

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 -25 °C to +80 °C at ambient temperatures between -10 °C and +40 °C
- Pressure up to 1 barg
- Pressure shock resistant up to 10 barg
- 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 anodised 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 measurements
Maximum allowable working pressure	-0.5 to 1 barg
Allowable conveying product temperature	-25°C to 80°C
Maximum allowable working temperature	-20°C to 60°C
ATEX 2014/34 EU	Marking of the mechanical equipment II 1D/2D and II -/2G

TYPE	AVAILABLE SIZES				
SPTDS plug diverter valve	50	65	80	100	125

MATERIAL SPECIFICATIONS

Cast housing/end covers/plug [2]	Aluminium G-Al Si 7 MG WA				
Optional plug coating [2HA]	Anodised				
Optional plug liner [2SSI]	Stainless steel AISI 316L		DIN 1.4404		
Static seal	Silicone		FDA-approved – EU 1935/2004-compliant		

DRIVE SPECIFICATIONS

Airtorque	Type DR Double acting pneumatic actuator
Medium	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

TYPE	AVAILABLE SIZES				
SPTDS plug diverter valve	50	65	80	100	125
At 6 bar LTR/stroke	2.3	2.3	2.3	2.3	3.6

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 8 bar
Connection	1/4"

SOLENOID COIL SPECIFICATIONS

Festo	Type VACN-N-...
Protection	IP 65
Socket connection	M 16 Ø 6–8 mm
Standard voltage	24 VDC 110/230 VAC 50/60 Hz
Temperature range	-20°C to 60°C

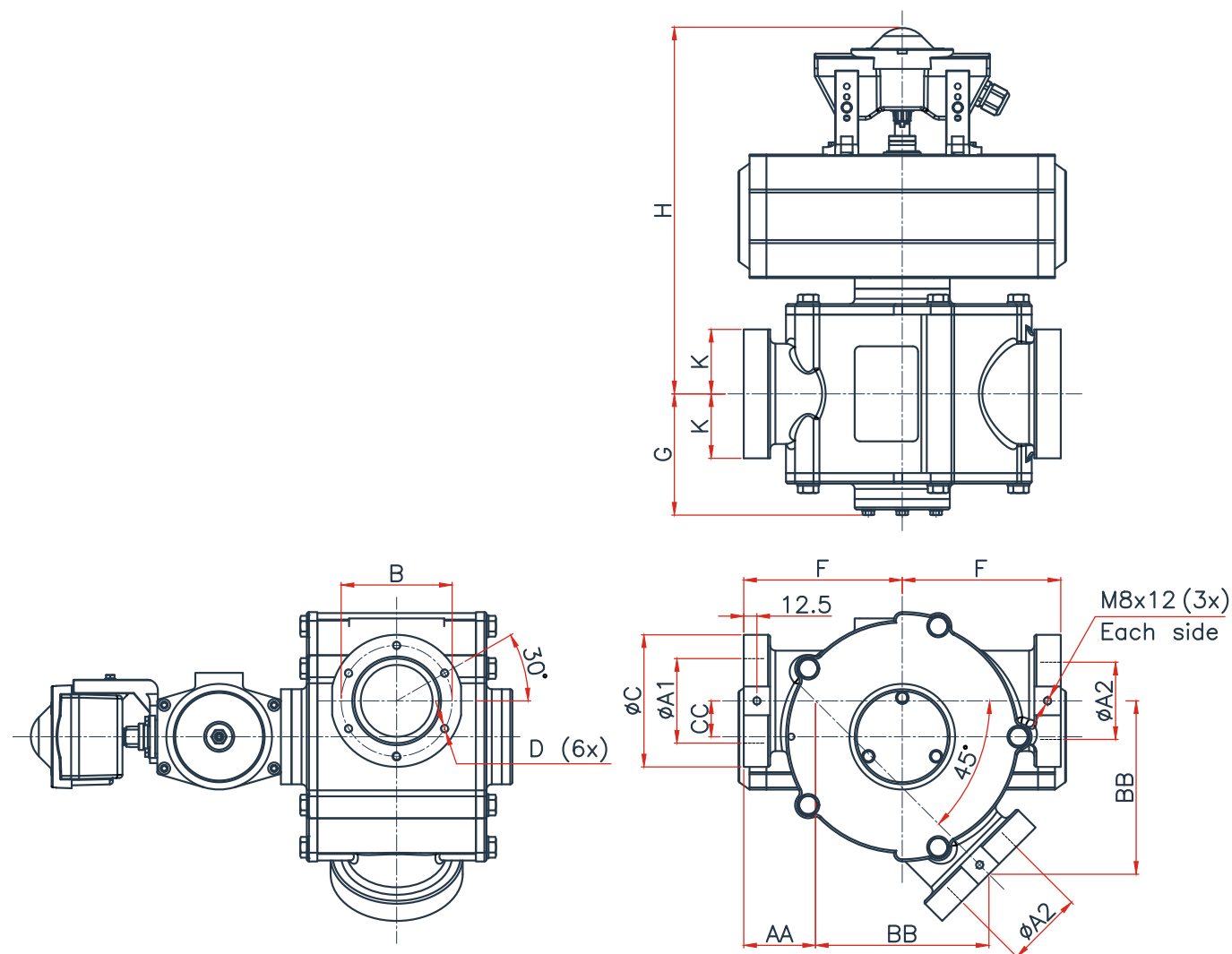
SWITCH/TERMINAL BOX SPECIFICATIONS

Rotech	Type ACR3ASTAZ10 Micro switches
Protection	IP 65
Standard voltage	4 A, 230 VAC
Temperature range	-25°C to 85°C
Gland	M20x1.5 Clamp. range 8 mm to 13 mm

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	-25°C to 70°C
Cable gland	M20x1.5 Clamp. range 8 mm to 13 mm

MEASUREMENTS



TYPE												
SPTDS	$\phi A1^*$	$\phi A2^*$	ϕB	D	ϕC	F	G	H	K	A4	BB	CC
50	50	47.8	95	M8x12	110	140	107.5	340	53	65.2	151.9	31
65	65	60.5	95	M8x12	110	140	107.5	340	53	65.2	151.9	31
80	80	72.1	110	M8x12	125	150	115	347	61	67.9	164.1	34
100	100	97.6	135	M10x15	155	170	125	357	76	78.3	185.1	38
125	125	125	160	M10x15	180	175	142	375	88	78.4	192	40

* Inside diameter of pipe

Technical modifications are possible, dimensions in mm.



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