

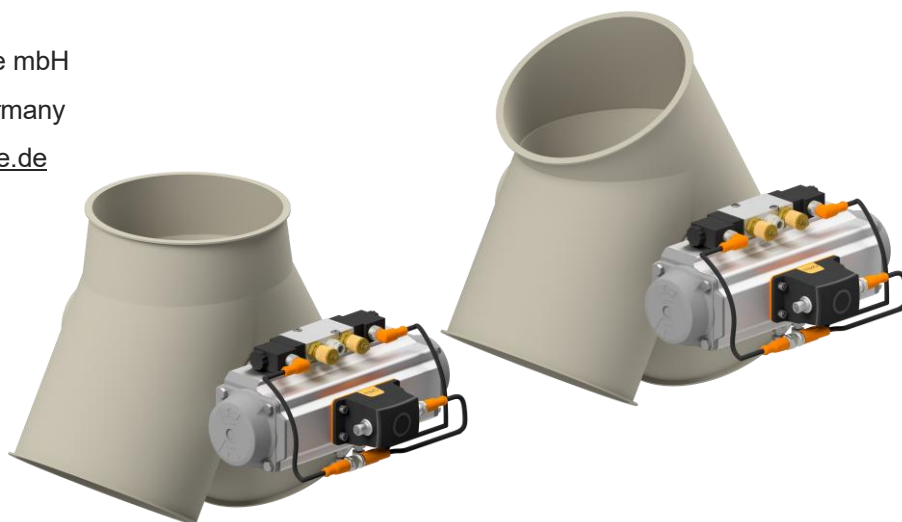
EN- Technical data sheet

Two-way valve with interior collar, 60°, pneumatically operated, rotary actuator

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Article code

20	2	5	0653
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①

Diameter

10 DN 100

12 DN 120

15 DN 150

...

35 DN 350

②

Thickness

2 2.0 mm

3 3.0 mm

③

Surface

5 1.0330, powder-coated

3 1.4301, shot-blasted

④

Article group

0653 Two-way valve with interior collar, 60°, pneumatically operated, rotary actuator, symmetrical

0663 Two-way valve with interior collar, 60°, pneumatically operated, rotary actuator, asymmetrical

1 Technical data

Area of application and use	Deflection of granular and free-flowing bulk materials into conveyor systems. Low overall height allows use in confined environments. Note the narrowing of the cross-section in the collar area. Only suitable for pressureless conveying. Adjustment only in the event of interrupted product flow. The actuation time depends on the drive. (<i>see table 1.1 Actuation, p.3</i>)
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Connection	All sides with flanged edges (<i>lips</i>) for clamping ring connections.
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Materials	
Case	According to article number 1.0330 (DC01) or 1.4301 (X5CrNi18-10) in specified material thickness
Flaps	Two pieces of 1.0038 (S235JR) or 1.4301 (X5CrNi18-10) in material thickness $t = 3 \text{ mm}$
Flap seal	Flat seal made of silicone, transparent, $60 \pm 5 \text{ Shore A}$
Shaft seal	Silicone profile seal, transparent, $60 \pm 5 \text{ Shore A}$
Shaft sealing ring	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: $30 - 60 \mu\text{m}$	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.

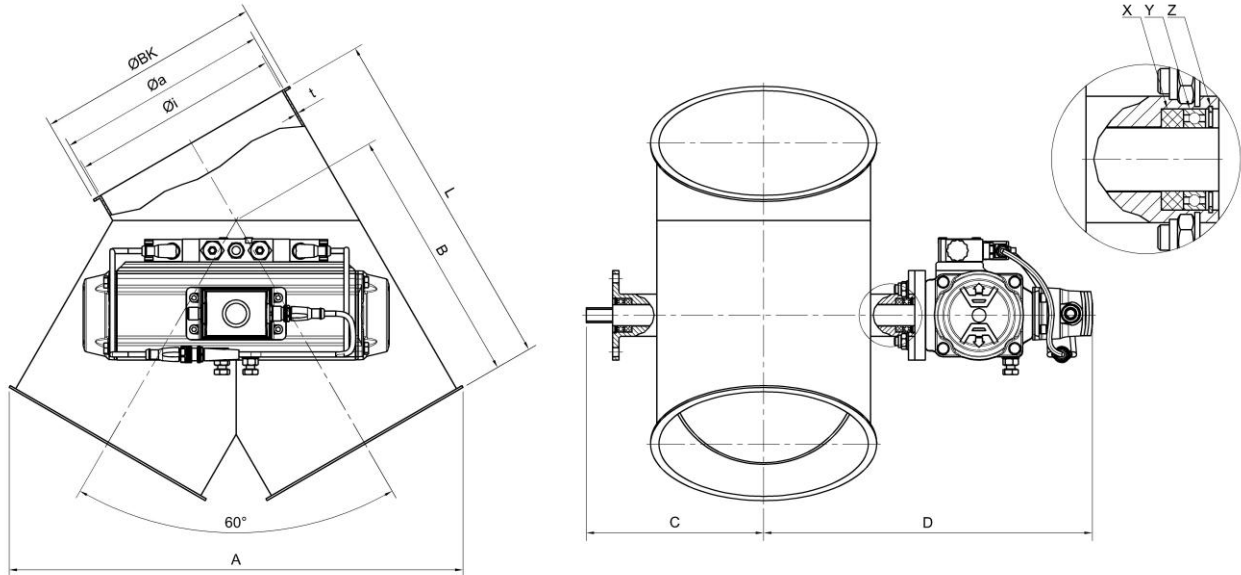
1.1 Actuation

Pneumatic rotary actuator			
Diameter	DN 100 – DN 175	DN 200 – DN 300	DN 350
Make	Air Torque		
Type	DR00038U	DR00068U	DR00108U
Compressed air supply	5 bar		
Torque (at 5 bar)	29,3 Nm	58,2 Nm	91,5 Nm
A/F double square	14mm	14mm	17mm
Air volume per double stroke	0,7 L	1,7 L	2,3 L
Actuation time (120°)	< 3 seconds		
Mode of action	double-acting		
Ambient temperature	-40° to +80°C		

5/2-way solenoid valve	
Voltage	24V DC
Make	Hafner
Type	MNDS 510 701
Number of spools	2 (bistable)
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	Stretch connection M12, code A

2 Dimensions

Dimension table: 60°, asymmetrical*pictured version: DN 200*

X= Silicone shaft sealing ring

Y= Deep groove ball bearing

Z= Retaining ring

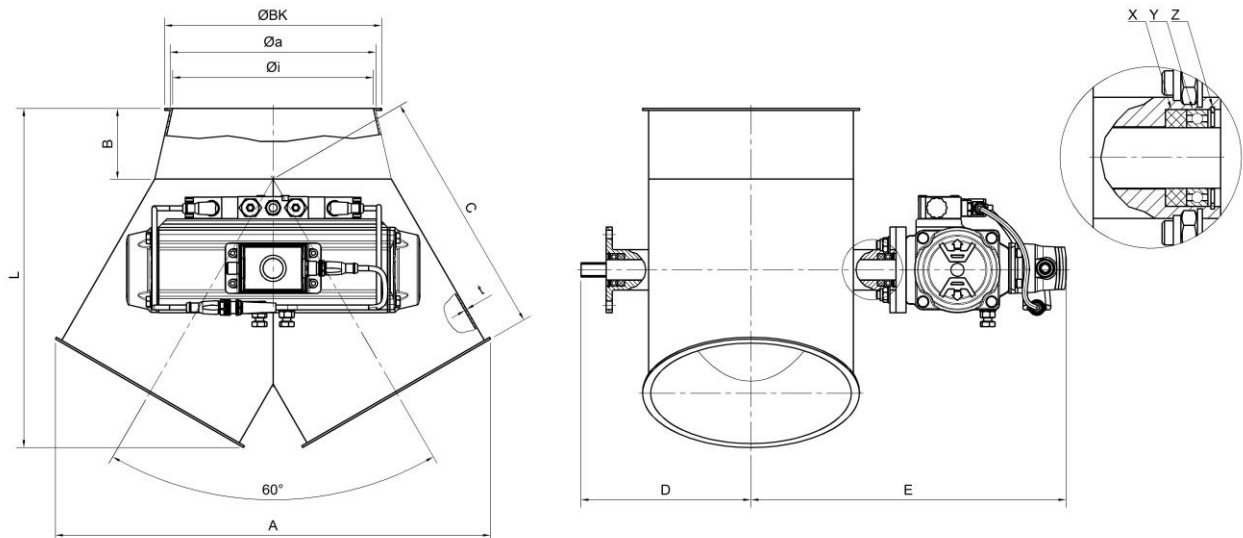
DN	t [mm]	Øi [mm]	Øa [mm]	ØBK [mm]	A [mm]	B [mm]	C [mm]	D [mm]	L [mm]	m [kg]
100	2	99	103	115	220	120	121,5	248,2	175	5,6
120		119	123	135	267	150	131,5	258,2	215	6,6
150		149	153	165	343	200	146,5	273,2	255	7,8
175		174	178	190	390	225	159	285,7	315	9,3
200		199	203	215	432	245	171,5	315,2	330	12,1
250		249	253	265	519	290	196,5	340,2	425	15,6
300		299	303	315	629	355	221,5	365,2	500	20,2
350		349	353	365	692	375	246,5	403,2	600	26,1

EN- Technical data sheet
**Two-way valve with interior collar, 60°,
pneumatically operated, rotary actuator**

NORO
SOLIDLY CONNECTED

Dimension table: 60°, symmetrical

pictured version: DN 200



X= Silicone shaft sealing ring

Y= Deep groove ball bearing

Z= Retaining ring

DN	t [mm]	Øi [mm]	Øa [mm]	ØBK [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	L [mm]	m [kg]
100	2	99	103	115	220	40	120	121,5	248,2	173	5,5
120		119	123	135	267	45	150	131,5	258,2	209	6,4
150		149	153	165	343	35	200	146,5	273,2	250	7,7
175		174	178	190	390	60	225	159	285,7	302	9,1
200		199	203	215	432	70	245	171,5	315,2	531	12
250		249	253	265	521	55	290	196,5	340,2	584	14,7
300		299	303	315	629	55	355	221,5	365,2	646	18,8
350		349	353	365	692	100	375	246,5	403,2	696	24

Tolerances

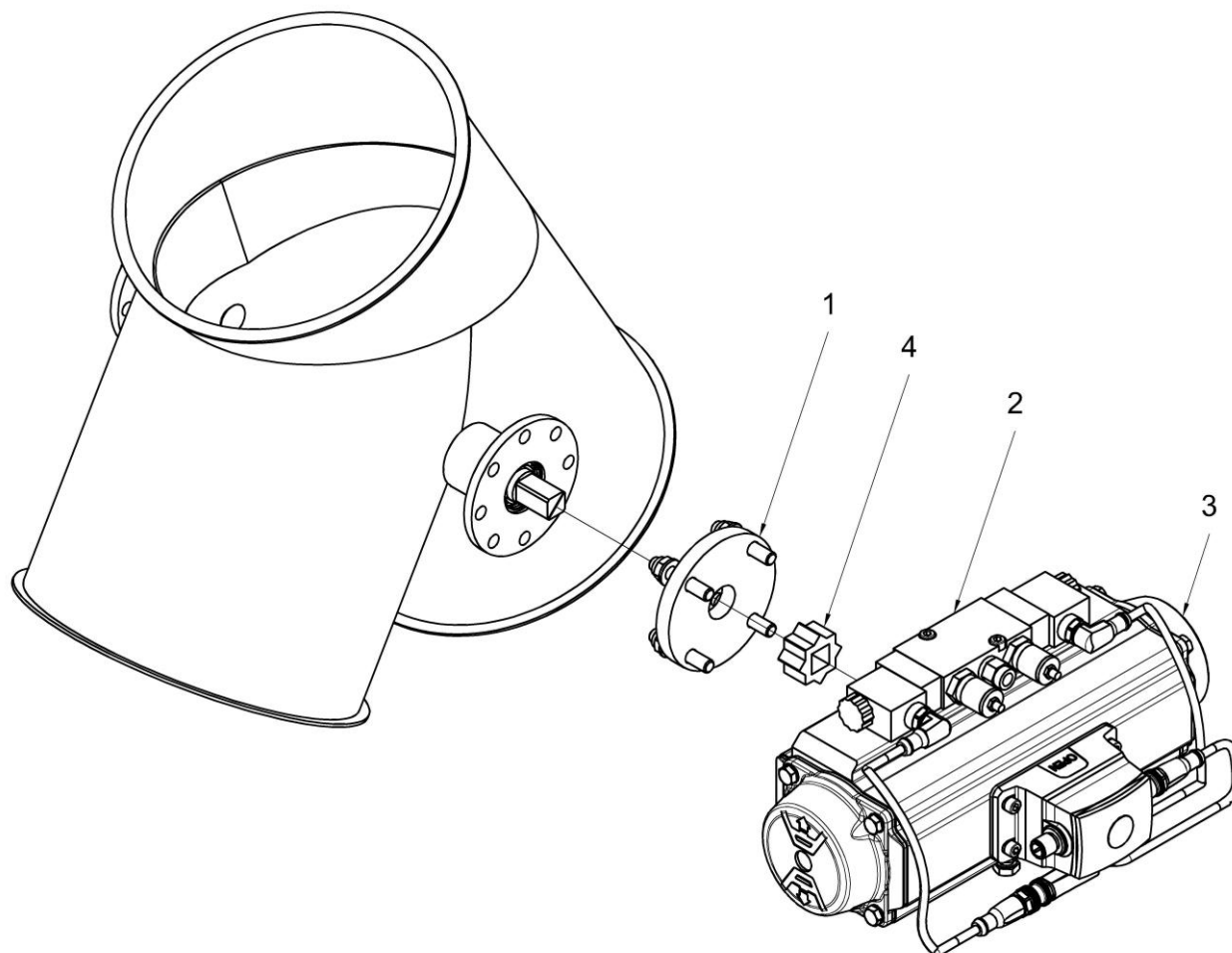
Pipe diameter and roundness according to DIN EN 10296-1:2004
Length and angular dimensions according to DIN ISO 2768-v (very coarse)
Lips: 6 mm ± 1mm

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 100 – DN 175	
			1.0330	1.4301
1	Spacer flange (for shaft diameter 20mm)	1	SO0105946	SO0123370
2	5/2-Way solenoid valve, bistable & limit switch (ZZ0692)	1	SO0131335	
3	Rotary actuator (DR00038U)	1	SO0131331	

Two-way valve with interior collar, 60°, pneumatically operated, rotary actuator



No.	Naming	Quantity	DN 200 – DN 300	
			1.0330	1.4301
1	Spacer flange <i>(for shaft diameter 20mm)</i>	1	SO0105946	SO0123370
2	5/2-Way solenoid valve, bistable & limit switch (ZZ0692)	1	SO0131335	
3	Rotary actuator (DR00068U)	1	SO0131332	

No.	Naming	Quantity	DN 300	
			1.0330	1.4301
1	Spacer flange <i>(for shaft diameter 20mm)</i>	1	SO0105946	SO0123370
2	5/2-Way solenoid valve, bistable & limit switch (ZZ0692)	1	SO0131335	
3	Rotary actuator (DR00108U)	1	SO0131333	
4	Reducing sleeve (17 / 14)	1	SO0106392	