



SOLENOID VALVES

pilot operated, spool type
single/dual solenoid (mono/bistable function)
brass body, NAMUR, 1/4

3/2 NC

5/2

3/2

5/2

Series

551



FEATURES

- The monostable spool valves in conformity with IEC 61508 Standard (2010 route 2_H version) have TÜV certified with integrity levels: SIL 2 for HFT = 0 / SIL 3 for HFT = 1
- 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 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 valve offers environmental protection against the ingress of liquids, dusts or any 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 solenoid valves satisfy all relevant EC Directives



GENERAL

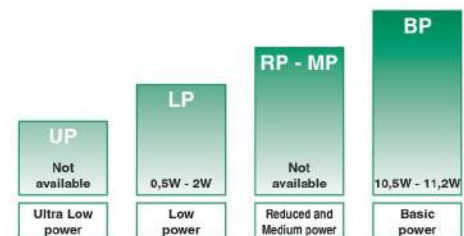
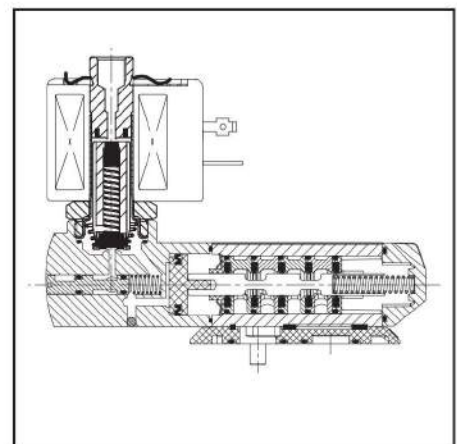
Differential pressure 2 - 10,4 bar [1 bar = 100 kPa]
Flow (Qv at 6 bar) 700 l/min (ANR)

| 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 | Brass |
| Spool valve internal parts | Brass, stainless steel, POM |
| Interface plates | Glass-filled PA |
| Core tube | Stainless steel |
| Core and plugnut | Stainless steel |
| Core spring | Stainless steel |
| Seals & discs | NBR |
| Top disc | PA |
| Disc holder | POM |
| Cartridge (Low power) | Welded, packless AISI 430 |
| Seat | Brass |
| Seat insert | POM |
| Shading coil | Copper |
| Rider ring (Low power) | PTFE (NF/WSNF solenoids only) |



POWER LEVELS - cold electrical holding values (watt)

SPECIFICATIONS

| pipe size | orifice size | flow coefficient kv | | operating pressure differential (bar) | | | power level | prefix optional solenoids | | | | | | | | | | basic catalogue number |
|--|--------------|---------------------|----|---------------------------------------|----|----|-------------|---------------------------|-----------|---|------------|--------------|-----|----|------|----|------|------------------------|
| | | | | | | | | min. (2) | max. (PS) | | NEMA 7 & 9 | ATEX / IECEx | | | | | IP65 | |
| | | | | | | | | | air (*) | ~ | | = | ~/= | EF | LPKF | NF | | |
| 3/2 NC - 5/2 - Solenoid air pilot operated - spring return (monostable) | | | | | | | | | | | | | | | | | | |
| 1/4 | 6 | 0,6 | 10 | 0 / 2 | 10 | 10 | BP | - | - | ● | - | ● | - | - | - | - | ● | ◇551A403 (1) |
| 1/4 | 6 | 0,6 | 10 | 0 / 2 | 10 | 10 | BP | ● | - | - | - | - | - | - | - | - | - | ◇551G403 (1) |
| 1/4 | 6 | 0,6 | 10 | 0 / 2 | 10 | 10 | LP | - | ● | ● | - | ● | ○ | ○ | - | - | ● | ◇551A303 (1) |
| 1/4 | 6 | 0,6 | 10 | 0 / 2 | 10 | 10 | LP | ○ | - | - | - | - | - | - | - | - | - | ◇551G303 (1) |
| 3/2 NC - 5/2 - Solenoid air pilot operated and return (bistable) | | | | | | | | | | | | | | | | | | |
| 1/4 | 6 | 0,6 | 10 | 0 / 2 | 10 | 10 | BP | - | - | ● | - | ● | ● | - | - | - | ● | ◇551A404 |
| 1/4 | 6 | 0,6 | 10 | 0 / 2 | 10 | 10 | BP | ● | - | - | - | - | - | - | - | - | - | ◇551G404 |
| 1/4 | 6 | 0,6 | 10 | 0 / 2 | 10 | 10 | LP | - | ● | ● | - | ● | ○ | ○ | - | - | - | ◇551A304 |
| 1/4 | 6 | 0,6 | 10 | 0 / 2 | 10 | 10 | LP | ○ | - | - | - | - | - | - | - | - | - | ◇551G304 |

◇ Select 8 for NPT ANSI 1.20.3 or select G for ISO G (228/1) ● Available feature ○ Available feature in DC only.

(1) Certified IEC 61508 Functional Safety data, use suffix "SL".

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