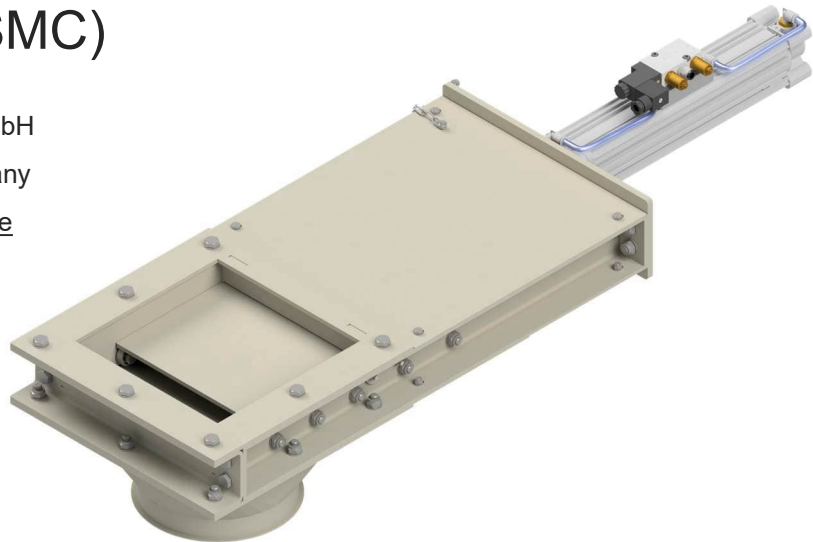


EN- Technical data sheet

Silo outlet gates, pneumatically operated, lifting cylinder (SMC)

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Article code

20	2	1	775	.01
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①

②

③

④

①

Diameter

15	DN 150
17	DN 175
20	DN 200
...	
30	DN 300

②

Thickness

2	2.0 mm
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③

Surface

1	1.0330, powder-coated
2	1.0330, hot-dip galvanized
3	1.4301, shot-blasted

④

Article group

775	Silo outlet gates, pneumatic, lifting cylinder
7751	Silo outlet gates, pneumatic, lifting cylinder with transition piece

1 Technical data

Area of application and use	For the discharge of free-flowing, granular and powdery bulk materials from silo containers. Only suitable for pressureless conveying. The actuation time depends on the drive. <i>(see table 1.1 Actuation, pp. 3-4)</i>
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Connection	
Inlet	Customer-side counter flange required according to hole pattern <i>(see inlet flange dimension table, p.6)</i>
Outlet	With transition piece: One side with shaped flanged edge for clamping ring connection Without transition piece: Customer-side counter flange required <i>(see outlet flange dimension table, p.7)</i>

Materials	
Transition piece	According to article number 1.0330 (DC01) or 1.4301 (X5CrNi18-10) in specified material thickness
Case	Made of 1.0038 (S235JR) or 1.4301 (X5CrNi18-10) in thickness t = 5 mm
Gate and connection flanges	Made of 1.0038 (S235JR) or 1.4301 (X5CrNi18-10) in thickness t = 6 mm
Seal	1.0330: Sealing strip made of felt, RG36, white 1.4301: Sealing strip made of silicone, 60 ±5 Shore A

Surfaces and temperature			
Surface treatment	Powder Coating (1.0330)	Hot-dip galvanizing (1.0330)	Stainless Steel Shot Blasting (1.4301)
	Standard colour: RAL 7032 ("pebble grey"); smooth, satin-gloss, electrostatically dissipative; Food physiologically harmless; Average layer thickness: 30 - 60 µm	Average layer thickness: 45 - 55 µm	Surface roughness Ra: 1.3 µm
Ambient temperature	-10°C to +60°C		
Product temperature*	-20°C to +80°C	-20°C to +80°C <i>(possible for short periods up to max. +120°C)</i>	-20°C to +100°C

**Note: If product temperatures exceed 50°C, the manual control or drive must be insulated against heat conduction on site.*

1.1 Actuation

Pneumatic lifting cylinder		
Diameter	DN 150 - DN 175	DN 200
Make	SMC	
Type	55-CP96SDB63-250C	55-CP96SDB63-300C
Stroke	250 mm	300 mm
Piston diameter	63 mm	
Compressed air supply	5 bar	
Mode of action	double-acting	
Cushioning	pneumatic and elastic	
Air volume per double stroke	8,76 L	10,5 L
Actuation time (per stroke)	< 3 seconds	
Ambient temperature	-10° to +60°C	

Diameter	DN 250	DN 300
Make	SMC	
Type	55-CP96SDB63-320C	55-CP96SDB63-400C
Stroke	320 mm	400 mm
Piston diameter	63 mm	
Compressed air supply	5 bar	
Mode of action	double-acting	
Cushioning	pneumatic and elastic	
Air volume per double stroke	11,2 L	14,0 L
Actuation time (per stroke)	< 3 seconds	
Ambient temperature	-10° to +60°C	

5/2-way solenoid valve	
Make	Hafner / Joyner
Type	MNH 510 701
Mode of action	monostable (with air spring return)
Flow	700 L/min
Ambient temperature	-10° to +60°C
Pneumatic Connection	Push-in connection for 8mm hose diameter

Solenoid	
Voltage	24 V DC
Make	Hafner / Joyner
Type	MA 22
Amperage	120 mA
Degree of protection	IP 65

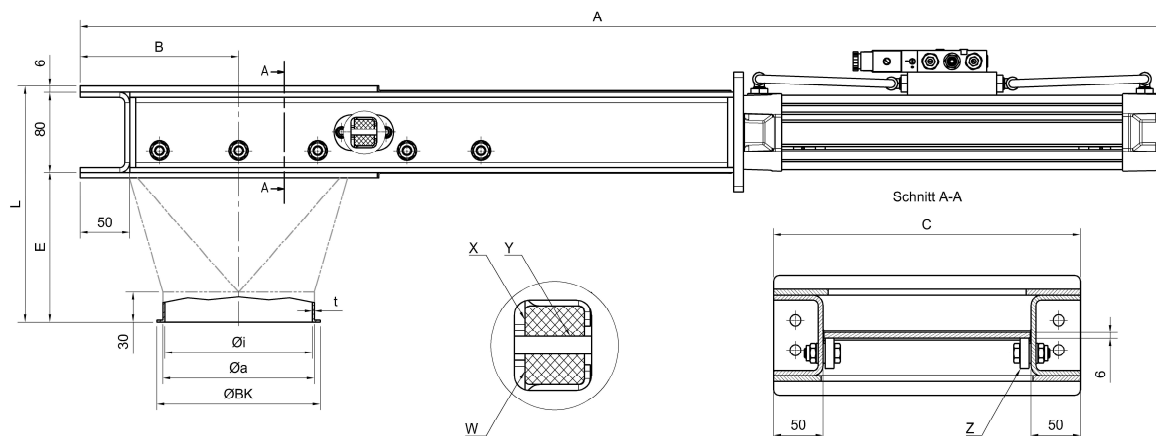
Power cord	
Voltage	Max. 250 V DC
Make	Hafner / Joyner
Type	G 122 PG
Construction	Industrie B
Current	max. 6 A
Degree of protection	IP65
Electrical connection	Cable gland PG9 Cable diameter: 6-8 mm

Proximity sensor	
Voltage	5-28 V DC
Make	SMC
Type	D-M9PL-588
Number	2 pieces (open/closed)
Output	PNP
Current	max. 40 mA
Degree of protection	IP67
Ambient temperature	-10°C to +60°C
Electrical Connection	Cable 3m, 3 wires with open end

2 Dimensions

Dimensions table Silo outlet gate

pictured version: DN 200



X= Sealing strip made of felt/silicone

Y= Sliding plate

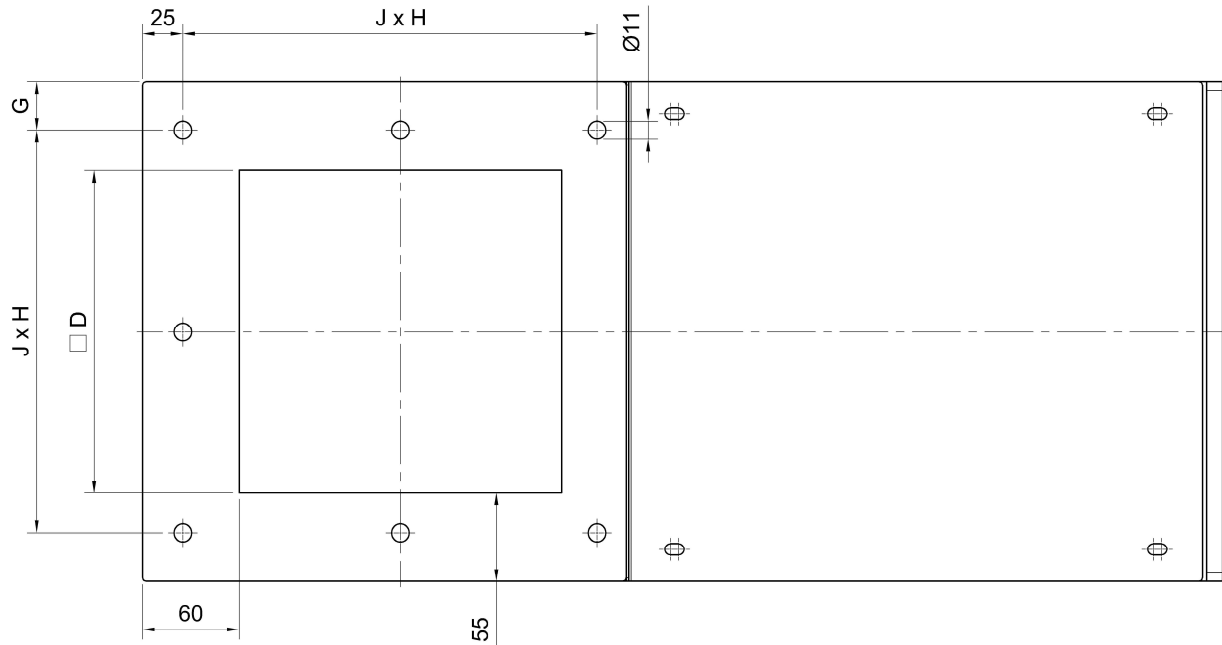
Z= Deep groove ball bearings

DN	t [mm]	Øi [mm]	Øa [mm]	ØBK [mm]	A [mm]	B [mm]	C [mm]	E [mm]	L [mm]	m* [kg]
150	2	149	153	165	1285	160	310	150	236	33,3
175		174	178	190	1285	160	310	150	236	33,1
200		199	203	215	1195	185	360	150	236	40,1
250		249	253	265	1305	210	410	150	236	46,7
300		299	303	315	1475	235	460	150	236	51,1

**Note: Weight indication including transition piece*

Inlet flange dimension table

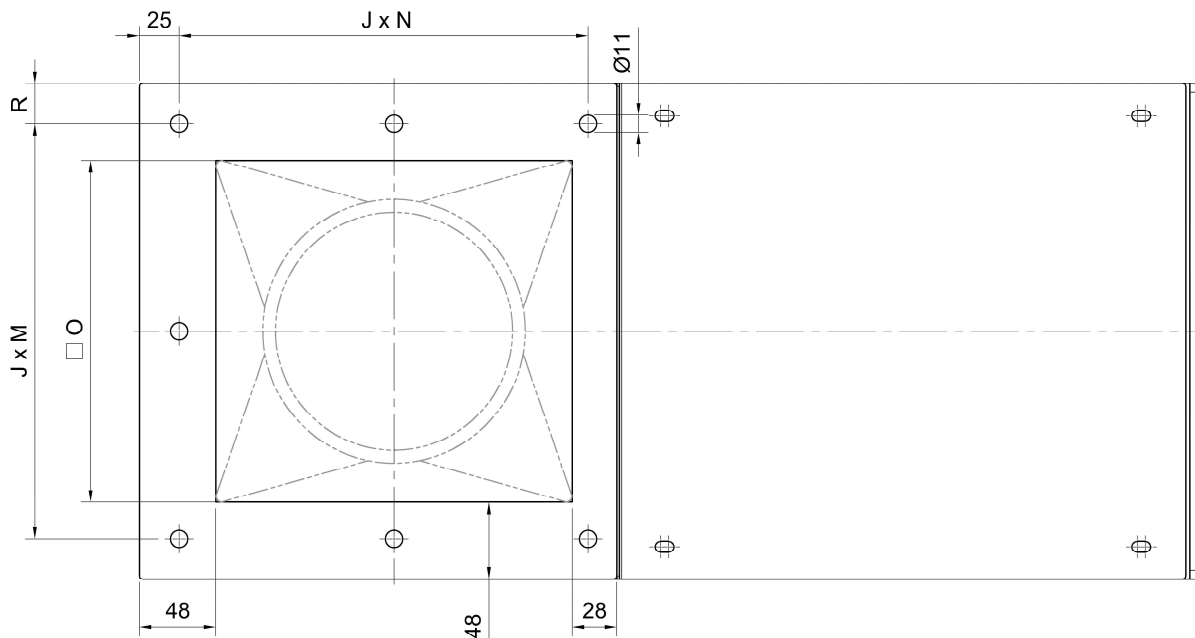
pictured version: DN 200



DN	t [mm]	D [mm]	G [mm]	J x H [mm]
150	6	200	30	2 x 125
175		200	30	2 x 125
200		250	30	2 x 150
250		300	30,1	3 x 116,6
300		350	25	4 x 102,5

Outlet flange dimension table

pictured version: DN 200



DN	t [mm]	O [mm]	R [mm]	J x M [mm]	J x N [mm]
150	6	214	25	2 x 130	2 x 115
175		214	25	2 x 130	2 x 115
200		264	25	2 x 155	2 x 140
250		314	20,5	3 x 123	3 x 116,6
300		364	25	4 x 102,5	4 x 102,5

Tolerances

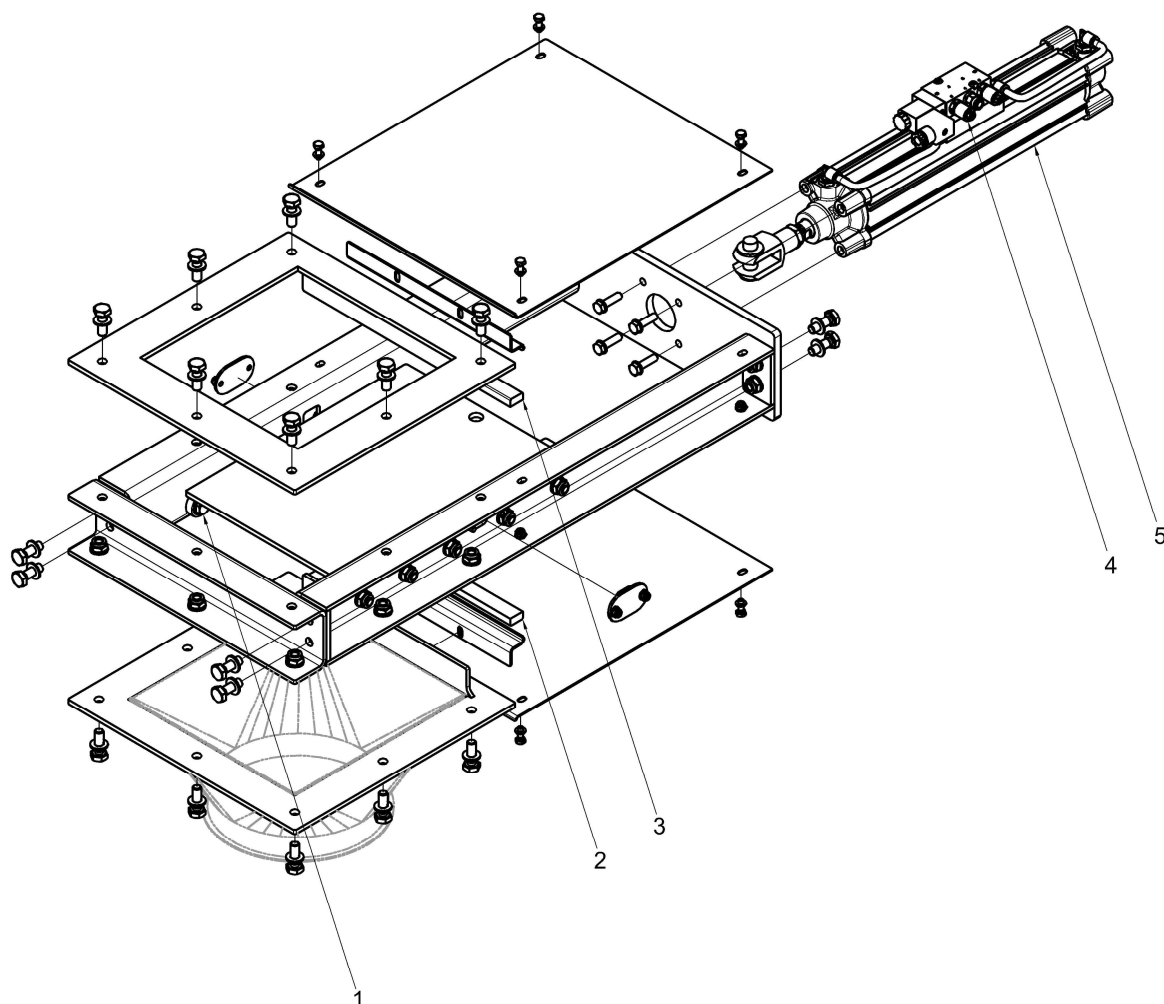
Pipe diameter and roundness according to DIN EN 10296-1:2004
Length and angular dimensions according to DIN ISO 2768-v (very coarse)
Lips: 6 mm ± 1mm

3D-Models

All 3D-models are available for download in our [CAD portal](#) in the common file formats.

3 Spare parts list

Exploded view



No.	Naming	Quantity	DN 150 – DN 300	
			1.0330	1.4301
1	DN 150 - DN 175: Deep groove ball bearings (SS-6200-2RS)	10	SO0131457	
1	DN 200 - DN 300: Deep groove ball bearings (SS-6200-2RS)	12	SO0131457	
2	Sealing strips (made of felt/silicone)	1	SO0111060	SO0131436
3	Sealing strips (made of felt/silicone)	1		SO0131435
4	5/2-way solenoid valve	1	SO0127862	
5	Lifting cylinder	1	(see table, p.9)	

EN- Technical data sheet
**Silo outlet gates, pneumatically operated,
 lifting cylinder (SMC)**



DN	Naming	Article
150	Lifting cylinder (CP96SDB63-0250-CEAC10165)	SO0132159
175		
200	Lifting cylinder (CP96SDB63-0300-CEAC10165)	SO0132160
250	Lifting cylinder (CP96SDB63-0320-CEAC10165)	SO0132161
300	Lifting cylinder (CP96SDB63-0400-CEAC10165)	SO0132162