

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 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	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

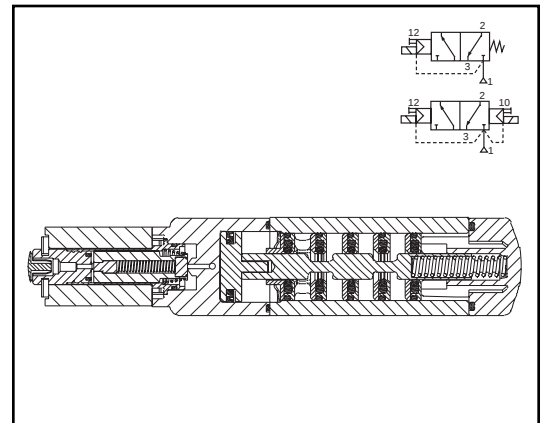
Solenoid Enclosures

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 Size Size (ins.)	Orifice Size Size (ins.)	Cv Flow Factor	Operating Pressure Differential (psi)		Fluid Temp. °F (for single and dual solenoid)			Single Solenoid PFD _{AVG} = 3.3 x 10 ⁻³	Dual Solenoid	Watt Rating/ Class of Coil Insulation	
			Min.	Max.	Min.	Max. AC	Max. DC	Catalog Number	Catalog Number	AC	DC
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
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
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 Size (ins.)	Orifice Size (mm)	Kv Flow Factor (m3/h)	Operating Pressure Differential (bar)		Fluid Temp. °C (for single and dual solenoid)			Single Solenoid PFD _{AVG} = 3.3 x 10 ⁻³	Dual Solenoid	Watt Rating/ Class of Coil Insulation	
			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)
H1	1.10 (28)	1.58 (40)
W	1.77 (45)	2.85 (72)

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

