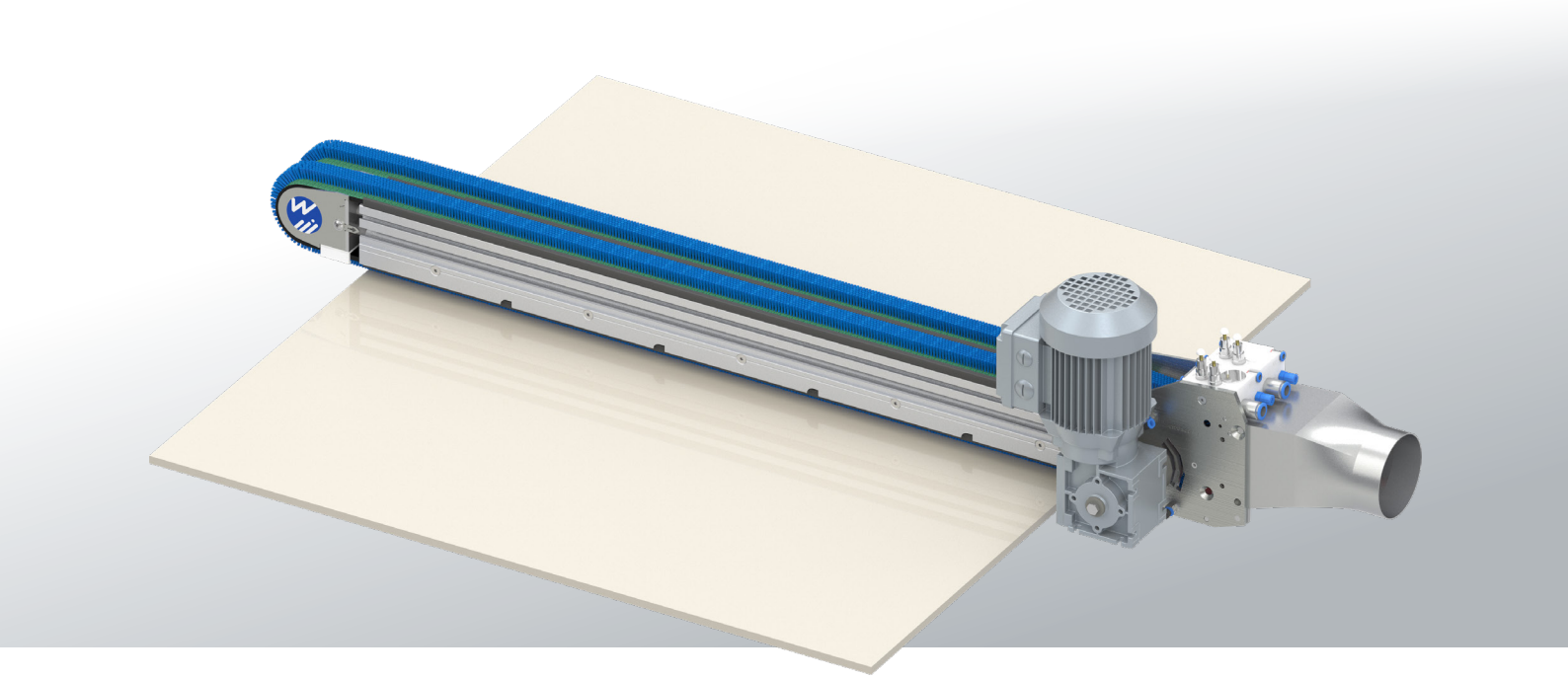
Sword Brush BIX 102.. / BIZ 102..

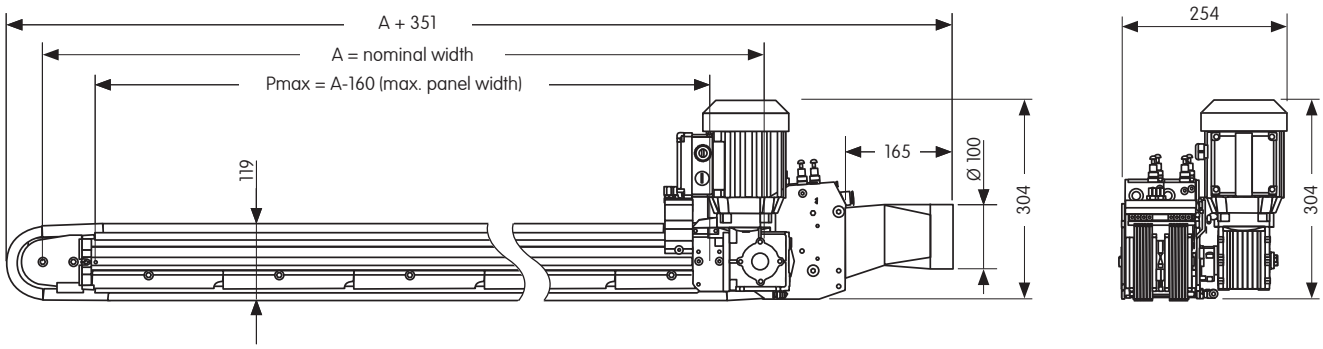


Brief description

The Sword Brushes BIX 102.. and BIZ 102.. are ideal to clean panels and boards that have large quantities of dust on the surface, e.g. floor laminates after sanding. In order to provide for a continuous, high quality cleaning result, it is recommended to have a reinforced self-cleaning mechanism if abrasive and electrically charged laminate dusts occur. The brush filaments are micro-moistened with the antistatic cleaning agent Ingromat® and may thus thoroughly remove even the tiniest dust particles. An integrated pressure buffer provides for a constant wiping force and ensures effective cleaning results even with slightly uneven surfaces.

Technical details

- 1 Sword Brush BIX 102.. or BIZ 102.. with two parallel linear brushes, pressure buffer and Ingromat® system. Necessary components: Ingromat® regulator and filter unit.



Values in mm

Ordering example

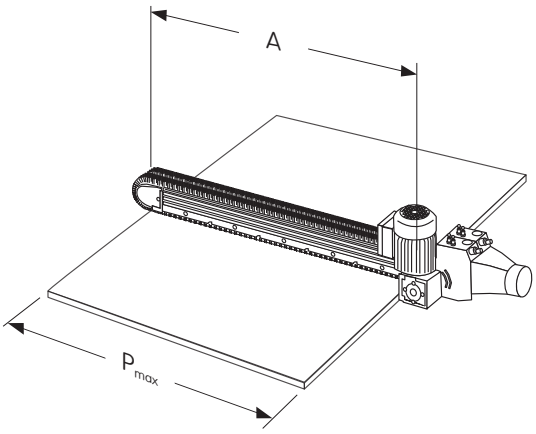
The subject panel has a max. width of
P_{max}= 800 mm.
Miniminum nominal width of Sword Brush:
$A_{min} = P_{max} + 160$ mm = 960 mm.
The most suitable Sword Brush
has a nominal width of A = 1000 mm.
Order code 2283-007
describes BIX 102/VM/1000

Self-cleaning nozzles

Standard Order no. 4163340
Reinforced Order no. 4158462
We recommend the reinforced version
for applications with high levels of dust.

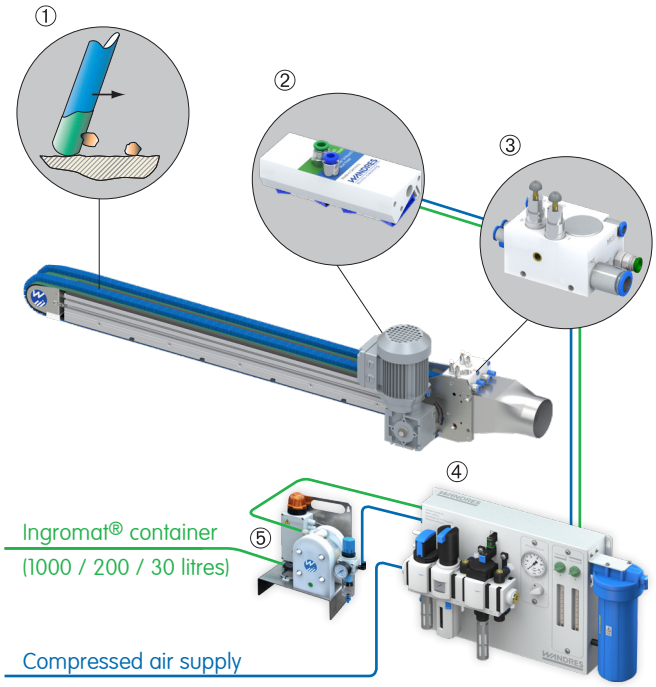
Explanation

A Nominal width of Sword Brush
= Distance between deviation rollers
P_{max} max. panel width = A – 160 mm



Order code

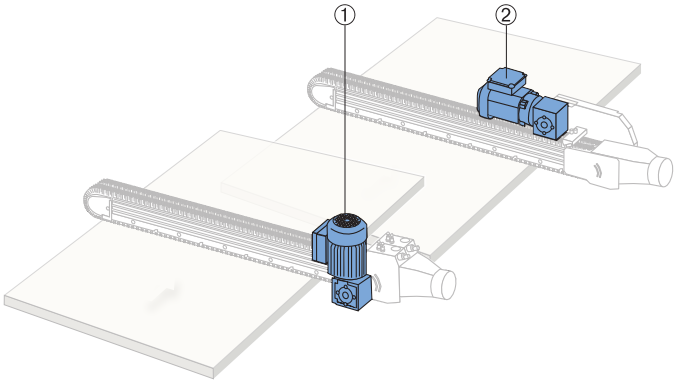
BIX 102.. → 2283 -	BIZ 102.. (M) → 2284 -	Nominal width A mm	Nominal width A inch	
- 003		400	15.75	
- 004		520	20.47	
- 005		650	25.59	
- 058		700	27.56	
- 006		850	33.46	
- 045		900	35.43	
- 007		1000	39.37	
- 008		1100	43.31	
- 031		1200	47.24	
- 009		1300	51.18	
- 030		1400	55.11	
- 010	- 010	1500	59.06	
- 011	- 011	1650	64.96	
- 059	- 059	1700	66.93	
- 012	- 012	1750	68.89	
	- 032	1900	74.80	
	- 013	2000	78.74	
	- 033	2100	82.68	
	- 014	2200	86.61	
	- 056	2300	90.55	with profile reinforcement
	- 015	2500	98.43	
	- 050	2700	106.29	
	- 016	2750	108.26	
	- 060	2800	110.23	
	- 036	2900	114.17	
	- 017	3000	118.11	
	- 037	3100	122.05	
	- 018	3200	125.98	
	- 039	3400	133.85	
	- 019	3500	137.79	
	- 020	3750	147.64	
	- 021	4000	157.48	
	- 022	4300	169.29	
	- 023	4500	177.17	



Ingromat® cleaning system

Ingromat® is an antistatic cleaning agent.
The brush filaments are micro-moistened with Ingromat® thus providing an effective removal of even very fine dust particles

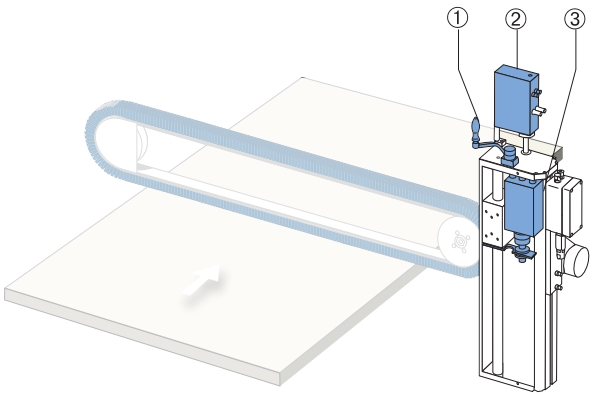
① Micro-moistened brush filament with Ingromat® (shown in green)
② Ingromat® sprayer SQL 102..
③ 2 x Distributor block VTB 100..
④ Ingromat® regulator and filter unit IR 100..
Ingromat® filter, dosage and display of inner pressure of pressure buffer
⑤ Option: Ingromat® central supply pump, e.g. IS 102 (self-priming, pneumatic pump with two membranes, a filter regulator and an oil free air control valve)



Motor position

① Sword Brush with vertical motor BIX 102..
with lateral drive (0.25 kW)

② Sword Brush with horizontal motor BIZ 102..
with drive on top of cleaning module (0.55 kW)



Option: Height adjustment

The mounting at an adjustment frame allows an easy adjustment of the Sword Brush in its vertical position:
① manually via a crank (HVM)
② or electrically via an actuator (HVE). The latter provides for a connection to the overall control which automatizes thickness adjustment entirely.
③ A pneumatic height adjustment via a pneumatic cylinder (HVP) allows for a rapid removal from the surface, e.g. if there is a potential crash situation.
Both the mechanical and the electrical height adjustment may be combined with the pneumatic quick adjustment.

Technical details	BIX 102.. →	BIZ 102.. →
Electrical details		
Drive Sword Brush	BIX 102.. 1 x 0.25 kW SEW motor, IP 54, UL-compatible 50 Hz; △ 220 - 240 V; 1,14 A; Y 380 - 415 V; 0,66 A 60 Hz; △ 240 - 266 V; 1,03 A; Y 415 - 480 V; 0,60 A	BIZ 102.. 1 x 0.55 kW SEW motor, IP 54, UL-compatible 50 Hz; △ 220 - 242 V; 2,45 A; Y 380 - 420 V; 1,42 A 60 Hz; △ 254 - 277 V; 2,35 A; Y 440 - 480 V; 1,35 A
Main valve	2/2 directional valve: 1 x 24 V DC; 1.5 W	
Pneumatic details		
Compressed air quality	filtered (max. particle size < 40µm), oil free (residual oil < 1.5 mg/m³ at 24° C)	
Compressed air connection	1 x 1/2" female thread; 6 bar	
Compressed air consumption	470 l/min (with standard self-cleaning nozzle), 570 l/min (with reinforced self-cleaning nozzle)	
Fluidics		
Ingromat® hose connection	1 x Ø 8 mm	
Ingromat® consumption	0.6 - 1.5 l/h	
Suction requirements		
Suction connection/capacity	1 x Ø 100 mm	
Suction capacity	1 x 14 m³/min	
Operating parameters	min. -500 Pa vacuum; min. 28 m/s (measured at suction connection)	
Acoustic emission		
	approx. 79 dB(A) Acoustic emission depends on the surface structure and the geometry of the subject material.	
Linear brush		
Linear brush type	Quadro R6	
Filament material	Polyamid 6.12	
Filament length	17 mm	
Filament-Ø	0.127 mm	
Transport speed		
Max. transport speed	100 m/min	
Dimensions of subject panel		
Min. panel length	L_{min} = 300 mm	
Min. panel width	P_{min} = 60 mm	
Max. panel width	P_{max} = A - 160 mm	

Technical information is subject to changes.

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