

FEATURES

- Solenoid valves for medical analysers, biotechnology and chemical industry
- Any application where the fluid may not come into contact with the electromagnetic control section of the solenoid valves
- The solenoid valves are ideal for controlling aggressive fluids and have easy to flush internal cavities
- The solenoid valves satisfy all relevant EC directives

GENERAL

Differential pressure	See «SPECIFICATIONS» [1 bar = 100 kPa]
Maximum viscosity	37 cSt (mm ² /s)
Response time	10 ms (SCE282B001) ; 20 ms (SCG282B003)
Dead volume	< 70 µl (coupling not included)

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gases, water, oil and liquids	- 10°C to + 100°C	VMQ (silicone)

MATERIALS IN CONTACT WITH FLUID

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

Body	Stainless steel AISI 316 or PVDF (polyvinylidene fluoride)
Diaphragm	VMQ, FPM or EPDM

OTHERS MATERIALS

Internal parts	Stainless steel
-----------------------	-----------------

ELECTRICAL CHARACTERISTICS

Coil insulation class	F
Connector	Spade plug (cable Ø 4-6 mm or Ø 6-10 mm)
Connector specification	

2,5 W (DMX)	DIN 43650, 9,4 mm, industry standard B
8 W /9 W (ANX)	ISO 4400 / EN 175301-803, form A

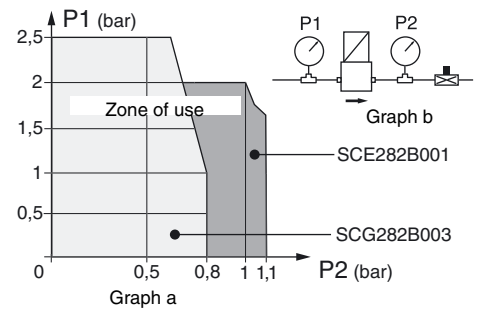
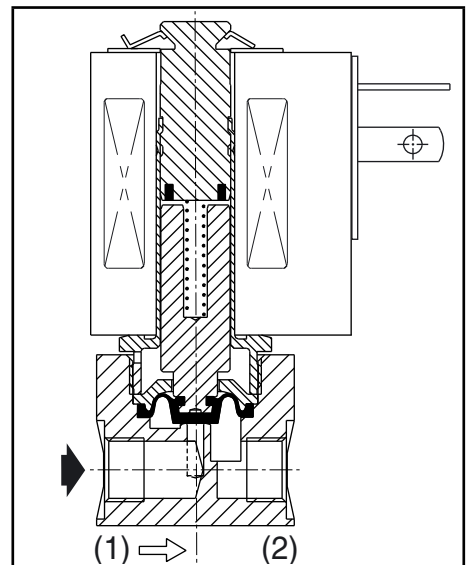
Electrical safety

Electrical enclosure protection Moulded IP65 (EN 60529)

Standard voltages	DC (=) : 12V - 24V
(Other voltages on request)	AC (~) : 24V - 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)		230 V/50 Hz	24 V DC		
SC	-	-	-	2,5	-10 to + 60	-	43005189	01
	23	14	8	9	-10 to + 60	43005275	43005272	02

⁽¹⁾ Refer to the dimensional drawings on the following page.



SPECIFICATIONS

pipe size	orifice size (mm)	flow coefficient Kv		min.	operating pressure differential (bar) max. (PS)				power coil (W)		catalogue number		FPM	EPDM
		(m ³ /h)	(l/min)		air, inert gases (*)		liquids (*)							
		~	=		~	=	~	=	stainless steel	PVDF				
NC - Normally closed														
M5	1,6	0,04	0,66	0	-	2 ⁽²⁾	-	2 ⁽²⁾	-	2,5	SCE282B001	-	V	E
G 1/8	4	0,32	5,33	0	2,5 ⁽²⁾	2,5 ⁽²⁾	2,5 ⁽²⁾	2,5 ⁽²⁾	8	9	-	SCG282B003	V	E

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

OPTIONS

- Valves can also be supplied with FPM (fluoroelastomer) and EPDM (ethylene-propylene) seals. 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 2 m (see Solenoids, Coils & Accessories section)

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)
- Installation/maintenance instructions are included with each valve
- Replacement coils are available:
2,5 W (DMX): DC, 12 V, catalogue number **43005188**
8 W/9 W (ANX): DC, 12 V, catalogue number **43005271**, AC, 24 V, catalogue number **43005273** ; 115 V, catalogue number **43005274**

ORDERING EXAMPLES:

SC	E	282	B	001	24V / DC	
SC	G	282	B	003	115V / 50 Hz	
SC	G	282	B	003	V	230V / 50 Hz

prefix — SC
 pipe thread — E, G
 basic number — 282 B 001, 282 B 003
 voltage — 24V / DC, 115V / 50 Hz, 230V / 50 Hz
 suffix — V

DIMENSIONS (mm), WEIGHT (kg)



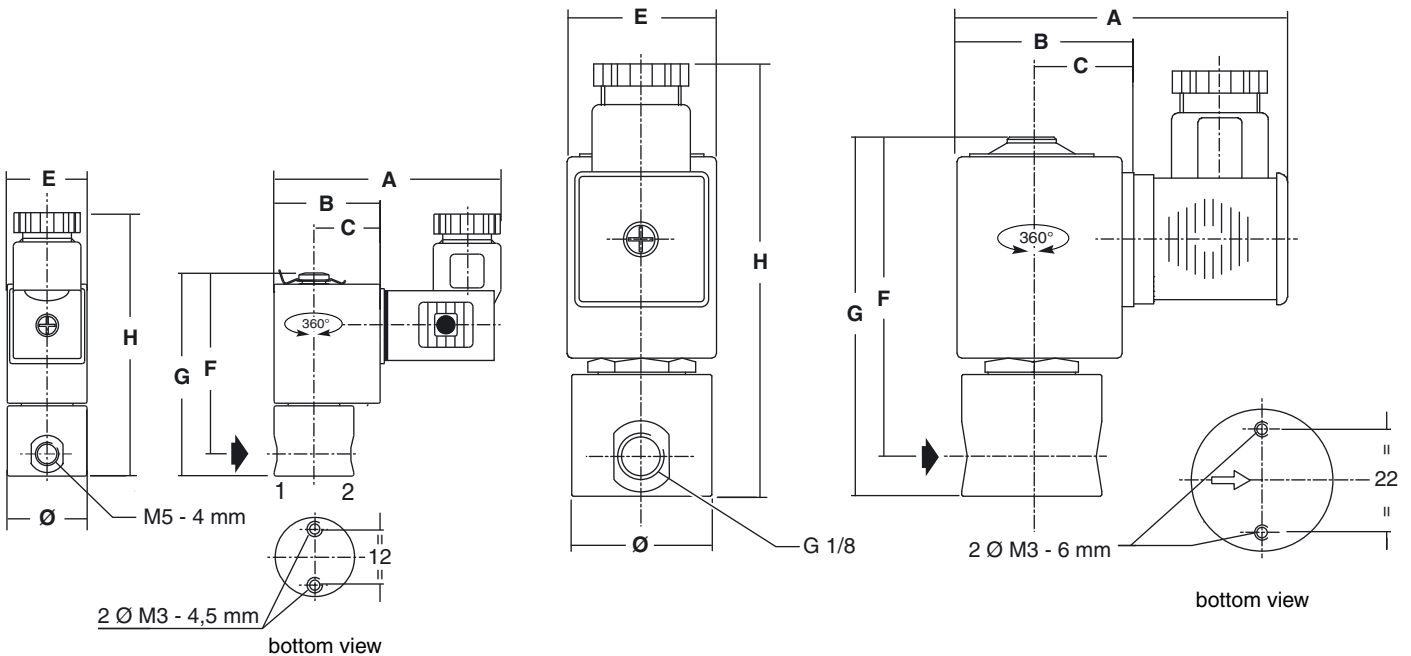
TYPE 01
Prefix "SC" Solenoid
Epoxy moulded
IEC 335 / DIN 43650
IP65

SCE282B001



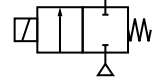
TYPE 02
Prefix "SC" Solenoid
Epoxy moulded
IEC 335 / ISO 4400
IP65

SCG282B003



type	prefix option	catalogue number	Ø	A	B	C	D	E	F	G	H	weight ⁽¹⁾
01	SC	SCE282B001	17	49,5	23,5	15	-	17	38,3	43	63	0,082
02	SC	SCG282B003	30	76,5	41,5	27	-	30	65	74	84	0,22

⁽¹⁾ Incl. coil(s) and connector(s).



FEATURES

- Solenoid valves for medical analysers, biotechnology and chemical industry
- Bi-directional operation provided up to 1 bar
- Flow restrictor built into the valve body (range of 10 to 100%)
- Any application where the fluid may not come into contact with the electromagnetic control section of the solenoid valves
- The solenoid valves are ideal for controlling aggressive fluids and have easy to flush internal cavities
- The solenoid valves satisfy all relevant EC directives

GENERAL

Differential pressure See «SPECIFICATIONS» [1 bar = 100 kPa]
Maximum viscosity 37 cSt (mm²/s)
Response time 20 ms

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gases, water, oil and liquids	- 10°C to + 80°C	FPM (fluoroelastomer)

MATERIALS IN CONTACT WITH FLUID

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

Body Glass fibre filled PP
Diaphragm FPM

OTHERS MATERIALS

Internal parts Stainless steel

ELECTRICAL CHARACTERISTICS

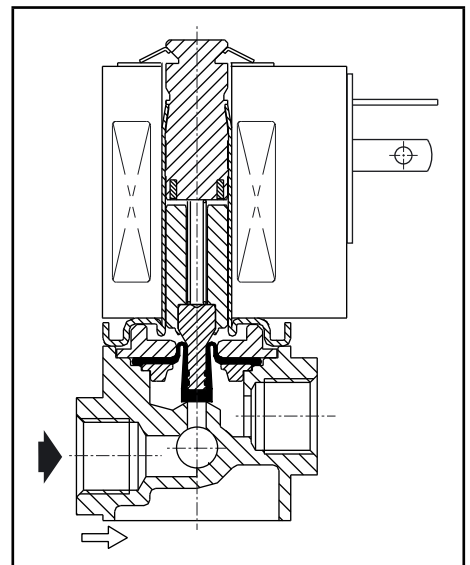
Coil insulation class F
Connector Spade plug (cable Ø 6-10 mm)
Connector specification ISO 4400 / EN 175301-803, form A
Electrical safety IEC 335
Electrical enclosure protection Moulded IP65 (EN 60529)
Standard voltages DC (=) : 12V - 24V
 AC (~) : 24V - 115V - 230V / 50 Hz
 (Other voltages and 60 Hz on request)

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	23	14	8	9	-10 to + 60	43005149	43005144	01

⁽¹⁾ Refer to the dimensional drawings on the following page.

SPECIFICATIONS

pipe size	orifice size (mm)	flow coefficient Kv (m ³ /h) (l/min)		operating pressure differential (bar)				power coil (W)		catalogue number		
				min.	max. (PS)							
					air, inert gases (*)		liquids (*)					
G	(mm)	(m ³ /h)	(l/min)		~	=	~	=	~	=	~/=	
NC - Normally closed												
1/4	4,5	0,45	7,5	0	1	1	1	1	8	9	SCG282A005	



OPTIONS

- 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. For optimum performance mount solenoid vertical and upright
- Pipe connection identifier is G = G (ISO 228/1)
- Installation/maintenance instructions are included with each valve
- Replacement coils are available:
8 W/9 W (AMX): DC, 12 V, catalogue number **43005143**, AC, 24 V, catalogue number **43005146** ; 115 V, catalogue number **43005147**

SPARE PARTS KIT & ACCESSORIES

catalogue number	spare parts kit no.	
	~	=
SCG282A005	C140097	C140097

ORDERING EXAMPLES:

SC	G	282	A	005	24V / DC
SC	G	282	A	005	230V / 50 Hz
prefix	pipe thread	basic number			voltage
					suffix

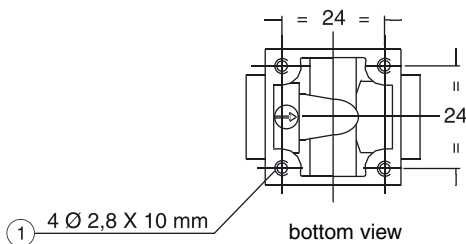
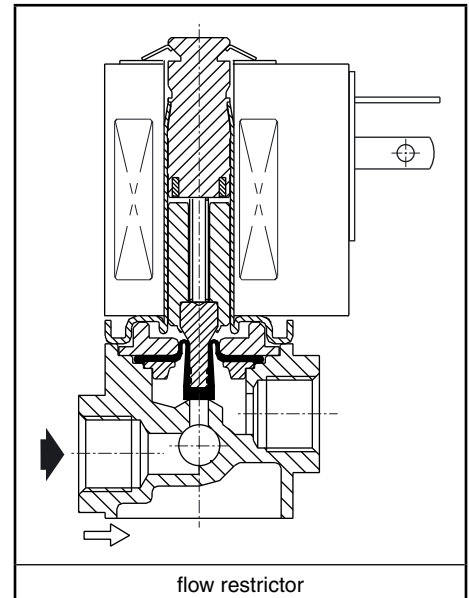
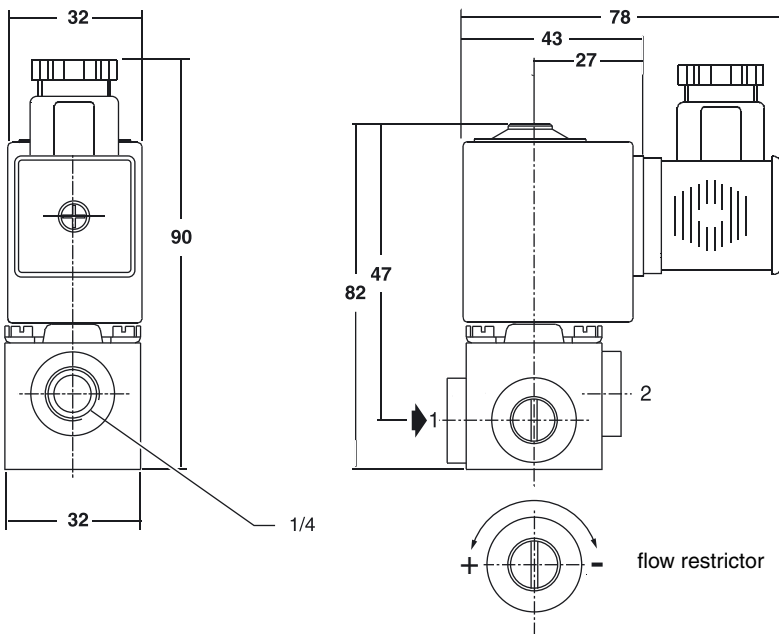
ORDERING EXAMPLES KITS:

	C140097
basic number	

DIMENSIONS (mm), WEIGHT (kg)

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

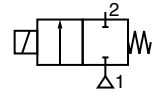
SCG282A005



type	prefix option	weight ⁽¹⁾
01	SC	0,32

⁽¹⁾ Only use self-tapping screws suitable for plastic materials.

⁽¹⁾ Incl. coil(s) and connector(s).



FEATURES

- Miniature solenoid valves for medical and gas analysers and biotechnology equipment
- Designed to control acids, bases and analytical reagents
- Hermetic separation of control mechanism and fluid:
 - Particulate contamination caused by friction of moving parts is excluded
 - Reliable operation in applications with highly aggressive fluids is ensured
- Easy-to-flush internal cavity and good self-draining capability
- Low dead volume
- Low power consumption
- Easy installation

GENERAL

Differential pressure	0 to +0,5 bar [1 bar =100 kPa]
Maximum viscosity	20 cSt (mm ² /s)
Response time	< 20 ms
Dead volume	< 10 µl

fluids (*)	temperature range (TS)	seal materials (*)
liquids or gases (filtered 50 µm)	+10°C to + 40°C	FFPM (perfluoroelastomer)

MATERIALS IN CONTACT WITH FLUID

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

Body	PEEK
Diaphragm	FFPM
Seals	FPM

OTHERS MATERIALS

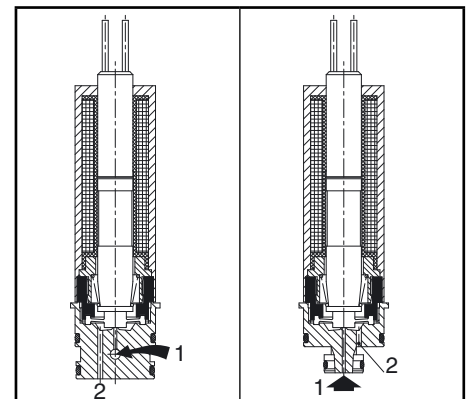
Internal parts	Stainless steel
-----------------------	-----------------

ELECTRICAL CHARACTERISTICS

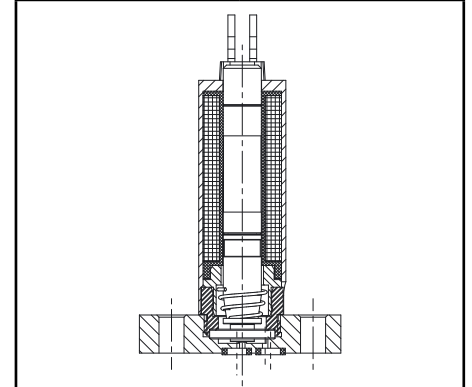
Coil insulation class	F
Connection	Cable ends, length 0,3 m
Electrical safety	IEC 335
Electrical enclosure protection	IP40 (EN 60529)
Standard voltages	DC (=) : 12V - 24V

prefix option	power ratings			operator ambient temperature range (TS) (C°)	replacement coil	type ⁽¹⁾
	inrush ~ (VA)	holding ~ (VA) (W)	cold = (W)			
L	-	-	-	+10 to + 40	-	01

⁽¹⁾ Refer to the dimensional drawings on the following page.



lateral supply (construction type 1) bottom supply (construction type 2)



pad-mounting body (construction type 3)

SPECIFICATIONS

pipe size	orifice size (mm)	flow coefficient Kv (m ³ /h) (l/min)		operating pressure differential (bar)		power coil (W)	catalogue number		
		min.	max. (PS) liquids, gases (*)	min.	max. (PS) liquids, gases (*)		lateral supply (construction type 1)	bottom supply (construction type 2)	pad-mounting body (construction type 3)
NC - Normally closed									
8 mm cartridge	0,3	0,0024	0,04	0	0,5	1	LS282A006	LS282A007	-
	0,5	0,0066	0,11	0	0,5	1	LS282A008	LS282A009	-
pad mounting	0,5	0,0066	0,11	0	0,5	1	-	-	LS282A010

OPTIONS

- Valves can also be supplied with FPM (fluoroelastomer) and EPDM (ethylene-propylene) seals and diaphragm. Contact us

INSTALLATION

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

ORDERING EXAMPLES:

L	S	282	A	006	12V / DC
L	S	282	A	007	24V / DC

prefix ————
 pipe thread ————
 basic number ————
 voltage ————
 suffix ————

DIMENSIONS (mm), WEIGHT (kg)



TYPE 01

Prefix "L" solenoid
IEC 335 / with cable ends, length 0,3 m
IP40
Weight: 0,00625

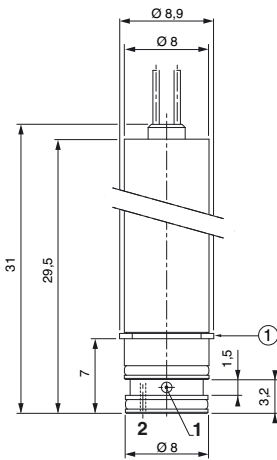


LS282A006/A008

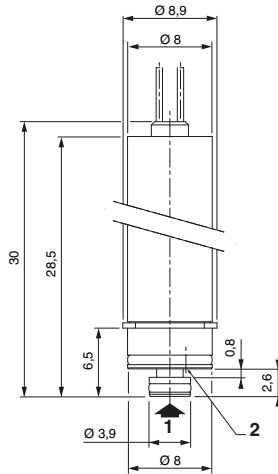
LS282A007/A009

LS282A010

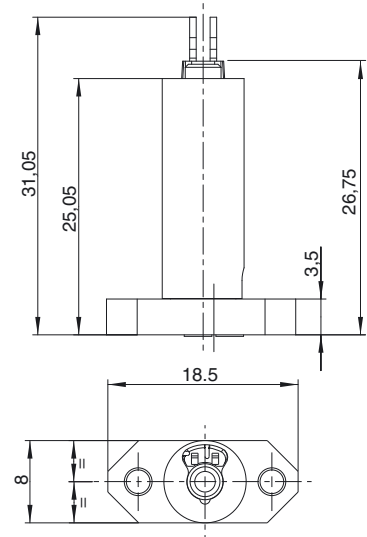
(construction type 1)



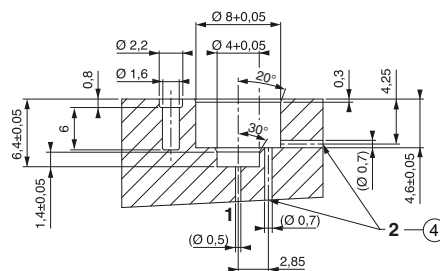
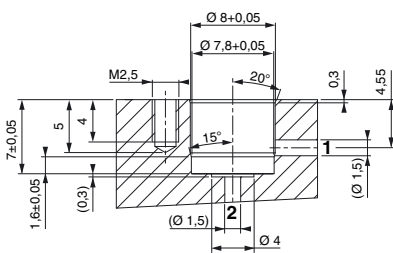
(construction type 2)



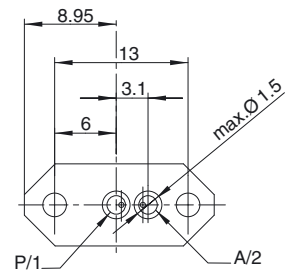
(construction type 3)



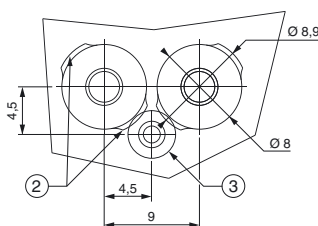
Mounting geometry



Pad-mounting pattern



Mounting pattern



- Brackets to fit the valve into the subbase
- Bracket positioning grooves in the subbase
- Retaining screw
- Outlet 2: 2 options