	1.2 (0.047)	105 (4.13)	35 (1.38)	25 (0.98)	32 (1.26)	4.5 (0.177)	23 (0.906)	31 (1.22)	0.285
02	SC	SCG283C006E	142.5 (5.61)	84 (3.31)	49 (1.93)	28 (1.10)	23.5 (0.93)	61.5 (2.42)	1.2 (0.047)	128 (5.04)	-	30 (1.18)	42 (1.65)	5.5 (0.217)	35 (1.38)	46 (1.81)	0.57

² Including coil(s) and connector(s).

Options

- Valves can also be supplied with FKM (fluoroelastomer) poppet seal. Use the appropriate optional suffix letter for identification
- Other pipe connections are available on request
- Plug with visual indication and peak voltage suppression or with cable length of 2m (78.7in)

Installation

- The solenoid valves can be mounted in any position without affecting operation. For optimum performance mount solenoid vertical and upright
- Pipe connection identifier is G = G (ISO 228/1)
- Replacement coils are available:
Type 01(AMX): DC: 12 V, cat. no.: **43005143**/AC: 24 V, cat. no.: **43005146**;
115 V, cat. no.: **43005147**
Type 02 (FNX): DC: 12 V, cat. no.: **43005316**/AC: 24 V, cat. no.: **43005318**;
115 V, cat. no.: **43005319**