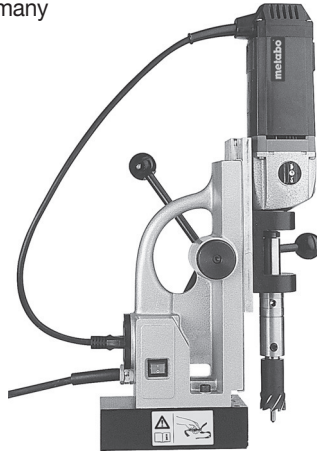


metabo®


Made in Germany

MAG 832

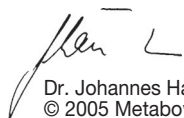


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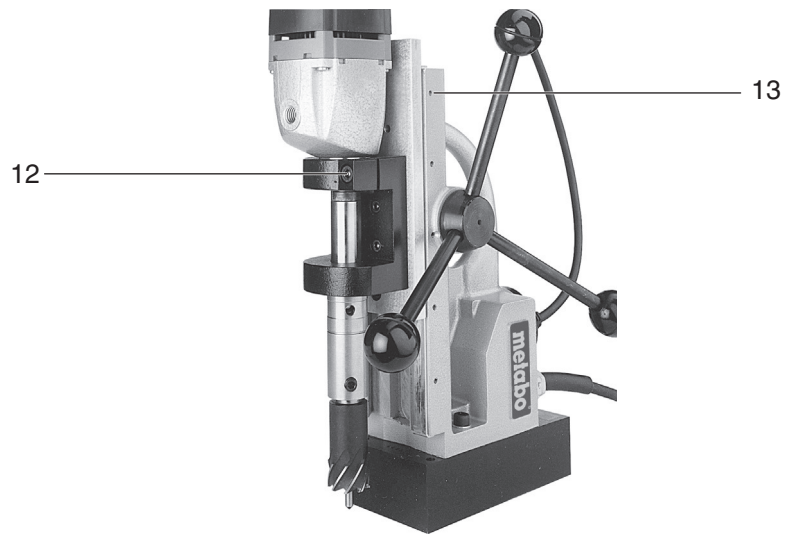
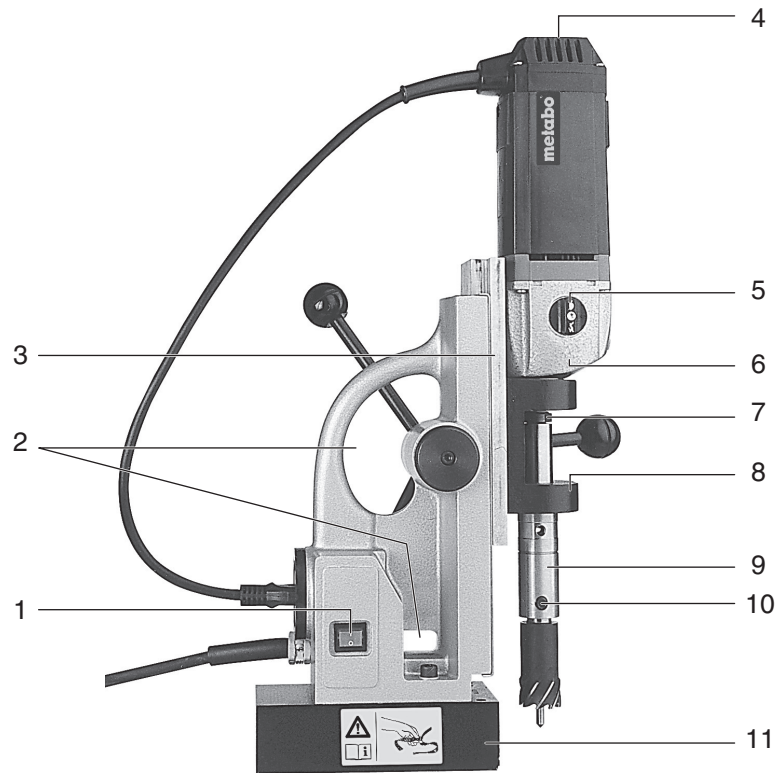
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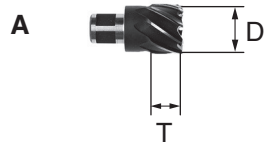
		MAG 832
M	Nm	50 / 19
D_{max}	mm	32
H_{max}	mm	130
P₁	W	50
F_{max}	N	8000
A	mm	90 x 170
P₁	W	800
P₂	W	450
n₀	/min	530 / 1400
n₁	/min	320 / 850
G	-	5/8"-16 UN
H_u	mm	405
H_o	mm	525
D_i	mm	19
m	kg	14,0
L_{pA}	dB(A)	88
L_{WA}	dB(A)	101

CE EN 61029,
73/23/EWG, 98/37EG, 89/336/EWG



Dr. Johannes Haupt, Geschäftsführung
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T	D	Nr.	T	D	Nr.
25 mm	14 mm	6.30025	50 mm	14 mm	6.30075
25 mm	15 mm	6.30026	50 mm	15 mm	6.30076
25 mm	16 mm	6.30027	50 mm	16 mm	6.30077
25 mm	17 mm	6.30028	50 mm	17 mm	6.30078
25 mm	18 mm	6.30029	50 mm	18 mm	6.30079
25 mm	19 mm	6.30030	50 mm	19 mm	6.30080
25 mm	20 mm	6.30031	50 mm	20 mm	6.30081
25 mm	21 mm	6.30032	50 mm	21 mm	6.30082
25 mm	22 mm	6.30033	50 mm	22 mm	6.30083
25 mm	23 mm	6.30034	50 mm	23 mm	6.30084
25 mm	24 mm	6.30035	50 mm	24 mm	6.30085
25 mm	25 mm	6.30036	50 mm	25 mm	6.30086
25 mm	26 mm	6.30037	50 mm	26 mm	6.30087
25 mm	27 mm	6.30038	50 mm	27 mm	6.30088
25 mm	28 mm	6.30039	50 mm	28 mm	6.30089
25 mm	29 mm	6.30040	50 mm	29 mm	6.30090
25 mm	30 mm	6.30041	50 mm	30 mm	6.30091
25 mm	31 mm	6.30042	50 mm	31 mm	6.30092
25 mm	32 mm	6.30043	50 mm	32 mm	6.30093

B 6.30054

C 6.30055

D  6.30051

Operating Instructions

Dear Customer,
Thank you for the trust you have placed in us by buying a Metabo power tool. Each Metabo power tool is carefully tested and subject to strict quality controls by Metabo's quality assurance. Nevertheless, the service life of a power tool depends to a great extent on you. Please observe the information contained in these instructions and the enclosed documentation. The more carefully you treat your Metabo power tool, the longer it will provide dependable service.

Contents

- 1 Declaration of Conformity
- 2 Specified Conditions of Use
- 3 General Safety Instructions
- 4 Special Safety Instructions
- 5 Overview
- 6 Special Product Features
- 7 Initial Operation
 - 7.1 Power-supply connection
 - 7.2 Backlash of the slide plate
- 8 Use
 - 8.1 Motor speed
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 - 8.3 Switch-on sequence
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 - 8.5 Cutting holes
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- 9 Maintenance
- 10 Accessories
- 11 Repairs
- 12 Environmental Protection
- 13 Technical Specifications

1 Conformity Declaration

We, being solely responsible, hereby declare that this product conforms to the standards and directives specified on page 2.

2 Specified Use

The MAG 832 is intended for cutting holes with suitable annular bits and drilling metal with twist drill bits.

The user bears sole responsibility for damage caused by improper use.

Generally accepted accident prevention regulations and the enclosed safety information must be observed.

3 General Safety Instructions



Before using this power tool, completely read and familiarise yourself with the enclosed safety information (red booklet) and the instructions for use. Keep all enclosed documentation for future reference, and pass on your power tool only together with this documentation.

4 Special Safety Instructions



For your own protection and for the protection of your power tool pay attention to all parts of the text that are marked with this symbol!

Pull the plug out of the plug socket before any adjustments, conversions or servicing are performed.

Wear ear protectors. Exposure to noise can cause loss of hearing.

Always wear protective goggles, gloves, and suitable shoes when working.

The hole-cutting and drilling unit must not be exposed to rain or used in wet, damp or potentially explosive areas.

Caution! If (after use) the hole-cutting and drilling unit is placed on a material with low heat-abstracting characteristics for a long period (e.g. plastic), do not switch the magnet of the magnetic stand on because this could lead to destruction of the magnetic coil.



When cutting holes and drilling on angled and vertical surfaces, or working overhead, the hole-cutting and drilling unit must be secured with the supplied clamping band so that it cannot fall down in the event of a power failure.

5 Overview

See page 3 (please unfold).

- 1 Switch (magnetic band)
- 2 Fixture points for the clamping band
- 3 Slide plate

- 4 Switch (motor)
- 5 Switch button
- 6 Arrow mark
- 7 Spanner flat of motor spindle
- 8 Machine holder
- 9 Bit holder
- 10 Headless pin (bit holder)
- 11 Magnet block
- 12 Allen screw
- 13 Headless pin (slide plate)

6 Special Product Features

- Magnet block with high adhesive force for safe work
- In conjunction with the supplied clamping band, also suitable for working on vertical and angled surfaces and overhead
- Produces exact and neat tapped holes. Motor and slide plate form a unit
- Effortless work. An annular groove is formed when cutting holes. This means that less material has to be removed and the required feeding force is kept to a minimum. The cut-out core is ejected by the pilot pin in the annular bit.
- Two speeds. High speed for hole cutting with annular bits with diameters up to approx. 16 mm and for drilling with drill bits with diameters of up to approx. 13 mm; low speed for hole cutting with annular bits with diameters of up to 32 mm.
- Holder for drill chuck (accessories) for working with twist drill bits

7 Commissioning



Prior to initial operation, check to see that the rated mains voltage and mains frequency, as stated on the rating label on the magnetic stand and motor, match your power supply.

Check the unit for possible damage: Before using the unit, protective devices or slightly damaged components must be carefully checked for perfect and specified operation. Check that moving parts are in perfect working order and do not jam and check whether parts are damaged. All parts must be correctly installed and fulfil all conditions necessary to ensure perfect operation of the unit. Damaged protective devices and parts must be repaired or replaced according to specifications by an authorised specialist workshop.

7.1 Power-supply connection

The motor of the hole-cutting and drilling unit is double-insulated (protection class II). The motor housing must not be drilled (e.g. to affix designa-

tion plates) because this could cancel the effectiveness of the double-insulation.

The magnet stand is protection class I equipment and the hole-cutting and drilling unit must only be connected to sockets that have an earth contact connected in accordance with regulations.

If an extension cord is needed, it must be a three-core lead with a protective (earth) contactor that is properly connected to both the plug and the coupler of the cord.

7.2 Backlash of the slide plate

The backlash of the slide plate (3) can be adjusted by means of the five headless pins (13).

The backlash should be adjusted so that while the slide plate (with motor installed) can still be moved freely up and down, it will remain in any position without the weight of the motor pulling it down.

8 Use

8.1 Motor speed

The motor of the hole-cutting and drilling unit has a two-stage gear unit.

When the >hare< symbol on the switch button (5) is opposite the arrow mark (6) on the gear housing, the higher speed gear is set. >Tortoise< symbol = lower speed.

Changing from one speed to another is best effected by switching the motor on briefly and moving the gear selection knob (5) as the motor slows to a stop.

8.2 Safety clamping band and ratchet



When cutting holes and drilling on angled and vertical surfaces, or working overhead, the hole-cutting and drilling unit must be secured with the supplied clamping band so that it cannot fall down in the event of a power failure.

The clamping band must be fitted to one of the two fixture points of the magnetic drilling stand. (2) Furthermore the clamping band must be secured to an additional suitable attachment point or to the material that is to be worked on. Ensure that the clamping band is kept taut. The clamping band does not replace the magnetic force of the drilling stand, it only serves to secure against the stand falling off in the event of voltage supply failure.

The clamping band must be fitted so that if the voltage supply should fail, the unit moves away from the operator.

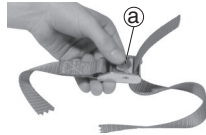


Caution ! Check the clamping band for damage.

ENG ENGLISH

Always carry out a thorough check before use to ensure that the clamping band is functioning fully as specified. If the clamping band is damaged or the ratchet is not working perfectly, replace the clamping band immediately.

Instructions for use of clamping band:



Press lever (a) down and insert the free end of the clamping band into the ratchet from below, as illustrated.

Release lever.

To tension, pull the free end of the band in the direction indicated by the arrow. Check that the clamping band connection is firmly seated.

8.3 Switch-on sequence



The magnet in the magnetic stand must always be switched on first (switch (1)) and only then the motor (switch (4)).

If the motor is switched on first it will not start, even if the magnet is switched on later.

When the magnet is switched on, the indicator lamp built into the switch (1) lights up.

If the magnet is switched off, the motor comes to a stop. The motor can only be switched on again after it too has been switched off and the magnet has been switched on again.

8.4 Placing the unit on the material

To permit the magnetic stand to adhere properly to material that is to be cut or drilled, the surface must be clean and smooth. Loose rust, dirt or grease must be removed before mounting the magnetic stand; any welding beads or surface irregularities must be smoothed. Thin coats of paint will not impair adhesion. Clean the magnet block as well (11) if necessary.

After switching the magnet on, hold the handle of the magnetic stand and shake it firmly to ensure that the unit is adhering properly. If it is not, then check the condition of the surface of the material and that of the bottom of the magnet block. Clean as necessary and try again.

Use on thin steel

The unit adheres best to low-carbon steel that is at least 12 mm thick.

For drilling or cutting a hole into thin steel, a steel plate measuring at least 100 x 200 x 12 mm can be secured under the material at the place where the magnetic stand is to be positioned.

Use on non-ferrous metal

To cut or drill a hole in non-ferrous metal, the steel plate should be secured on the surface of the material and the unit then placed on the steel plate.

Round or cambered surfaces

If it is required to cut a hole or drill into a round or cambered surface, then the magnet block (11) should be positioned with its longitudinal axis parallel to the axis of the camber.

The open space between the magnet block and the camber should be packed with steel wedges or rods on both sides along the entire length of the magnet block so that after switching on the magnet as many as possible magnetic lines of force are conducted from the magnet pole through the wedges (or rods) and the material to the magnet block housing.

Ensure that there is a similar thickness of packing on both sides of the magnet block so that the axis of the annular bit will point directly towards the centre of curvature; otherwise it could be diverted to one side.

By shaking the handle of the magnet stand, make sure that the unit adheres properly to the material.

8.5 Cutting holes

Motor speed

The higher-speed gear (>hare<) may be engaged for cutting holes of up to approx. 16 mm in diameter.

The slow speed (>tortoise<) should be selected for cutting holes beyond that diameter.

Fitting an annular bit

A summary of the Metabo annular bits available for the hole-cutting and drilling unit is provided in the chapter Accessories.

Fit the pilot pin (of the appropriate length) to the annular bit required for the cutting operation, pull the motor plug out of the magnetic stand socket and insert the annular bit into the bit holder (9) so that one of the flats on the cylindrical part of the annular bit is at the position of the headless pin (10) (with internal hexagon). Tighten move the annular bit - against the pressure of the integral spring - upwards as far as it will go and tighten the headless pin (10) (with the 5-mm hexagon spanner).

Cutting operation

Centre-punch the position where the hole is to be cut.

Align the hole-cutting and drilling unit so that the pilot pin fitted in the annular bit is over the marking.

Switch on the magnet of the magnetic stand and then the motor.

Start the cutting operation with minimum feeding force. When the teeth of the bit have started to cut, higher feeding force can be applied. Excessive initial pressure will tend to blunt the teeth of the annular bit.

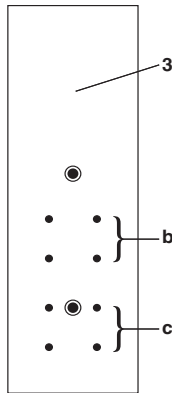
Ensure that the chip flow is regular

and keep the cutting edges of the bit cool by applying ample coolant.

Use a wire hook to remove the chips.

The cut-out core is ejected by the pilot pin in the annular bit.

8.6 Drilling



When the hole-cutting and drilling unit leaves the factory, the motor holder (8) is fitted to the slide plate (3) as shown in the photos on page 3. (The motor holder (8) is screwed on at the tapped holes (c) of the slide plate (3)).

For drilling with chuck and drill bits over 10 mm, the holder can be screwed on to the slide plate at the tapped holes (b).

To do this proceed as follows

- Release the Allen key (12) and withdraw the motor upwards,
- unscrew the four fixing screws of the motor holder (8) and remove the motor holder, then
- screw on the motor holder (8) at the upper four tapped holes (b) of the slide plate (3), making sure that its longitudinal edges are parallel to the longitudinal edges of the slide plate.

Place the motor back in the motor holder.

Removing the bit holder

Pull the plug of the motor from the socket in the magnetic stand.

Pass the crossbar of the chuck key through one of the two holes and the opposite hole in the bit holder (9).

To unscrew the bit holder from the motor spindle, hold the motor spindle by placing a 22-mm open-end spanner on its flats (7). The spindle has a right-hand thread. The bit holder can be loosened, if necessary, by gently tapping the chuck-key crossbar with a hammer.

For drilling, a chuck holder 6.30051 (see chapter Accessories) should be screwed onto the spindle of the motor.

A drill chuck with a 1/2"-20 UNF female thread can then be screwed onto the chuck holder spindle.

Motor speed

The higher-speed gear >hare<) may be engaged for drilling in steel with drill bits with diameters of up to approx. 13 mm.

Removing the chuck holder

To unscrew the chuck holder from the motor spindle, pass the crossbar of the chuck key through the hole in the chuck holder and tap lightly to slacken off.

8.7 No-voltage release

If, with the magnet and the motor switched on, the power supply fails or is interrupted, the motor stops running. The motor will not start automatically when power is restored. It is then necessary to switch the motor off and then on again.

9 Maintenance

Perform regular maintenance work, cleaning and lubrication.

Disconnect the mains plug before starting any setting, maintenance or repair work.

For lubricating the rack and pinion that moves the slide plate up and down, a few drops of oil should be applied occasionally to the rack.

The sliding surface of the slide plate itself should be coated with Molykote grease.

10 Accessories

Use only genuine Metabo accessories. The use of other tools and accessories can result in a risk of injury.

If you need any accessories, check with your dealer.

For dealers to select the correct accessory, they need to know the exact model designation of your power tool.

See page 4.

- A Annular bits, HS (HSS), weld-on shank 19 mm
- B Chuck holder for chuck with female thread 1/2"-20 UNF
- C Pilot pin, short, suitable for cutting depth 25 mm
- D Pilot pin, long, suitable for cutting depth 50 mm

11 Repairs

Repairs to electrical tools must be carried out by qualified electricians ONLY!

Any Metabo power tool in need of repair can be sent to one of the addresses listed in the spare parts list.

Please enclose a description of the fault with the power tool.

12 Environmental Protection

Metabo's packaging can be 100% recycled.

Scrap power tools and accessories contain large amounts of valuable resources and plastics that can be recycled.

These instructions are printed on chlorine-free bleached paper.



Only for EU countries: Never dispose of power tools in your household waste! In accordance with European Guideline 2002/96/EC on used electronic and electric equipment and its implementation in national legal systems, used power tools must be collected separately and handed in for environmentally compatible recycling.

13 Technical Specifications

Explanatory notes on the specifications on page 2.

Changes due to technological progress reserved.

M = Torque
D_{max} = Largest annular bit diameter

Magnetic stand:

H_{max} = Max. stroke
P_{1M} = Power consumption
F_{max} = Max. adhesive force
A = Dimensions of magnetic flux

Motor:

P₁ = Nominal power input
P₂ = Power output
n₀ = Idling speeds
n₁ = Speeds at rated load
G = Spindle thread

Hole-cutting and drilling unit:

H_u = Height (incl. motor) with slide plate in bottom position
H_o = Height (incl. motor) with slide plate in top position
D_i = Inner diameter of bit holder
m = Weight without mains cable

Typical A-effective perceived sound levels:

L_{pA} = Sound pressure level
L_{WA} = Acoustic power level

During operation the noise level can exceed 85 dB(A).



Wear ear protectors!

Measured values determined in conformity with EN 50144.

The technical specifications quoted are subject to tolerances (in compliance with the relevant valid standards).

metabo[®]

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