



# BIAX

Professional Power

1919 - 2019  
**100 JAHRE**  
Das Original



MADE IN GERMANY

## SE 50 SILENT GRINDER

### THE NEW MICRO GRINDER FROM BIAX

Lightweight · Low vibration · Extremely low noise



#### Technical data

Speed range [rpm]	1000–50,000
Operating voltage [volts]	100–240
Rated frequency [Hz]	50/60
Power [watts]	150
Overload protection	Eliminates waiting time when switching back on
Direction of rotation	Switch between clockwise and anti-clockwise rotation

SEB 50 control unit  
Article no. 001 611 704

#### Manual pieces

Article no.	ESB 3-50 (basic) 160 100 000	ESS 3-50 (slim) 160 100 010	ESW 3-50 (90° angle) * 160 100 020
Diameter [mm]	Max. 30	Max. 29	Max. 29
Length [mm]	165	162	158
Weight without cable [g]	240	240	180
Run-out accuracy [mm]	< 0.02	< 0.02	< 0.02
Collets diameter [mm]	3.0 (standard) 2.35 (optional)	3.0 (standard) 2.35 (optional)	3.0 (standard) 2.35 (optional)
Tool changing	Quick clamping	Quick clamping	Special tool
Cooling	Enclosed (all models)		
Drive system	Brushless DC motor (all models)		

\* Recommended speed  
Max. 20,000 rpm

The long-established Swabian brand, BIAX, well-known for its high-precision industrial deburring grinders, is launching an electric micro-motor for the first time within the "SE 50 silent grinder" micro grinder set. The set comprises a compact control unit (SEB 50) and a robust, high-precision straight grinder manual piece with a micro motor (ESB 3-50). There is also an optional slim manual piece (ESS 3-50), for more delicate work where you might need to hold the grinder like a pen, and a modular angled manual piece at 90 degrees (ESW 3-50 recommended maximum speed 20,000 rpm). Additional accessories include a dynamic foot-operated switch and an on/off foot switch.

3 mm shafts can be fitted to all grinders. However, high-precision collets are also available in the sizes 1.6 mm, 3/32" (2.35 mm) and 1/8" (3.175 mm). A tool change can be carried out simply and without any additional tools thanks to the fast clamping system. The speed can be adjusted up to 50,000 rpm without set increments, the power is 150 watts. The clamping wrenches for the collets are also stored at the same time in the practical machine stowage area. All components are manufactured in Germany.

The compact BIAX micro motors are so incredibly quiet in use that several devices can be very comfortably operated within short distance of each other. Their even balance, together with their light and compact design, enables continuous fatigue-free and efficient working. At the same time, the micro motors work in their usual reliable and durable manner and require little service. This is not least due to special sealing of the powerful ball bearings.

## Optional accessories



**SEFD 50 dynamic  
foot-operated start switch**  
Order no. 001 611 705



**SEFT 50 foot-operated  
ON/OFF switch**  
Order no. 001 611 706



**Vario-holder**  
Order no. 007 012 848



**Manual piece holder for grinder**  
Order no. 001 611 710



**Collet diameter 3.0 mm**  
Order no. 001 611 708

**Collet diameter 2.35 mm**  
Order no. 001 611 707



**Counterholder wrench**  
Order no. 001 611 711

**Collet wrench**  
Order no. 001 611 712

*Special ESW tool  
available on request*