



Pilot Operated
Direct Mount Inline Spool Valves
 Anodized Aluminum Bodies • Direct NAMUR Mount
 1/4" and 1/2" NPT

**3/2•5/2
 SERIES
 8551, 8553
 Direct
 Mount**

Features

- Compact spool valve convertible from 3/2 to 5/2
- NAMUR mount construction
- Standard manual operator
- DIN, Watertight and Explosionproof solenoids available
- Single and dual solenoid constructions
- Mountable in any position
- Vents air from spring side of actuator to prevent corrosion of actuator

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 and Plate | 6/6 glass filled PA/FV |
| Spool | Aluminum |
| Internal Parts | Zamak, Steel, CA |

Electrical

| Standard Coil and Class of Insulation | Enclosure Type | Watt Rating and Power Consumption | | | | Spare Coil Part Number | |
|---------------------------------------|----------------|-----------------------------------|----------|------------|-----------|------------------------|--------|
| | | DC Watts | AC Watts | VA Holding | VA Inrush | AC | DC |
| F | SC | 3 | 2.5 | 3.5 | 6 | 400127 | 400127 |
| F | SC | 6.9 | 5 | 7 | 15 | 400727 | 400727 |
| 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

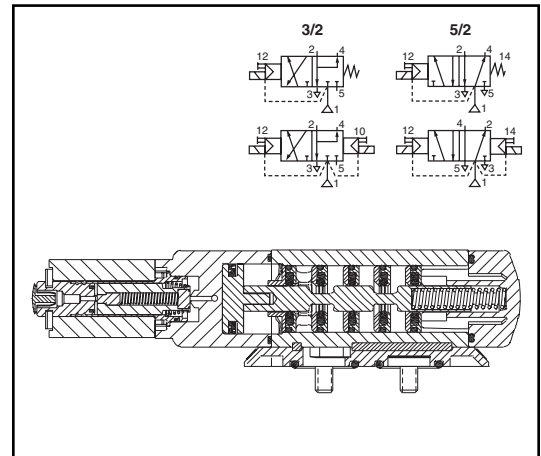
Solenoid Enclosures

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, 5P, 7, 9 Class I, Div. 1 (Groups A - D) and Class II, Div. 1 Type 9 (Groups E-G)



VALVE AUTOMATION

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. (Series 8551 only)

WT: UL listed, CSA certified. (Series 8551 only)

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.

Specifications (English units)

| Pipe Size (in) | Orifice Size (in) | Cv Flow Factor | Operating Pressure Differential (psi) | | Fluid Temperature °F (for single and dual solenoid) | | | Single Solenoid PFD _{AVG} = 3.3 x 10 ⁻³ | Dual Solenoid | Const. Ref. | Watt Rating/ Class of Coil Insulation | |
|---------------------------------|-------------------|----------------|---------------------------------------|------|---|---------|---------|---|---------------|-------------|---------------------------------------|-----|
| | | | Min. | Max. | Min. | Max. AC | Max. DC | | | | AC | DC |
| OPEN FRAME DIN COIL | | | | | | | | | | | | |
| 1/4 ① | 1/4 | .86 | 30 | 150 | 5 | 140 | 140 | SC8551A001MS | SC8551A002MS | 1 | 2.5 | 3 |
| 1/2 | 1/2 | 3.7 | 30 | 150 | -15 | 140 | 140 | SC8553A001MS | SC8553A002MS | 2 | 5 | 6.9 |
| WATERTIGHT ENCLOSURE | | | | | | | | | | | | |
| 1/4 ① | 1/4 | .86 | 30 | 150 | 5 | 140 | 77 | WT8551A001MS | WT8551A002MS | 1 | 6.3 | 6.9 |
| 1/2 | 1/2 | 3.7 | 30 | 150 | -15 | 140 | 77 | WT8553A001MS | WT8553A002MS | 2 | 6.3 | 6.9 |
| EXPLOSIONPROOF ENCLOSURE | | | | | | | | | | | | |
| 1/4 ① | 1/4 | .86 | 30 | 150 | 5 | 104 | 77 | EF8551A001MS | EF8551A002MS | 1 | 6.3 | 6.9 |
| 1/2 | 1/2 | 3.7 | 30 | 150 | -15 | 104 | 77 | EF8553A001MS | EF8553A002MS | 2 | 6.3 | 6.9 |

① 1/8 inch NPT exhausts.

Specifications (Metric units)

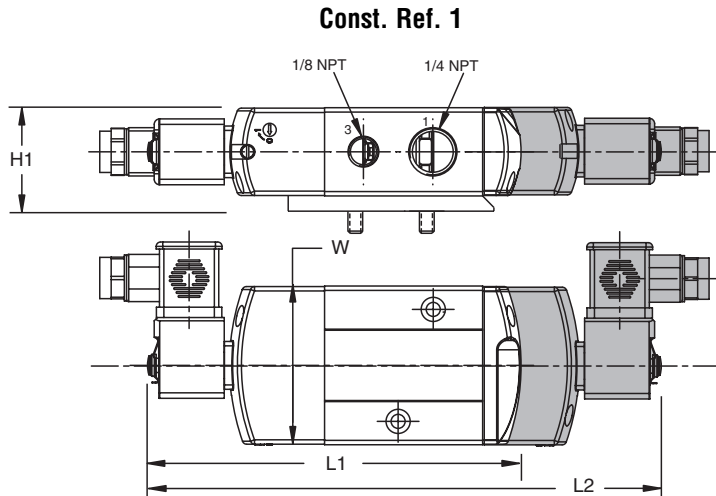
| Pipe Size (in) | Orifice Size (mm) | Kv Flow Factor (m ³ /h) | Operating Pressure Differential (bar) | | Fluid Temperature °C (for single and dual solenoid) | | | Single Solenoid PFD _{AVG} = 3.3 x 10 ⁻³ | Dual Solenoid | Const. Ref. | Watt Rating/ Class of Coil Insulation | |
|---------------------------------|-------------------|------------------------------------|---------------------------------------|------|---|---------|---------|---|---------------|-------------|---------------------------------------|-----|
| | | | Min. | Max. | Min. | Max. AC | Max. DC | | | | AC | DC |
| OPEN FRAME DIN COIL | | | | | | | | | | | | |
| 1/4 ① | 6.4 | .7 | 2 | 10 | -15 | 60 | 60 | SC8551A001MS | SC8551A002MS | 1 | 2.5 | 3 |
| 1/2 | 13 | 3.15 | 2 | 10 | -25 | 60 | 60 | SC8553A001MS | SC8553A002MS | 2 | 5 | 6.9 |
| WATERTIGHT ENCLOSURE | | | | | | | | | | | | |
| 1/4 ① | 6.4 | .7 | 2 | 10 | -15 | 60 | 25 | WT8551A001MS | WT8551A002MS | 1 | 6.3 | 6.9 |
| 1/2 | 13 | 3.15 | 2 | 10 | -25 | 60 | 25 | WT8553A001MS | WT8553A002MS | 2 | 6.3 | 6.9 |
| EXPLOSIONPROOF ENCLOSURE | | | | | | | | | | | | |
| 1/4 ① | 6.4 | .7 | 2 | 10 | -15 | 40 | 25 | EF8551A001MS | EF8551A002MS | 1 | 6.3 | 6.9 |
| 1/2 | 13 | 3.15 | 2 | 10 | -25 | 40 | 25 | EF8553A001MS | EF8553A002MS | 2 | 6.3 | 6.9 |

① 1/8 inch NPT exhausts.

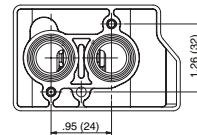
Dimensions inches (mm)

| Series | 8551 |
|--------|------------|
| NPT | 1/4 |
| L1 | 5.47 (139) |
| L2 | 7.56 (192) |
| H1 | 1.30 (33) |
| W | 1.77 (45) |

**NOTE: Valve shown with CM22
DIN terminal coil and connector.
Connector sold separately.**

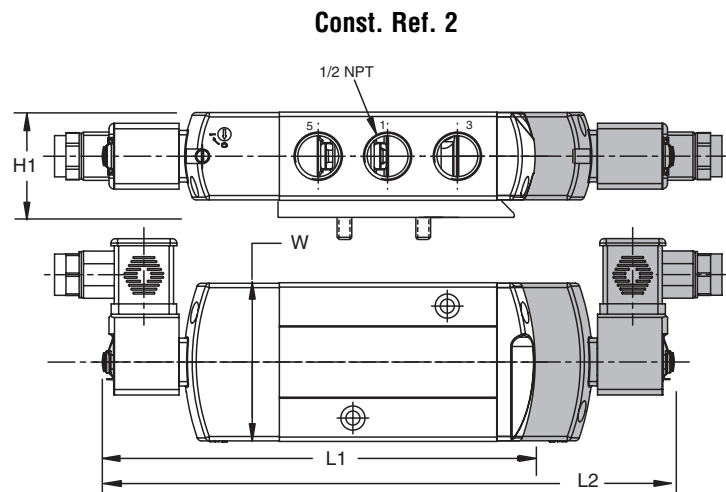


8551 NAMUR Footprint

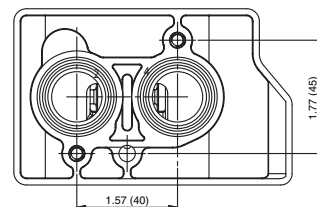


| Series | 8553 |
|--------|-------------|
| NPT | 1/2 |
| L1 | 7.76 (197) |
| L2 | 10.25 (260) |
| H1 | 1.94 (49) |
| W | 2.85 (72) |

**NOTE: Valve shown with CM22
DIN terminal coil and connector.
Connector sold separately.**



8553 NAMUR Footprint



**VALVE
AUTOMATION**