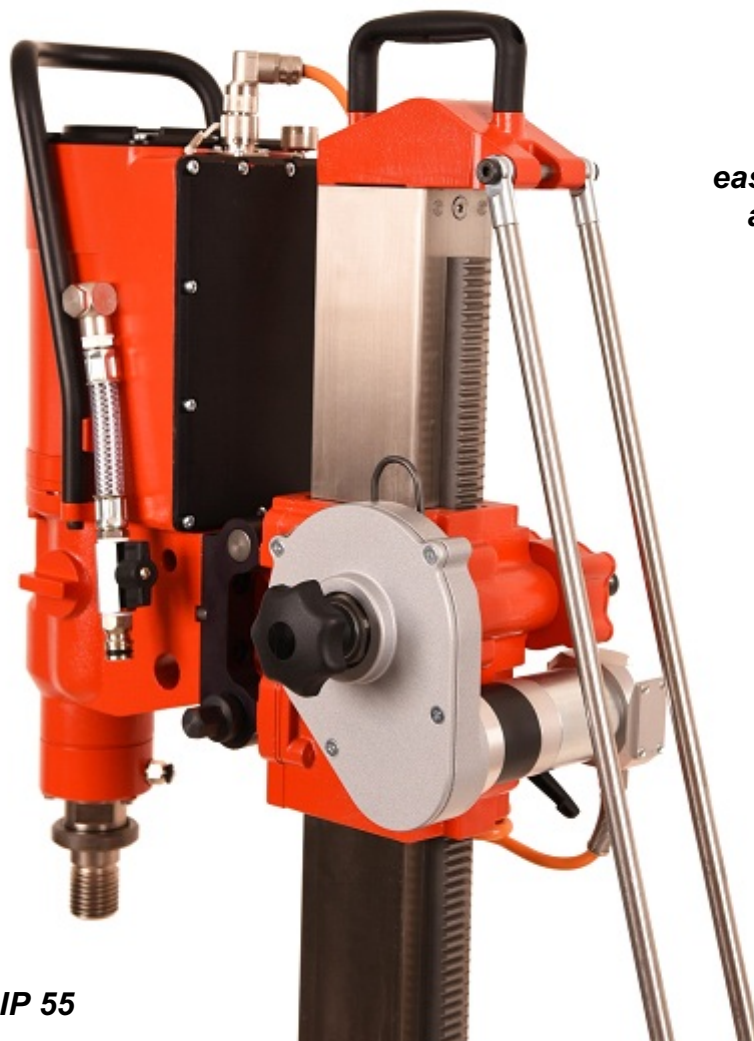


Automatic drill system BA 50



*easy assembly with
adapter plate and
tension spring*

water protection class IP 55

Technical Data:	Type	BA 50
Rated Voltage	V	48
Feed Force	N	5000
Feed Rate	m/min	0 - 0,4
Weight	kg	3,5
Mode of operation		automatic/manual

My name is **BA 50**, I am the new automatic drill system of WEKA.

My job is to relieve the operator of work which I do highly efficient and very comfortable. The adapter flange can be easily installed at the respective drill rig (image 2). For this the feed case of the drill rig will be modified slightly which is indicated by the additional marking BA (e.g. KS50BA). In just a few steps my motor (image 1) is attached to the drill rig within seconds (image 3 and 4). Now I have to be connected to my friend, the Mammut SR25BA/38BA or the Jumbo SR65BA/68BA/75BA via a plug connector. These machines manage my control - now I'm ready.

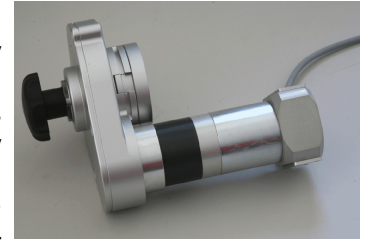


Image 1

Because my friends manage me, I do not need any additional controls in a separate casing. This is why there is no additional tangled mess of cables. I also do not have additional operating elements because I am intelligently controlled by my friends.

Core Drill

As already mentioned I work together with the SR25/38 and the SR65/68/75. My control system will be integrated in these machines and a small connector will be attached. The implementation of these features is indicated on the name plate by the additional marking BA (e.g. SR25BA).

I only work together with these machines, because they are intelligent enough in order to meet my needs. As an option these machines are available with integrated water stop. In addition to the manually adjustable ball valve the machine starts / stops water flow automatically when you start and stop the machine.

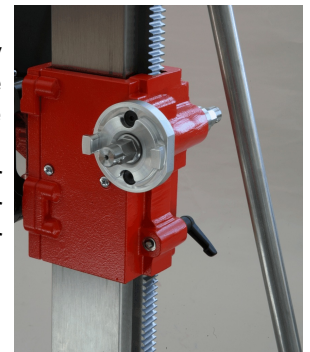


Image 2

Drilling process

After my motor has been attached to the drill rig and I was connected to the SR machine the operator positions the drill bit a few millimeters above the surface to be drilled in by means of the hand wheel, mechanically engages the feed unit and presses the start button of the SR machine for two seconds and I begin to work.

The feed rate is chosen automatically together with my friends. In the initial setup I run with 90% drilling performance. If the operator does not want to drill under full load he can easily reduce the drilling performance to 70% by pressing the start button once again.

I gently start drilling and carefully increase the feed rate until the load limit is reached. Of course I sense every concrete reinforcement and adapt my feed rate to the performance of the machine. If my friends are overloaded my feed rate is automatically reduced. I also feel if the drill bit has gone through the material when drilling a clearance hole and switch off. If only a blind hole shall be drilled my operator adjusts a stop according to the required drilling depth. As soon as I recognize the stop I switch off.

I also sense excessive vibrations, for example if the drill bit does not cut properly and switch of the machine.

As discussed I switch off when I'm finished. I do not automatically pull out the drill bit because it takes longer than by hand and often harms the drill bit and diamond segments. My operator simply uncouples the feed unit with one movement and I can be moved backwards manually.



Image 3

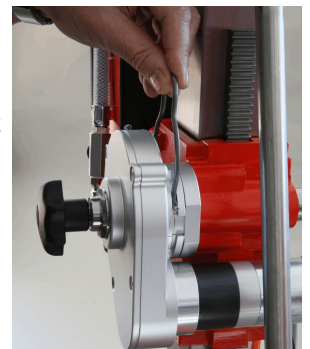


Image 4

Advantages

- ◆ I am very easy to handle as I am thoroughly regulated and controlled by my intelligent electronic.
- ◆ While I am working my operator can do other jobs, or of course relax and watch me working.
- ◆ Because of my super quick assembly I am quickly ready for use.
- ◆ Both drill rig and SR machine can be operated manually or automatically by means of my mechanical coupling without disassembling me.

Assembling of the feed drive

Assemble the adapter flange at the drill rig. This will in general not be disassembled any more, i.e also when drilling without feed drive, this drill rig can be used.

Now pull the feed drive onto the adapter flange and secure it with the locking spring. When the star grip is pulled out, the drive is disconnected, the feed can now be done manually. By pushing the star grip in, the feed drive is connected, it can be drilled automatically now. In this case, the hand wheel at the drill rig can not be moved manually any more. It is more secure to remove it.

Operation

Install the drill rig and machine as usually and afterwards connect the plug of the DC-motor with the bayonet coupling at the drill's casing. Disconnect the feed, move the drill bit manually to the surface with approx. 1 cm distance and connect the feed again. Select the appropriate drilling diameter as usually on the keypad and start the machine. If you stay longer than two seconds on the green button, the LED below this button starts to light green. Shortly after this, the feed unit will start to move slowly towards the surface and on contact it will start to drill controlled. In this mode the machine works with 90% of the nominal power. If you push the green button once more longer than two seconds, the green LED starts to flash. The machine works now with 70% of the nominal power. If you push the green button once more longer than two seconds, the LED switches off and the feed is deactivated.

The drill process can be stopped by the machine for following reasons, which will be shown in a two digit error code by a flashing red LED:

Error code	Meaning	Action
30	Over current DC-motor	<ul style="list-style-type: none">- Check the cable between DC-motor and machine on damages- Clean the connector- Bring machine and feed to a service station for maintenance
31	Transcription error communication feed	<ul style="list-style-type: none">- Bring machine and feed to a service station for maintenance
32	Transcription blackout communication feed	<ul style="list-style-type: none">- Bring machine and feed to a service station for maintenance
33	Long idle speed	<ul style="list-style-type: none">- Bring the drill bit closer to the surface and start drilling again
34	Perforation	<ul style="list-style-type: none">- The perforation is finished and the feed is deactivated
35	Stop up to marking	<ul style="list-style-type: none">- The marking is reached and the feed is deactivated
36	Vibration too heavy	<ul style="list-style-type: none">- Check the fixing of the drill rig- Change to manual operation
37	Too frequent overload intervals	<ul style="list-style-type: none">- Feed rate too slow. Core bit no longer cuts, or very high proportion of reinforcement. Reduce drilling power to 70%, or use a core bit with better cutting performance

All messages must be confirmed with the red button before the machine can be started again.