

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	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

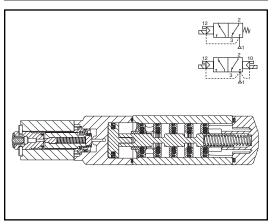
Solenoid Enclosures

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)

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Pipe Size	Orifice Size	Cv Flow	Operating Pressure Differential (psi)		Fluid Temp.°F (for single and dual solenoid)			Single Solenoid PFD _{AVG} = 3.3 x 10 ⁻³	Dual Solenoid	I	Rating/ of Coil ation
(ins.)	(ins.)	Factor	Min.	Max.	Min.	Max. AC	Max. DC	Catalog Number	Catalog Number	AC	DC
OPEN FRA	ME DIN COI	Ĺ									
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
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 Kv Flow		Operating Pressure Differential (bar)		Fluid Temp.°C (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 (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
WATERTIG	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)	H1
W	1.77 (45)	2.85 (72)	
DIN terminal (Connector sol		ctor.	L1 L2