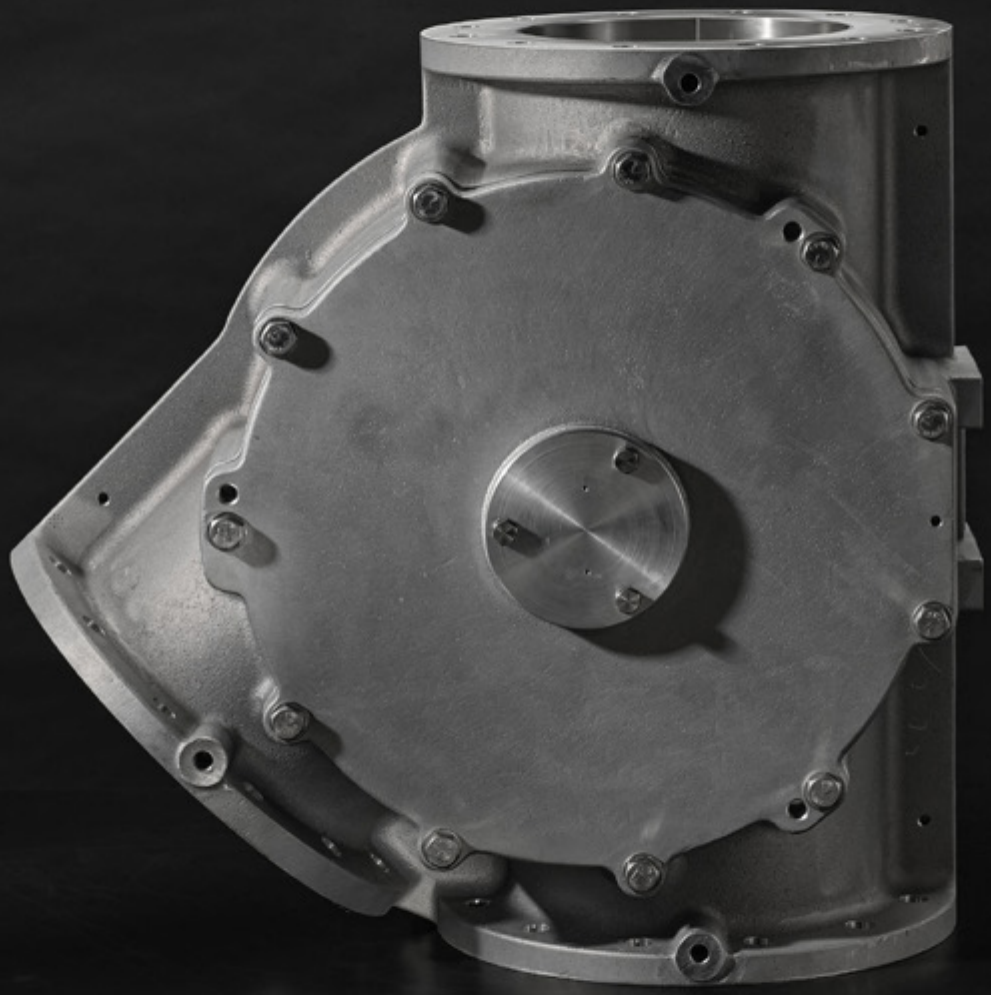
DMN
WESTINGHOUSE



PRODUCT INFORMATION SHEET

SPTD
PLUG DIVERTER VALVE

FUTURE-PROOF VALUE SINCE 1950

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 SPTD PLUG DIVERTER VALVE

The Single-pipe Plug-Type Diverter valve (SPTD) is especially designed to route powders, granules, and pellets in pneumatic conveying systems with minimum degradation. You can use the SPTD with a static or an inflatable seal.

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

THE SPTD 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 3 barg with static seals
- Pressure up to 6 barg with inflatable seals
- Pressure shock resistant up to 10 barg
- Universal application; diverting only
- Available with a static or an inflatable seal
- 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 SPTD 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	Round PN 10 or ANSI 150 lbs.
Maximum allowable working pressure	-0.5 to 3 barg
Optional: inflatable seal size 50-200	-0.5 to 6 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									
SPTD plug diverter valve	150	162	200	213	250	267	300	318	350	400

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
Inflatable 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 10 bar
Temperature range	-40˚C to 80˚C
Working pressure	5–8 bar
Tube	Ø 10 mm

AIR CONSUMPTION

TYPE	AVAILABLE SIZES									
SPTD plug diverter valve	150	162	200	213	250	267	300	318	350	400
At 6 bar LTR/stroke	**2.3**	**2.3**	**4.7**	**4.7**	**9**	**9**	**9**	**9**	**14.7**	**14.7**

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

SOLENOID VALVE SPECIFICATIONS

Inflatable seal	3/2 monostable version with manual control
Festo	Type MFH-3-1/4-EX
Medium	Air filtration lubricated or not up to 8 bar
Connection	1/4”

SOLENOID COIL SPECIFICATIONS

Festo	Type MSF...
Protection	IP 65
Socket connection	M 16 Ø 6–8 mm
Standard voltage	24 VDC 110/230 VAC 50/60 Hz
Temperature range	-5˚C to 40˚C

PRESSURE SWITCH SPECIFICATIONS

Festo	Type PEV-1/4-B
Protection	IP 65
Voltage	Max. 125 VDC/250 VAC

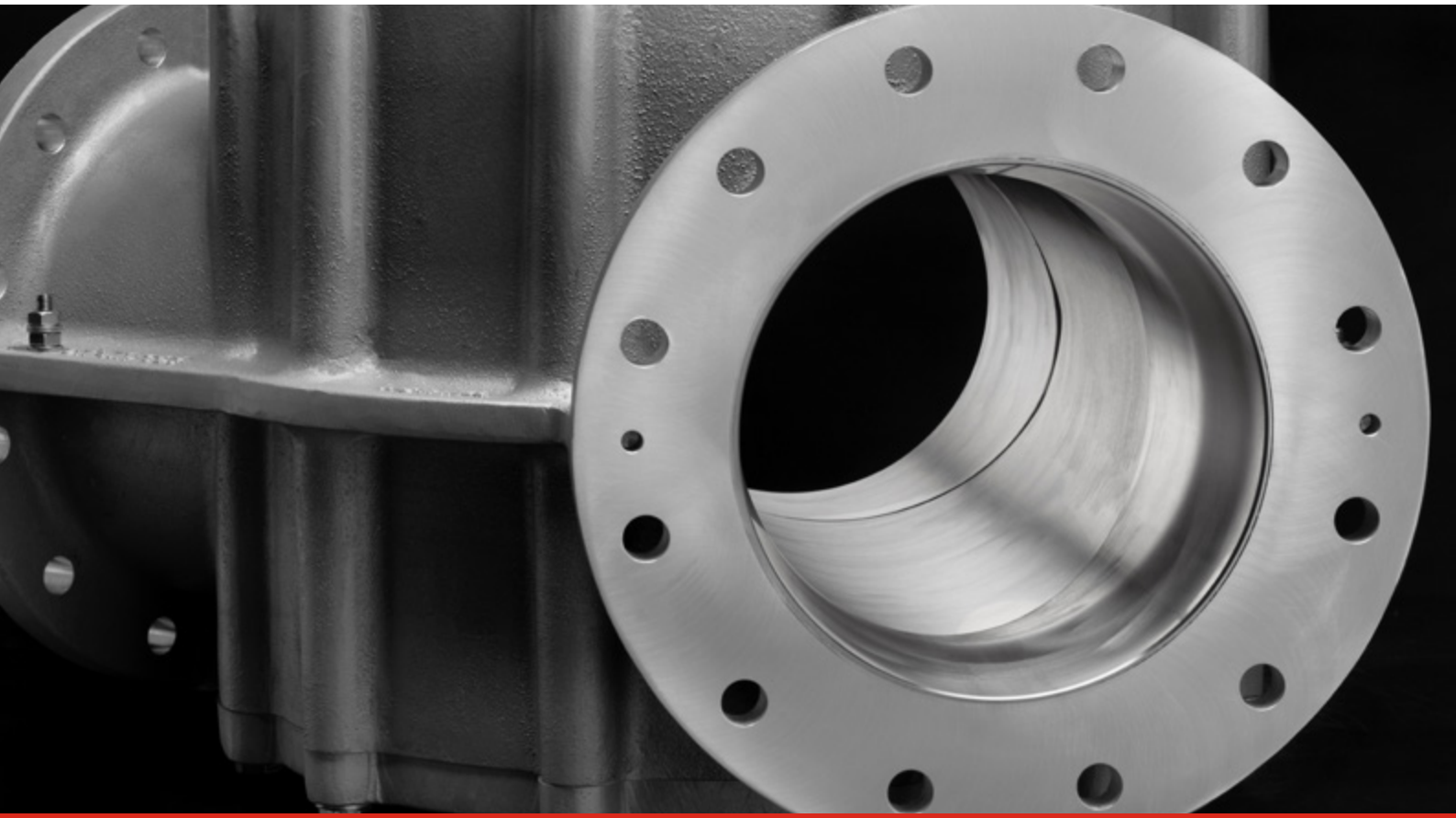
SENSOR SPECIFICATIONS

Pepperl & Fuchs		
Standard	Type NBB5-18GM50-E2	
	D.C. sensor (3 wire)	
	Nominal voltage: 10-30 VDC	
	Normally open PNP	
	Ambient temperature: -25˚C to 70˚C	
Optional	Type NCB5-18GM40-NO	Type NBB5-18GM60-WS
	NAMUR DIN 19234 sensor (2 wire)	A.C. sensor (3 wire)
	Nominal voltage: 8 VDC	Nominal voltage: 20 VAC to 250 VAC
	-	Normally open PNP
	Ambient temperature: -25˚C to 100˚C	Ambient temperature: -25˚C to 70˚C

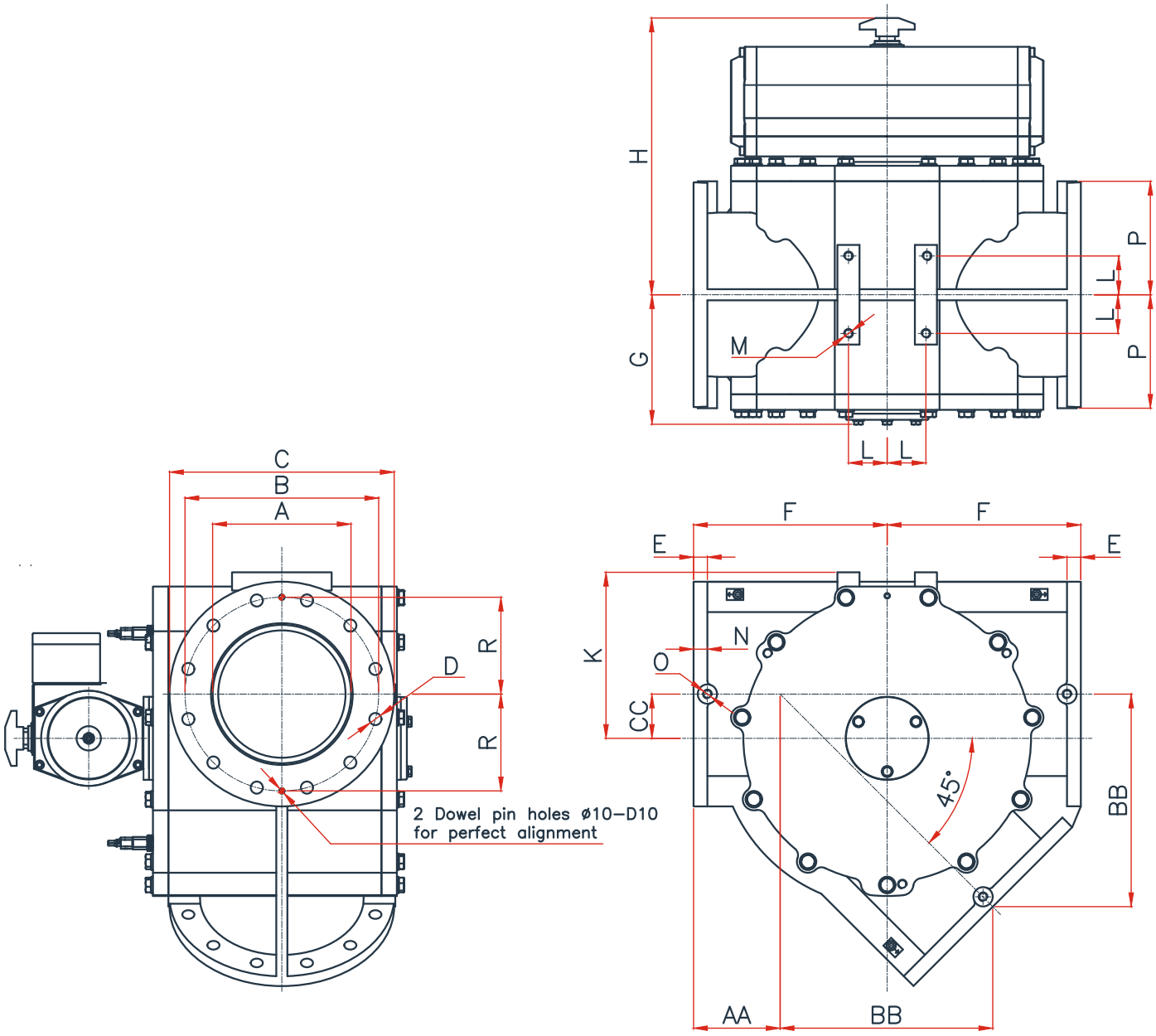
TERMINAL BOX SPECIFICATION

ROSE

Material	Polyester
Protection	IP 66



MEASUREMENTS



TYPE		DIN			ANSI														
SPTD	ØA	ØB	D	ØC	ØB	D	E	F	G	H	K	L	M	N	O	P	AA	BB	CC
150	150	240	8xØ22	285	241.4	8xØ22,2	20	260	180	390	195	50	M16x24	20	M16x24	145	151	261	45
162*	162																		
200	200	295	8xØ22	343	298.4	8xØ22,2	25	300	205	435	240	50	M16x24	25	M16x24	175	155	315	60
213*	213																		
250	250	350	12xØ22	406	361.9	12xØ25,4	25	350	235	500	300	70	M16x24	25	M16x24	205	156	384	80
267*	267																		
300	300	400	12xØ22	483	431.8	12xØ25,4	25	400	260	525	360	70	M16x24	25	M16x24	245	170	445	95
318*	318																		
350	350	460	16xØ22	530	476.2	12xØ28.6	25	450	290	597	400	70	M16x32	25	M16x24	270	184	506	110
400	400	515	16xØ22	595	539.7	16xØ28.6	25	525	315	622	450	70	M16x32	25	M16x24	300	223	585	125

Technical modifications are possible, dimensions in mm.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