

EN- Technical data sheet

Rotary distributor heads, 45°, dust-tight

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Article code

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Diameter

10 DN 100
 12 DN 120
 15 DN 150

...

30 DN 300

②

Thickness

3 3,0 mm

③

Surface

1 1.0330, powder-coated

④

Number of outlets

04 4 pieces
 06 6 pieces
 08 8 pieces
 10 10 pieces

...

20 20 pieces

⑤

Conveyor pipe angle

4 45°
 6 60°

⑥

Article group

99 Rotary distributor heads, dust-tight

1 Technical data

Area of application and use	For deflection of free-flowing, granular, powdery bulk materials and non-conductive dusts (KSt value max. 160 bar m/sec). Only suitable for unpressurised conveying.
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Connection	All connections with flanged edges (<i>lips</i>) for clamping ring connection Alternatively with welded-on flanges, drilled according to DIN 24154 R2
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Materials	
Inlets and outlets	Aus 1.0330 (DC01) in material thickness t = 3 mm
Conveyor pipe	DN 100 Pipe DA 155,0 x 5,0 mm DN 120 Pipe DA 133,0 x 6,3 mm DN 150 Pipe DA 168,3 x 6,3 mm DN 175 Pipe DA 191,0 x 8,0 mm DN 200 Pipe DA 219,1 x 6,3 mm DN 250 Pipe DA 273,0 x 6,3 mm DN 300 Pipe DA 323,9 x 7,1 mm <i>All conveyor pipes made of S235JR</i>
Contact seal	Natural caoutchouc NK, colour: light, 65° Shore A
Outlet seal	Caoutchouc NR/SBR, colour: light, 60° Shore A
O-ring seal in the run-in area	NBR 70A
Flange seal	Flat seal made of PTFE

Surfaces and temperature	
Surface treatment	Powder Coating (1.0330)
	Standard colour: RAL 7032 ("pebble grey"); smooth, satin-gloss, electrostatically dissipative; Food physiologically harmless; Average layer thickness: 30 - 60 µm
Ambient temperature	0°C to +40°C
Product temperature	-20°C to +80°C

ATEX approval	
Application	Group II, Category 3D Zone 22
Marking	Ⓔx II 3 D c T 130°C
Equipotential bonding	with welded earthing bolts for on-site grounding

Maximum speed (< 0,8 m/s)		
DN	Spouts	Max. output speed [min ⁻¹]
100	4 – 16	15,07
	18 – 20	10,81
120	4 – 14	15,59
	16 – 20	11,07
150	4 – 10	15,59
	12 – 16	11,07
175	4 – 10	16,19
	12 – 16	11,37
200	4 – 8	16,54
	10 – 12	11,54
250	4 – 10	12,2
300	4 – 8	12,2

2 Electrical and pneumatic components

Parallel gear motor	
Make	SEW
Type	FHF37/II2GD EDRN71MS4/3D/KCC/TF/AK8W/AL
Output speed	15 revolutions / minute
Output torque	171 Nm (50 Hz)
Ambient temperature	-20°C to +40°C
System voltage	400 V
Power	0,25 kW
Motor frequency	50 Hz
Duty cycle	S1
Voltage range	220 – 240 V (Triangle) 380 – 415 V (Star)
Max. amperage	2,10 A (Triangle) 1,22 A (Star)
Degree of protection	IP65
Ventilation	AL = Metal fan
Motor protection	TF = Temperature sensor PTC
Transmitter	AK8W
Electrical interface	Asynchron, serial RS485
Absolute value	Singelturm 16 Bit + Multiturn 16 Bit
Transducer Supply Voltage	7 – 30 V DC
Energy efficiency class	IE3
Lubricant	CLP HC 220 synth. Oil
ATEX approval	II3D Ex tc IIIB T120°C Dc
Electrical connection	KCC = 6 Terminal blocks with cage tension spring Terminal box lower part made of ALU with tapped hole 2xM25, 1xM16

5/2-way solenoid valve	
Make	Festo
Type	JMFH-5-1/8-EX
Mode of action	bistable
Flow	600 L/min
Working pressure	1,5 to 8 bar
Ambient temperature	-5°C to +40°C
Degree of protection	IP65
ATEX approval	II 2G Ex h IIC T4 Gb II 2D Ex h IIIC T130°C Db
Pneumatic connection	Push-in connection for 8 mm hose diameter

Solenoid	
Make	Festo
Type	MSFG-24-EX
Voltage	24 V DC
Output	4,5 W
Degree of protection	IP65
Ambient temperature	-5°C to +40°C
ATEX approval	II 3G Ex nA IIC T4 X Gc II 3D Ex tc IIIC T130°C X Dc

Power cord	
Make	Festo
Type	MSSD-F-M16
Voltage	max. 250 V DC / AC
Current	6 A
Degree of protection	IP65
Ambient temperature	-20°C to +115°C
Electrical connection	Cable gland M16x1.5 Cable Diameter: 6-8mm

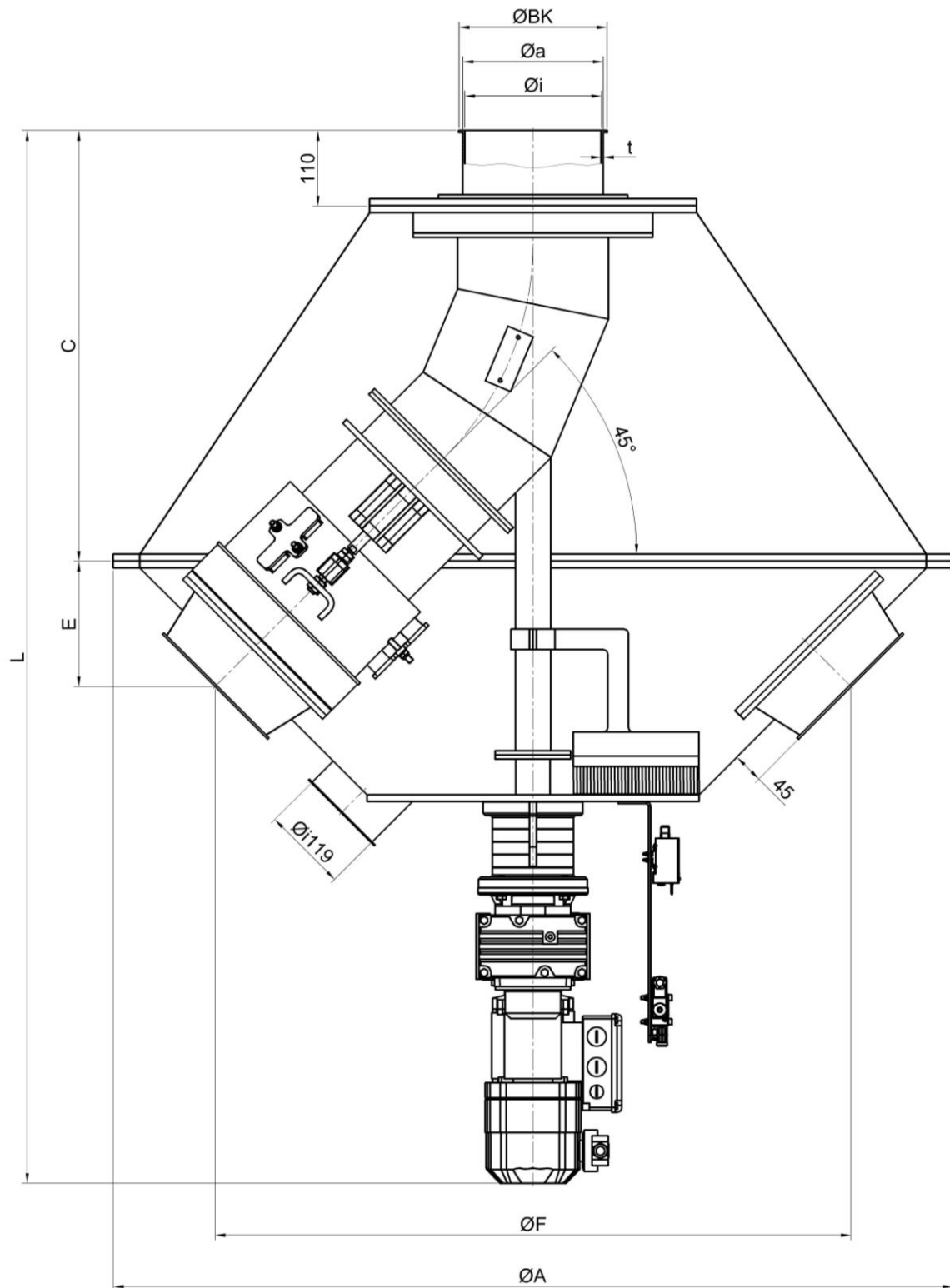
Pressure cylinder	
Make	Festo
Type	ADN-63-40-A-P-A-EX4
Stroke	40 mm
Piston diameter	63 mm
Recommended compressed air supply	5 bar
Working pressure	0,6 to 10 bar
Mode of action	double-acting
End position damping	elastic cushioning on both sides
Air volume per double stroke	1,45 L
Actuation time (per stroke)	> 1 second
Ambient temperature	-20°C to +80°C
ATEX approval	II 2G Ex h IIC T4 Gb II 2D Ex h IIIC T120°C Db
Pneumatic connection	Push-in connection for 8 mm hose diameter

Pressure sensor	
Make	Festo
Type	SDE3-D10S-B-WQ4-2P-M12-EX2-W
Voltage	15 V to 30 V
Pressure measurement range	0 to 10 bar
Degree of protection	IP65
Ambient temperature	-0°C bis +50°C
ATEX approval	II 3G Ex ec IIC T6 X Gc II 3D Ex tc IIIC T80°C X Dc
Electrical connection	M12x1 A-coded Cable length: 2.5 m

Safety switch for inspection hatch	
Make	Schmersal
Type (Switch)	EX-BNS 33-02Z-2187-3GD 5M
Type (Actuator)	EX-BPS 33-3GD
Switching voltage	24 V DC / 100 V AC
Current	max. 0,01 A
Switching capacity	max. 0,24 W
Degree of protection	IP67
Ambient temperature	-25°C to +70°C
ATEX approval	II 3G Ex nC IIC T6 Gc X II 3D Ex tc IIIC T80°C Dc X
Electrical connection	Cable length: 5 m

2 Dimensions

Dimension table



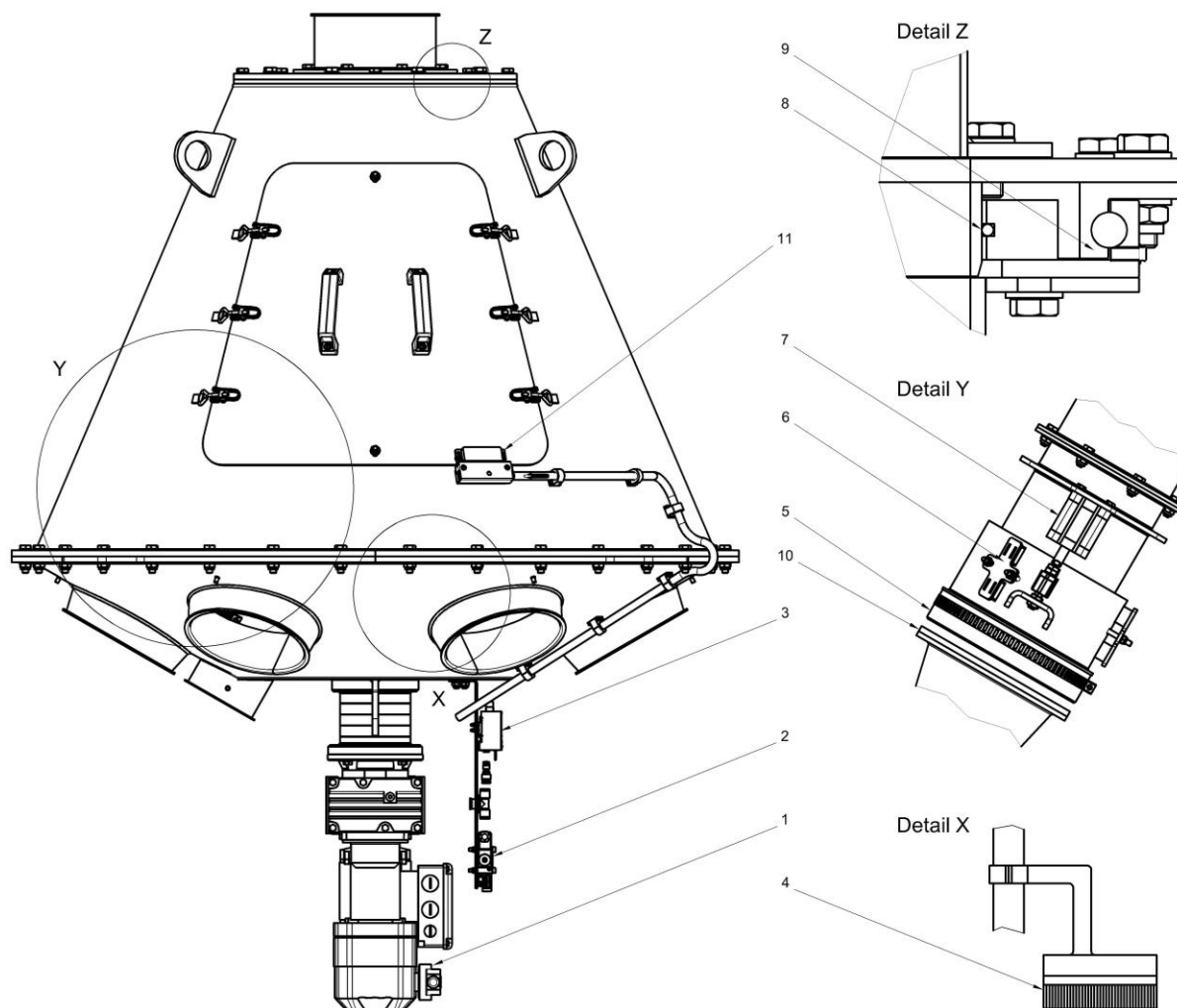
DN	Øi [mm]	Øa [mm]	ØBK [mm]	Spouts	ØA [mm]	C [mm]	E [mm]	ØF [mm]	L [mm]	m* [kg]
100	98	104	116	4	1220	643	138	1014	1535	236
				6						239
				8						241
				10						245
				12						247
				14						250
				16						252
				18	1620	843		1414	1935	338
				20						340
120	118	124	136	4	1220	621	155	980	1513	240
				6						243
				8						247
				10						249
				12						252
				14						256
				16						341
				18	1620	812		1380	1904	345
				20						348
150	148	154	166	4	1220	640	155	980	1532	246
				6						249
				8						252
				10						256
				12	1620	840		1380	1932	345
				14						349
				16						352
				16						352
175	173	179	191	4	1220	622	173	944	1514	252
				6						257
				8						260
				10						264
				12	1620	822		1344	1914	358
				14						361
				16						364
				16						364
200	198	204	216	4	1220	626	183	924	1518	248
				6						252
				8						256
				10	1620	826		1324	1918	349
				12						352
				12						352
250	248	254	266	4	1620	784	219	1252	1826	369
				6						379
				8						378
				10						382
300	298	304	316	4	1620	817	219	1252	1859	375
				6						380
				8						384

Tolerances	Pipe diameter and roundness according to DIN EN 10296-1:2004 Length and angular dimensions according to DIN ISO 2768-v (very coarse) Lips: 6 mm ± 1mm
3D-Models	All 3D-models are available for download in our CAD portal in the common file formats.

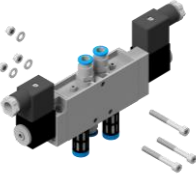
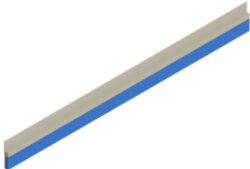
**Note: Weights are approximate and may vary depending on the design and material.*

3 Spare parts list

Exploded view



No.	Portrayal	Naming	Quantity	DN	Article
1		Parallel gear motor	1	100	SO0129816
				120	
				150	
				175	
				200	
				250	
				300	

No.	Portrayal	Naming	Quantity	DN	Article
2		5/2-way solenoid valve	1	100	SO0106297
				120	
				150	
				175	
				200	
				250	
				300	
3		Pressure sensor	1	100	SO0128070
				120	
				150	
				175	
				200	
				250	
				300	
4		Brush	1	100	SO0129818
				120	
				150	
				175	
				200	
				250	
				300	
5		Pressing seal	1	100	SO0131675
				120	SO0129901
				150	SO0103765
				175	SO0126794
				200	SO0103763
				250	SO0103038
				300	SO0103045
6		Guide castor set	3	100	SO0100670
				120	
				150	
				175	
				200	
				250	
				300	
7		Short-stroke cylinders	2	100	SO0106298
				120	
				150	
				175	
				200	
				250	
				300	

No.	Portrayal	Naming	Quantity	DN	Article
8		O-Ring	1	100	SO0131678
				120	SO0131677
				150	SO0128947
				175	SO0131679
				200	SO0129815
				250	SO0128072
				300	SO0127813
9		Ball slewing rings	1	100	SO0100360
				120	
				150	
				175	
				200	
				250	SO0103033
				300	
10		Outlet seal	(See Number of outlets)	100	SO0131681
				120	SO0129900
				150	SO0103766
				175	SO0131680
				200	SO0103767
				250	SO0112590
				300	SO0103047
11		Safety switch for inspection hatch	1	100	SO0129817
				120	
				150	
				175	
				200	
				250	
				300	