

# ASCO™ Spool Valves

single/dual solenoid (mono/bistable function) - pilot operated  
aluminium body - "NAMUR" style - 1/4" tapped - stainless steel screws

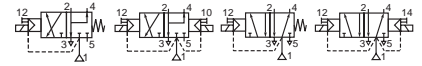
3/2 NC-5/2

Series

**551**

## Features & Benefits

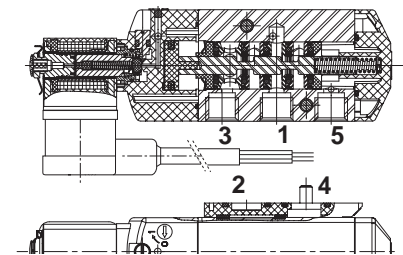
- Spool valve protected against food and beverage environment thanks to stainless steel screws
- The solenoid operated spool valves have threaded port connections and NAMUR interface
- The same spool valve can be adapted for 3/2 NC or 5/2 functions for controlling double-acting and single-acting actuators
- 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)
- The solenoid valves satisfy all relevant EU directives



## General

**Differential pressure** 2 - 10 bar [1 bar = 100 kPa]  
**Flow (Qv at 6 bar)** 700 l/min (ANR)

| fluids (*)               | temperature range (TS) | seal materials (*)                 |
|--------------------------|------------------------|------------------------------------|
| air, inert gas, filtered | - 25°C to + 60°C       | NBR (nitrile) + PUR (polyurethane) |



## Materials in contact with fluid

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

|                            |                                 |
|----------------------------|---------------------------------|
| Body, end cover            | Aluminium, black anodized       |
| End cover (spring return)  | PBT                             |
| Spool valve internal parts | stainless steel, POM, aluminium |
| Seals                      | NBR + PUR                       |
| Core and core tube         | Stainless steel                 |
| Shading coil               | Copper                          |
| Screws                     | Stainless steel 316L            |

## Electrical characteristics

|                                       |   |
|---------------------------------------|---|
| Coil insulation class                 | F   |
| Connector                             | Spade plug connector with cable outlet 2 m long<br>EN 175301-803, 11 mm, industry standard form B (type 01) |
| Connector specification               |   |
| Electrical safety                     | IEC 335   |
| Electrical enclosure protection       | Moulded-in cable IP67 (EN 60529)  |
| Standard voltages                     | DC (=): 24V - 48V<br>AC (~): 24V - 48V - 115V - 230V / 50 Hz  |
| (Other voltages and 60 Hz on request) |   |

| prefix option | power ratings |           |     |            | operator ambient temperature range (TS) (C°) | replacement coil |            | type <sup>(1)</sup> |
|---------------|---------------|-----------|-----|------------|--|------------------|------------|---------------------|
|               | inrush ~      | holding ~ |     | hot/cold = |  | ~                | =          |                     |
|               | (VA)          | (VA)      | (W) | (W)        |  | 230 V/50 Hz      | 24 V DC    |                     |
| SC            | 6             | 3.5       | 2.5 | 2.5/3      | -25 to +60                                   | 400127-097       | 400904-542 | 01                  |

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

## Specifications

| pipe size  | orifice size | flow coefficient Kv |         | operating pressure differential (bar) |           |    | power coil (W) |   | Catalog number<br>(with maintained manual operator) |
|--|--------------|---------------------|---------|---------------------------------------|-----------|----|----------------|---|---|
|  |              |                     |         | min.                                  | max. (PS) |    | ~              | = |   |
|  |              |                     |         |                                       | air (*)   |    |                |   |   |
| G  | (mm)         | (m³/h)              | (l/min) |                                       | ~         | =  | ~              | = | ~/=   |
| <b>3/2 NC - 5/2 - Solenoid air pilot operated - spring return (monostable)</b> |              |                     |         |                                       |           |    |                |   |   |
| 1/4  | 6            | 0,6                 | 10      | 2                                     | 10        | 10 | 2,5            | 3 | SCG551A082MS  |
| <b>3/2 NC - 5/2 - Solenoid air pilot operated and return (bistable)</b>        |              |                     |         |                                       |           |    |                |   |   |
| 1/4  | 6            | 0,6                 | 10      | 2                                     | 10        | 10 | 2,5            | 3 | SCG551A084MS  |

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**Options**

- Valves equipped with exhaust reducers G 1/8 (3/2 NC-5/2, series 551), suffix M
- Set of two G 1/8 exhaust reducers (series 551), catalogue number **88100344**
- Other pipe connections are available on request
- Spade connector size 22, IP67 with integrated visual LED and varistor protection and PVC 0,75 mm<sup>2</sup> cable length of 2 m: **88100937**
- Plug with visual indication and peak voltage suppression or with cable length of 2 m

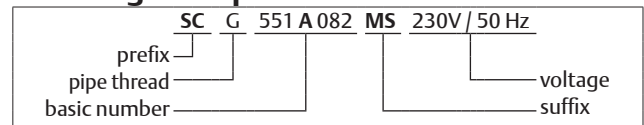
**Installation**

- The valves can be mounted in any position without affecting operation
- 3/2 NC-5/2 spool valve supplied with two interface plates with NAMUR mating surfaces. Depending on function (3/2 NC or 5/2), position one of the two plates on the spool valve body before installing on actuator
- Dowel pin (if necessary), bolts and gaskets are standard supplied
- 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.)
- Threaded pipe connection is standard: G = G (ISO 228/1)
- Installation/maintenance instructions are included with each valve

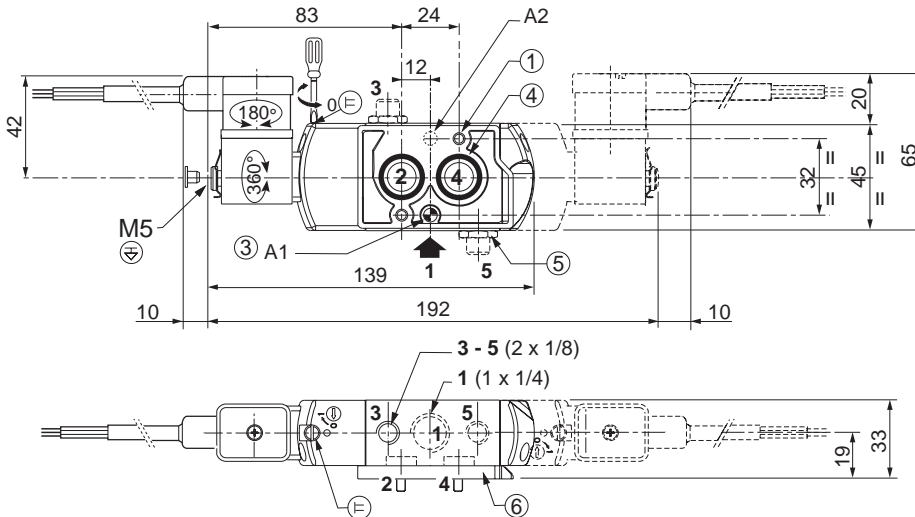
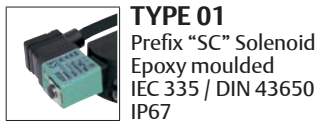
**Accessories**

| series | pipe size | exhaust protector |
|--------|-----------|-------------------|
|        |           | (stainless steel) |
| 551    | G 1/8     | <b>34600418</b>   |
| 551    | M5        | <b>34600484</b>   |

**Ordering examples valves:**



**Dimensions (mm), Weight (kg)**



| type | prefix option | weight <sup>(1)</sup> |          |
|------|---------------|-----------------------|----------|
|      |               | monostable            | bistable |
| 01   | SC            | 0.47                  | 0.59     |

<sup>(1)</sup> Incl. coil(s) and connector(s).

- ① 2 mounting holes: 5.3 mm dia. (Spotfacing: 9 mm dia., depth 5 mm)
- ② 2 mounting holes: 6.5 mm dia. (Spotfacing: 11 mm dia., depth 6 mm)
- ③ One 5 mm dia. hole for dowel pin:  
- in position A1: 3/2 NC function plate  
- in position A2: 5/2 function plate
- ④ 2 O-ring seals (supplied)
- ⑤ Exhaust reducer (G 1/8, 3/2 NC-5/2, series 551) or exhaust protector
- ⑥ Interface plate