

SOLENOID VALVES

pilot operated, spool type

single/dual solenoid (mono/bistable function)

brass body, 1/4

FEATURES

- All the exhaust ports of the 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
- The monostable spool values in conformity with IEC 61508 Standard (2010 route $2_{\rm H}$ version) have TÜV certified with integrity levels: SIL 2 for HFT = 0 / SIL 3 for HFT = 1
- The solenoid valves satisfy all relevant EU directives

GENERAL

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

| 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

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IEC 335

hot/cold

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DC (=): 24V - 48V

operator ambient

temperature range (TS)

10

| Body, end cover, 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

Coil insulation class

Coil connection (WP)

Connector (SC)

Cable entry (WP)

Standard voltages

Electrical safety

prefix

option

1/4

1/4

Solenoid enclosure (WP)

Connector specification (SC)

Electrical enclosure protection

(Other voltages and 60 Hz on request)

inrush

ELECTRICAL CHARACTERISTICS

power ratings

5/2 - Solenoid air pilot operated and return (bistable)

6 0,75 12,5 0/2 10

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

6 0,75 12,5 0/2 10 10 10,5 11,2

holding

Zinc plated steel (epoxy coated)

Spade plug (cable Ø 6-10 mm)

ISO 4400 / EN 175301-803, form A

Cable gland, polyamide (PA), M20x1,5

AC (~): 24V - 48V - 115V - 230V / 50 Hz

Embedded screw terminal (cable ø 7 - 12 mm)

Moulded IP65 (SC) or IP67 (WP) (EN 60529)

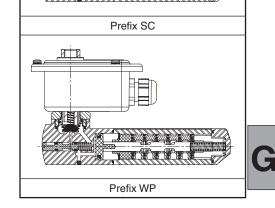
replacement coil

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type (1)

SCG551A420

SCG551A419SL



specifications are subject to change without notice. All rights reserved and 00185GB-2016/R01 design Availability,

| ÷ 1 | | | | | | | Jun 20 (1 - | / | | | | |
|----------|--|------------|----------|--------------|----------|---------------------------|-------------|-------|-----------|---------------|--------|---------------------|
| i rigni: | | (VA | (V. | A) (\ | N) | (W) | (C°) | 23 | 0 V/50 Hz | 24 V DC | | |
| ц. Э | SC | 55 | 2 | 3 10 |),5 9 | / 11,2 | -40 to +7 | 75 40 | 0425-117 | 400425-142 | 01 | |
| 10110 | WP | 55 | 2 | 3 10 |),5 9 | / 11,2 | -40 to +7 | 75 40 | 0405-117 | 400405-142 | 02 | |
| nno | (1) Refer | to the dir | nensiona | l drawing | s on the | following | j page. | | | | | |
| пім абі | SPEC | IFICA | IONS | | | | | | | | | |
| IO CIIAI | pipe | orifice | | ow . | | rating pre ferential (| | pow | er coil | | | talogue |
| lect | size | size | | icient (v | | max | . (PS) | . () | W) | | n | umber |
| sup | | | | LV | min. | ai | r (*) | | | type 0 | 1 (SC) | type 02 (WP) |
| sare | G | (mm) | (m³/h) | (l/min) | | ~ | = | ~ | = | ~ | /= | ~/= |
| | 5/2 - Solenoid air pilot operated - spring return (monostable) | | | | | | | | | | | |
| lica | 1/4 | 6 | 0,75 | 12,5 | 0/2 | 10 | 10 | 10,5 | 11,2 | SCG5 | 51A419 | WPG551A419 |

5/2 - Solenoid air pilot operated spring return (monostable), certified IEC 61508 Functional Safety data

10,5 11,2





All leaflets are available on: www.asco.com

WPG551A420

WPG551A419SL

options

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> MO -

MO



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 2014/34/EU (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 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

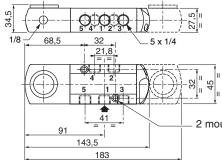
- · The solenoid valves can be mounted in any position without affecting operation
- It is necessary to connect pipes or fittings to the exhaust ports to protect the internal parts of the spool valve and its pneumatic operator if used outside or in harsh environments (dusts, liquids etc.)
- IEC 61508 Functional Safety (suffix SL). Check temperature range of valve body and solenoid for suitability. For probability of failure, contact us
- Threaded pipe connection is standard: 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⁾ |
| | th cuffix "SI | 9 |

Supplied with suffix "SL".

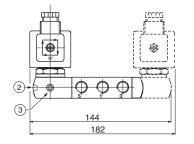
DIMENSIONS (mm), **WEIGHT** (kg)

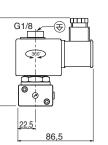


2 mounting holes: 5,3 mm dia. (Spotfacing: 9 mm dia., depth 5 mm)









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| prefix | weight (1) | | | | | |
|--------|--------------|------------------------------|--|--|--|--|
| option | monostable | bistable | | | | |
| SC | 1,52 | 2,28 | | | | |
| WP | 1,70 | 2,72 | | | | |
| | option SC | option monostable SC 1,52 | | | | |

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



ORDERING EXAMPLES:

prefix

pipe thread basic number SC G 551 A 419

WP G 551 A 420

SC G 551 A 419 SL 230V/50 Hz

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

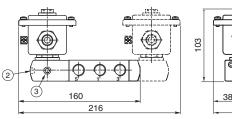
230V / 50 Hz

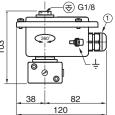
24V / 50 Hz

voltage

suffix

Prefix "WP" Solenoid Metal; epoxy coated





(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