

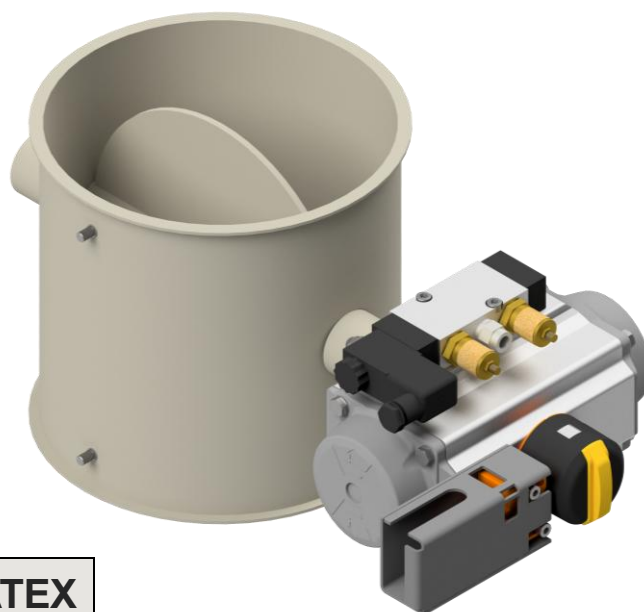
EN- Technical data sheet

Stop valve without seal, pneumatically operated, rotary actuator, ATEX

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Article code

20	2	1	2131	/ATEX
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①

Diameter

08	DN 80
10	DN 100
12	DN 120
...	
63	DN 630

②

Thickness

1	1.5 mm
2	2.0 mm (<i>from DN 315</i>)

③

Surface

1	1.0330, powder-coated
3	1.4301, shot-blasted

④

Article group

2131	Stop valve without seal, pneumatically operated, rotary actuator
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1 Technical data

Area of application and use	Shut-off (OPEN / CLOSED) of air volume flows in ventilation systems (overpressure max. 0.03 bar) as well as free-flowing, powdery or granular bulk materials (KSt value max. 160 bar m/sec) by actuating the flap. The actuation time depends on the drive. <i>(see table 1.1 Actuation, pp. 3-4)</i>
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Connection	Both sides with shaped flanged edge for clamping ring connection
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Materials	
Case	According to article number 1.0330 (DC01) or 1.4301 (X5CrNi18-10) in specified material thickness
Flap	Made of 1.0038 (S235JR) or 1.4301 (X5CrNi18-10) in thickness t = 4 mm
Flap seal	Without seal
Shaft seal	Flat sealing ring made of silicone, transparent, 60 ±5 Shore A

Surfaces and temperature		
Surface treatment	Powder Coating (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	Surface roughness Ra: 1.3 µm
Ambient temperature	-10°C to +50°C	
Product temperature*	-20°C to +120°C <i>(from +80°C impairment of the appearance is to be expected)</i>	-10°C to +180°C

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

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

1.1 Actuation

Pneumatic rotary actuator, ATEX				
Diameter	DN 80– DN 250	DN 280– DN 400	DN 450– DN 560	DN 630
Make	Air Torque			
Type	DR00030U	DR00060U	DR00100U	DR00150U
Compressed air supply	5 bar			
Torque (at 5 bar)	29,3 Nm	58,2 Nm	91,5 Nm	133 Nm
A/F double square	14 mm		17 mm	
Air volume per double stroke	0,42 L	0,8 L	1,29 L	1,82 L
Actuation time (90°)	< 3 seconds			
Mode of action	double-acting			
Ambient temperature	-40°C to +80°C			
ATEX approval	II 2 G Ex h IIC T6...T5 Gb X II 2 D Ex h IIIC T85°C...T95°C Db			

5/2-way solenoid valve, monostable	
Make	Hafner / Joyner
Type	MNH 510 701 Ex
Mode of action	monostable (with air spring return)
Flow	1250L/min
Ambient temperature	-10° to +50°C
ATEX approval	II 3 G Ex h IIC T6 Gb II 3 D Ex h IIIC T80°C
Pneumatic connection	Push-in connection for 8 mm hose diameter

Solenoid	
Voltage	24 V DC
Make	Amisco
Type	0709SD02403AX
Current	max. 120mA
Degree of protection	IP65
Ambient temperature	-10° to +50°C
ATEX approval	II 3 G Ex ec IIC T5 Gc II 3 D Ex tc IIIC T95°C Dc

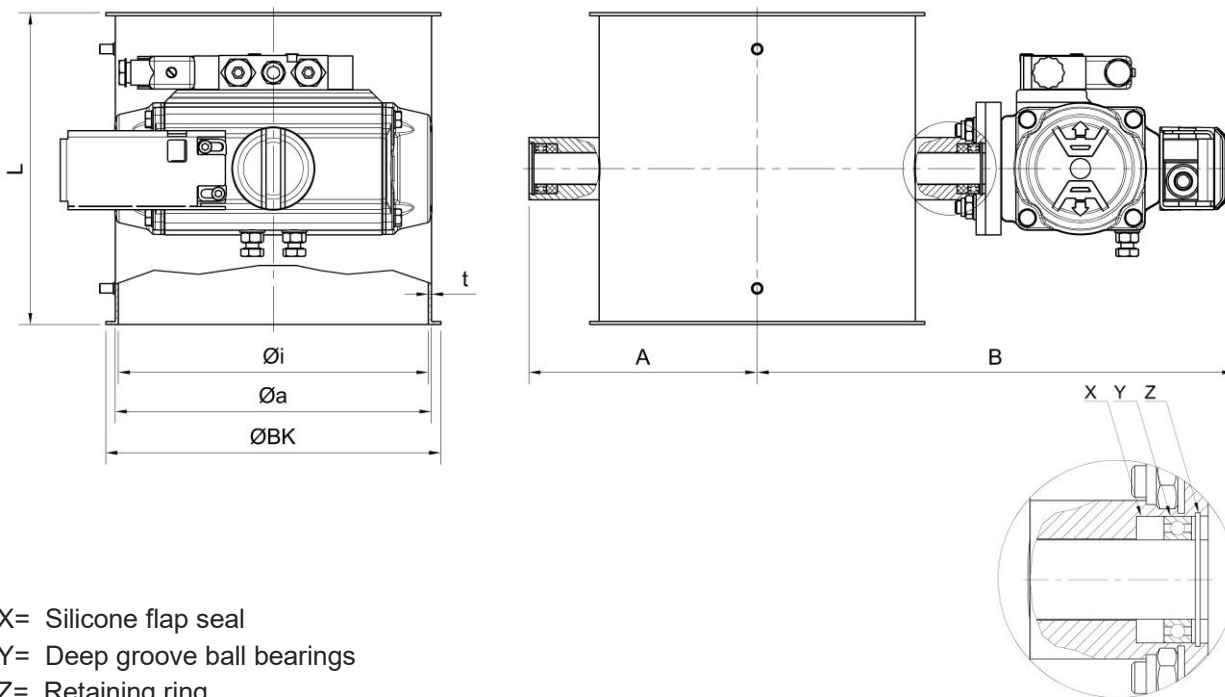
Power cord	
Voltage	max. 300 V DC (230 V AC)
Make	H.T.P.
Type	M1NS2000-ATEX
Construction	B-Industrie
Current	max. 10A
Degree of protection	IP65 / IP67
ATEX approval	II 2 G Ex eb IIC T5 Gb II 2 D Ex tb IIIC T100°C Db
Electrical connection	Cable gland PG9 Cable diameter: 6-8mm

Sensor	
Voltage	10 - 30V DC
Make	ifm
Type	IN507A
Output	PNP
Current	max. 15 mA
Degree of protection	IP67
ATEX approval	II 3G Ex ec IIC T6 Gc X II 3D Ex tc IIIC T80°C Dc IP67 X
Ambient temperature	-20°C to +60°C
Electrical Connection	M12 connector, coding: A

2 Dimensions

Dimension table

pictured version: DN 200

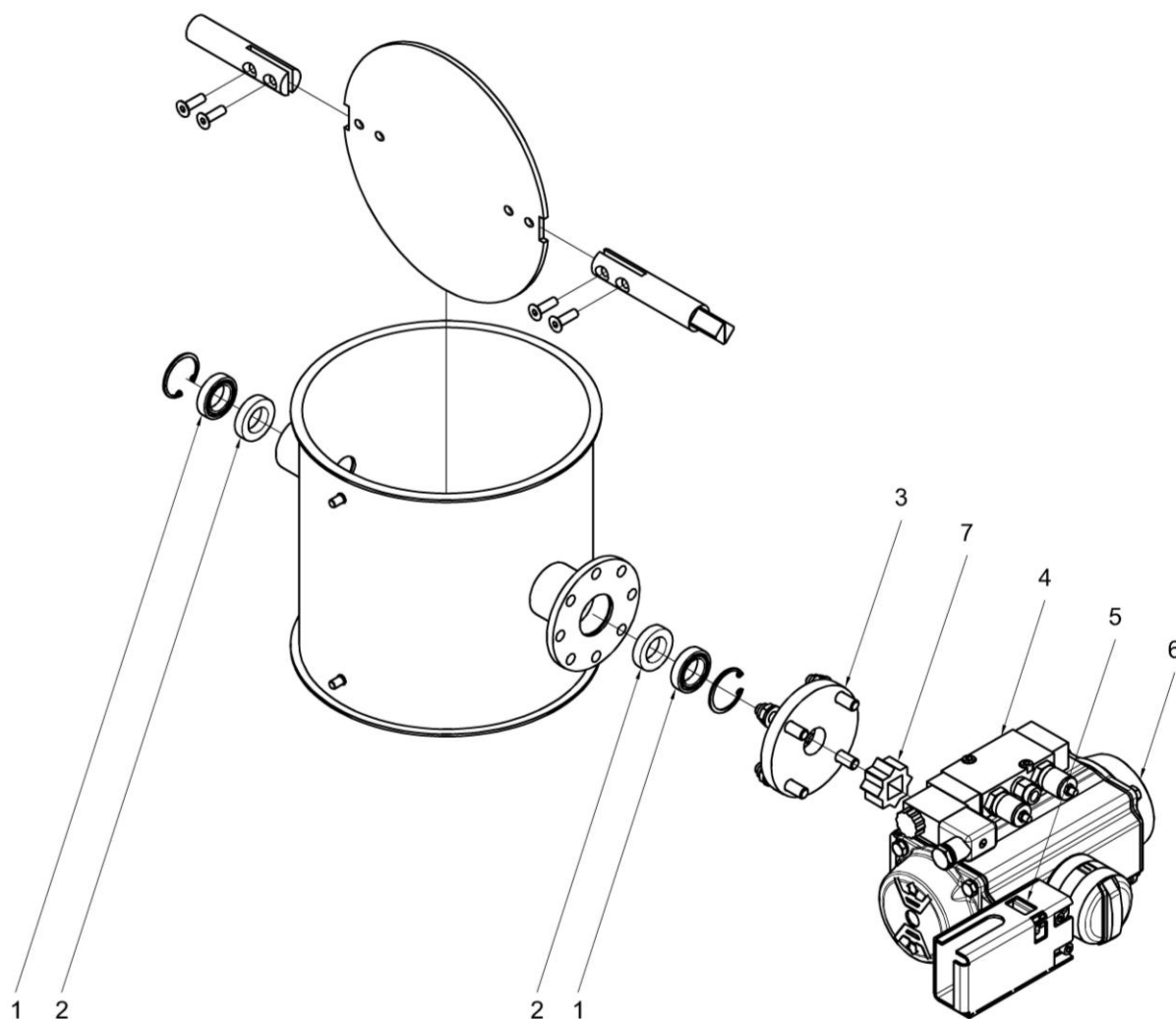


DN	t [mm]	Øi [mm]	Øa [mm]	ØBK [mm]	A [mm]	B [mm]	L [mm]	m [kg]
80	1,5	77,5	80,5	92,5	85,3	228	80	4,2
100		99,5	102,5	114,5	96,3	238,7	100	4,5
120		119,5	122,5	134,5	106,3	248,7	120	4,8
140		135,5	138,5	150,5	114,3	256,7	140	5,1
150		149,5	152,5	164,5	121,3	263,7	150	4,9
160		159,5	162,5	174,5	126,3	268,7	160	5,1
175		174,5	177,5	189,5	134	276,2	175	6,9
200		199,5	202,5	214,5	146,3	288,7	200	7,6
224		219,5	222,5	234,5	156,3	298,7	200	7,9
250		249,5	252,5	264,5	171,3	313,7	200	8,5
280		278,5	281,5	293,5	186	345,3	200	9,1
300		299,5	302,5	314,5	196,3	355,8	200	9,5
315	2	313	317	329	203,5	363,0	200	11,7
350		349	353	365	221,5	381,0	200	12,8
400		399	403	415	246,5	406,0	200	14,1
450		449	453	465	271,5	443,9	200	18,0
500		499	503	515	291,5	498,9	200	22,0
560		558	562	574	321	528,4	200	24,8
630		628	632	644	356	575,4	200	27,4

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 80 – DN 250	
			1.0330	1.4301
1	Deep groove ball bearings (for shaft diameter 20 mm)	2	SO0128616	SO0118470
2	Shaft seal (for shaft diameter 20 mm)	2	SO0118471	
3	Spacer flange (for shaft diameter 20 mm)	1	SO0105946	SO0123370
4	5/2-way solenoid valve, monostable, ATEX	1	SO0126850	
5	Position sensor, ATEX	1	SO0118518	
6	Rotary actuator (DR00030U)	1	SO0131326	

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No.	Naming	Quantity	DN 280 – DN 400	
			1.0330	1.4301
1	Deep groove ball bearings <i>(for shaft diameter 20 mm)</i>	2	SO0128616	SO0118470
2	Shaft seal <i>(for shaft diameter 20 mm)</i>	2	SO0118471	
3	Spacer flange <i>(for shaft diameter 20 mm)</i>	1	SO0105946	SO0123370
4	5/2-way solenoid valve, monostable, ATEX	1	SO0126850	
5	Position sensor, ATEX	1	SO0118518	
6	Rotary actuator <i>(DR00060U)</i>	1	SO0131327	

No.	Naming	Quantity	DN 450	
			1.0330	1.4301
1	Deep groove ball bearings <i>(for shaft diameter 20 mm)</i>	2	SO0128616	SO0118470
2	Shaft seal <i>(for shaft diameter 20 mm)</i>	2	SO0118471	
3	Spacer flange <i>(for shaft diameter 20 mm)</i>	1	SO0105946	SO0123370
4	5/2-way solenoid valve, monostable, ATEX	1	SO0126850	
5	Position sensor, ATEX	1	SO0118518	
6	Rotary actuator <i>(DR00100U)</i>	1	SO0131328	
7	Reducing sleeve <i>(17 / 14)</i>	1	SO0106392	

No.	Naming	Quantity	DN 500 – DN 560	
			1.0330	1.4301
1	Deep groove ball bearings <i>(for shaft diameter 20 mm)</i>	2	SO0131354	SO0130364
2	Shaft seal <i>(for shaft diameter 20 mm)</i>	2	SO0130363	
3	Spacer flange <i>(for shaft diameter 20 mm)</i>	1	SO0131383	SO0131384
4	5/2-way solenoid valve, monostable, ATEX	1	SO0126850	
5	Position sensor, ATEX	1	SO0118518	
6	Rotary actuator <i>(DR00100U)</i>	1	SO0131328	

No.	Naming	Quantity	DN 630	
			1.0330	1.4301
1	Deep groove ball bearings <i>(for shaft diameter 20 mm)</i>	2	SO0131354	SO0130364
2	Shaft seal <i>(for shaft diameter 20 mm)</i>	2	SO0130363	
3	Spacer flange <i>(for shaft diameter 30 mm)</i>	1	SO0131383	SO0131384
4	5/2-way solenoid valve, monostable, ATEX	1	SO0126850	
5	Position sensor, ATEX	1	SO0118518	
6	Rotary actuator <i>(DR00150U)</i>	1	SO0131329	