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1. Description

The milling motor **UFM 1050** is an universal motor with **230 V** operating voltage, the milling motor **UFM 1050-11** is an universal motor with **110 V** operating voltage.

Both motor types are provided with integrated tacho control electronics as well as a collet chuck seat system □ of collet chuck □ (optional) and tension nut □ for optimal guidance of the tool shank as well as for exact concentricity. Because of the slim design the motors are optimally applicable also at close space conditions.

2. Application

The milling motors UFM 1050 and UFM 1050-11 are particularly suitable for high performance milling operations.

These are for example:

- Profile milling, edge machining
- Dowel joints
- Drilling and 3D milling in Aluminum

5. General Notes

The milling motors UFM 1050 and UFM 1050-11 are

- certified by the SEV exam. authority and correspond to the spec. sheets EN 50144, IEC 60745, EN 55014, EN 61000, IEC 61000
- all-insulated (Protection class II)
- with noise suppression according to VDE standard 0875

3. Operation

1. Load a suitable tool
2. Attach voltage supply for the milling motor with on/off switch switched off □
3. Select the desired speed with the speed adjusting wheel □ (make sure that the desired speed is allowed for the used tool)
4. Switch on the motor with the on/off switch □

4. Working notes

The motor is equipped with electronics and an overload protection and works as follows:

- soft accelerating without jerking
 - the current consumption rises with increasing load, whereby the speed is kept almost constant
 - when the motor gets overloaded, the overload protection cuts the current supply automatically
- In this case, immediately switch the on/off switch to "0" and restart the motor in unloaded status as soon as possible in order to ensure the re-cooling in the no-load operation.*

Please pay attention to the following:

- keep the motor dry and clean
- keep the cooling air openings □ free
- regularly check the leads and let damaged cables be replaced in any case
- **Repairs may only be executed by an electrical specialist**

6. Setting of the working speed

For safety reasons, the speed, matched to the tool and set before the initiation, may never be changed during operation.

- Make sure, that the desired speed is suitable for the tool being used
- The speed sticker shows the respective speed adjusting wheel level (1 to 6)
- Turn the wheel □ until the correct wheel level points to the arrowhead of the speed sticker

Setting wheel level

6 = 25.000 rpm

5 = 22.000 rpm

4 = 19.000 rpm

3 = 16.000 rpm

2 = 13.000 rpm

1 = 11.000 rpm

The motor may not be operated with an additional speed control unit. The electronics of the motor would be influenced

in an illegal way by that. A safe function can no more be insured in such case.

Attention:

High-energy high frequency interferences can cause speed fluctuations of up to 20 %. However, they'll disappear as soon as the interferences faded away. With low speed settings, the motor can switch off prematurely for safety reasons because of electromagnetic interferences. Please switch off and on the motor in this case.

7. Technical data

	UFM 1050	UFM 1050-11
Voltage	230 V	110 V
Idling speed	11.000 - 25.000 rpm	
On-load speed	21.000 rpm	
Input power	1050 W	
Output power	720 W	
Efficciency	71 %	
Torque	0,32 Nm	

8. Collet chuck seat

The collet chucks are precision clamping devices according to DIN 6388-A.

These collet chucks are bolted with the collet chuck seat by a tension nut.

1. Unscrew the tension nut (fig. 1) from the collet chuck seat.
2. Press the collet chuck (fig. 2) into the tension nut (fig. 3) in such a way, that the nose (arrow) locks into the tension nut.
3. Screw this combination on the thread of the collet chuck seat (fig. 4)
4. Now you can clamp the drill bit or the milling cutter into the collet chuck.
Tighten the nut with the enclosed hook wrench. The wrench (size 18) serves as holder-up at the collet chuck seat.

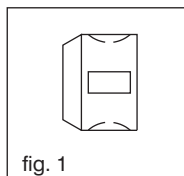


fig. 1

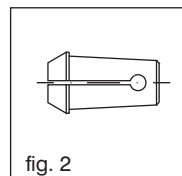


fig. 2

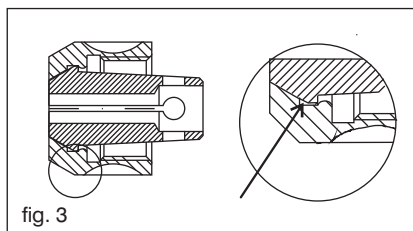


fig. 3

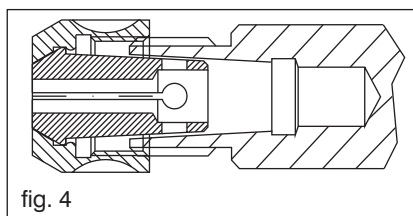


fig. 4

9. Scope of delivery, accessories

The scope of delivery contains:

- Milling motor
- Tension nut □
- Hook wrench □
- Wrench, size 18 □

Accessories (optionally)

- Collet chucks 1 mm - 8 mm □
- Clamping blocks (for attaching the

Collet chucks	Item number
1,0 mm	239112 1000
1,5 mm	239112 1500
2,0 mm	239112 2000
2,5 mm	239112 2500
3,0 mm	239112 3000
3,175 mm	239112 3175
3,5 mm	239112 3500
4,0 mm	239112 4000
4,5 mm	239112 4500
5,0 mm	239112 5000
6,0 mm	239112 6000
8,0 mm	239112 8000

Clamping blocks	Item number
Attachments Ra 100 and Ra 150 mm	290 902
Attachment Ra 100 mm	290 903
Attachment Ra 125 mm	290 904