

EN- Technical data sheet

Stop valve without seal, electrically operated, actuating drive ATEX

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Article code

20	2	1	2181/24V	/ATEX
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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

2181/24V	Stop valve without seal, electrically operated, actuating drive 24V
2181/230V	Stop valve without seal, electrically operated,

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 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	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: $30 - 60 \mu\text{m}$	Surface roughness $R_a: 1.3 \mu\text{m}$
Ambient temperature	-20°C to $+70^\circ\text{C}$	
Product temperature*	-20°C to $+120^\circ\text{C}$ (from $+80^\circ\text{C}$ impairment of the appearance is to be expected)	-20°C to $+180^\circ\text{C}$

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

Electric actuating drive, ATEX				
Diameter	DN 80 – DN 400		DN 450 – DN 560	
Nominal voltage	24V	230V	24V	230V
Make	Valpes			
Series	VRX		VSX	
Type	VRX75.70B.G00	VRX75.70A.G00	VSX100.90B.G00	VSX100.90A.G00
Voltage	15V to 30V AC (50/60Hz) 12V to 48V DC	100V to 240V AC (50/60 Hz) 100V - 350V DC	15V to 30V AC (50/60Hz) 12V to 48V DC	100V to 240V AC (50/60 Hz) 100V - 350V DC
Power consumption	45 W			
Torque	75 Nm		100 Nm	
Actuation time (90°)	20 seconds		15 seconds	
A/F Double Square	17 mm		22 mm	
Manual operation	Outgoing axle		Handwheel	
Duty cycle	50 %			
Limit switch	Four (2x position detection, 2x feedback) 4V to 24V DC and 12 to 250V AC / max. 5A			
Degree of protection	IP68			
Ambient temperature	-20°C to +70°C			
ATEX approval	II 2 G D Ex db IIB T6 Gb Ex tb IIIC T80 °C D			
Electrical connection	2x cable gland ISO M20			

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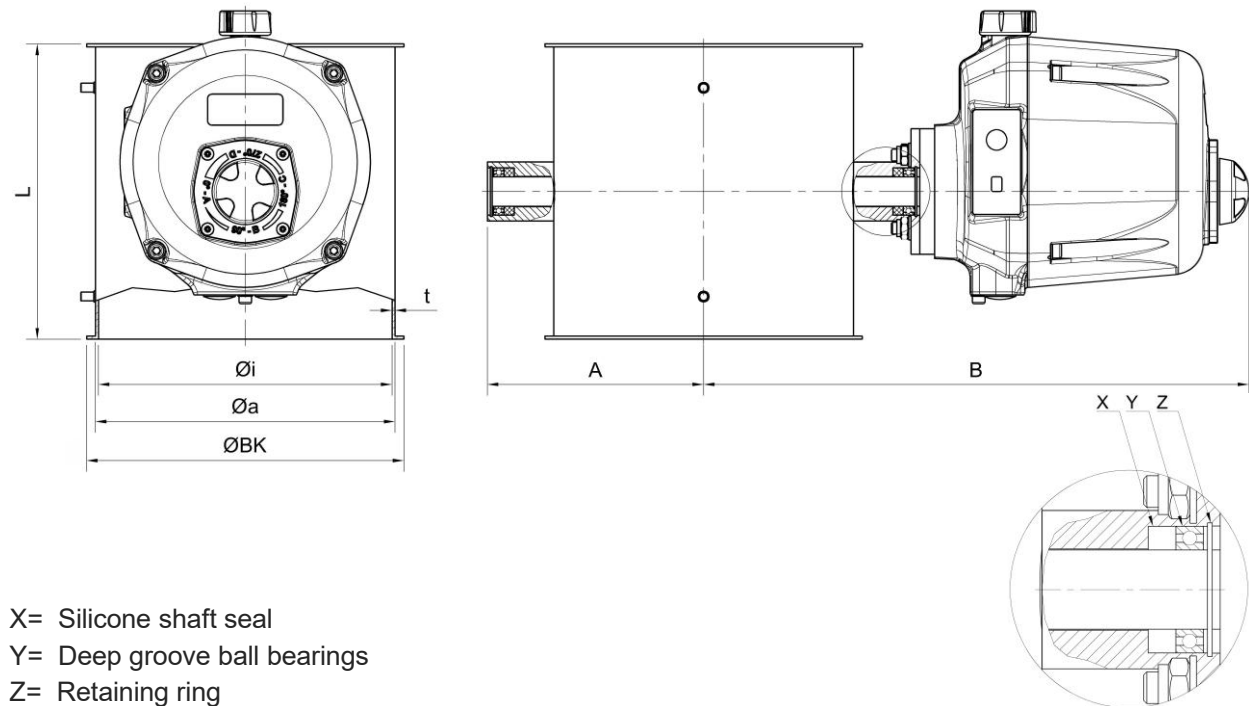


Diameter	DN 630	
Nominal voltage	24V	230V
Make	Valpes	
Series	VSX	
Type	VSX150.90B.G00	VSX150.90A.G00
Voltage	15V to 30V AC (50/60Hz) 12V to 48V DC	100V to 240V AC (50/60 Hz) 100V - 350V DC
Power consumption	45 W	
Torque	150 Nm	
Actuation time (90°)	30 seconds	
A/F Double Square	22 mm	
Manual operation	Handwheel	
Duty cycle	50 %	
Limit switch	Four (2x position detection, 2x feedback) 4V to 24V DC and 12V to 250V AC / max. 5A	
Degree of protection	IP68	
Ambient temperature	-20°C to +70°C	
ATEX approval	II 2 G D Ex db IIB T6 Gb Ex tb IIIC T80 °C D	
Electrical connection	2x cable gland ISO M20	

2 Dimensions

Dimension table

pictured version: DN 200

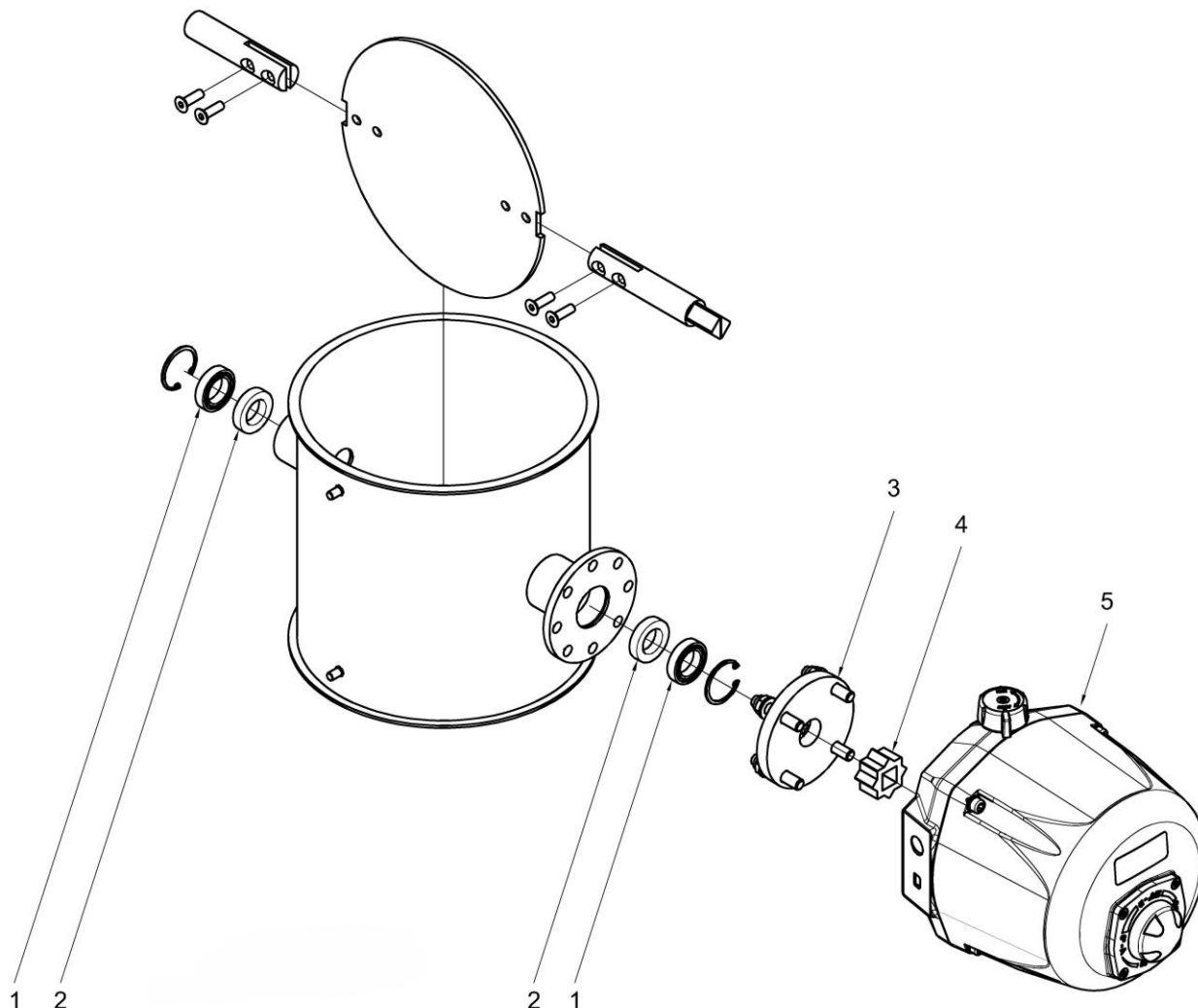


DN	t [mm]	Øi [mm]	Øa [mm]	ØBK [mm]	A [mm]	B [mm]	L [mm]	m [kg]
80	1,5	77,5	80,5	92,5	85,3	308,3	80	6,8
100		99,5	102,5	114,5	96,3	319,3	100	7,1
120		119,5	122,5	134,5	106,3	329,3	120	7,4
140		135,5	138,5	150,5	114,3	337,3	140	7,7
150		149,5	152,5	164,5	121,3	344,3	150	7,5
160		159,5	162,5	174,5	126,3	349,3	160	7,7
175		174,5	177,5	189,5	134	356,8	175	8,0
200		199,5	202,5	214,5	146,3	369,3	200	8,6
224		219,5	222,5	234,5	156,3	379,3	200	9,0
250		249,5	252,5	264,5	171,3	394,3	200	9,6
280		278,5	281,5	293,5	186	408,8	200	10,2
300		299,5	302,5	314,5	196,3	419,3	200	10,6
315	2	313	317	329	203,5	426,6	200	11,6
350		349	353	365	221,5	444,6	200	12,7
400		399	403	415	246,5	469,6	200	14,1
450		449	453	465	271,5	554,8	200	17,9
500		499	503	515	291,5	609,8	200	20,6
560		558	562	574	321	639,3	200	23,5
630		628	632	644	356	659	200	26,0

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 400	
			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	Reducing sleeve (17 / 14)	1	SO0106392	
5	Actuating drive ATEX (VRX75.70B.G00 - 24 V DC)	1	SO0101255	
5	Actuating drive ATEX (VRX75.70A.G00 - 230 V AC)	1	SO0114924	

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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	Reducing sleeve <i>(22 / 14)</i>	1	SO0128056	
5	Actuating drive ATEX <i>(VSX100.90B.G00- 24 V DC)</i>	1	SO0131350	
5	Actuating drive ATEX <i>(VSX100.90A.G00 - 230 V DC)</i>	1	SO0131351	

No.	Naming	Quantity	DN 500 – DN 560	
			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 30 mm)</i>	2	SO0130363	
3	Spacer flange <i>(for shaft diameter 30 mm)</i>	1	SO0131383	SO0131384
4	Reducing sleeve <i>(22 / 17)</i>	1	SO0129887	
5	Actuating drive ATEX <i>(VSX100.90B.G00- 24 V DC)</i>	1	SO0131350	
5	Actuating drive ATEX <i>(VSX100.90A.G00 - 230 V DC)</i>	1	SO0131351	

No.	Naming	Quantity	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 30 mm)</i>	2	SO0130363	
3	Spacer flange <i>(for shaft diameter 30 mm)</i>	1	SO0131383	SO0131384
4	Reducer sleeve <i>(22 / 17)</i>	1	SO0129887	
5	Actuating drive ATEX <i>(VSX150.90B.G00- 24 V DC)</i>	1	SO0131352	
5	Actuating drive ATEX <i>(VSX150.90A.G00 - 230 V DC)</i>	1	SO0131353	