

► KBU 35-2 Q (\*\*) 7 270 ...



EN 61029-1:2009 + Cor.:2009 + A11:2010 EN 55014-1:2006 + A1:2009 + A2:2011 EN 55014-2:2015 EN 61000-3-2:2014 EN 61000-3-3:2013

EN 61000-3-3:2013 2011/65/EU, 2006/42/EG, 2014/30/EU

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i. V. A. Gansen i. V. Dr. S Director of Product Head of I Development Electronic

i. V. Dr. Schreiber Head of Development/ Electronics and Drives

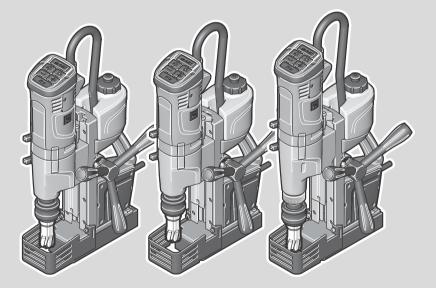
Schwäbisch Gmünd-Bargau, 16.01.2018

### **FEIN Service**

C. & E. Fein GmbH Hans-Fein-Straße 81 D-73529 Schwäbisch Gmünd-Bargau

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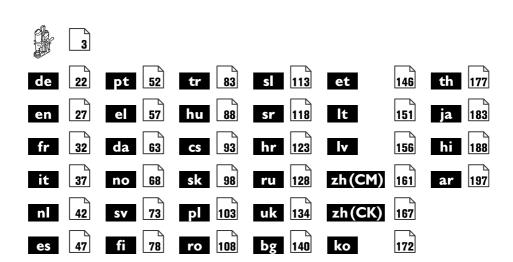


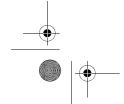




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		KBU 35 Q(**)	KBU 35 MQ (**)	KBU 35-2 Q (**)
		7 270	7 270	7 270
$P_1$	W	1100 (1010*)	1100 (1010*)	1100 (1010*)
$P_2$	W	550 (460*)	550 (460*)	550 (460*)
n <sub>OR</sub>				
•	/min, min <sup>-1</sup> , rpm, r/min	550	550	550
••	/min, min <sup>-1</sup> , rpm, r/min	-	-	1700
n <sub>OL</sub>				
•	/min, min <sup>-1</sup> , rpm, r/min	370	370	370
••	/min, min <sup>-1</sup> , rpm, r/min	-	-	1140
i	kg	10,6	11,0	11,0
HSS, HM 📳 Ø 🏗 Fe 400	mm	12 – 35	12 – 35	12 – 35
HSS \mid 🛇 Ø 🏗 Fe 400	mm	16	18	16
		M14	M14	M14
<del>2</del>	mm	16	18	16
Ø	mm	31	31	31
L <sub>pA</sub>	dB	86,7	86,7	85,6
K <sub>pA</sub>	dB	3	3	3
L <sub>wA</sub>	dB	97,7	97,7	96,6
K <sub>wA</sub>	dB	3	3	3
L <sub>pCpeak</sub>	dB	101,2	101,2	98,9
<b>K<sub>pCpeak</sub></b>	dB	3	3	3
$a_{h}$	m/s <sup>2</sup>	< 2,5	< 2,5	< 2,5
<b>K</b> <sub>a</sub>	m/s <sup>2</sup>	1,5	1,5	1,5
T <sub>a</sub>	°C	-5 + 40	-5 + 40	-5 + 40

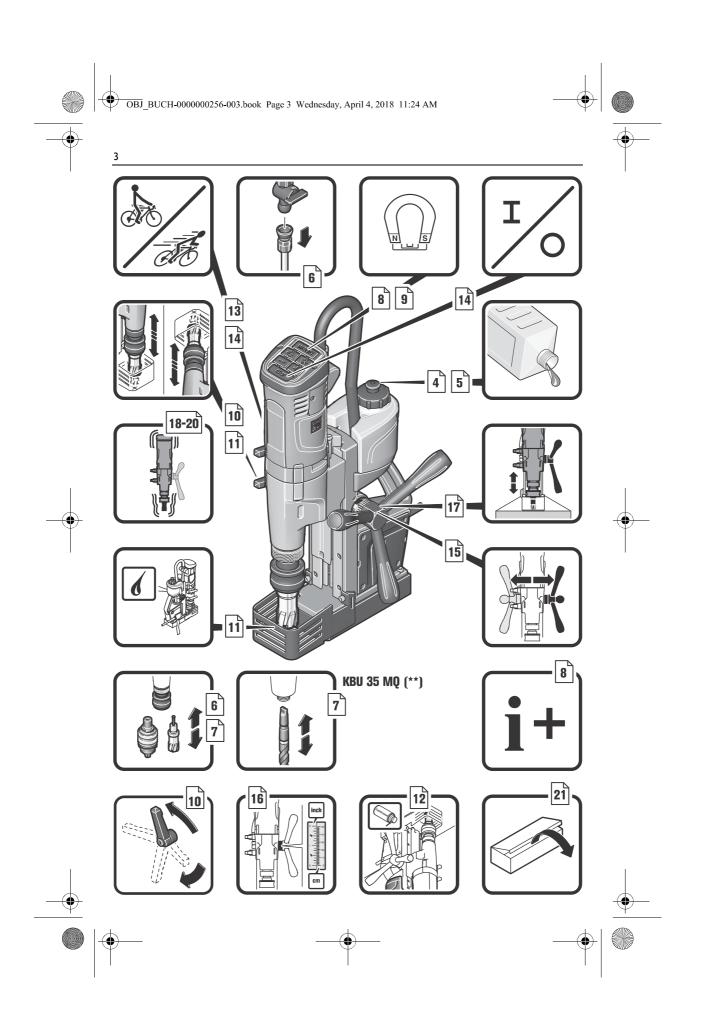


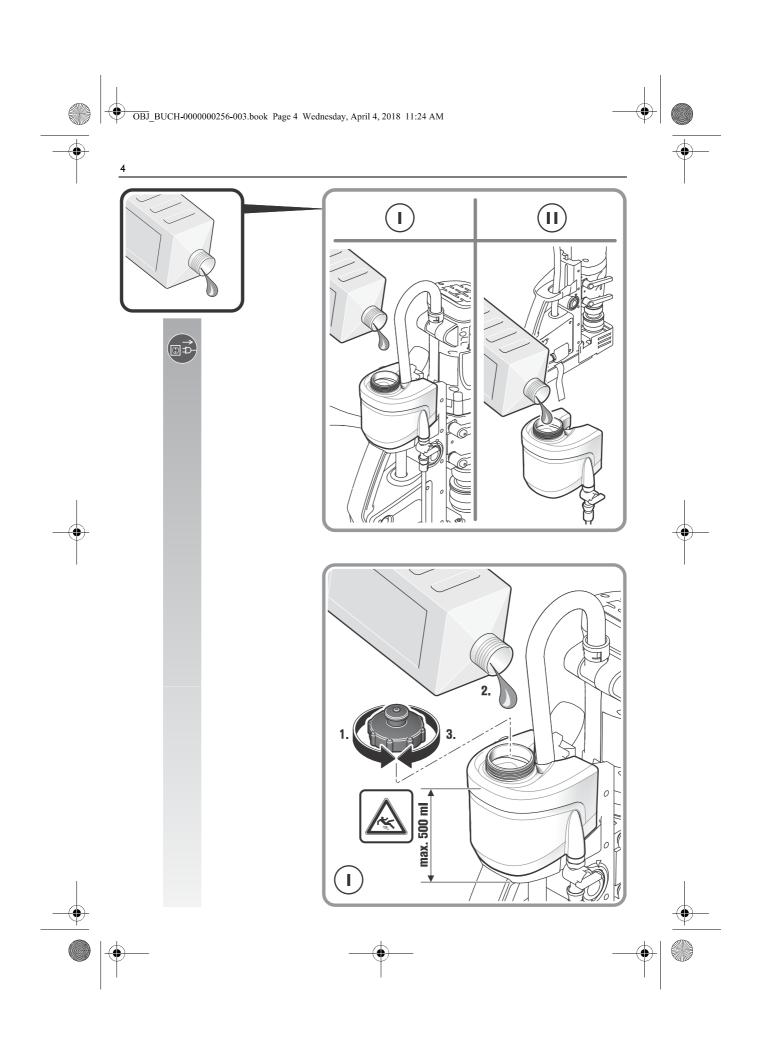


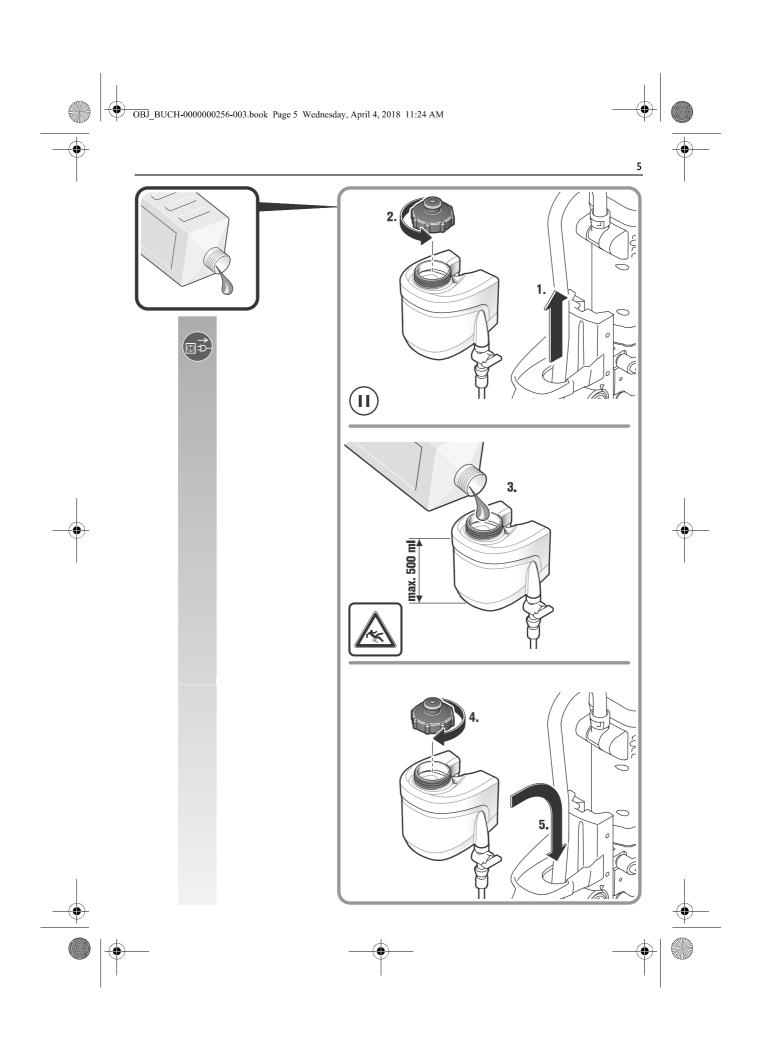


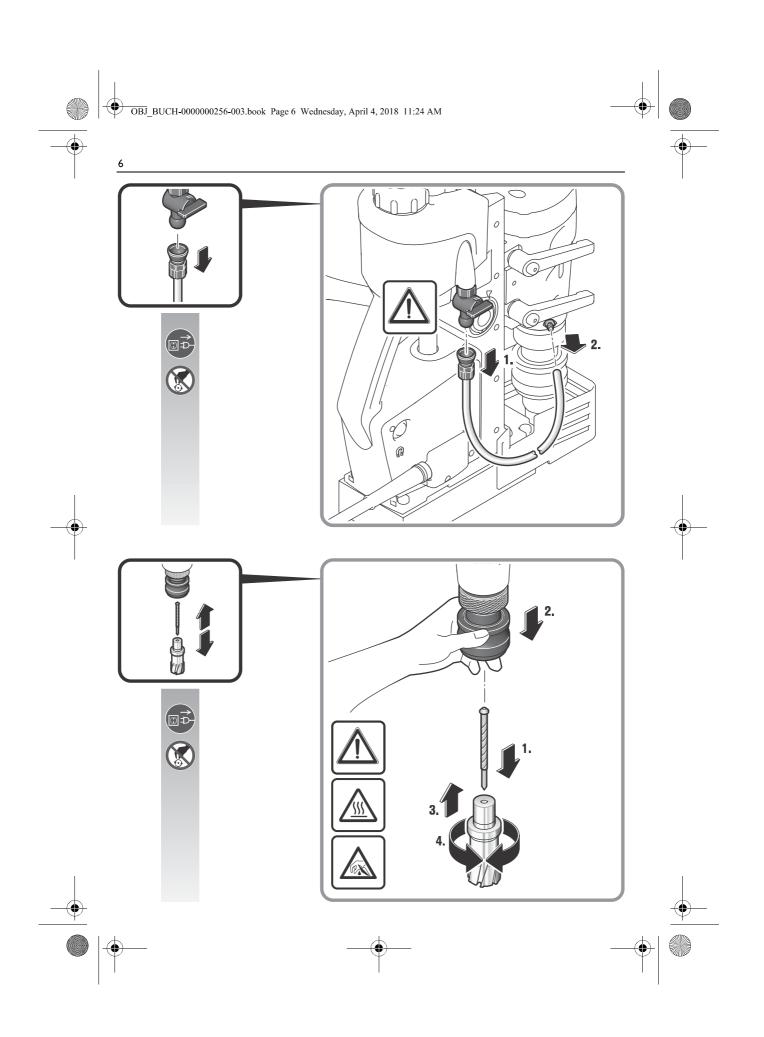


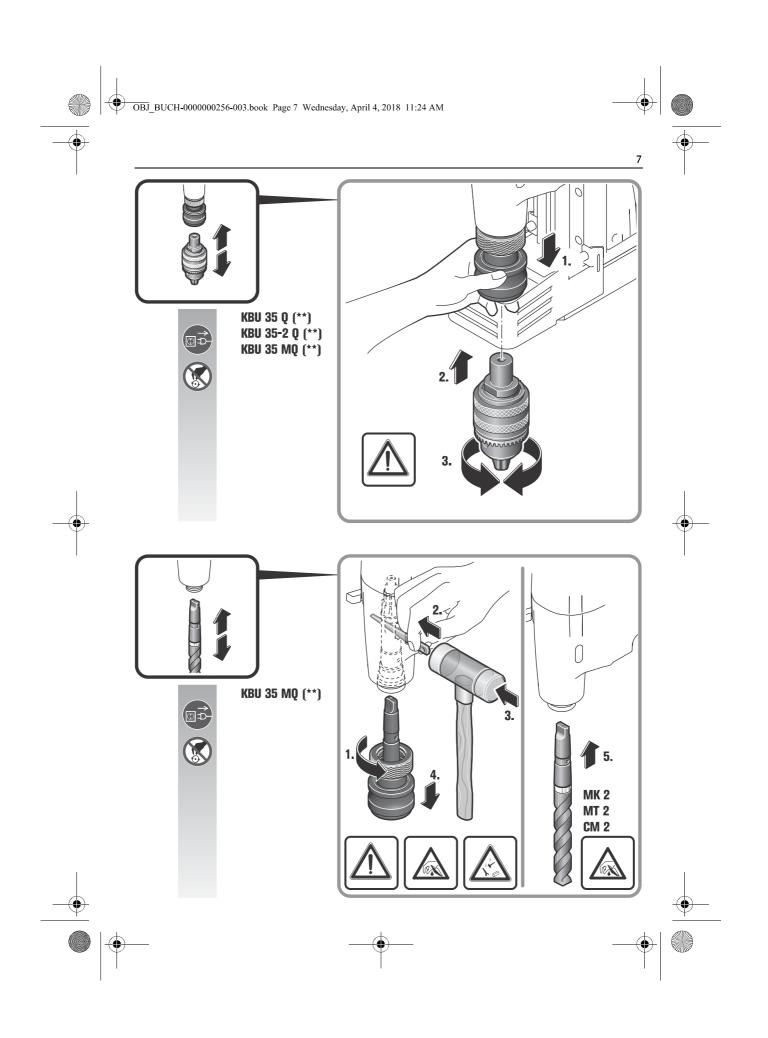


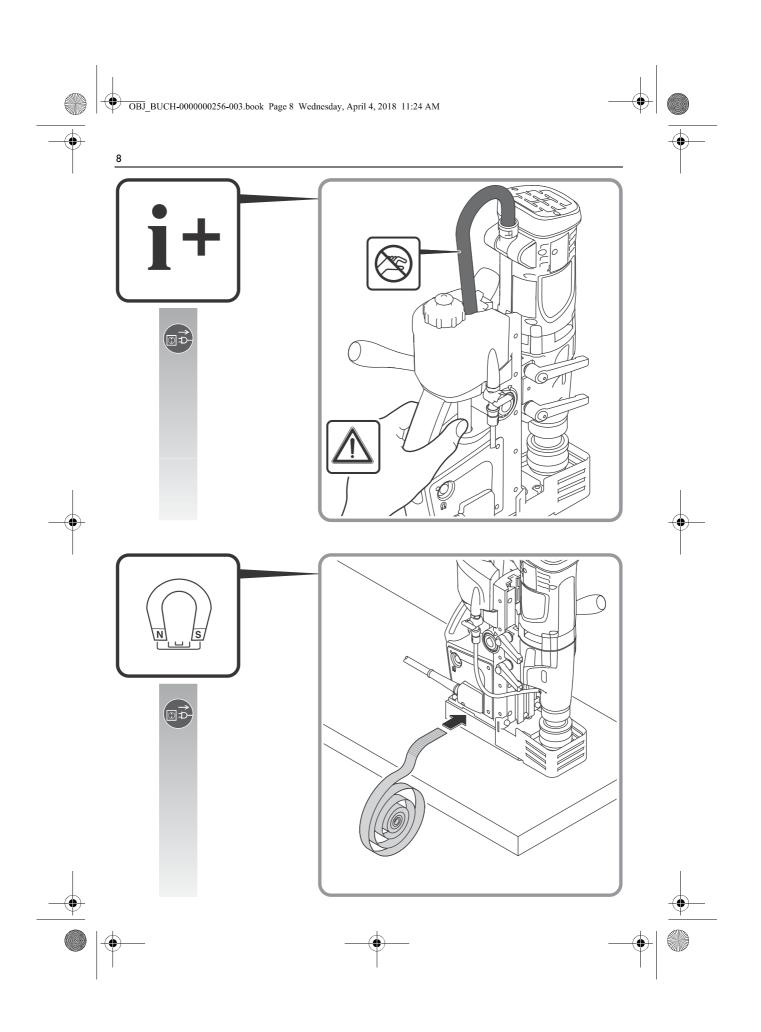


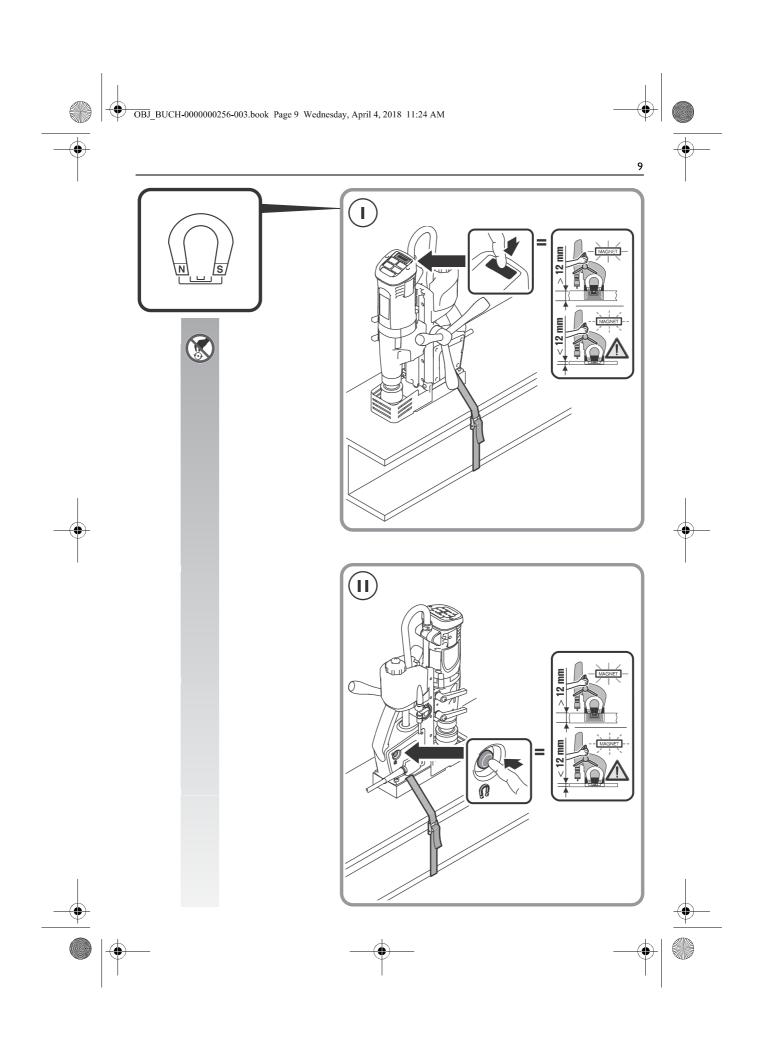


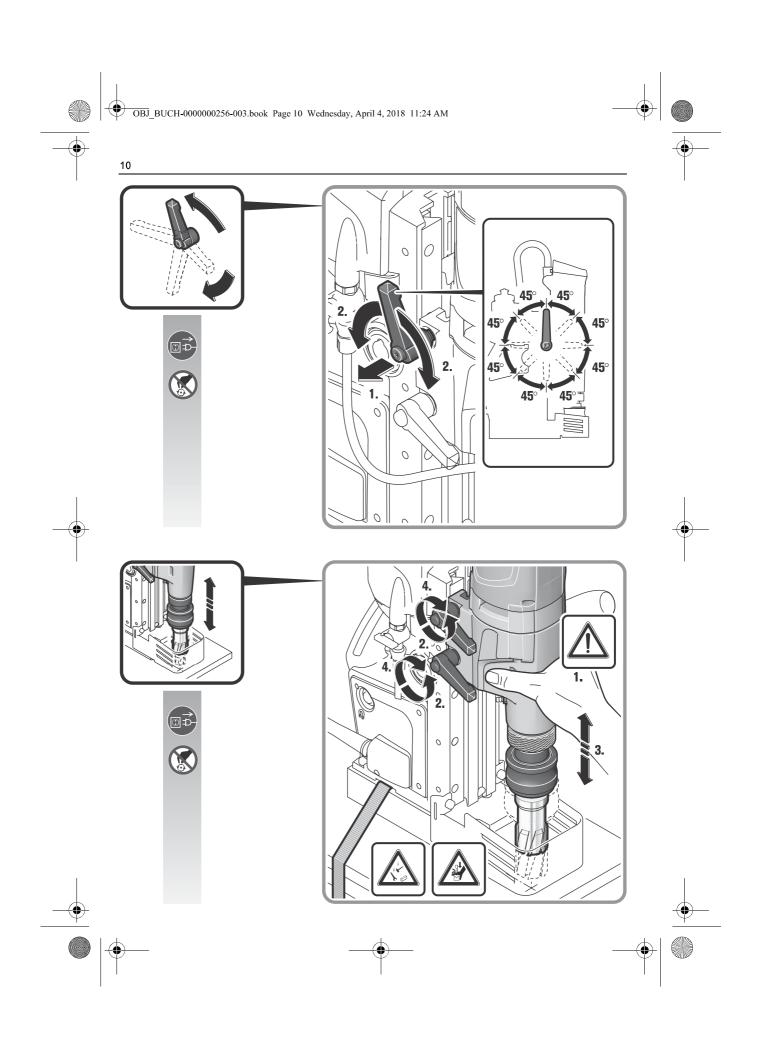


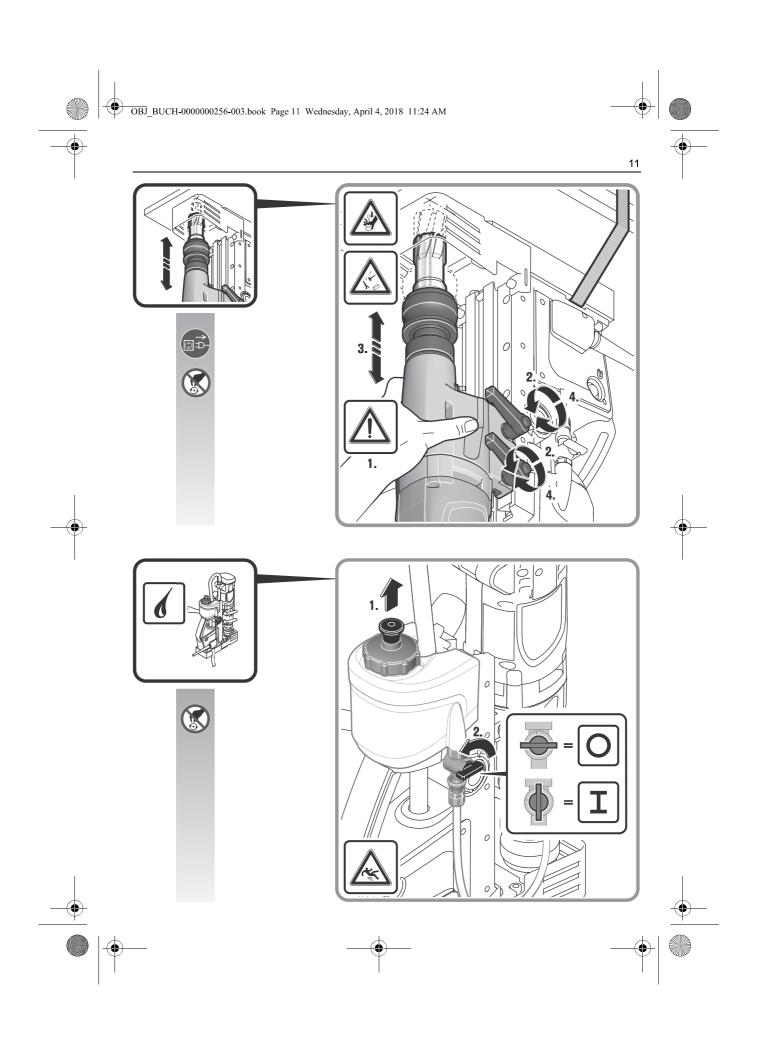


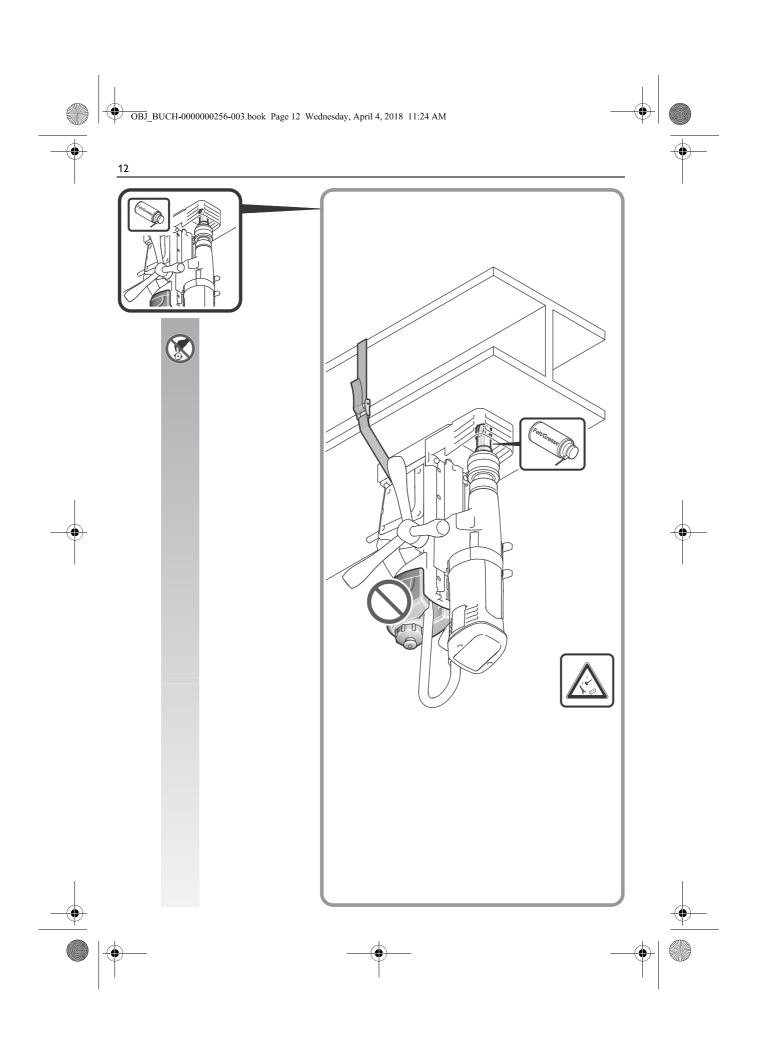








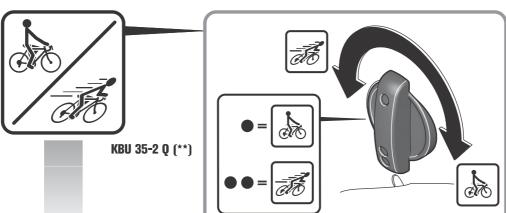








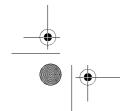




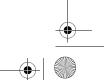


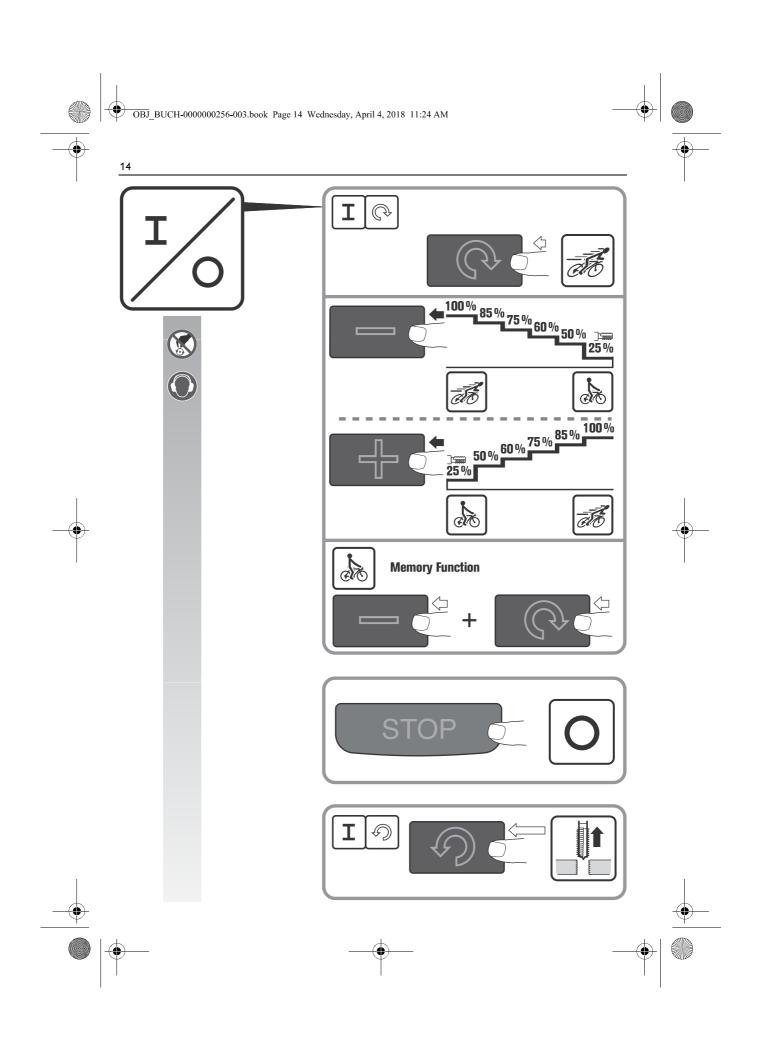
		HSS, HM 1 Ø 1 Fe 400	HSS	] ø
KBU 35 Q (**) KBU 35-2 Q (**)	•	12 – 35 mm	6 – 16 mm	M 5 – M 14
KBU 35 MQ (**)	•	12 – 35 mm	10 – 18 mm	M 5 – M 14
KBU 35-2 Q (**)	••	-	1,5 – 9 mm	-

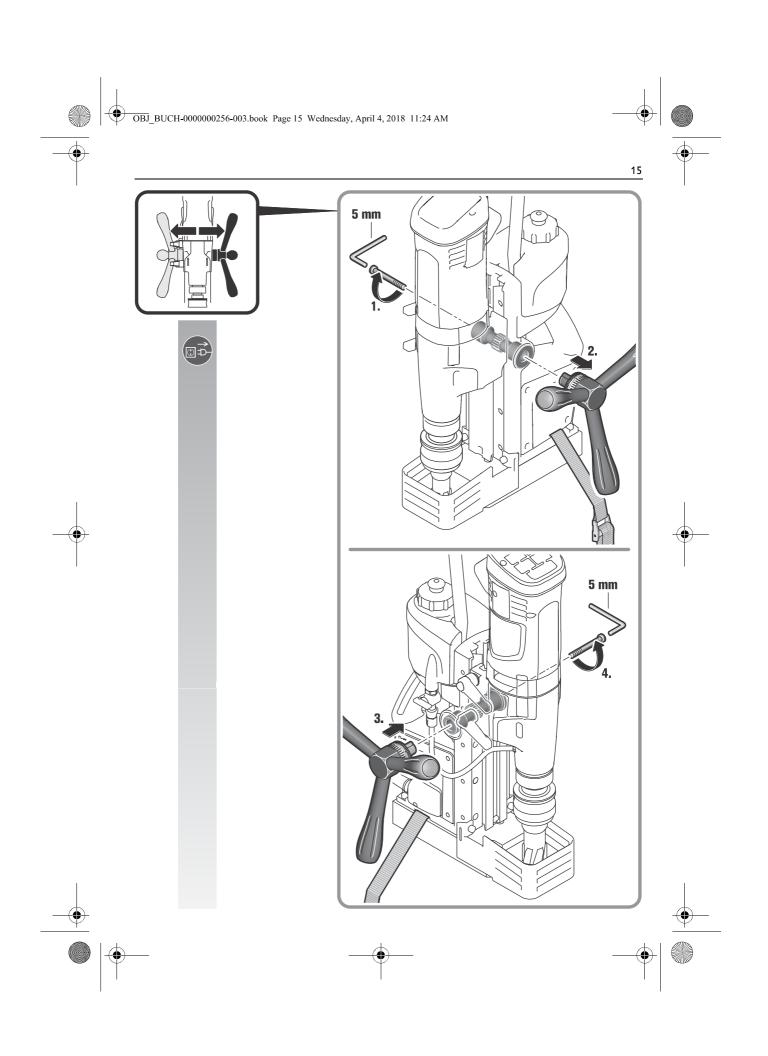
		zalle ø	ø Ø
KBU 35 Q (**)	•	≤ <b>16 mm</b>	
KBU 35 MQ (**)	•	≤ 18 mm	≤ <b>31 mm</b>
KBU 35-2 Q (**)	•	≤ <b>16 mm</b>	

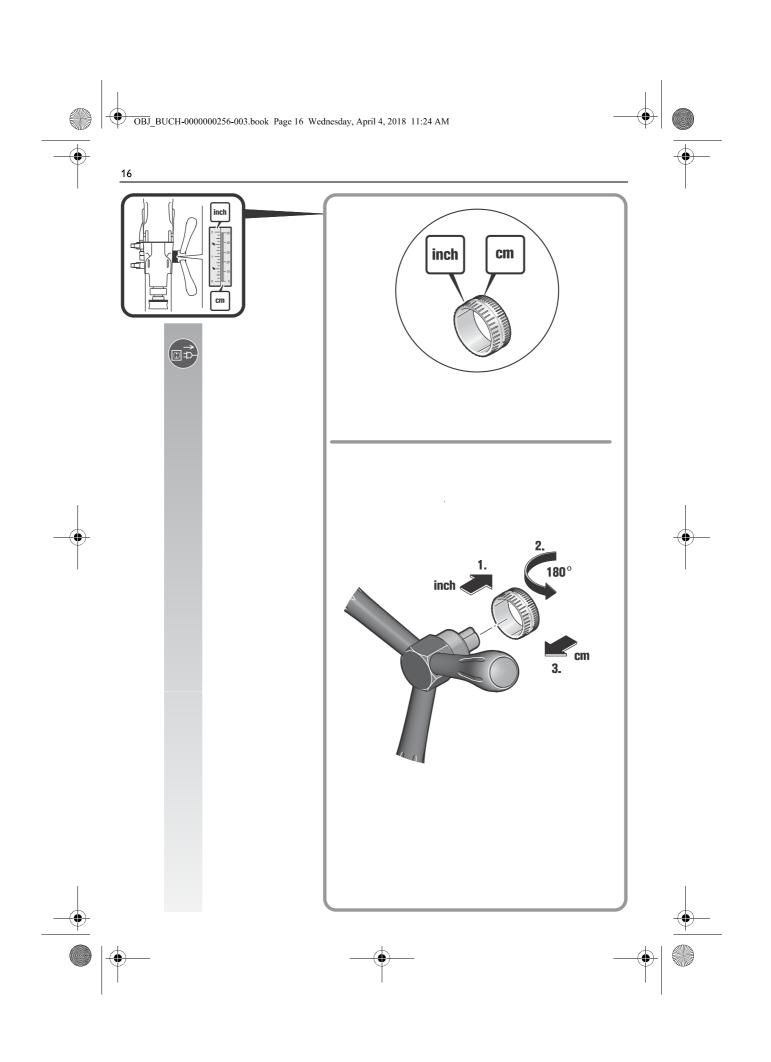


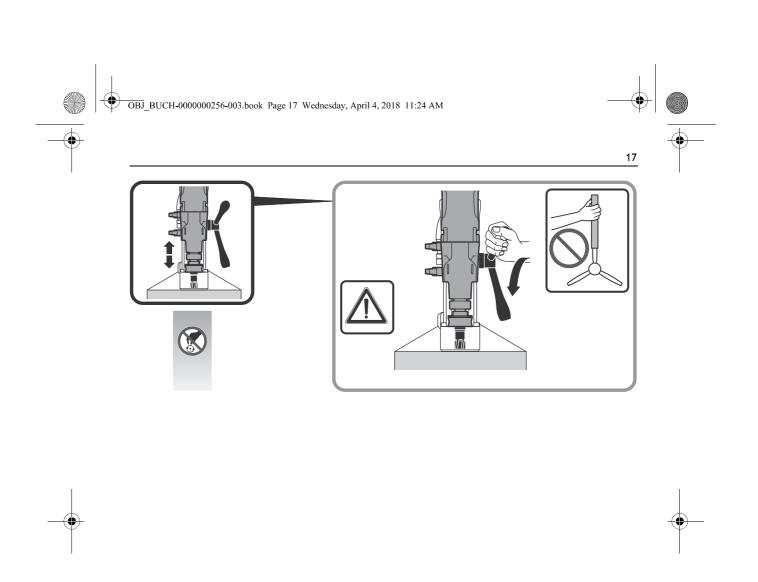


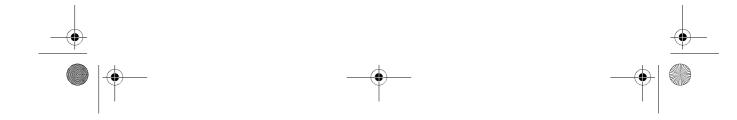


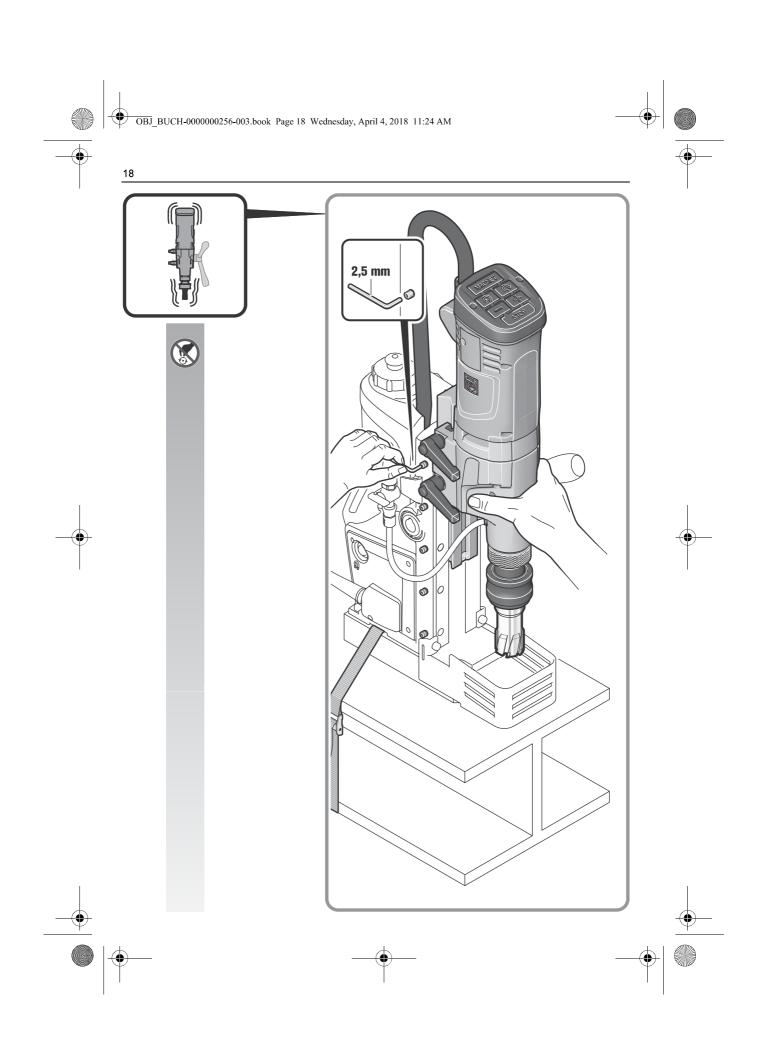


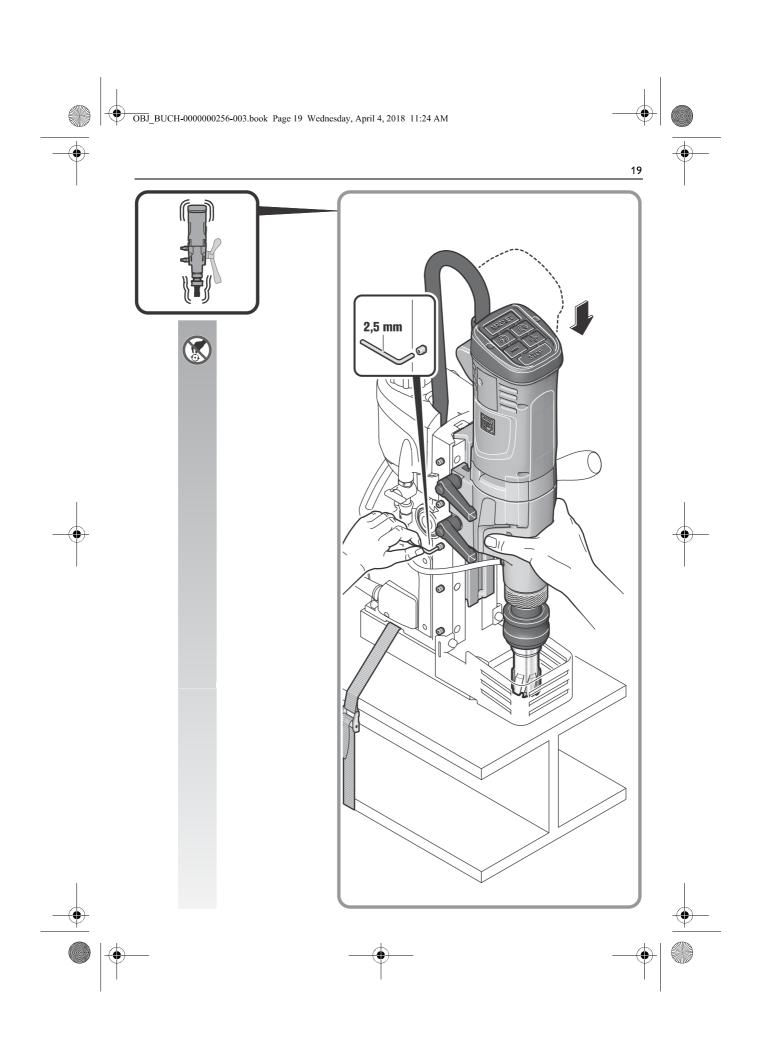


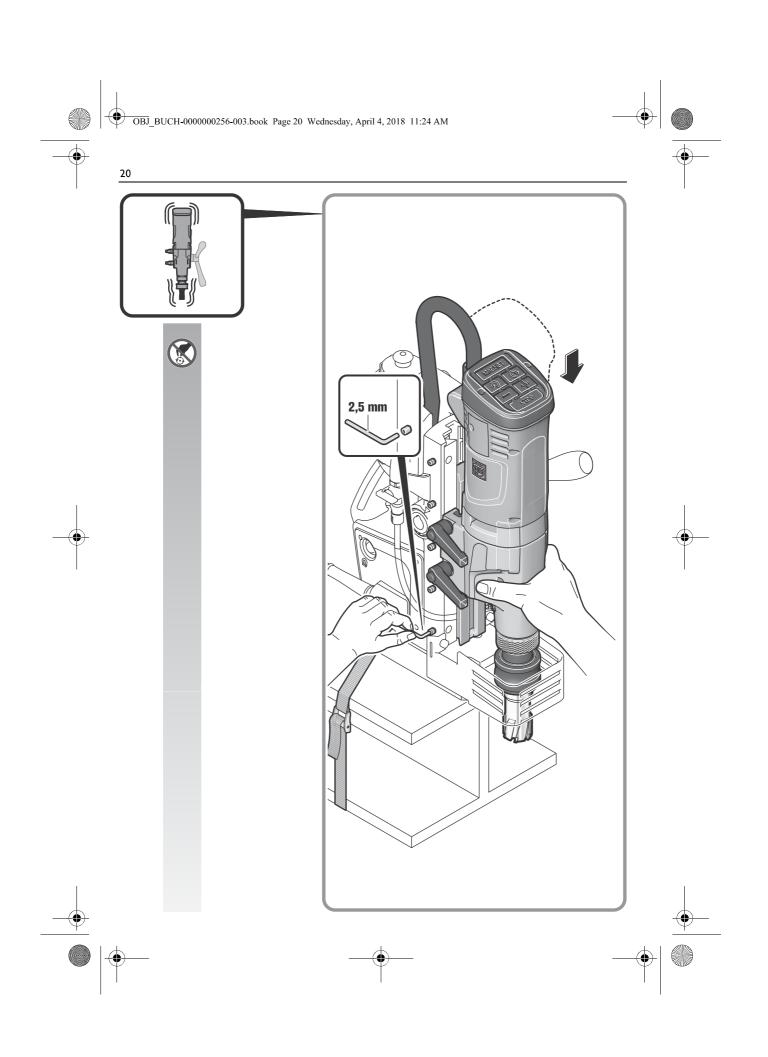


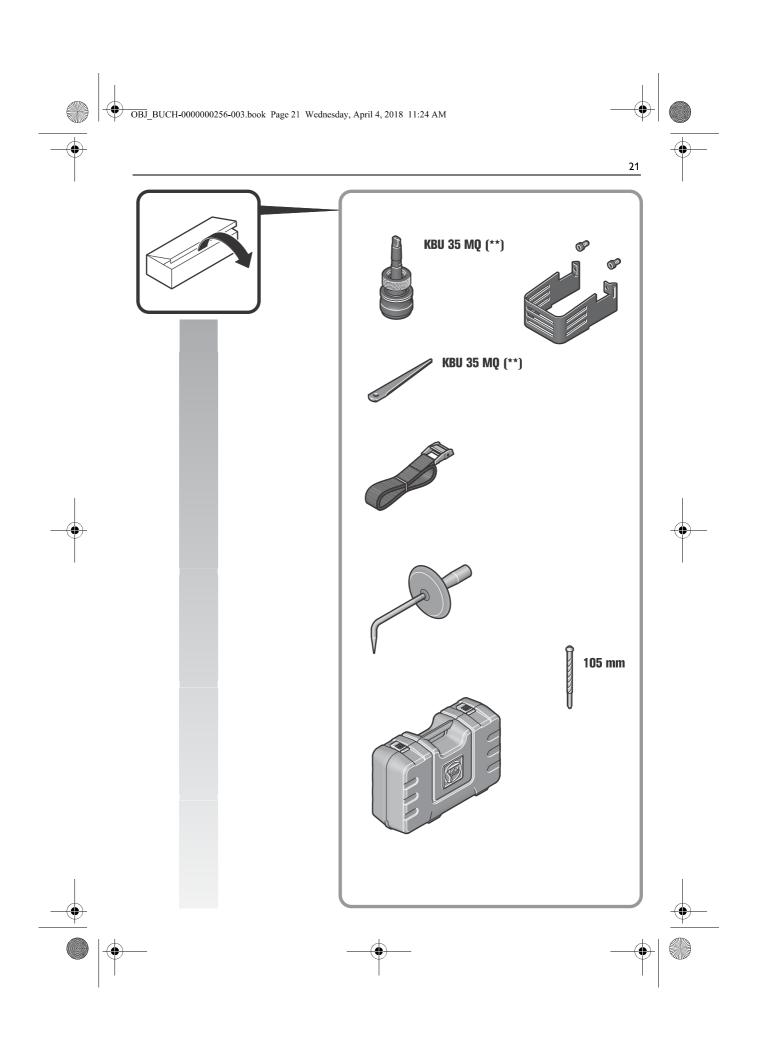






















Symbol, character Explanation	
	Magnetic holding power, sufficient
	Magnetic holding power, insufficient
I	Starts the drill motor. Rotation direction: clockwise
0	Stops the motor
	Starts the drill motor. Rotation direction: dockwise
	Starts the drill motor in inch mode. Rotation direction: anticlockwise
	Speed reduction in steps
<b>+</b>	Speed increase in steps
STOP	Stops the motor
MAGNET	Switches the magnet On/Off
(**)	may contain numbers and letters
( *) 110 V version for Great Britain	

Character	Unit of measure- ment, international	Unit of measure- ment, national	Explanation
$P_1$	W	W	Power input
$P_2$	W	W	Output
n <sub>OR</sub>	/min, min <sup>-1</sup> , rpm, r/min	rpm	No-load speed (clockwise)
n <sub>OL</sub>	/min, min <sup>-1</sup> , rpm, r/min	rpm	No-load speed (anticlockwise)
in	inch	inch	Size
U	٧	٧	Rated voltage
f	Hz	Hz	Frequency
M	mm	mm	Size of metric thread
Ø	mm	mm	Diameter of a round part
HM 1 7 7 Fe 400	mm	mm	Max. capacity in steel with up to 400 N/mm <sup>2</sup> – TCT (core drill bit)
HSS 1 Ø	mm	mm	Max. capacity in steel with up to 400 N/mm <sup>2</sup> – high speed steel (core drill bit)
HSS	mm	mm	Max. capacity in steel with up to 400 N/mm <sup>2</sup> – high speed steel (twist drill bit)
<b>(1)</b>	mm	mm	Max. drill chuck capacity
zitz Ø	mm	mm	Reamer diameter
Ø	mm	mm	Counterboring diameter
i	kg	kg	Weight according to EPTA-Procedure 01
$T_a$	°C	°C	Allowable ambient temperature
$L_{pA}$	dB	dB	Sound pressure level
Ĺ	dB	dB	Sound power level













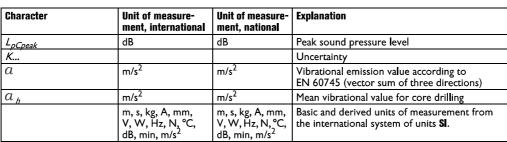












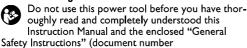
## For your safety.

**⚠** WARNING

Read all safety warnings and all instructions. Failure to follow the

warnings and instructions may result in electric shock, fire and/or serious injury

Save all warnings and instructions for future reference.



3 41 30 054 06 1). The documents mentioned should be kept for later use and enclosed with the power tool, should it be passed on or sold.

Please also observe the relevant national industrial safety regulations.

## Intended use of the power tool:

Magnetic core drill unit for drilling with core drill bits and solid drill bits, reaming, countersinking and tapping on materials with surfaces suitable for magnets in weatherprotected environments using the application tools and accessories recommended by FEIN.

This power tool is also suitable for use with AC generators with sufficient power output that correspond to the Standard ISO 8528, design type G2. This Standard is particularly not complied with when the so-called distortion factor exceeds 10 %. When in doubt, please refer to the generator instruction/specification guide.

These appliances are not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety

Children should be supervised to ensure that they do not play with the appliance.

# Special safety instructions.

Wear personal protective equipment. Depending on the application, use a face shield, safety goggles or safety glasses. Wear ear protection. The safety glasses must be capable of protecting against flying particles generated by the various different operations. Prolonged exposure to high intensity noise may cause loss of hearing.

Do not touch the sharp edges of the core drill bit. Danger

Replace the protective cable bushing immediately when damaged. A defective protective cable bushing can lead to overheating of the machine and to an emergency stop. Before putting into operation: Mount the contact protector to the machine.

Always secure the power tool with with the supplied lashing strap. In case of a power failure or when the mains plug is pulled, the magnetic holding power is not maintained. When carrying out such work, beware of falling objects, such as cores or chips.

When working overhead or on vertical surfaces, the coolant container must not be used. Use a coolant spray instead. Liquids penetrating your electric power tool may cause electric shock.

Avoid touching the drilled core that is automatically ejected by the centering pin when the working procedure is finished. Contact with the core when it is hot, or if it falls, can cause personal injuries.

Operate the power tool only from grounded sockets that comply with the specifications. Do not use any connection cables that are damaged; use extension cables with a grounding contact that are checked at regular intervals. A ground conductor without continuity can cause an electric shock.

To prevent injuries, always keep your hands, clothing, etc. away from rotating swarf. The swarf can cause injuries. Always use the chip guard.

Do not attempt to remove the cutting tool if it still turns. This can lead to serious injuries.

Hold power tool by the insulated gripping surfaces, when performing an operation where the cutting accessory may contact hidden wiring or its own cord. Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock.

Beware of any concealed electric cables, gas or water conduits. Check the working area before commencing work, e. g. with a metal detector.

Do not work materials containing magnesium. Danger of

Do not work CFP (carbon-fiber-reinforced polymer) and materials containing asbestos. These materials are considered carcinogenic.

Do not rivet or screw any name-plates or signs onto the power tool. If the insulation is damaged, protection against an electric shock will be ineffective. Adhesive labels are recommended.























Do not overload the power tool or the storage case and do not use it as a ladder or stand. Overloading or standing on the power tool or the storage case can lead to the upward shifting of the centre of gravity of the power tool or the storage case, and its tipping over.

Do not use accessories which are not specifically designed and recommended by the power tool manufacturer. Safe operation is not ensured merely because an accessory fits your power tool.

Clean the ventilation openings on the power tool at regular intervals using non-metal tools. The blower of the motor draws dust into the housing. An excessive accumulation of metallic dust can cause an electrical hazard.

Before putting into operation, check the mains connection and the mains plug for damage.

Recommendation: The tool should always be supplied with power via a residual current device (RCD) with a rated current of 30 mA or less.

#### Hand/arm vibrations

The vibration emission level given in this information sheet has been measured in accordance with a standardised test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.

The declared vibration emission level represents the main applications of the tool. However, if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period.

An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns.

# Operating Instructions.

Only use water-soluble cutting fluids (oil in water) as the cooling agent.

Observe the manufacturer's instructions on coolant. Pay attention that the set-up surface for the magnetic foot is flat, clean, rust-free and ice-free. Remove varnish, putty/filler layers and other materials. Prevent an air gap between the magnetic foot and the set-up surface. The air gap reduces the magnetic holding power.

When working, always use the magnetic foot; pay attention that the magnetic holding power is sufficient:

- When the green button on the control panel lights up permanently, the magnetic holding power is sufficient and the machine can be operated with manual or automatic feed.
- When the Magnet button on the control panel flashes, the magnetic holding power possibly is insufficient and the machine must be operated with reduced feed.

When working non-magnetic materials, suitable FEIN fastening devices, such as vacuum plates or pipe drilling devices, which are available as accessories, must be used. Observe the corresponding operating instructions for these.

When working on steel materials with a material thickness of less than 12 mm, the workpiece must be reinforced with an additional steel plate in order to guarantee the magnetic holding power.

The magnetic foot is monitored by means of a power sensor. If the magnetic foot is defective, the motor will not start.

In case of overload, the motor automatically stops and must be restarted again.

Work only with the absolutely required amount of feed. Excessive feed can lead to breakage of the application tool and loss of the magnetic holding power.

When the power supply is disconnected while the motor is running, a protective circuit prevents automatic restarting of the motor. Restart the motor again.

Adjust the gear setting only when the machine is at a complete stop or when the motor is running down.

The last set speed is automatically stored (memory function). To start the power tool with the last set speed, press and hold the button with the symbol, and then press the button with the symbol.

Do not stop the drill motor during the drilling procedure. Only remove the core bit from the drilled hole while the motor is running.

If the core bit should remain stuck in the material, stop the drill motor and carefully turn the core bit out counter-clockwise.

Remove the chips and the drilled core after each drilling process.



Do not touch the chips with your bare hand. Always use a chip hook.



Danger of burning! The surface of the magnet can reach high temperatures. Do not touch the magnet with your bare hands.

When changing a drill bit, pay attention not to damage the cutting edges.

When core drilling layered material, remove the core and the chippings after drilling each layer.

Do not use the magnetic core drill unit when the coolinglubricant system is defective. Each time before operating, check for tightness against leaks and for cracks in the hoses. Prevent liquids from entering or penetrating electrical components.



















Error message/ Response of Magnet Button	Meaning	Corrective Action
Indicator lights up green	Magnetic holding power is sufficient.	
Indicator flashes green	Magnetic holding power possibly insufficient.	Even when working on steel materials where the material thickness is below 12 mm, the work piece must be made thicker with an additional steel plate in order to ensure the magnetic holding power.
Indicator lights up red for 1 second	<ul> <li>Motion sensor has actuated</li> <li>Overload shut-off has actuated</li> <li>Incorrect mains voltage</li> </ul>	After malfunction correction, the power tool can be switched on again.
Indicator flashes red 3 x	No speed signal	If the error occurs frequently, send the machine to your FEIN customer service agent.
Indicator lights up red continuously	<ul> <li>Incorrect mains voltage/mains frequency</li> <li>Drill stand is overheated</li> <li>Button is blocked when switching on</li> </ul>	After malfunction correction, the power tool can be switched on again.  If the error occurs frequently, send the machine to your FEIN customer service agent.
Indicator flashes red continuously	Power tool is defective.	Send the machine to your FEIN customer service agent.

# Repair and customer service.





When working metal under extreme operating conditions, it is possible for conductive dust to settle in the interior of the power tool.

The total insulation of the power tool can be impaired. Blow out the interior of the power tool via the ventilation slots frequently with dry and oil-free compressed air, and connect a residual current device (RCD) on the line

Renew stickers and warning indications on the power tool when aged and worn.

After several hours of operation, the play in the dove-tail guide can increase. As a consequence, the drill motor can glide alongside the dove-tail guide by itself. In this case, retighten all set screws of the dove-tail guide correspondingly so that the drilling motor can easily be moved manually, yet does not glide by itself (see page 18).

If the supply cord of this power tool is damaged, it must be replaced by a specially prepared cord available through the FEIN customer service centre.

TThe current spares parts list for this power tool can be found on our website at www.fein.com.

Use only original spare parts.

If required, you can change the following parts yourself: Application tools, cooling-lubricant tank

# Warranty and liability.

The warranty for the product is valid in accordance with the legal regulations in the country where it is marketed. In addition, FEIN also provides a guarantee in accordance with the FEIN manufacturer's warranty declaration.

The delivery scope of your power tool may include only a part of the accessories described or shown in this Instruction Manual.

## **Declaration of conformity.**

FEIN declares itself solely responsible for this product conforming with the relevant provisions given on the last page of this Instruction Manual.

Technical documents at: C. & E. Fein GmbH, C-D1\_IA, D-73529 Schwäbisch Gmünd

### **Environmental protection, disposal.**

Packaging, worn out power tools and accessories should be sorted for environmental-friendly recycling.

