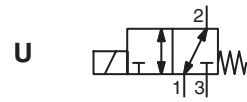




# SOLENOID VALVES

direct operated, high flow  
balanced poppet  
1/4 - 1/2



3/2  
Series  
327

## FEATURES

- The valves are certified according to IEC 61508 Functional Safety data and have SIL-3 capability (TUV & Exida certification)
- The solenoid valves are recommended for pilot applications with basic flow (Ø5,5 mm) or high flow (Ø12 mm), wide pressure ranges and no minimum operating pressure
- PTFE rider rings and graphite-filled PTFE seals reduce friction and eliminate sticking
- Dedicated execution for extreme low ambient temperatures
- The solenoid valves satisfy all relevant EU directives
- Manual Operators are optional including an under pressure removable type

## GENERAL

Differential pressure 0 - 10 bar [1 bar =100 kPa]  
Maximum viscosity 65 cSt (mm<sup>2</sup>/s)  
Response time < 100 ms

fluids (*)		temperature range (TS)	seal materials (*)
5,7 mm	air, inert gas, water, oil	-20°C to +120°C	FPM (fluoroelastomer)
		-40°C to +40°C	VMQ (silicone)
		-50°C to +60°C	(F)VMQ ((fluoro)silicone)
12 mm	air, inert gas	-25°C to +60°C	NBR (nitrile)
		-10°C to +90°C	FPM (fluoroelastomer)
		-50°C to +60°C	(F)VMQ ((fluoro)silicone)

## MATERIALS IN CONTACT WITH FLUID

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

Body Brass or stainless steel AISI 316L  
Stem, core tube Stainless steel  
Core and plugnut Stainless steel  
Springs Stainless steel  
Seals & poppets Ø 5,7 mm: FPM or VMQ or (F)VMQ  
Ø 12 mm: NBR or FPM or (F)VMQ  
Rider ring PTFE

## ELECTRICAL CHARACTERISTICS

Coil insulation class H  
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 (-) : 24V - 48V  
(Other voltages and 60 Hz on request) AC (~) : 24V - 48V - 115V - 230V<sup>(2)</sup> / 50 Hz

prefix option	power ratings				operator ambient temperature range (TS) (C°)	replacement coil		type <sup>(1)</sup>
	inrush		holding			~	=	
	~	=	~	=				
SC	10	10	10	9 / 11,2	-40 to +55	123664-017	400425-142	01
	3,7	3,7	3,7	3,2 / 3,6	-40 to +55	<sup>(2)</sup>	400923-042	02
	10	10	10	9 / 10	-40 to +60	400924-197	400923-342	02
	14,1	14,1	14,1	11 / 14	-40 to +90	400924-697	400923-642	02

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

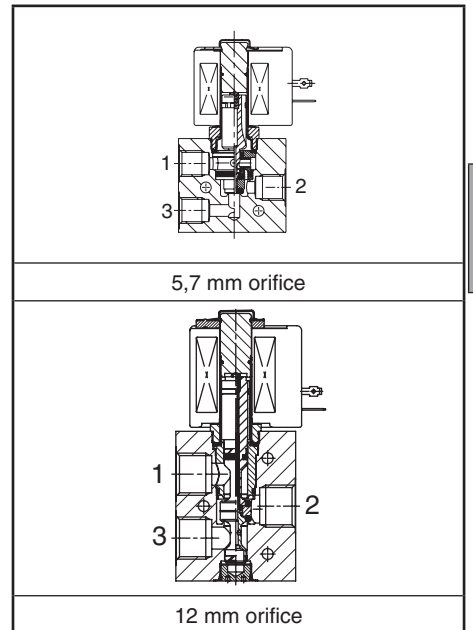
<sup>(2)</sup> 3,7 W: Limited to max. 115 V / 50 Hz / Replacement coil 115 V/50 Hz: 400924-098

## SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)				power coil (W)		catalogue number		options					
				max. (PS)								maintained man. operator <sup>(4)</sup>	impulse man. operator <sup>(4)</sup>				
				min..		air (*)										water(*)	
G	(mm)	(m <sup>3</sup> /h)	(l/min)	~	=	~	=	~	=	brass	stainless steel	~/=	~/=				
<b>U - Universal, FPM seals and poppets</b>																	
1/4	5,7	0,45	7,5	0	10	10	10	10	10	11,2	SCG327B001	SCG327B002	MS <sup>(3)</sup>	MO	-	-	-
	12	1,5	25	0	10	10	-	-	14,1	14	SCG327B101	SCG327B102	MS <sup>(3)</sup>	MO	-	-	-
1/2	12	1,5	25	0	10	10	-	-	14,1	14	SCG327A649	SCG327A650	MS <sup>(3)</sup>	MO	-	-	-
											SCG327A609	SCG327A610	MS <sup>(3)</sup>	MO	-	-	-
<b>U - Universal, NBR seals and poppets</b>																	
1/4	12	1,5	25	0	10	10	-	-	10	10	SCG327A647	SCG327A648	MS <sup>(3)</sup>	MO	-	-	-
1/2											SCG327A607	SCG327A608	MS <sup>(3)</sup>	MO	-	-	-
<b>U - Universal, VMQ seals and poppets</b>																	
1/4	5,7	0,45	7,5	0	10	10	10	10	10	11,2	SCG327B011	SCG327B012	MS <sup>(3)</sup>	MO	-	-	-
<b>U - Universal, (F)VMQ seals and poppets</b>																	
1/4	5,7	0,45	7,5	0	10	10	10	10	3,7	3,6	SCG327B111	SCG327B112	MS <sup>(3)</sup>	MO	-	-	-
	12	1,5	25	0	10	10	-	-	10	10	SCG327A645	SCG327A646	MS <sup>(3)</sup>	MO	-	-	-
1/2	12	1,5	25	0	10	10	-	-	10	10	SCG327A605	SCG327A606	MS <sup>(3)</sup>	MO	-	-	-

<sup>(3)</sup> Functional Safety certification is not applicable with this feature.

<sup>(4)</sup> Under pressure removable execution (Consult our catalogue «Pilot Valves and Systems for the Process Industry» at: [www.asco.com](http://www.asco.com))



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### 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 (see "Explosionproof solenoids" section)
- Compliance with "UL", "CSA" and other local approvals available on request
- 3/8" pipe thread executions are available on request
- Manual reset construction
- Stainless steel exhaust protector for valves certified to IEC 61508 Functional Safety, catalogue number: **34600419** (G1/4) or **34600479** (G1/2)
- 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
- Solenoid valves have 2 or 3 mounting holes in body
- Pipe connection identifier is G = G (ISO 228/1)
- Installation/maintenance instructions are included with each valve

### SPARE PARTS KIT

catalogue number	spare parts kit no.
SCG327B001/002	<b>C123670</b>
SCG327B011/012	<b>C131237</b>
SCG327B101/102	<b>C132251</b>
SCG327B111/112	<b>C132253</b>
SCG327A605/606/645/646	<b>C117638</b>
SCG327A607/608/647/648	<b>C117640</b>
SCG327A609/610/649/650	<b>C117640V</b>

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

### ORDERING EXAMPLES:

SC	G	327	B	001	230V / 50 Hz
SC	G	327	B	101 MS	115V / 50 Hz
SC	G	327	A	647	24V / DC
SC	G	327	B	002 MO	230V / 50 Hz

prefix — pipe thread — basic number — voltage — suffix

### ORDERING EXAMPLES KITS:

C123669 <sup>(1)</sup>	
C132251	
C132640	V

basic number — suffix

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



**TYPE 01-02**  
Prefix "SC" Solenoid  
Epoxy moulded  
IEC 335 / ISO 4400  
IP65

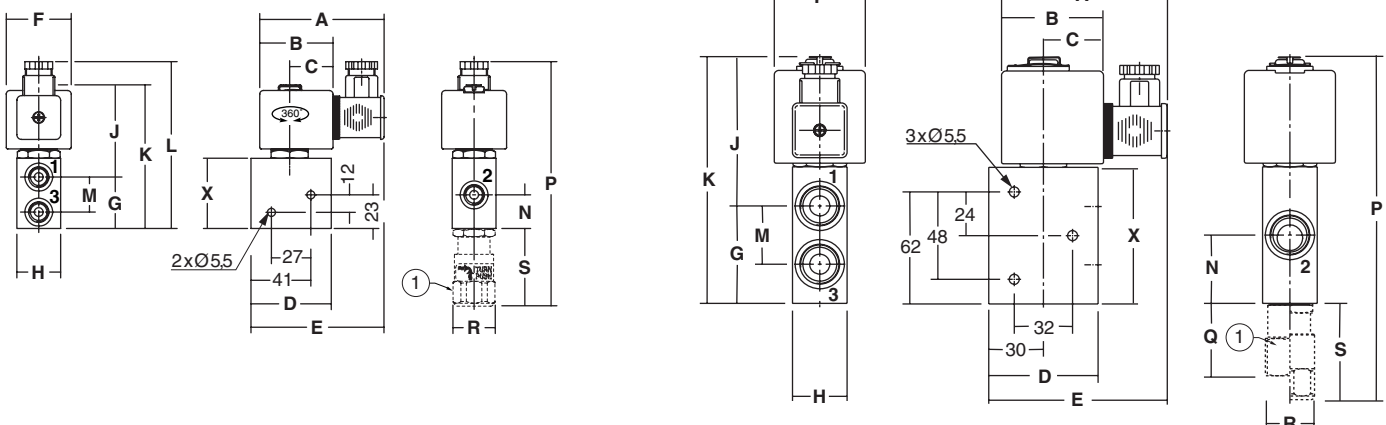
Type 01: SCG327B001/002/011/012

Type 02: SCG327B101/102/111/112



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

SCG327A605/606/607/608/609/610/645/646/647/648/649/650



<sup>(1)</sup> Manual operator location (Type MO/MS)

type	prefix option	catalogue number	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	X	weight <sup>(2)</sup>
01	SC	SCG327B001/002/011/012	86	50	30	55	88	45	35	30	55	90	114	24	23	167	-	29	54	48	0,95
02	SC	SCG327B101/102/111/112	92	56	33	55	91	50	35	30	74	109	108	24	23	162	-	29	54	48	1,05
		SCG327A605/606/607/608/609/610/645/646/647/648/649/650	92	56	33	60	100	50	54	30	81	135	-	32	38	189	40	29	54	76	1,6

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