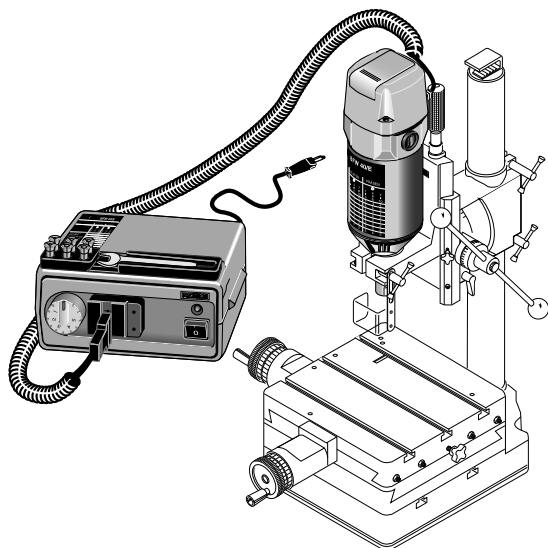


PROXXON

BFW 40/E



Manual

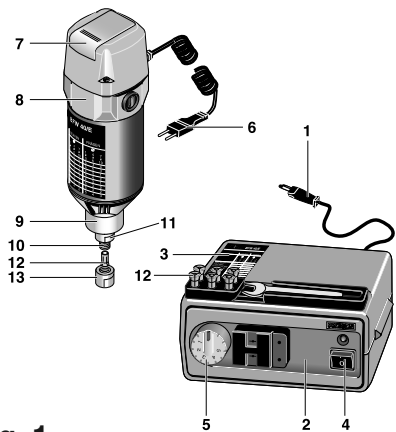


Fig. 1

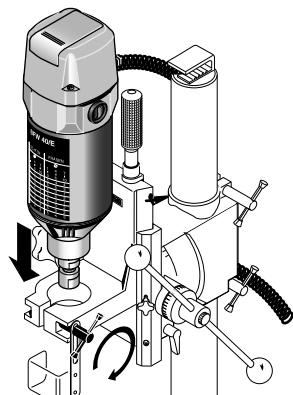


Fig. 2

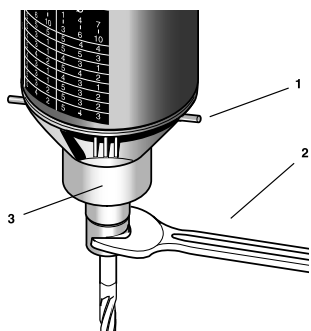


Fig. 3

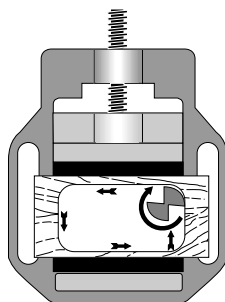


Fig. 4

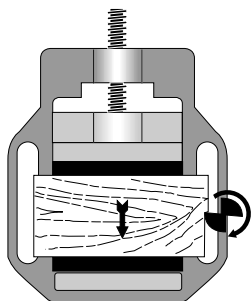


Fig. 5

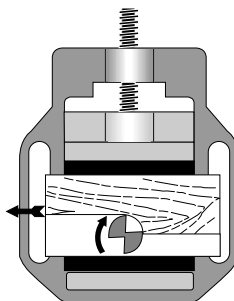


Fig. 6



Translation of the Original Operating Instructions BFW 40/E

Vibration: $\leq 2,5 \text{ m/s}^2$
 General measuring uncertainty: K=3 dB

Dear Customer,

With the BFW 40/E you have purchased a machine which is ideal for milling and drilling metal, plastic and wood. This machine is equipped with:

- a high-quality, quiet running permanent magnet DC motor with a high tractive force throughout the entire speed range;
- high-performance voltage supply unit with low voltage safety feature;
- stepless speed control for optimal adaptation of speed to different materials and tools;
- continuous spindle for true-running precision with $\frac{1}{2}$ " external thread for mounting collet chucks or drill chuck;
- $\varnothing 43 \text{ mm}$ spindle neck for mounting in drilling or milling stands according to European standards;
- 6 steel collet chucks from 2.35 to 6 mm for optimal true-running.

WARNING!

Read all safety warnings and instructions. Failure to follow all safety warnings and instructions listed below may result in electric shock, fire and/or serious injury.

KEEP ALL SAFETY WARNINGS AND INSTRUCTIONS FOR THE FUTURE !



Key (Fig. 1):

1. Power cable for voltage supply unit
2. Voltage supply unit 230V/AC – 40 V/DC
3. Speed table
4. On/off switch for voltage supply unit
5. Speed control
6. Motor connecting lead for 40V/DC
7. On/off switch
8. Motor
9. $\varnothing 43\text{mm}$ mounting for drilling or milling stands
10. Spindle with $\frac{1}{2}$ " thread for collet chucks or drill chuck
11. A/F 17 spanner flats
12. Collet chuck
13. Union nut for collet chuck
14. Locking pin

Technical data:

Motor:

Voltage: 40 volts DC
 Power rating: 250 watts - short-time duty 10 mins.
 Speed: 900 to 6000 rpm
 Noise level: < 70 dB(A)

Noise/vibration information

The information on vibration and noise emission has been determined in compliance with the prescribed standardised and normative measuring methods and can be used to compare electrical devices and tools with each other.

These values also allow a preliminary evaluation of the loads caused by vibration and noise emissions.

Warning!

Depending on the operating conditions while operating the device, the actually occurring emissions could differ from the values specified above!

Please bear in mind that the vibration and noise emission can deviate from the values given in these instructions, depending on the conditions of use of the tool. Poorly maintained tools, inappropriate working methods, different work pieces, too high a feed or unsuitable work pieces or materials or unsuitable bits and cutters (here: saw blade) can significantly increase the vibration load and noise emission across the entire work period.

To more accurately estimate the actual vibration and noise load, also take the times into consideration where the device is switched off, or is running but is not actually in use. This can clearly reduce the vibration and noise load across the entire work period.

Warning:

- Ensure regular and proper maintenance of your tool
- Stop operation of the tool immediately if excessive vibration occurs!
- Unsuitable bits and cutters can cause excessive vibration and noises. Only use suitable bits and cutters!
- Take breaks if necessary when working with the device!

Voltage supply unit:

Primary voltage: 230 volts, 50/60 Hz
 Secondary voltage: 40 volts DC
 Power rating: 250 watts - short-time duty 10 mins.
 Collet chucks: $\varnothing 2.35 \text{ mm}$, 3.0 mm , 3.2 mm , 4.0 mm , 5.0 mm , 6.0 mm .

Risk of injury!

Never work without dust protection mask and safety glasses. Some dusts have a hazardous effect! Materials containing asbestos may not be machined!



For your safety, always wear hearing protection while working!



For use in dry environments only



Protection class II device



Please do not dispose off the machine!



Machining work pieces:

1. Adjust the milling guard on the drilling stand so that it forms a barrier between the milling tool and the operator.
2. Securely clamp the work piece using holding straps or a machine vice.

Important

Ensure that the milling tool or drill is not touching the work piece before switching on the motor.

Only use sharp tools. Blunt tools impair the quality of the results and overload the motor.

Switch off the motor immediately if the tool becomes blocked.

3. Switch on the voltage supply unit.
4. Set the required speed on the voltage supply unit.
5. Switch on the motor by pressing button 7 (Fig. 1).

Note

The voltage supply unit is equipped with overload protection. If the overload protection is activated, disconnect the mains plug for the voltage supply unit and allow the unit to cool for 5 to 10 minutes.

Caution: Switch off the motor and ensure that the milling tool or drill is not touching the work piece before re-connecting the power cable.

Note

Good results can only be achieved with correct and uniform speed. Therefore, never overload the motor through excessive rate of feed or depth of cut.

Important

The feed must always be against the cutting direction of the milling tool.

6. Feed for milling a rectangle (Fig. 4)
7. Feed for milling edges (Fig. 5)
8. Feed for milling a rebate (Fig. 6)

Operation:

Important

The motor must only be operated with the accompanying safety voltage supply unit (40 volts DC). There is a risk of injury if used with another voltage supply unit.

Mounting on a drilling or milling stand:

Note

Safe and precise operation is only possible if the machine is properly fastened in a stable drilling or milling stand. The drilling or milling stand must be securely fastened to a table top. For safe and precise operation, we recommend the PROXXON BFB 2000 drilling and milling stand in conjunction with the KT 150 compound-table.

Important

Disconnect the power cable or the motor connecting lead before all operations on the machine.

1. Insert the machine in a secure drilling stand (Fig. 2) and tighten the clamp.
2. Connect the voltage supply unit to the mains using the power cable.
3. Ensure that the voltage supply unit is switched off.
4. Connect the machine to the voltage supply unit.

Tool change

Attention!

The collet chuck and the milling shaft must be of the same diameter, otherwise the collet chuck could be damaged.

1. Put the locking pin (1) into the requisite hole in the lower flange (see Fig. 3). If necessary, rotate the motor shaft to find the cross-hole in the shaft.
2. Insert the locking pin fully.
3. Use the key (2) provided to turn the flattened coupling ring (3) (see Fig. 3) and remove the tool from the collet chuck. Insert the new tool and once again carefully tighten the coupling ring. Ensure when doing this that the correct collet chuck had been inserted into the shaft.
4. Remove the locking pin from the hole.

After operating:

1. Switch off voltage supply unit.
2. Thoroughly clean cuttings and dirt from the machine using a brush and a dry cloth. Lightly grease or oil collet chucks, union nut and mounting in order to protect against corrosion.

Important

No grease or oil must enter the motor.

Accessories

For more detailed information on accessories, please request our device catalogue from the address specified on the last page in the warranty information.

Please note in general:

Proxxon bits and cutters have been designed to work with our machines, which makes them optimal for their use.

We will not assume any liability whatsoever for the safe and proper function of our devices when using third-party bits and cutters!

Disposal:

Please do not dispose of the device in domestic waste! The device contains valuable substances that can be recycled. If you have any questions about this, please contact your local waste management enterprise or other corresponding municipal facilities.

CE - Declaration of Conformity

Name and address:

PROXXON S.A.
6-10, Härebierg
L-6868 Wecker

Product designation: BFW 40/E
Article No.: 20165

In sole responsibility, we declare that this product conforms to the following directives and normative documents:

EU EMC Directive 2014/30/EC

DIN EN 55014-1 / 05.2012
DIN EN 55014-2 / 01.2016
DIN EN 61000-3-2 / 03.2015
DIN EN 61000-3-3 / 03.2014

EU Machinery Directive 2006/42/EC

DIN EN 62841-1 / 07.2016

Date: 06.11.2017



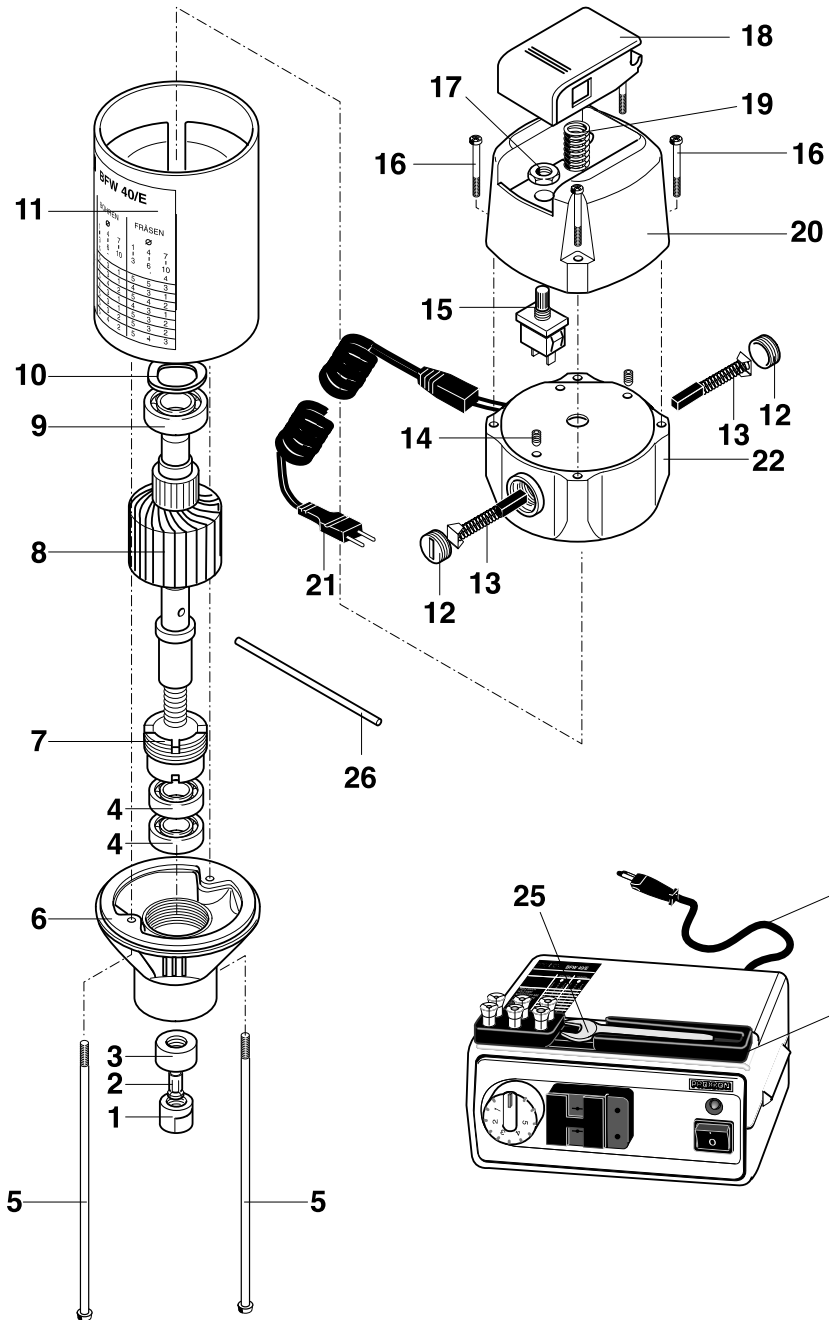
Dipl.-Ing. Jörg Wagner

PROXXON S.A.
Machine Safety Department

The CE document authorized agent is identical with the signatory.

List of Spare Parts

Art.	Designation
20165 - 01	Cap nut
20165 - 02	Collet (Accessories)
20165 - 03	Nut
20165 - 04	Roller bearing
20165 - 05	Screw
20165 - 06	Flange
20165 - 07	Nut
20165 - 08	Armature
20165 - 09	Roller bearing
20165 - 10	Wave washer
20165 - 11	Motor casing
20165 - 12	Threaded cap
20165 - 13	Carbon brush
20165 - 14	Set screw
20165 - 15	Switch
20165 - 16	Screw
20165 - 17	Nut
20165 - 18	Cover for switch
20165 - 19	Spring
20165 - 20	Cover
20165 - 21	Power supply cord
20165 - 22	Collector casing
20165 - 23	Power supply unit
20165 - 24	Holder for collets
20165 - 25	Wrench
20165 - 26	Blocking pin
20165 - 27	Packaging
20165 - 28	Manual incl. Safety instructions



PROXXON

GB **Service note**

All PROXXON products are thoroughly inspected after production. Should a defect occur nevertheless, please contact the dealer from whom you purchased the product. Only the dealer is responsible for handling all legal warranty claims which refer exclusively to material and manufacturer error.

Improper use, such as capacity overload, damage due to outside influences and normal wear are excluded from the warranty.

You will find further notes regarding "Service and Spare Parts Management" at www.proxxon.com.