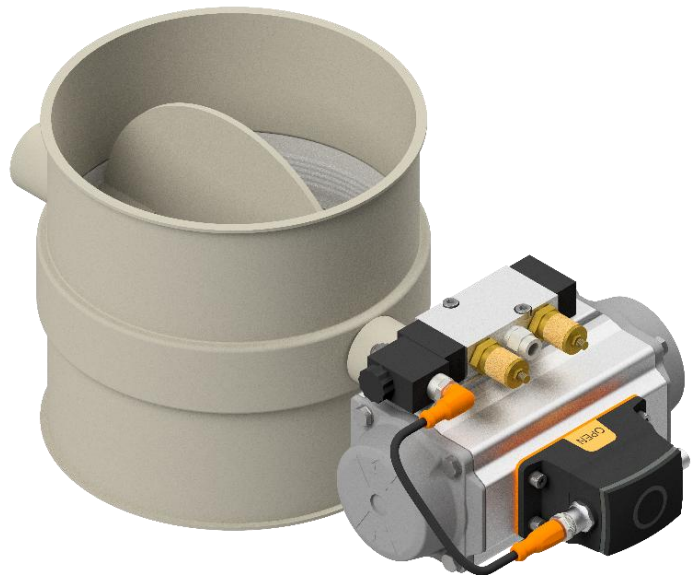


EN- Technical data sheet

Stop valve with seal, pneumatically operated, rotary actuator

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Article code

20	2	1	2138
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①

②

③

④

①

Diameter

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

②

Thickness

1	1.5 mm (<i>DN 80 only</i>)
2	2.0 mm

③

Surface

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

④

Article group

2138	Stop valve with seal, pneumatically operated, rotary actuator
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1 Technical data

Area of application and use	Dust-tight 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 by operating the flap. The actuation time depends on the drive. <i>(see table 1.1 Actuation, p.3)</i>
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Connection	Both sides with flanged edge (<i>lips</i>) 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 $t = 4 \text{ mm}$
Flap seal	Silicone profile seal, transparent, 60 ± 5 Shore A
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: $30 - 60 \mu\text{m}$	Surface roughness $R_a: 1.3 \mu\text{m}$
Ambient temperature	-10°C to $+50^\circ\text{C}$	
Product temperature*	-20°C to $+120^\circ\text{C}$ <i>(from $+80^\circ\text{C}$ impairment of the appearance is to be expected)</i>	-10°C to $+180^\circ\text{C}$

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

1.1 Actuation

Pneumatic rotary actuator				
Diameter	DN 80 – DN 160	DN 175 – DN 300	DN 315 – DN 450	DN 500 – 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	14 mm	17 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			

5/2-way solenoid valve	
Voltage	24V DC
Make	Hafner
Type	MNDS 510 701
Mode of action	monostable (with air spring return)
Flow	1250 L/min
Ambient temperature	-10°C to +50°C
Electrical connection	wired with sensor as standard
Pneumatic connection	Push-in connection for 8 mm hose diameter

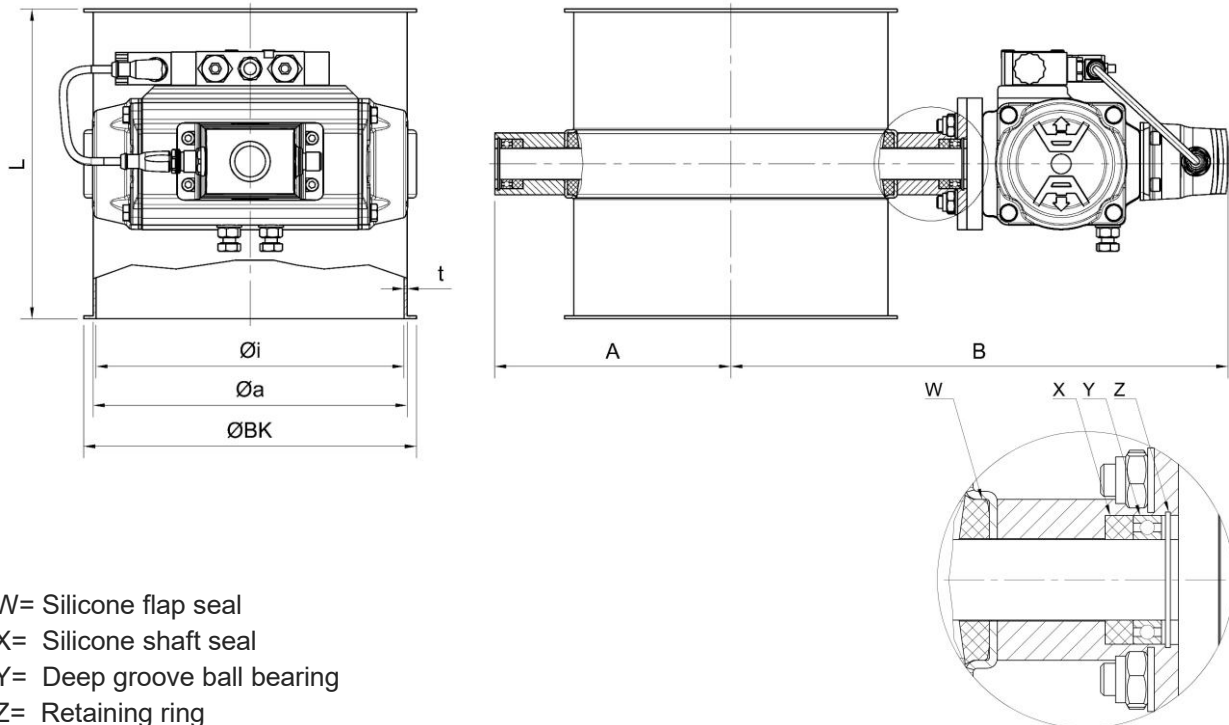
Sensor	
Voltage	10 - 30V DC
Make	Ifm
Type	MVQ201
Communication interface	IO-Link
Output	PNP
Power consumption	< 40mA
Degree of protection	IP65
Ambient temperature	-25°C to +70°C
Electrical connection	M12 connector, code A

**Note: Flap position closed without power*

2 Dimensions

Dimension table

pictured version: DN 200



W= Silicone flap seal

X= Silicone shaft seal

Y= Deep groove ball bearing

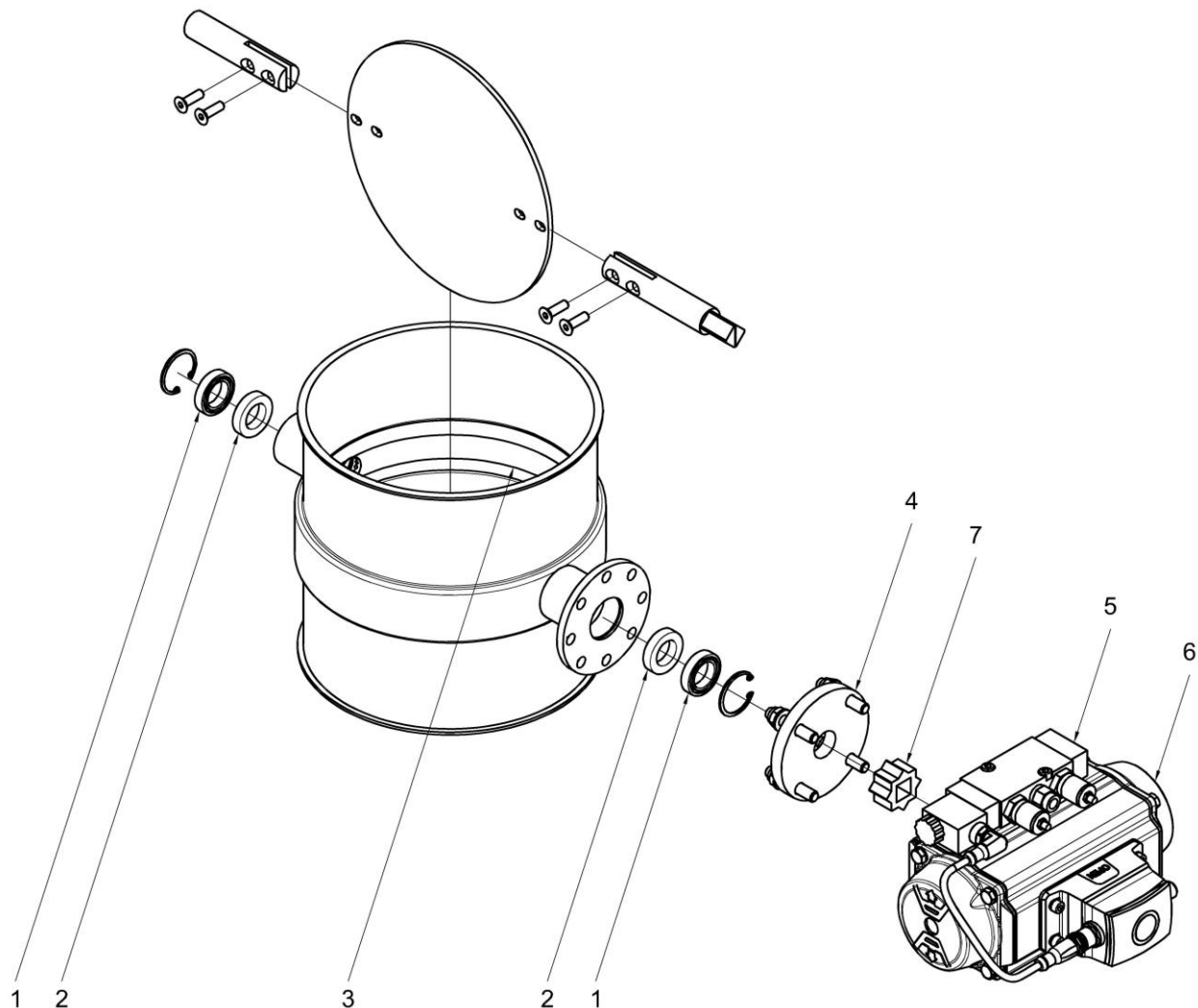
Z= Retaining ring

DN	t [mm]	Øi [mm]	Øa [mm]	ØBK [mm]	L [mm]	A [mm]	B [mm]	m [kg]
80	1,5	77,5	80,5	92,5	80	94,3	246	4,7
100	2	99	103	115	100	105,5	257,2	4,9
120		119	123	135	120	113	264,7	5,2
140		135	139	151	140	123,5	275,2	5,9
150		149	153	165	150	128	279,7	5,8
160		159	163	175	160	135,5	287,2	6,4
175		174	178	190	175	143	311,7	8,3
200		199	203	215	200	153	321,7	8,7
224		219	223	235	200	165,5	334,2	8,4
250		249	253	265	200	178	346,7	9,7
280		278	282	294	200	195	363,7	11,0
300		299	303	315	200	203	371,7	10,8
315		313	317	329	200	212,5	394,2	13,1
350		349	353	365	200	230,5	412,2	14,2
400		399	403	415	200	255,5	437,2	15,7
450		449	453	465	200	280,5	462,2	18,1
500		499	503	515	200	300,5	529,2	21,8
560		558	562	574	200	330	558,7	23,9
630		628	632	644	200	365	593,7	27,1

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 160	
			1.0330	1.4301
1	Deep groove ball bearings (for shaft diameter 20mm)	2	SO0128616	SO0118470
2	Shaft seal (for shaft diameter 20mm)	2	SO0118471	
3	Flap seal		(see table, p.8)	
4	Spacer flange (for shaft diameter 20mm)	1	SO0105946	SO0123370
5	5/2-Way solenoid valve, monostable & limit switch (ZZ0691)	1	SO0131334	
6	Rotary actuator (DR00030U)	1	SO0131326	

EN- Technical data sheet
**Stop valve with seal, pneumatically operated,
 rotary actuator**



No.	Naming	Quantity	DN 175 – DN 300	
			1.0330	1.4301
1	Deep groove ball bearings <i>(for shaft diameter 20mm)</i>	2	SO0128616	SO0118470
2	Shaft seal <i>(for shaft diameter 20mm)</i>	2	SO0118471	
3	Flap seal		<i>(see table, p.8)</i>	
4	Spacer flange <i>(for shaft diameter 20mm)</i>	1	SO0105946	SO0123370
5	5/2-Way solenoid valve, monostable & limit switch (ZZ0691)	1	SO0131334	
6	Rotary actuator (DR00060U)	1	SO0131327	

No.	Naming	Quantity	DN 315 – DN 450	
			1.0330	1.4301
1	Deep groove ball bearings <i>(for shaft diameter 20mm)</i>	2	SO0128616	SO0118470
2	Shaft seal <i>(for shaft diameter 20mm)</i>	2	SO0118471	
3	Flap seal		<i>(see table, p.8)</i>	
4	Spacer flange <i>(for shaft diameter 20mm)</i>	1	SO0105946	SO0123370
5	5/2-Way solenoid valve, monostable & limit switch (ZZ0691)	1	SO0131334	
6	Rotary actuator (DR00100U)	1	SO0131328	
7	Reducing sleeve (17 / 14)	1	SO0106392	

No.	Naming	Quantity	DN 500 – DN 630	
			1.0330	1.4301
1	Deep groove ball bearings <i>(for shaft diameters 30mm)</i>	2	SO0131354	SO0130364
2	Shaft seal <i>(for shaft diameter 30mm)</i>	2	SO0130363	
3	Flap seal		<i>(see table, p.8)</i>	
4	Spacer flange <i>(for shaft diameter 30mm)</i>	1	SO0131383	SO0131384
5	5/2-Way solenoid valve, monostable & limit switch (ZZ0691)	1	SO0131334	
6	Rotary actuator (DR00150U)	1	SO0131329	

Flap seal (item no.: 3)			
DN	Required length [mm]	Quantity* [m]	Article
80	281	1	SO0116014
100	352		
120	415		
140	465		
150	509		
160	540		
175	587		
200	666		
224	738		
250	823		
280	914		
300	980	2	
315	1024		
350	1137		
400	1294		
450	1451		
500	1608		
560	1794		
630	2014	3	

**Note: Flap seal is offered by the meter.*