

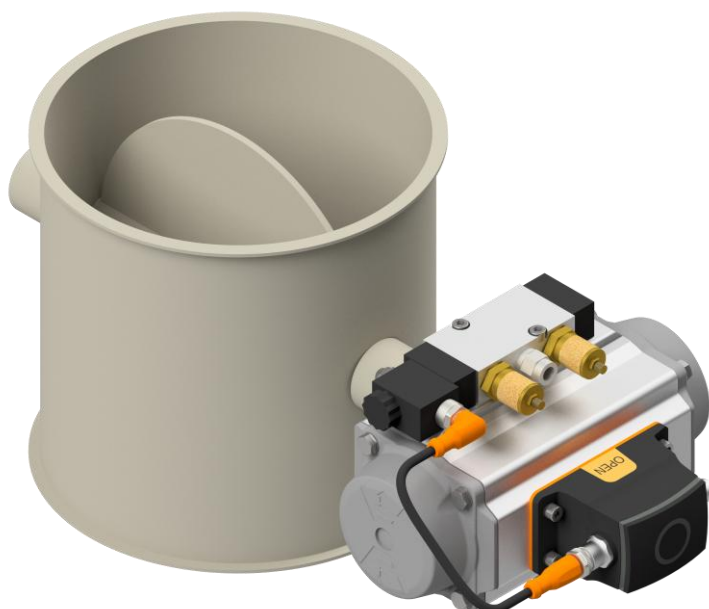
EN- Technical data sheet

Stop valve without seal, pneumatically operated, rotary actuator

NORO Gesellschaft für Rohrsysteme mbH

Kruppstraße 1 | 49453 Rehden | Germany

info@noro-rohre.de | www.noro-rohre.de



Article code

20	1	1	2131
-----------	----------	----------	-------------

①

②

③

④

①

Diameter

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

②

Thickness

1	1.5 mm
2	2.0 mm (from DN 315)

③

Surface

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

④

Article group

2131	Stop valve without seal, pneumatically operated, rotary actuator
-------------	--

1 Technical data

Anwendungs- und Einsatzbereich	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>
---	---

Connection	Both sides with flanged edge (<i>lips</i>) for clamping ring connection
-------------------	---

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	Without seal
Shaft seal	Flat sealing ring made of silicone, transparent, $60 \pm 5 \text{ Shore A}$

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: $30 - 60 \text{ }\mu\text{m}$	Surface roughness $R_a: 1.3 \text{ }\mu\text{m}$
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 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	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
Number of spools	1 (monostable)
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

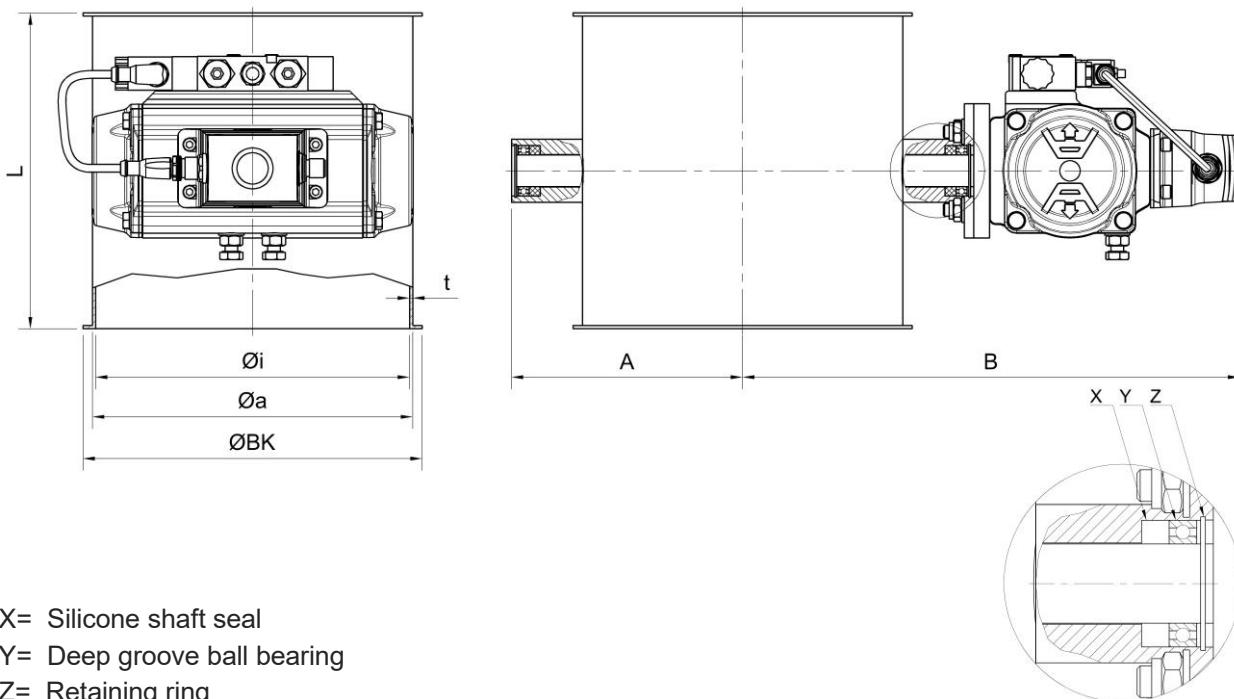
Sensor	
Voltage	10 - 30V DC
Make	ifm
Type	MVQ201
Communication interface	IO-Link
Output	PNP
Power consumption	< 40mA
Degree of protection	IP65
Ambient temperature	-25°C to +70°C
Electrical connection	M12 connector, code A

**Note: Flap position closed without power*

2 Dimensions

Dimension table

pictured version: DN 200

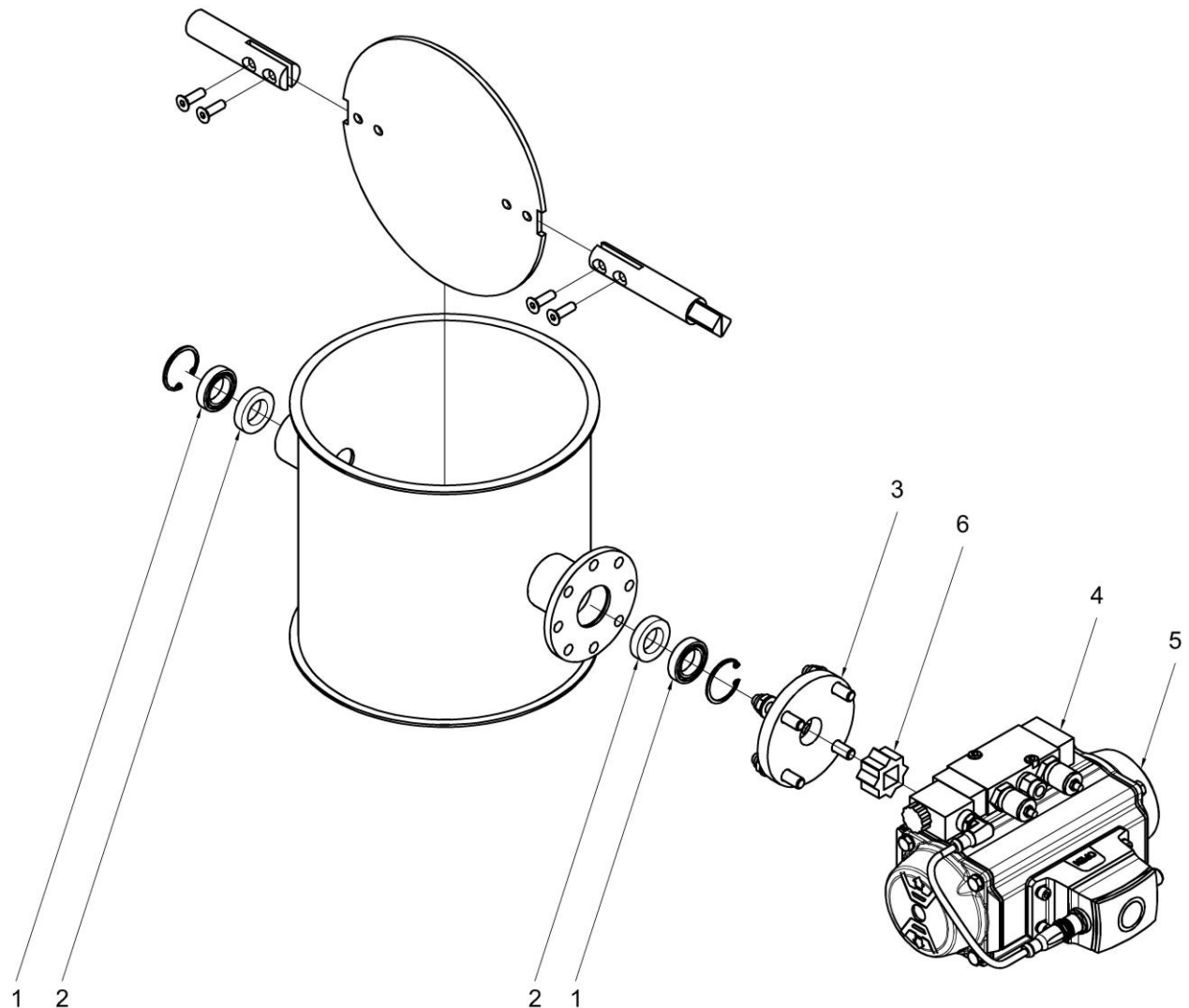


DN	t [mm]	Øi [mm]	Øa [mm]	ØBK [mm]	L [mm]	A [mm]	B [mm]	m [kg]
80	1,5	77,5	80,5	92,5	80	85,3	237	4,5
100		99,5	102,5	114,5	100	96,3	248,0	4,8
120		119,5	122,5	134,5	120	106,3	258,0	5,2
140		135,5	138,5	150,5	140	114,3	266,0	5,5
150		149,5	152,5	164,5	150	121,3	273,0	5,3
160		159,5	162,5	174,5	160	126,3	278,0	5,5
175		174,5	177,5	189,5	175	134	285,5	7,3
200		199,5	202,5	214,5	200	146,3	298,0	7,9
224		219,5	222,5	234,5	200	156,3	308,0	8,3
250		249,5	252,5	264,5	200	171,3	323,0	8,8
280		278,5	281,5	293,5	200	186	354,5	9,4
300		299,5	302,5	314,5	200	196,3	365,0	9,9
315	2	313	317	329	200	203,5	372,2	12,0
350		349	353	365	200	221,5	390,2	13,1
400		399	403	415	200	246,5	415,2	14,6
450		449	453	465	200	271,5	453,2	18,3
500		499	503	515	200	291,5	508,2	22,4
560		558	562	574	200	321	537,7	25,2
630		628	632	644	200	356	584,7	27,8

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 20mm)	2	SO0128616	SO0118470
2	Shaft seal (for shaft diameter 20mm)	2	SO0118471	
3	Spacer flange (for shaft diameter 20mm)	1	SO0105946	SO0123370
4	5/2-Way solenoid valve, monostable & limit switch (ZZ0691)	1	SO0131334	
5	Rotary actuator (DR00030U)	1	SO0131326	

EN- Technical data sheet
**Stop valve without seal, pneumatically operated,
 rotary actuator**



No.	Naming	Quantity	DN 280 – DN 400	
			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	Spacer flange <i>(for shaft diameter 20mm)</i>	1	SO0105946	SO0123370
4	5/2-Way solenoid valve, monostable & limit switch (ZZ0691)	1	SO0131334	
5	Rotary actuator (DR00060U)	1	SO0131327	

No.	Naming	Quantity	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	Spacer flange <i>(for shaft diameter 20mm)</i>	1	SO0105946	SO0123370
4	5/2-Way solenoid valve, monostable & limit switch (ZZ0691)	1	SO0131334	
5	Rotary actuator (DR00100U)	1	SO0131328	
6	Reducing sleeve (17 / 14)	1	SO0106392	

No.	Naming	Quantity	DN 500 – DN 560	
			1.0330	1.4301
1	Deep groove ball bearings <i>(for shaft diameter 30mm)</i>	2	SO0131354	SO0130364
2	Shaft seal <i>(for shaft diameter 30mm)</i>	2	SO0130363	
3	Spacer flange <i>(for shaft diameter 30mm)</i>	1	SO0131383	SO0131384
4	5/2-Way solenoid valve, monostable & limit switch (ZZ0691)	1	SO0131334	
5	Rotary actuator (DR00100U)	1	SO0131328	

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