

## Plug Style (PST30) Diverter Valve

- 30° diverter with internally, shim-able positive stops, inflatable pneumatic seals at each port and position indication
- Plug rotates port-to-port
- 2-way switching capability for either dilute or dense phase conveying
- Aluminum housing, endplates and plug are hard anodized for wear and corrosive resistance
- Can handle line pressures up to 60 psi
- Available in all aluminum or 316 stainless steel construction

### **Application**

This precision machined valve is designed to prevent contamination and provide line switching for either dilute or dense phase conveying. The two-way PST30 valve operates as a 1 to 2 way diverting valve or a 2 to 1 way converging valve in a pneumatic conveying system for powdered or granular materials.

### Equipment

- Cast aluminum (363) housing, plug
- Fabricated aluminum (6061-T651) end plates
- Aluminum housing, plug, and endplates are anodized, .001", spec. AMS-2468
- Food grade inflatable silicone rubber seal at each port
- Pneumatic rotary actuator
- 24VDC or 120 VAC double solenoid for rotary actuator
- 24VDC or 120 VAC single solenoid for inflatable seals
- (2) Position indicating proximity sensors, stainless steel construction
- Ports flanged to mate 150# ANSI or PN10-DIN drilling
- Temperature: -20 °F to 225 °F (-29 °C to 107 °C)
- Pressure (maximum convey): 60 psig, all models
- Integrated lifting and mounting accommodations



#### **Function**

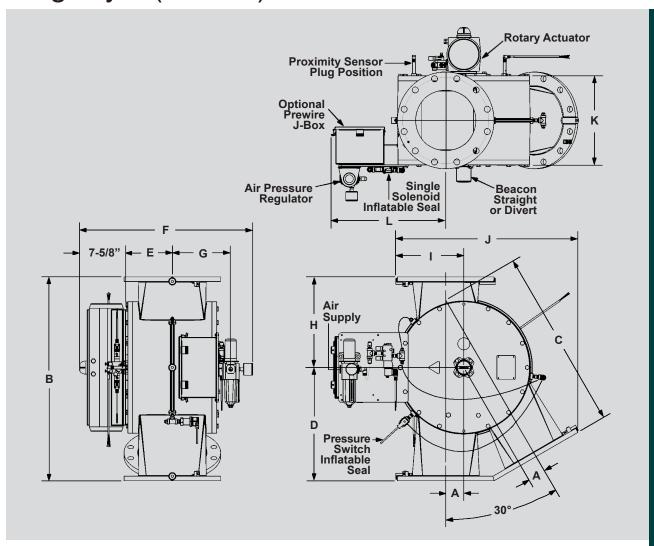
The plug is rotated forwards and backwards in the housing by the actuator, which positions the plug to either the divert ports or the straight-through ports. Shaft bearings in the two endplates and between two thrust washers provide support to the plug and positive stops located within the plug provide precise adjustment for both conveying positions.

Plug position, whether straight-through or divert, indication is made by two proximity switches mounted in the drive endplate, sensing directly off of the plug. A positive seal is made at each port, between the outside diameter of the plug and the inflated seals fixed to housing interior. During plug position changes, the seals must be deflated.

The PST30 can also be ordered without seals and serve as a drop in replacement for customers currently operating with Schenck Process PV valves. No changes in existing air lines or wiring are required as a result of replacement.



# Plug Style (PST30) Diverter Valve Dimensions



		Dimensions (Inches)													
	Pipe													Aluminum	316 SS
Model	Size	Α	В	С	D	E	F	G	Н	- 1	J	K	L	(lbs.)	(lbs.)
80PST30	8	3.19	25.5	25.03	13.5	7.75	28.69	9.69	12	10.19	25.63	14.72	15.66	226	580
100PST30	10	3	33.75	29.94	18.75	7.75	28.69	9.69	15	11.25	30.25	14.72	19	320	894
120PST30	12	4	36.75	35.69	20.75	9.88	32.97	11.81	16	13.75	35.91	19	18	425	1,118
140PST30	14	4.56	38.5	39.78	22.75	9.88	32.94	11.81	15.75	15.31	39.81	19	17.91	460	1,245