
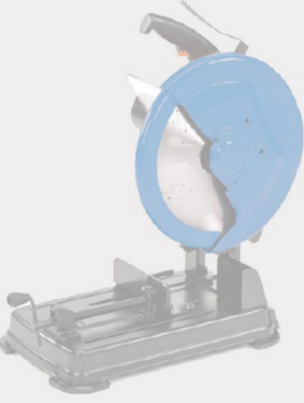


# FEpowerTools®

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MAGNETIC DRILLING MACHINES	BEVELING MACHINES	SAWING MACHINES
 <p>Manual FE 30 FE 32 X FE 36 S FE 50 X FE 50 RLX FE 60 RLX FE 100 R/L</p>	 <p>Manual FEB 20 FEB 30 FEB 45 FEB R25</p>	 <p>Manual FE 355</p>

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## 2. Instructions Before Use - Safety Warning Explanation

### Safety Warning Explanation

Following warnings are present in this manual

<b>⚠ DANGER</b>
<b>A warning of this category draws attention to an impending dangerous situation.</b> If the dangerous situation is not avoided, it may lead to serious injury or even death. <ul style="list-style-type: none"><li>➤ Follow the instructions in this warning to avoid the danger of serious injury or even death.</li></ul>
<b>⚠ WARNING</b>
<b>A warning of this category draws attention to a potentially dangerous situation.</b> If the dangerous situation is not avoided, it may lead to injuries. <ul style="list-style-type: none"><li>➤ Follow the instructions in this warning to avoid the risk of injury.</li></ul>
<b>CAUTION</b>
<b>A warning of this category draws attention to potential material damage.</b> If the situation is not avoided, it may lead to material damage. <ul style="list-style-type: none"><li>➤ Follow the instructions in this warning to avoid material damage.</li></ul>
<b>NOTE</b>
<ul style="list-style-type: none"><li>➤ A note draws attention to additional information that simplifies the use of the machine.</li></ul>

### Instructions Before Use

The machine is intended solely for drilling operations in magnetic and non-magnetic metals, and for cutting threads, countersinking and reaming within the limits specified in the technical data.

Use in any other or further way is not considered an intended use.

<b>⚠ WARNING</b>
<b>Danger from use for other than the intended purpose!</b> If not used for its intended purpose and/or used in any other way, the machine may be or become a source of danger. <ul style="list-style-type: none"><li>➤ Use the machine only for its intended purpose.</li><li>➤ Observe the procedures described in these operating instructions.</li></ul>

No claims of any kind will be accepted for damage or injury resulting from use of the machine for other than its intended purpose.

The risk has to be borne solely by the machine owner.

## **NOTE**

- If used commercially, pay attention to compliance with the accident prevention regulations and the Safety at Work Ordinance.

### ***Liability Disclaimer***

All technical information, data and instructions for commissioning, operation and care of the machine contained in these operating instructions represent the latest status at the time of printing. The manufacturer assumes no liability for damage or injury resulting from failure to observe the operating instructions, use for other than the intended purpose, unprofessional repairs, unauthorised modifications or use of non-approved spare parts and accessories, tools and lubricants.

## **⚠ CAUTION**

**When using electrical tools, the following fundamental precautions must be taken to protect against electric shock and the risk of injury and fire!**

### 3. Technical overview / Before Use: Fundamental Safety Precautions

	FE 30	FE 32X	FE 36 S	FE 50 X	FE 50 RLX	FE 60 RLX	FE 100 R/L	
Motor	1050 W	1050 W	1080 W	1150 W	1150 W	1600 W	1800 W	
Spindle	Direct – 19 mm Weldon	Direct – 19 mm Weldon	Direct – 19 mm Weldon	MT 2 – 19 mm Weldon	MT 2 – 19 mm Weldon	MT 3 – 19 mm Weldon	MT 3 – 19 mm Weldon	
Hole cutter mm	30	30 mm	32 mm	36 mm	50 mm	50 mm	60 mm	100 mm
Hole cutter mm	55	30 mm	32 mm	N/A	50 mm	50 mm	60 mm	100 mm
Hole cutter mm	110	N/A	N/A	N/A	50 mm	50 mm	60 mm	100 mm
Countersink	N/A	N/A	N/A	N/A	40 mm	50 mm	55 mm	
Reaming	N/A	N/A	N/A	N/A	23 mm	25 mm	31.75 mm	
Twist drills	N/A	N/A	13 mm	N/A	23 mm	23 mm	25 mm	31.75 mm
Tap	N/A	N/A	N/A	N/A	M 5-20	M 5-20	M 6-30	
RPM	$n_0$ 750 min <sup>-1</sup> n 460 min <sup>-1</sup>	$n_0$ 750 min <sup>-1</sup> n 460 min <sup>-1</sup>	$n_0$ 700 min <sup>-1</sup> n 400 min <sup>-1</sup>	$n_0$ 400 min <sup>-1</sup> $n_0$ 730 min <sup>-1</sup> n 250 min <sup>-1</sup> n 450 min <sup>-1</sup>	$n_0$ 50-250 min <sup>-1</sup> $n_0$ 100-450 min <sup>-1</sup>	$n_0$ 70-280 min <sup>-1</sup> $n_0$ 180-580 min <sup>-1</sup>	$n_0$ 40-140 min <sup>-1</sup> $n_0$ 120-480 min <sup>-1</sup>	
Stroke	70 mm	160 mm	39 mm	160 mm	160 mm	160 mm	250 mm	
Weight	9.9 kg	12 kg	11 kg	12 kg	12 kg	15 kg	27 kg	
Magnet	845 kg min. 1500 kg max.	845 kg min. 1500 kg max.	715 kg min. 1500 kg max.	915 kg min. 1200 kg max.	915 kg min. 1700 kg max.	910 kg min. 1700 kg max.	1430 kg min. 3500 kg max.	
Noise Level	90db(A)	87db(A)	89db(A)	87db(A)	87db(A)	89db(A)	89db(A)	
Vibration	1,64 m/s <sup>2</sup>	0,81 m/s <sup>2</sup>	0,85 m/s <sup>2</sup>	0,81 m/s <sup>2</sup>	0,81 m/s <sup>2</sup>	0,85 m/s <sup>2</sup>	0,85 m/s <sup>2</sup>	

### **Fundamental Safety Precautions**

- Do not use the machine in flammable or potentially explosive environments.
- Persons who due to their physical, mental or motor response abilities are unable to operate the machine safely may only use the machine under supervision or instruction by a responsible person.
- Persons with heart pacemakers or other medical implants must not use this machine.
- Children must not be allowed to use the machine.
- Inspect the machine for visible signs of damage before use. Do not use a visibly damaged machine.
- Before beginning work, check the condition of the safety chain and the function of the switches on the machine.
- Repairs to the mains cable may only be carried out by a qualified electrician.
- Repairs to the machine may only be carried out by an authorised workshop or by the works after-sales service. Unqualified repairs can lead to considerable danger for the user.
- Repairs to the machine during the warranty period may only be carried out by a service centre authorised by the manufacturer, as otherwise the warranty will be voided.
- Defective parts may only be replaced with original spare parts. Only these parts guarantee that the safety requirements are satisfied.
- Do not leave the machine unsupervised during operation.
- Store the machine in a dry, temperate location out of the reach of children.
- Do not leave the machine standing outdoors and do not expose it to moisture.
- Make sure that your work area is sufficiently lit (>300 Lux).
- Do not use low power machines for heavy working.
- Make sure that your workplace is clean.
- Keep the machine clean, dry and free of oil and grease.
- Follow the instructions on lubricating and cooling the tool

### **Electric Shock Hazard**

#### **⚠ DANGER**

#### **Danger to life by electric shock!**

#### **Contact with live wires or components could lead to serious injury or even death!**

Observe the following safety precautions to avoid electric shocks:

- Do not open the housing of the machine. Risk of electric shock if live terminals are touched.
- Never immerse the machine or the plug into water or other liquids.
- Use only extension leads or cable drums with a cable crosssection of 1.5 mm<sup>2</sup>.
- Only use extension leads that are approved for the place of work.
- Check the condition of the extension lead regularly and replace if damaged.
- Avoid direct body contact with grounded parts (e.g., tubes, radiators, steel girders) to reduce the risk of electric shock in the event of a defect.