



Pilot Operated Inline Spool Valves Anodized Aluminum Bodies 1/4" and 1/2" NPT

3/2 SERIES 8551 8553

Features

- Compact spool valve with threaded port connections
- All exhaust ports are pipable, providing better protection against harsh environments
- Standard manual operator
- DIN, Watertight and Explosionproof solenoids available
- Single and dual solenoid constructions
- Mountable in any position

Construction

| Valve Parts in Contact with Fluids | | | | | | | |
|------------------------------------|-------------------------------|--|--|--|--|--|--|
| Body | Black Anodized Aluminum | | | | | | |
| Spring | Phosphate Treated Black Steel | | | | | | |
| Shading Coil | Copper | | | | | | |
| Seals | NBR + PUR | | | | | | |
| Core and Core Tube | Stainless Steel/Brass | | | | | | |
| End Covers | 6/6 Glass Filled PA/FG | | | | | | |
| Spool | Aluminum | | | | | | |
| Internal Parts | Zamak, Steel, CA, Aluminum | | | | | | |

Electrical

| Standard Coil and | | Wa | | g and Pov Imption | Spare Coil Part Number | | |
|------------------------|-------------------|-------------|-------------|----------------------|---------------------------|----------|----------|
| Class of Insulation | Enclosure Type | DC Watts | AC Watts | VA Holding | VA Inrush | AC | DC |
| F | SC | 3 | 2.5 | 3.5 | 6 | 400125 | 400125 |
| F | SC | 6.9 | 5 | 7 | 15 | 43004649 | 43004647 |
| F | EF | 6.9 | 6.3 | 7 | 10.1 | 266762 | 270007 |
| F | WT | 6.9 | 6.3 | 7 | 10.1 | 266763 | 270008 |

Standard Voltages: SC: 24, 120, 240 Volts AC, 50-60 Hz; 12, 24, 120 Volts DC. WT and EF: 24/50-60HZ, (120/60, 110-120/50)①, (240/60, 220-240/50)② Volts AC; 6, 12, 24, 120 Volts DC.

- ① Order as 120/60, 110/50
- 2 Order as 240/60, 220/50

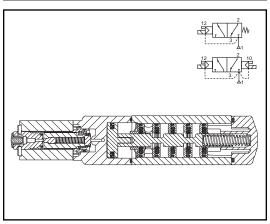
Solenoid Enclosures

Standard: - Prefix

SC = IP65 type DIN (open frame) per 46244

WT = Combination General Purpose and Watertight Types 1, 2, 3, 3S, 4, and 4X **EF** = Combination Explosionproof and Watertight Types 3, 3S, 4, 4X, 6, 6P, 7, 9 Class I, Div. 1 (Groups A - D) and Class II, Div. 1 Type 9 (Groups E-G)





Nominal Ambient Temp. Ranges

SC: AC/DC: 5°F to +140°F (-15°C to 60°C)
EF: AC: 5°F to +104°F (-15°C to 40°C)
DC: 5°F to +77°F (-15°C to 25°C)
WT: AC: 5°F to +140°F (-15°C to 60°C)
DC: 5°F to +77°F (-15°C to 25°C)

Note: For temperatures below 32°F (0°C) moisture-free air must be used.

Refer to Engineering Section for details.

Approvals

SC (2.5W and 3W only) UL recognized component, CSA certified.

WT: UL recognized component, CSA certified.

EF: UL and CSA listed solenoid.

Meets applicable CE directives.

SIL 3 capable per IEC 61508 on normally closed single solenoid. Third party certification provided by EXIDA. *Refer to Engineering Section for details.*

Note

When mounting inline 8551 valves with WT & EF solenoids (6.3 & 6.9 watts), ASCO recommends using two (2) 1/8" thick washers under the valve body to provide clearance for the solenoid coil.



Specifications (English units)

| Pipe | | | Fluid Temp.°F (for single and dual solenoid) | | | Single Solenoid PFD _{AVG} = 3.3 x 10 ⁻³ | Dual Solenoid | Watt F Class Insul | of Coil | | |
|----------------|--------------------------|----------------|---|------|------|--|---------------|--------------------------|----------------|-----|-----|
| Size (ins.) | Size (ins.) | Flow Factor | Min. | Max. | Min. | Max. AC | Max. DC | Catalog Number | Catalog Number | AC | DC |
| OPEN FRA | OPEN FRAME DIN COIL | | | | | | | | | | |
| 1/4 | 1/4 | .86 | 30 | 150 | 5 | 140 | 140 | SC8551A005MS | SC8551A006MS | 2.5 | 3 |
| 1/2 | 1/2 | 3.7 | 30 | 150 | -15 | 140 | 140 | SC8553A005MS | SC8553A006MS | 5 | 6.9 |
| WATERTIG | WATERTIGHT ENCLOSURE | | | | | | | | | | |
| 1/4 | 1/4 | .86 | 30 | 150 | 5 | 140 | 77 | WT8551A005MS | WT8551A006MS | 6.3 | 6.9 |
| 1/2 | 1/2 | 3.7 | 30 | 150 | -15 | 140 | 77 | WT8553A005MS | WT8553A006MS | 6.3 | 6.9 |
| EXPLOSIO | EXPLOSIONPROOF ENCLOSURE | | | | | | | | | | |
| 1/4 | 1/4 | .86 | 30 | 150 | 5 | 104 | 77 | EF8551A005MS | EF8551A006MS | 6.3 | 6.9 |
| 1/2 | 1/2 | 3.7 | 30 | 150 | -15 | 104 | 77 | EF8553A005MS | EF8553A006MS | 6.3 | 6.9 |

Specifications (Metric units)

| Pipe Orifice Ky Flow | | Operating Pressure Differential (bar) | | Fluid Temp.°C (for single and dual solenoid) | | | Single Solenoid PFD _{AVG} = 3.3 x 10 ⁻³ | Dual Solenoid | | tating/ of Coil ation | |
|--------------------------|--------------|---|------|---|------|---------|--|----------------|----------------|-----------------------------|-----|
| Size (ins.) | Size (mm) | Factor (m3/h) | Min. | Max. | Min. | Max. AC | Max. DC | Catalog Number | Catalog Number | AC | DC |
| OPEN FRAME DIN COIL | | | | | | | | | | | |
| 1/4 | 6 | .75 | 2 | 10 | -15 | 60 | 60 | SC8551A005MS | SC8551A006MS | 2.5 | 3 |
| 1/2 | 13 | 3.2 | 2 | 10 | -25 | 60 | 60 | SC8553A005MS | SC8553A006MS | 5 | 6.9 |
| WATERTIGHT ENCLOSURE | | | | | | | | | | • | |
| 1/4 | 6 | .75 | 2 | 10 | -15 | 60 | 25 | WT8551A005MS | WT8551A006MS | 6.3 | 6.9 |
| 1/2 | 13 | 3.2 | 2 | 10 | -25 | 60 | 25 | WT8553A005MS | WT8553A006MS | 6.3 | 6.9 |
| EXPLOSIONPROOF ENCLOSURE | | | | | | | | | | • | |
| 1/4 | 6 | .75 | 2 | 10 | -15 | 40 | 25 | EF8551A005MS | EF8551A006MS | 6.3 | 6.9 |
| 1/2 | 13 | 3.2 | 2 | 10 | -25 | 40 | 25 | EF8553A005MS | EF8553A006MS | 6.3 | 6.9 |

Dimensions inches (mm)

| Series | 8551 | 8553 | |
|---------------|---------------|------------|-------|
| NPT | 1/4 | 1/2 | |
| L1 | 5.69 (145) | 6.70 (170) | |
| L2 | 7.79 (198) | 9.18 (233) | 3 3 1 |
| H1 | 1.10 (28) | 1.58 (40) | H1 |
| W | 1.77 (45) | 2.85 (72) | |
| Connector sol | d separately. | | L1 L2 |





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