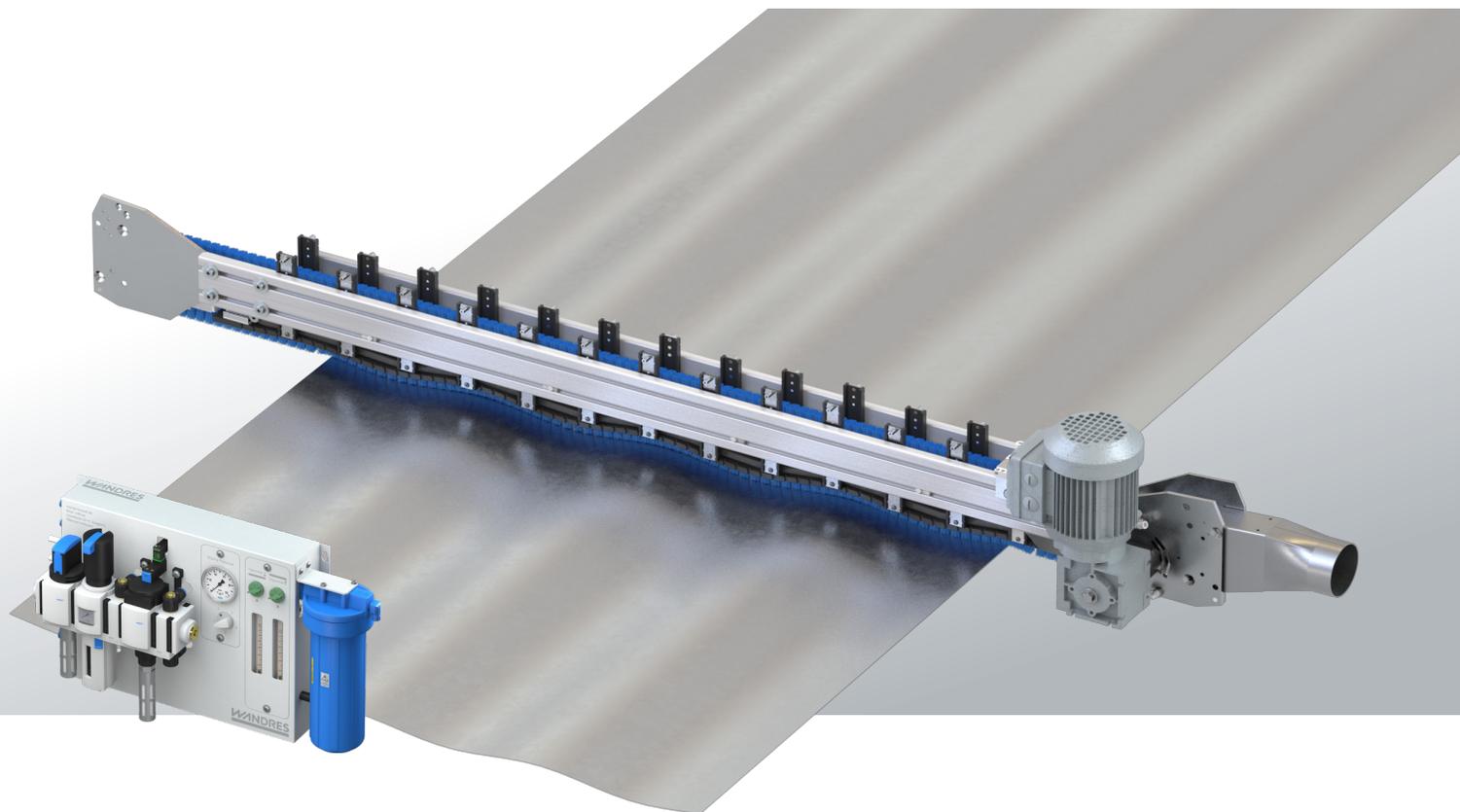




## Sword Brush BIF 51.. / BIFT 51.. / BIF 53..

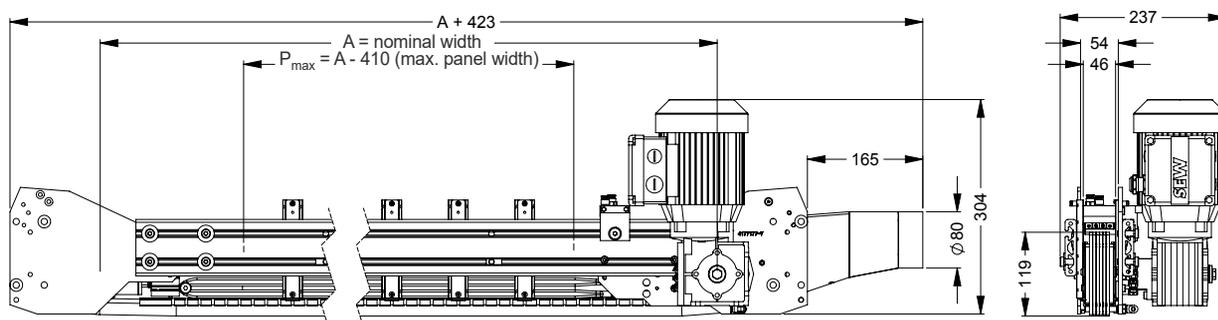


### Brief description

The Sword Brush BIF 51.. cleans material surfaces such as coils, wooden or plastic panels. Brush filaments are micro-moistened with the antistatic cleaning agent Ingromat® and may thus remove even the tiniest dust particles effectively. An integrated flexible pressure buffer provides for a constant wiping force and ensures effective cleaning results even with uneven surfaces. The Sword Brush BIFT 51.. features a tactile control element TSE 51.. that lifts the linear brush guide if necessary. This may be the case, if there are bursts on the panel surface. The Sword Brush BIF 53.. has brush filaments with a length of 32 mm. It can therefore effectively clean even slightly arched surfaces such as foils before injection moulding

### Technical details

- 1 x Sword Brush BIF.. 51/1M/A with flexible pressure buffer and Ingromat® system, necessary component:  
Ingromat® regulator and filter unit IR 100.. (standard) or control and pneumatic cabinet as an option
- with Sword Brush BIFT 51.. Tactile control elements TSE 51 to lift the linear brush guide



Sword Brush BIF 51..

Values in mm

### Ordering example

The subject panel has a max. width of  $P_{max} = 800$  mm. Minimum nominal width of Sword Brush:

$$A_{min} = P_{max} + 410 \text{ mm} = 1210 \text{ mm.}$$

The most suitable Sword Brush has a nominal width of  $A = 1300$  mm.

Order N° 2287-009

describes BIF 51/1M/1300

### Options for special applications



2385-

**BIFT 51..**

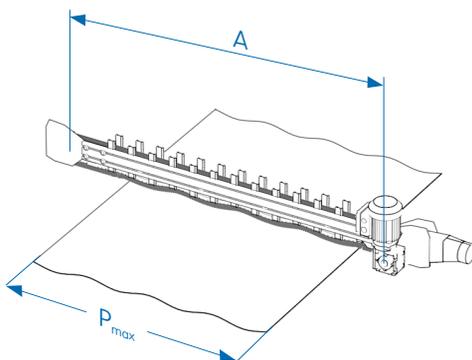
with tactile control elements TSE 51..



2288-

**BIF 53..**

with filament length BL = 32 mm and motor 0.18 kW



Order N°  
**BIF 51..**



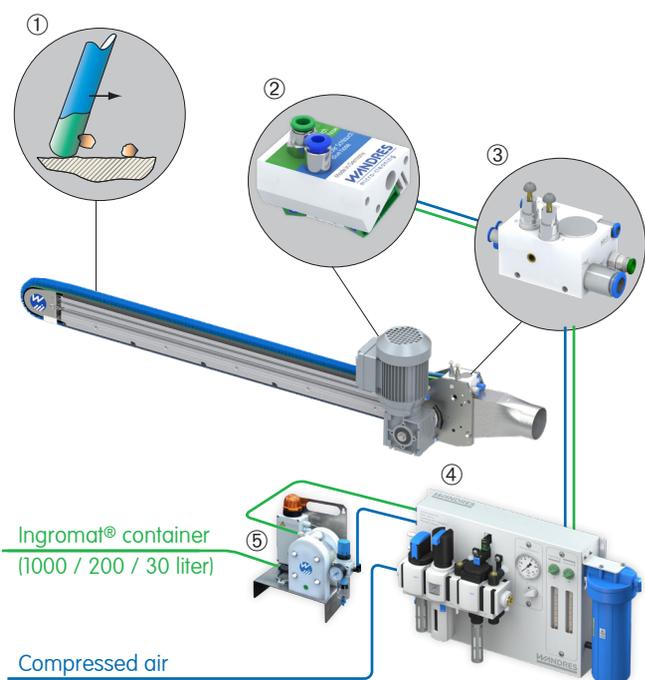
2287 -

	Nominal width A in mm	Nominal width A in inches	
- 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	1500	59.06	
- 011	1650	64.96	
- 059	1700	66.93	
- 012	1750	68.89	
- 032	1900	74.80	
- 013	2000	78.74	
- 033	2100	82.68	
- 014	2200	86.61	
- 056	2300	90.55	
- 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	

With profile reinforcement

### Explanation

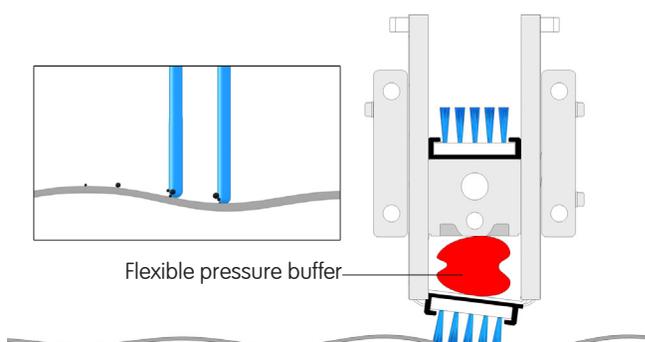
A Nominal width of Sword Brush  
= distance between deviation rollers  
Pmax max. coil or panel width  
= A - 410 mm



### Ingromat® system

Ingromat® is an anti-static cleaning agent. The brush filaments are micro-moistened with Ingromat® and effectively remove even the tiniest dust particles.

- ① Micro-moistened brush filament with Ingromat® (shown in green)
- ② Ingromat® sprayer SQL 51..
- ③ Distributor block VTB 100..
- ④ Ingromat® regulator and filter unit IR 100..  
Ingromat® filter, dosage and display of inside pressure of pressure buffer
- ⑤ Option: Ingromat® central supply pump e.g. IS 102 (self-priming pneumatic double membrane pump)



### Flexible pressure buffer

The contact area of the linear brush is flexibly bedded on a pressure buffer. The flexible pressure buffer compensates surface variations between +10 and -20 mm. Brush filaments are not bent excessively, they are always in a perpendicular position regarding the material surface. Thus even uneven areas are cleaned with a constant wiping force and are spotlessly clean afterwards.



### Option: Tactile control elements

With the Sword Brush BIFT 51.. tactile control elements TSE 51.. lift the linear brush guide if thickness varies considerably (e.g. bursts on chipboards). This feature will avoid collisions between the material and the cleaning module.

## Technical data



BIF 51.. →



BIFT 51.. →



BIF 53.. →

### Electrical details

Drive Sword Brush BIF 51.. / BIFT 51..

1 x 0.25 kW SEW motor; IP 54; UL compatible  
50 Hz; Δ 220 - 240 V; 1.14 A; Y 380 - 415 V; 0.66 A  
60 Hz; Δ 240 - 266 V; 1.03 A; Y 415 - 480 V; 0.6 A

Drive Sword Brush BIF 53..

1 x 0.18 kW SEW motor, IP 54, UL compatible  
50 Hz; Δ 220 - 240 V; 0.96 A; Y 380 - 415 V; 0.55 A  
60 Hz; Δ 240 - 266 V; 0.87 A; Y 415 - 480 V; 0.5 A

Main valve

2/2 directional valve; 1 x 24 V DC; 1.5 W

### Pneumatic details

Compressed air quality

filtered (particle size < 40µm), oil free (residual oil < 1.5 mg/Nm<sup>3</sup> at 24° C)

Compressed air connection

1 x 1/2" female thread; 6 bar

Compressed air consumption

230 l/min (with standard self-cleaning nozzle)

280 l/min (with reinforced self-cleaning nozzle)

### Fluidics

Ingromat® hose connection

1 x Ø 8 mm

Ingromat® consumption

0.2 - 0.8 l/h

### Suction

Suction

1 x Ø 80 mm

Required suction capacity

1 x 9 m<sup>3</sup>/min

Operational parameter

min. -500 Pa vacuum; min. 28 m/s (at suction connection)

### Acoustic emission

Sound pressure level LpA

approx. 74 dB (A)

The sound pressure level depends on the surface structure and the geometry of the subject panel.

### Linear brush

Linear brush type

Quadro R6

Filament material

Polyamide 6.12

Filament length

17 mm (BIF.. 51..); 32 mm (BIF 53..)

Filament-Ø

0.127 mm

### Transport speed

Max. transport speed

100 m/min

### Dimensions of subject panel

Min. panel length

L<sub>min</sub> = 240 mm

Min. panel width

P<sub>min</sub> = 60 mm

Max. panel width

P<sub>max</sub> = A - 410 mm

Technical data are subject to change

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