



PRODUCT INFORMATION SHEET

SPTDS PLUG DIVERTER VALVE







BACKGROUND

Established in 1950, DMN-WESTINGHOUSE has been a worldwide, trusted supplier of rotary valves and diverter valves for decades, serving a large range of dry bulk solids processing industries. True to our promise to provide future-proof value, our experts continue monitoring the performance of our products in practice, including in the context of customer feedback and emerging new technologies and practices.

Our staff have developed a complete range of premium diverter valves for the transport of any type of dry bulk solid in powder, granule, or pellet form. We offer plug, tube, flap, and ball diverter valves — all with the DMN-WESTINGHOUSE quality mark.

These durable diverters can be further customised to your specifications and are easy to integrate with your current rotary valves. Tell us more about your setup and applications, and we will offer you the perfect diverter valve.

MEET THE SPTDS PLUG DIVERTER VALVE

The Single-pipe Plug-Type Diverter valve Static (SPTDS) is especially designed to route powders, granules, and pellets in pneumatic conveying systems with minimum degradation. Precision machining, effective sealing, and an obstruction-free internal geometry guarantee a smooth passage of your product.

The user-friendly, foolproof design enables quick on-site internal examination, servicing, and — when necessary — replacement of seals. The SPTDS features no moving parts on the outside and complies with all current guidelines regarding safety in the workplace.



THE SPTDS PLUG DIVERTER VALVE AT A GLANCE

- Suitable for product temperature from -13°F to +176°F at ambient temperatures between 14°F and 104°F
- Pressure up to 14.5 psi
- Pressure shock resistant up to 145 psi
- Static seals
- Non-standard flange connections make for a compact design
- Product contact surfaces: stainless steel AISI 316L/ DIN 1.4404, with the option of Anodized aluminium
- EC1935/2004- and FDA-compliant version available
- ATEX 2014/34/EU certification available

PROPERTIES

- Universal application; diverting only
- No moving parts on the outside
- Compact solution with obstruction-free design

BENEFITS

The SPTDS is a compact diverter valve, saving you valuable space in your plant. A single-pipe diverter offers simple operation and control, reducing the margin for human error. The obstruction-free design and effective sealing ensure minimal product degradation.

This diverter valve brings you **increased efficiency and reduced expenses**.

APPLICATIONS

DMN-WESTINGHOUSE produces all existing types of diverter valves, for a broad range of industries. Get in touch and share the details of your process and installation, so that we can recommend the perfect valve for you.

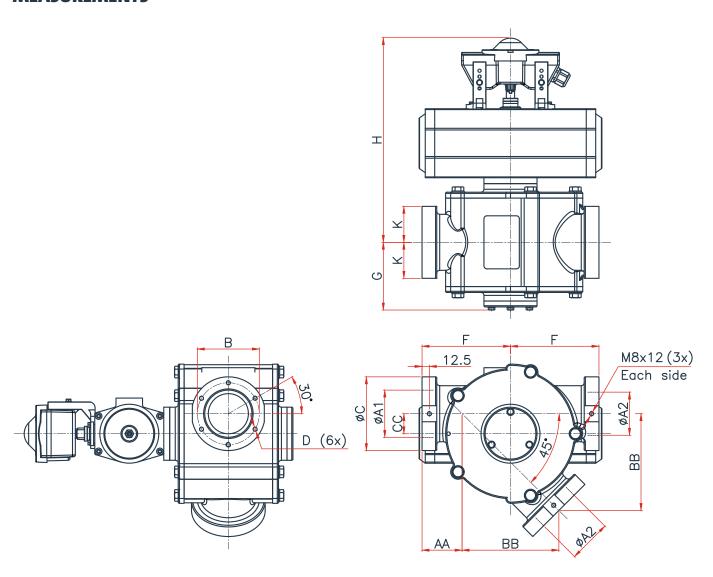
SPECIFICATIONS

Flange connection	See measuremen	ts							
Maximum allowable working pressure	-7.25 psi to 14.5 psi								
Allowable conveying product temperature	-13°F to 176°F								
Maximum allowable working temperature	-4°F to 140°F								
ATEX 2014/34 EU	Marking of the mechanical equipment II 1D/2D and II -/2G								
ТУРЕ	AVAILABLE SIZES								
SPTDS plug diverter valve	2" (50) 2.5" (65) 3" (80) 4" (100) 5" (125)								
51 155 plug alverter valve	2 (30)	2.5 (03)	3 (00)	+ (100)	3 (123)				
MATERIAL SPECIFICATIONS									
Cast housing/end covers/plug [2]	Aluminium G-Al S	i 7 MG WA							
Optional plug coating [2HA]	Anodized								
Optional plug liner [2SSI]	Stainless steel AIS	SI 316L	DIN 1.4	404					
Static seal	Silicone		FDA-ap	proved – EU 1935	5/2004-compliant				
DRIVE SPECIFICATIONS									
	Type DP Double a	cting proumatic	actuator						
Airtorque Medium	Type DR Double acting pneumatic actuator								
	Air filtration lubricated or not up to 8 bar								
Temperature range	-40°C to 80°C								
Working pressure	5–8 bar								
Tube	Ø 10 mm								
AIR CONSUMPTION									
ТҮРЕ	AVAILABLE SIZES								
SPTDS plug diverter valve	2" (50)	2.5" (65)	3" (80)	4" (100)	5" (125)				
At 87 PSI FT³/stroke	0.074	0.175	0.19	0.22	0.41				
SOLENOID VALVE SPECIFICATIONS									
Actuator	5/2 NAMUR bistable version with manual control								
Festo	Type VSNC-F-B52-G14-FN								
Medium	Air filtration lubricated or not up to 116 psi								
Connection	1/4"								
SOLENOID COIL SPECIFICATIONS									
Festo	Type VACN-N								
Protection									
Socket connection	IP 65								
Standard voltage	M 16 Ø 0.24-0.31"								
	24 VDC 110/230 VAC 50/60 Hz -4°F to 140°F								
Temperature range	7 1 tO 140 F								
SWITCH/TERMINAL BOX SPECIFICATIONS	T 4600.16T1=	10.141							
Rotech Protection	Type ACR3ASTAZ10 Micro switches								
Standard voltage	IP 65 4 A, 230 VAC								
Temperature range	-13°F to 185°F								
Gland	M20x1.5 Clamp. range 0.31" to 0.51"								
	MZOAT.3 CIAMP. Tange 0.31 to 0.31								

OPTIONAL SWITCH/TERMINAL BOX SPECIFICATIONS

Rotech	Type APFN412EASEAZ10				
Inductive proximity switch	Pepperl & Fuchs. Type NBN4-12GM50-E2				
Protection	IP 65				
Standard voltage	10 VDC to 30 VDC 3-wire PNP NO 0-200 mA				
Temperature range	-13°F to 158°F				
Cable gland	M20x1.5 Clamp. range 0.31" to 0.51"				

MEASUREMENTS



TYPE												
SPTDS	ØA1*	ØA2*	ØВ	D	ØС	F	G	н	K	A4	ВВ	cc
2" (50)	1.97	1.88	3.54	M8x12	4.33	5.51	4.23	13.39	2.09	2.57	5.98	1.22
2.5" (65)	2.56	2.38	3.54	M8x12	4.33	5.51	4.23	13.39	2.09	2.57	5.98	1.22
3" (80)	3.15	2.84	4.13	M8x12	4.92	5.91	4.53	13.66	2.40	2.67	6.46	1.34
4" (100)	3.94	3.84	5.12	M10x15	6.10	6.69	4.92	14.06	2.99	3.08	7.29	1.50
5" (125)	4.92	4.92	6.10	M10x15	7.09	6.89	5.59	14.76	3.46	3.09	7.56	1.57

Technical modifications are possible, dimensions in inches.

^{*} Inside diameter of pipe

