

FEATURES

- All the exhaust ports of this spool valve are connectable, providing better environmental protection, particularly recommended for sensitive areas, such as clean rooms, and applications in the pharmaceutical and food processing sectors
- The valves offer environmental protection against the ingress of liquids, dusts or other foreign matter (environmentally-protected construction)
- Can be externally piloted (external air pilot supply) to convert valve to zero minimum operation by flipping a gasket (ASCO solenoid interface)
- The monostable spool valves have TÜV certified IEC 61508 Functional Safety data and can be used up to SIL 4/AK 7
- The solenoid valves satisfy all relevant EC Directives

GENERAL

Differential pressure 2 - 10 bar [1 bar = 100 kPa]
Flow (Qv at 6 bar) 860 l/min (ANR)
Pilot mounting interface surface ISO 15218 (CNOMO E06.36.120N, size 15)

fluids (*)	temperature range (TS)	seal materials (*)
air, inert gas, filtered	- 40°C to + 60°C	VMQ (silicone) + PUR (polyurethane)

MATERIALS IN CONTACT WITH FLUID

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

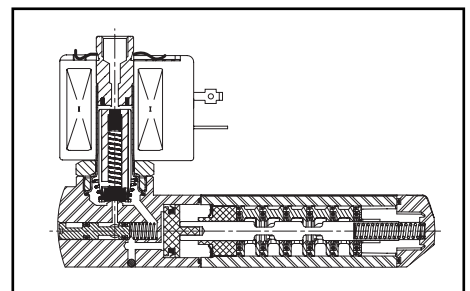
Body, end covers, seats Brass
Spool valve internal parts Brass, stainless steel, POM
Core tube Stainless steel
Core and plugnut Stainless steel
Core spring Stainless steel
Top disc PA
Pilot seals FPM, NBR
Shading coil Copper

OTHERS MATERIALS

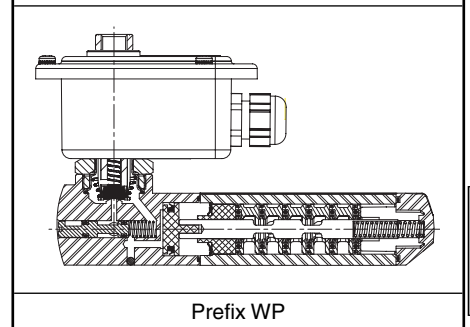
Solenoid enclosure (WP) Zinc plated steel (epoxy coated)

ELECTRICAL CHARACTERISTICS

Coil insulation class F
Connector (SC) Spade plug (cable Ø 6-10 mm)
Connector specification (SC) ISO 4400 / EN 175301-803, form A
Coil connection (WP) Embedded screw terminal (cable Ø 7 - 12 mm)
Cable entry (WP) Cable gland, polyamide (PA), M20x1,5
Electrical safety IEC 335
Electrical enclosure protection Moulded IP65 (SC) or IP67 (WP) (EN 60529)
Standard voltages DC (=): 24V - 48V
 (Other voltages and 60 Hz on request) AC (~): 24V - 48V - 115V - 230V / 50 Hz



Prefix SC



Prefix WP

prefix option	power ratings				operator ambient temperature range (TS) (C°)	replacement coil		type (1)
	inrush ~ (VA)	holding ~ (W)		hot/cold = (W)		~ 230 V/50 Hz	= 24 V DC	
		(VA)	(W)					
SC	55	23	10,5	9 / 11,2	-40 to +75	400425-117	400425-142	01
WP	55	23	10,5	9 / 11,2	-40 to +75	400405-117	400405-142	02

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

SPECIFICATIONS

pipe size	orifice size (mm)	flow coefficient Kv (m³/h) (l/min)		operating pressure differential (bar)				power coil (W)		catalogue number		options	
				min. (2)	max. (PS)		type 01 (SC)			type 02 (WP)			
					air (*)								
G	(mm)	(m³/h)	(l/min)		~	=	~	=	~/=	~/=	impulse/ maintained man. operator		
5/2 - Solenoid air pilot operated - spring return (monostable)													
1/4	6	0,75	12,5	0 / 2	10	10	10,5	11,2	SCG551A419	WPG551A419	MO	- -	
5/2 - Solenoid air pilot operated and return (bistable)													
1/4	6	0,75	12,5	0 / 2	10	10	10,5	11,2	SCG551A420	WPG551A420	MO	- -	
5/2 - Solenoid air pilot operated - spring return (monostable) certified IEC 61508 Functional Safety data													
1/4	6	0,75	12,5	0 / 2	10	10	10,5	11,2	SCG551A419SL	WPG551A419SL	-	- -	

(2) Zero minimum is only achieved if external pressure is applied.

OPTIONS

- Valves configured for external pilot air supply, use TPL 20547
- Explosionproof enclosures for use in zones 0/20-1/21-2/22, categories 1-2-3 to ATEX Directive 94/9/EC (see "Explosionproof Solenoids" section)
- Compliance with "UL", "CSA" and other local approvals available on request
- Coil insulation class H for max. ambient temperature +80°C, prefix HT ("SCHT" or "WPHT")
- 1/2" NPT (prefix "T") and M20 x 1.5 (prefix "ET") conduits (aluminium or 316 SS) available for steel solenoid enclosure
- Other pipe threads are available on request
- Plug with visual indication and peak voltage suppression or with cable length of 2m (see Solenoids, Coils & Accessories section)

INSTALLATION

- The solenoid valves can be mounted in any position without affecting operation
- It is necessary to connect pipes or fittings to the exhaust ports to protect the internal parts of the spool valve and its pneumatic operator if used outside or in harsh environments (dusts, liquids etc.)
- IEC 61508 Functional Safety (suffix SL), allowable temperature range: -40°C to +60°C. For probability of failure, contact us
- Threaded pipe connection identifier is G = G (ISO 228/1)
- Prefix "WP" execution: solenoid enclosure has a cable gland with integral strain relief for cables with an O.D. from 7 to 12 mm and is provided with internal and external grounding terminals
- Valves with suffix "SL" are supplied with specific exhaust protectors
- Installation/maintenance instructions are included with each valve

ACCESSORIES

series	pipe size	exhaust protector
		stainless steel
551	G 1/8	34600418 ⁽¹⁾
	G 1/4	34600419 ⁽¹⁾

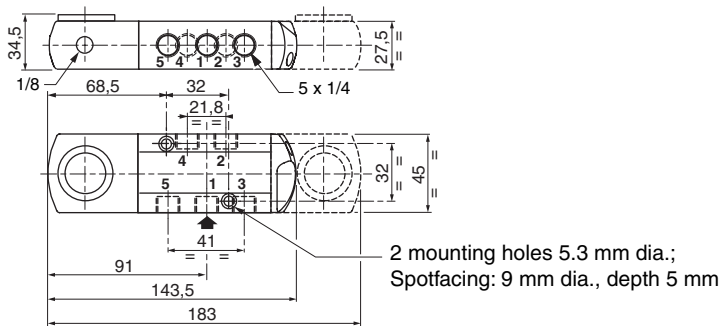
⁽¹⁾ Supplied with suffix "SL".

ORDERING EXAMPLES:

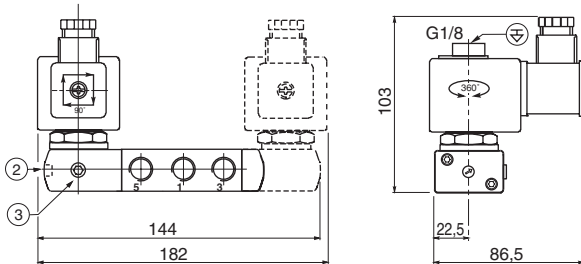
SC	G	551	A	419	230V / 50 Hz	
SC	G	551	A	419	SL	230V / 50 Hz
WP	G	551	A	420	24V / 50 Hz	
WP	G	551	A	419	MO	115V / 50 Hz
WPHT	G	551	A	420	MO	230V / 50 Hz

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

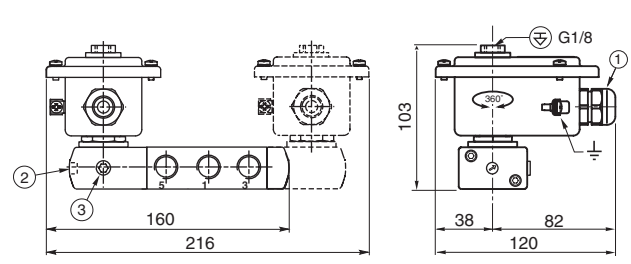
DIMENSIONS (mm), WEIGHT (kg)



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



TYPE 02
Prefix "WP" Solenoid
Metal; epoxy coated
IEC 335
IP67



type	prefix option	weight ⁽²⁾	
		monostable	bistable
01	SC	1,52	2,28
02	WP	1,70	2,72

⁽²⁾ Including coil(s), connector (SC) and cable gland (WP).

- ① Cable gland for unarmoured cable with 7 to 12 mm dia. sheath
- ② Manual operator location
- ③ External pilot air supply, 1/8 pipe size