



### Portable drilling machine KSDV

532

#### Execution



- Portable undercutting drilling machine with vacuum foot
- Industry Standard
- Flushing chuck
- Drilling chuck
- Vacuum foot
- Venturi nozzle
- PRCD (partial)
- Self activated water control Stop rail

### For use in

For drilling and undercutting

### Application

With KEIL diamond facade drill bit

### Accessories

- ▶ Diamond tipped facade drill bit ■32
- Diamond tipped facade drill bit with countersink Diamond tipped facade drill bit for through
- holes 34
- ▶ Roller conveyor drilling table KRT ■47

- ▶ Chuck for portable drilling machines ■64

- ▶ Wooden case for transportation of KSDV, KSHV and KRDV ■65

- ▶ Corrosion inhibitor ■68

### Usage

Speed approx. 10,000 rpm



12345 Volt Hertz PRCD -0-€ € 230 V 50 Hz 105.00 260.00 D 532 500 000 yes ΕU 532 500 001 110 V 50 Hz 105,00 260,00 yes 120 V 60 Hz 105,00 260,00 no USA 532 500 005

### **Product information 532**

### Portable drilling machine KSDV

Portable drilling machine KSDV

- The portable drills are used for industrial and mobile drilling and undercutting of small batches, infill and special size panels.
- This handy machine is placed on the facade panel at any point and is rigidly connected to the panel via the vacuum foot.
- Precise positioning can be carried out via stop rails.
- The portable drill has been developed for water-cooled drilling with the KEIL diamond facade drill bit.
- The simple handling is supported by the low weight of the portable machine and makes its use on site possible.
- Panels of any size or weight are drilled efficiently and undercut precisely with it.



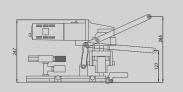
Photo: KEIL





- ▶ Cooling water supply ■62
- ▶ Filter cartridge ■62
- ▶ Water pressure tank ■63
- Cooling lubricant ■63
- ▶ Flushing chuck for KSD/HV ■64
- ▶ Fastener set 1 ■65
- ▶ Whetstone ■66
- ▶ Seal for vacuum foot ■66
- ▶ Ball bearing ■66
- Carbon brush set ■66
- ▶ Cable integrated circuit breaker ■67
- ▶ Water locking ■67
- ▶ Silencer ■67

# Portable drilling machine KRDV



### Execution



- Portable undercutting drilling machine with vacuum foot
- Professional design
- Flushing chuck
- Drilling chuck
- Vacuum foot
- Venturi nozzle
- ▶ PRCD
- Self activated water control
- Stop rail
- For use in
- For drilling and undercutting

### Application

With KEIL diamond facade drill bit

#### Accessories

- ▶ Diamond tipped facade drill bit ■32
- ► Diamond tipped facade drill bit with countersink ■33
- ▶ Roller conveyor drilling table KRT ■47
- Cooling water supply ■62
- Filter cartridge ■62
- ▶ Water pressure tank ■63
- Cooling lubricant ■63
- ► Fastener set 1 ■65
- ▶ Whetstone ■66
- ▶ Wooden case for transportation of KSDV, KSHV and KRDV ■65
- ▶ Seal for vacuum foot ■66
- ▶ Ball bearing ■66
- Carbon brush set ■66
- ▶ Solenoid valve for portable machine ■67
- Cable integrated circuit breaker 
  67
- ▶ Silencer ■67
- Corrosion inhibitor 
  68

### Usage

Speed adjustable up to approx. 6,500 rpm





Volt	Hertz	€	€	PRCD	-	12345	€
230 V	50 Hz	105,00	260,00	yes	D	532 600 000	
120 V	60 Hz	105,00	260,00	yes	USA	532 600 025	

### **Product information 532**

### Portable drilling machine KRDV

- The portable drilling machines are used for professional mobile drilling and undercutting of small batches, infill and special size panels.
- This handy machine is placed on the facade panel at any point and is rigidly connected to the panel via the vacuum foot.
- Precise positioning can also be carried out via stop rails.
- The KRDV portable drilling machine has been developed for water-cooled drilling of holes with the KEIL diamond facade drill bit.
- The simple handling is supported by the low weight of the portable machine and makes its use on site possible.
- Panels of any size or weight are drilled efficiently and undercut precisely with it.







45

### Portable drilling machine KSHV Blow out nozzle for KSHV

#### Execution



- Portable undercutting drilling machine with vacuum foot
- Industry Standard
- Drill chuck for dry drilling
- Vacuum foot
- Venturi nozzle
- ▶ Stop rail

For use in

▶ For drilling and undercutting

### Application

With KEIL carbide tipped facade drill bit

### Accessories

- ▶ Carbide tipped facade drill bit ■39
- ▶ Roller conveyor drilling table KRT ■47
- ▶ Chuck for portable drilling machines ■64
- ► Fastener set 1 ■65
- ♦ Wooden case for transportation of KSDV, KSHV and KRDV ■65
- Seal for vacuum foot ■66
- ▶ Ball bearing ■66
- ► Silencer ■67

Execution

For use in

► Corrosion inhibitor ■68

### Usage

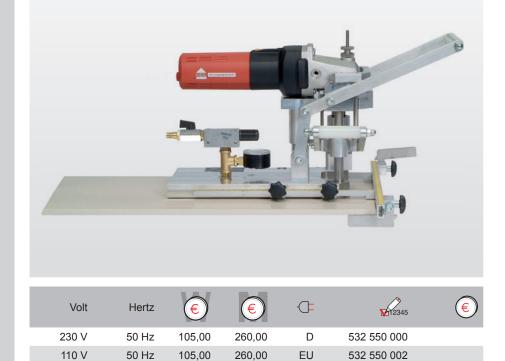
▶ Speed approx. 1,400 - 4,200 rpm

Flexible adjustable nozzle head
Regulator for blow out pressure

Nozzle for cleaning and cooling while drilling





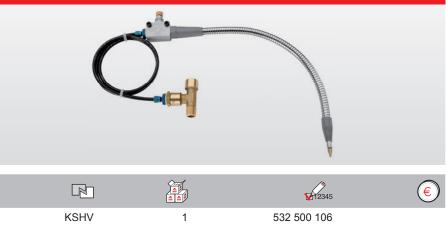


### **Product information 532**

### Portable drilling machine KSHV

- The portable drilling machines are used for industrial and mobile drilling and undercutting of small batches, infill and special size panels.
- This handy machine is placed on the facade panel at any point and is rigidly connected to the panel via the vacuum foot.
- Precise positioning can also be carried out via stop rails.
- The KSHV portable drilling machine has been developed for drilling dry holes with the KEIL carbide facade drill bit.
- The simple handling is supported by the low weight of the portable machine and makes its use on site possible.
- Panels of any size or weight are drilled efficiently and undercut precisely with it.

### **Blow out nozzle for KSHV**



### **Roller conveyor drilling table KRT**

532

### Execution

CE

- Multidirectional roller conveyor 1500mm x 600mm inc. portable drilling machine
- Of stainless steel
- With pneumatic tile fixing device (manual control)
- 2 stop rails
- ▶ 4 swinging stops
- Air service unit
- Max. Edge distance to hole from axis Y = 150 mm
- Crate

#### For use in

For drilling and undercutting

### Application

With KEIL diamond facade drill bit

### Accessories

- ▶ Diamond tipped facade drill bit ■32
- ► Diamond tipped facade drill bit with countersink ■33
- Diamond tipped facade drill bit for through holes
   34
- ▶ Set for KRT for front face controlled drilling ■48
- ▶ Portable drilling machine KRDV ■45
- ▶ Portable drilling machine KSHV ■46
- ▶ Cooling water supply ■62
- ► Filter cartridge ■62
- ▶ Water pressure tank ■63
- ► Cooling lubricant ■63
- ► Fastener set 1 ■65
- ▶ Whetstone ■66
- Corrosion inhibitor ■68
- ► Collecting tray for KRT ■48

### Usage

Speed approx. 10,000 rpm



### Product information 532

### Drilling table with roller conveyor KRT

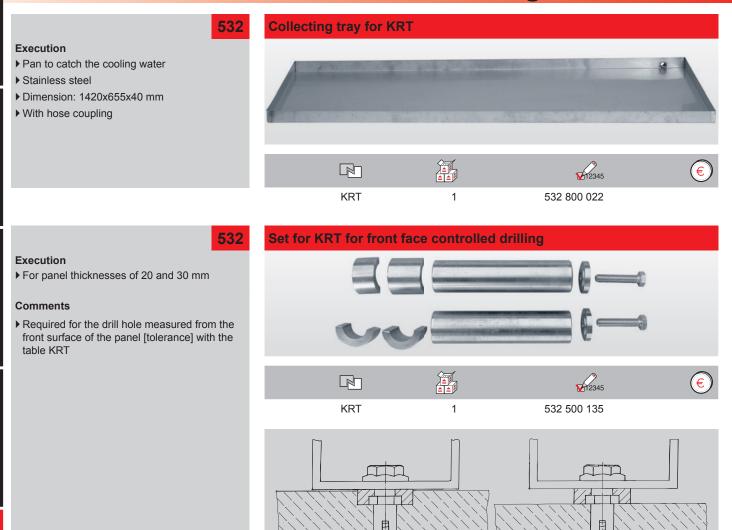
- Drilling machine for the efficient manufacture of KEIL undercut holes for use in workshop and on site (total weight approx. 90 kg). The multidirectional roller conveyor (1,500 mm x 600 mm) with pneumatic panel clamping unit and attached KSDV or KSHV portable drill provides excellent handling, simple operation and fast changeover to different hole spacings.
- After setting the insertion depth h<sub>s</sub>, panels of different thickness can be drilled without further adjustment.
- The depth of the undercut hole may be constant either to the front or rear of the panel. For undercut holes which are constant to the front of the panel, the conversion kit for front face controlled drilling has to be fitted.
- The undercutting drilling machine can be removed and used with the vacuum foot (without roller conveyor).







# Collecting tray for KRT Set for KRT for front face controlled drilling





### **Roller conveyor drilling table KRRT**

532

### Execution

CE

- Multidirectional roller conveyor 1600mm x 840mm inc. portable drilling machine
- Professional design
- ▶ Of aluminium, stainless
- With pneumatic tile fixing device (manual control)
- Stop rail
- 4 swinging stops
- Air service unit
- Max. Edge distance to hole from axis Y = 250 mm
- Crate

### For use in

For manual drilling and undercutting

### Application

With KEIL diamond facade drill bit

### Accessories

- ▶ Diamond tipped facade drill bit ■32
- ► Diamond tipped facade drill bit with countersink ■33
- Diamond tipped facade drill bit for through holes 34
- Cooling water supply ■62
- ► Filter cartridge ■62
- ▶ Water pressure tank ■63
- Cooling lubricant ■63
- ► Fastener set 1 ■65
- ▶ Whetstone ■66
- ► Corrosion inhibitor ■68

### Usage

Speed up to 10,000 rpm



### **Product information 532**

### Drilling table with roller conveyor KRRT

- Drilling machine for the efficient manufacture of KEIL undercut holes for use in workshop and on site (total weight approx. 115 kg). The multidirectional roller conveyor (1,600 mm x 840 mm) with pneumatic panel clamping unit and frequency controlled drilling motor provides excellent handling, simple operation and fast changeover to different hole spacings.
- After setting the insertion depth h<sub>s</sub>, panels of different thickness can be drilled without further adjustment.
- The depth of the undercut hole may be constant either to the front or rear of the panel.
- The conversion kit for front face controlled drilling is available on request.



# Automatical drill-unit type KA

**532** 

### Execution



- Automated drilling machine for undercut holes
- Table/Plate size according to customer
- Inc. shelf
- Inc. bridge
- With one or two KEIL undercut units available
- Programmable logic controller (PLC)
- ▶ Positioning accuracy approx. +/- 0.2 mm (constant distance from either the rear or front panel)

### For use in

**DRILLING TOOLS** 

**DRILLING TECHNOLOGY** 

For drilling and undercutting

Application

With KEIL diamond facade drill bit

#### Accessories

- ▶ Diamond tipped facade drill bit ■32
- Diamond tipped facade drill bit with countersink
- Diamond tipped facade drill bit for through holes
- ▶ Cooling water supply ■62
- ▶ Filter cartridge ■62
- ▶ Water pressure tank ■63
- ▶ Cooling lubricant ■63
- ▶ Whetstone ■66
- ▶ Corrosion inhibitor ■68
- ► Grease ■68

### Comments

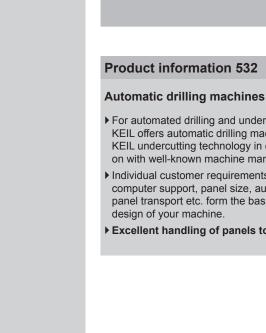
- Design by agreement
- Price on request

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- For automated drilling and undercutting, KEIL offers automatic drilling machines with KEIL undercutting technology in cooperation with well-known machine manufacturers.
- Individual customer requirements regarding computer support, panel size, automated panel transport etc. form the basis of the
- Excellent handling of panels to be drilled
- Materials such as natural stone, ceramics, HPL, fibre cement, glass etc. can be processed (max. panel size, for example, 3,500 mm x 1,800 mm).
- Efficient working due to simultaneous processing of 2 panels - while panel 1 is drilled fully automatically, panel 2 can be checked and positioned. Simple programming of drilling schematics.







### Drilling unit AF Control for drilling unit KG

### Execution

# CE

- For drilling-units inc. water supply and pneumatic drill feed
- Dimension: 220 x 690 x 400 mm

### For use in

For drilling and undercutting

### Application

With KEIL diamond facade drill bit

### Accessories

- ▶ Diamond tipped facade drill bit ■32
- ► Diamond tipped facade drill bit with countersink ■33

### Comments

- 2.100 8.730 rpm (Carbide approx. 2100 rpm; Diamond > 7.000 rpm)
- Controlled via frequency transformer (not supplied)



### **Product information 532**

### look at page 50



### Execution

For controlling the drilling unit KG

### For use in

 PLC Controlling including touchpanel and frequency converter for drilling unit KG

### **Control for drilling unit KG**

**532** 



## Undercut drilling unit HSE "E"

**532** 

### Execution



- For drilling-units inc. flushing chuck
- Dimensions: 500 x 110 x 170 mm

### For use in

For drilling and undercutting

### Application

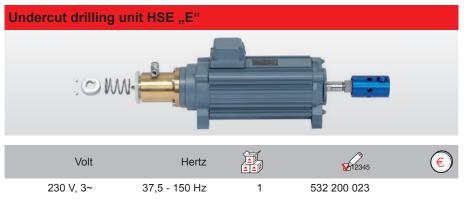
With KEIL diamond facade drill bit

### Accessories

- ▶ Diamond tipped facade drill bit ■32
- Diamond tipped facade drill bit with countersink ■33
- Diamond tipped facade drill bit for through holes 34
- ▶ Chuck HSE ■64
- ▶ Flushing chuck for HSE ■64
- ▶ Fastener set 2 ■65
- ▶ Fastener set 3 ■65

### Comments

- > 2,100- 8,730 rpm
- Controlled via frequency transformer (not supplied)



### **Product information 532**

### Undercut unit for automatic drilling machines

- The KEIL undercutting unit for drilling machines is the optimum automated drill unit for drilling and undercutting.
- Almost all available drilling/milling machines can be retrofitted with this.
- The undercutting unit uses diamond or carbide tipped facade drill bits, depending on which material is to be worked.
- For undercutting, the drill head is pneumatically deflected after reaching the pre-selected drilling depth. If the diamond facade

drill bit is used, water is applied through the centre of the spindle.

• The carriage of the machine supports the KEIL undercutting unit with frequency-controlled motor. Thus the motor speed can be selected for drilling with the carbide facade drill bit (approx. 2,000 rpm) or for drilling with the diamond facade drill bit (approx. 7,000 rpm).



### **Chuck P**

### **Chuck P**

**581** 

€

53

### Execution

- Drilling chuck for attachment to su drilling / milling / CNC machines
- Pneumatic deflection of the facade drill bit
- ▶ chuck R 1/2" or cylindrical drive
- Water supply through spindle
- For automatic drilling machines
- With integrated support and one-way-restrictor
- Facade drill bit not included

### Application

With KEIL diamond facade drill bit

### Accessories

- ► Fastener set 2 ■65
- ► Fastener set 3 ■65
- ▶ Corrosion inhibitor ■68
- ► Grease ■68

### Packaging



]0	-300
uitable	

12345		
581 000 021	1	Ø 16
581 000 023	1	R 1/2"

### **Product information 581**

### Chuck P

- At the heart of all KEIL drilling machines is the KEIL drill head.
- The cylindrical hole and the undercut are quickly and precisely produced with this drill head together with the facade drill bit.
- The drill head can also be attached to your existing automatic drilling or milling machine. (Fitting as per customer requirement).
- Various mating conditions must be met to be able to fit the KEIL P drill head with pneumatic deflection to existing machines.
- The spindle speed must be about 6,000-7,000 rpm for water-cooled drilling with the diamond facade drill bit and about 2,000 rpm for drilling with the carbide drill bit. The facade drill bit must be seated free from play and the spindle must be running faultlessly to guarantee precise undercuts and long life of the drill bit. Locking must be possible in the different feed directions.
- When drilling with the diamond facade drill bit, the water is supplied through the drill spindle (water pressure > 4 bar). It is

advantageous to use a water filter to avoid any water failure which could lead to the diamond plate detaching.

A circulating water supply with added cooling lubricant provides good corrosion protection and has a positive effect on the optimum life of the facade drill bit.

### The customer must:

- Screw in the drill head or insert it into the collet.
- Fit locking for drill head.
- Depending on machine, control of the drill head can be mechanical or under program control. For mechanical control, a KEIL pneumatic unit is attached/installed which is controlled by a limit switch which starts the undercutting process.