



*Ritz GmbH Electrical Machinery
& Apparatus Engineering*

ABISOFIX & ABISOBRUSH

Catalogue & Technical Overview



Precise stripping, cleaning and twisting of wires, strands and flat copper.

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How is an ABISOFIX constructed?



What can an ABISOFIX do?

Stripping of	Stranding of	Twisting of	Removal of
Enamelled copper wire, wrapped wire strands, flat copper	Strands	Wires	Oxide layers enamel, solder

What are the dimensions of an ABISOFIX?

175 mm ABISOFIX device length	45 mm Device diameter	450 g Device weight
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How does an ABISOFIX work?

Three carbide blades close from the largest to the smallest diameter as rotational speed increases. Thanks to the soft start, the blades do not close abruptly; they gently contact the material to be stripped before increasing the required cutting pressure.

With stepless speed control, the blades close only to a defined diameter. For example, the thin insulation layer of enamelled copper wire is removed while the copper itself is barely affected. The steplessly adjustable power supply enables optimum working speed and smooth motor operation.

Note: ABISOFIX cutter head

We offer complete ABISOFIX devices as well as individual cutter heads. All cutter heads fit the AMO or ADBW motor.

ABISOFIX

Cutter Heads and Tools

Standard Cutter Head



Stripping of enamel-insulated and wrapped wires. Fitted insulating sleeves can be removed at the same time.

ABISOFIX	Cutter Head	Dimensions
A1	MK1	0,2-0,8 mm
A3	MK2	0,6-2,0 mm
A5.2	MK3	1,2-4,5 mm

Blade Limiter and Length Stop



Stripping of enamel-insulated and wrapped wires as well as removal of oxide layers. The length stop "L" fixes the stripping length from 3 to 40 mm. For longer stripping lengths, the length stop can be removed. The blade limiter "M" can be set to a defined wire diameter. This prevents damage to the wire and enables higher cycle rates.

ABISOFIX	Cutter Head	Dimensions
A1LM	MK1LM	0,2-0,8 mm
A3LM	MK2LM	0,6-2,0 mm
AS.2LM	MK5LM	1,2-4,5 mm

Special Cutter Head



In special cases, especially in electronics, stripping may be required right up to a component (zero clearance).

ABISOFIX	Cutter Head	Dimensions
ASH	MKSH	0,4-3,00 mm
ASHM	MKSHM	0,4-3,00 mm
AS	MKS	0,4-3,00 mm

Flat-Positioned Blades



Stripping of strands or wires with thick-walled insulation. Available only with length stop and blade limiter.

ABISOFIX	Cutter Head	Dimensions
AFLM3	MK3FLM	0,25-4,00 mm
AFLM5	MK5FLM	2,0-5,0 mm

Small Cutter Head



Stripping and cleaning terminal pins from enamel and excess solder. Minimum pin spacing 5.0 mm (limited 4.0 mm). Stripping length 0.5 - 30 mm.

ABISOFIX	Cutter Head	Dimensions
AK1	KMK1	0,5 mm
AK2	KMK2	0,6 mm
AK3	KMK3	0,7 mm
AK4	KMK4	0,8 mm
AK5	KMK5	0,9 mm
AK6	KMK6	1,0 mm
AK7	KMK7	1,1 mm
AK8	KMK8	1,2 mm

ABISOFIX

Cutter (Solid Carbide)



Stripping and cleaning terminal pins from enamel and excess solder. Produces the fit dimension for PCB assembly. Minimum pin spacing 5.0 mm (limited 4.0 mm). Stripping length 0.5 - 30 mm. The pin diameter can be slightly readjusted.

ABISOFIX	Cutter Head	Dimensions
AF	MKF	up to 18 mm

Stranding Head



Stranding of wire strands so they can be inserted into terminals, cable lugs and other connections like solid wire.

ABISOFIX	Cutter Head	Dimensions
AV3	MKV3	0,2-2,5mm ²
AV5	MKV5	2,5-6,0mm ²

Twisting Hook



Twisting two or more wires using a wire loop. If required, the twisted wires can be stripped together with a cutter head.

ABISOFIX	Cutter Head	Dimensions
AVH	VH	up to 6.0 mm ²

Services

- Cutter head adjustment: Send us a sample wire or specify the required wire diameter and stripping depth. We adjust all ordered cutter heads and ABISOFIX devices at the factory to your requirements.
- Cutter head overhaul: Send us your used cutter heads; defective or worn blades are replaced as required.
- Motor overhaul: Send us your used ABISOFIX motors and we will service and repair them.

ABISOFIX



ABISOFIX Accessories

Power Supply

Specially developed power supply with stepless control, constant voltage, quasi soft start and electronic overload protection.

Item	Input	Output
NE42C	115 V-230 V 50/60 Hz	10-40 V
NE42C2	115 V-230 V 50/60 Hz	10-40 V
NE42C/USA	115 V-230 V 50/60 Hz	10-40 V

Motor



The ABISOFIX motor can also be supplied separately. In the ADBW version it has a drilled-through shaft so the wire can be fed through the device.

Item	Data
AMO	Motor only
ADBW	Motor with bore 2.8 mm ²

[ABISOFIX](#)

Table Mount with Foot Switch



The ABISOFIX device is fixed stationary to a tabletop. It is switched on and off using the foot switch.

Item

ATH
ATU

Spring Balancer



With the spring bracket and spring balancer, an ABISOFIX device can be attached at the workstation so it is always within reach without taking up workbench space. This also prevents the ABISOFIX device from falling.

Item

A8610

Spring Bracket



With the spring bracket and spring balancer, an ABISOFIX device can be attached at the workstation so it is always within reach without taking up workbench space. This also prevents the ABISOFIX device from falling.

Item

A8600

[ABISOFIX](#)

Plexiglass Protective Cap



For safety reasons, work may only be performed with the protective cap. It is supplied with the device and is available as a spare part.

Item

KA
KA.2

Replacement Blades



Replacement blades are available for all types. In case of wear, we recommend factory overhaul of the complete cutter head or device. For serial work, we recommend blades with wear protection.

Item

MES#
z.B.: MES.1

ABISOBRUSH

ABISOBRUSH: Enamel Removal with Rotating Brushes



ABISOBRUSH devices remove enamel insulation from round wires and flat copper. Selection depends on device type, brush diameter and optional extraction unit.

What can an ABISOBRUSH do?

Enamel removal from	Device Types	Options
enamel-insulated round wires flat copper wire diameters from 0.15 to 8 mm	handheld devices stationary machines production workstations	brushes 30 / 35 / 40 mm extraction adapter (-SA) different brush grades

How do ABISOBRUSH devices differ?

The suitable device can be determined by three choices: handheld device or stationary machine, brush diameter matched to the wire diameter, and optionally an extraction unit for stripping residues.

- Design: Choose a handheld device if the ABISOBRUSH has to be moved or held in a special position. However, only stationary ABISOBRUSH devices can be equipped with the largest brushes.
- Brushes: Select the brush size to match the diameter of the wire to be stripped.
- Extraction unit: Select the version with extraction if residues are to be removed by suction.

Selection	Handheld Device	Stationary Machine	Extraction Adapter
Device Type	mobil / flexibel	for serial production	can be ordered with -SA
Brushes	30 mm / 35 mm	30 mm / 35 mm / 40 mm	for extraction
Wire Range	0,15 - 6 mm	0,15 - 8 mm	extract stripping residue

ABISOBRUSH

Design	Handheld Device			Stationary Machine	
	  				
Wire Diameter	0,15 mm - 3mm			1mm - 6mm	
Brush Diameter	30 mm			35 mm	
	  				
Brush Rotation	counter-rotating draws in the wire			same direction no force transmission	
Extraction Unit	with (SA)			without	

How does an ABISOBRUSH work?

All ABISOBRUSH devices remove enamel from the wire between two rotating brushes. The brush spacing can be adjusted steplessly to the wire diameter.

On the HQ30, counter-rotating brushes draw the wire into the device. HQ35P, ST35 and ST40 work with brushes rotating in the same direction, so no pulling force is applied to the wire. Different brushes allow the stripping quality to be adapted to wire diameter and insulation material.

How do you strip a round wire with an ABISOBRUSH?

Insert the enamelled wire, rotate it 90 degrees, pull it out - done. By inserting the wire from the side, stripping can also be performed in the middle of the wire (tap points).

ABISOBRUSH**CATALOGUE**

Devices and Brushes

HQ30 / HQ30-SA

Handheld stripping machine for wires from 0.15 to 3.00 mm
 230 V(115 V) 50 Hz
 Weight 2.1 kg, brushes 30 mm

Brush Type	for Wire Diameter
SRB30.10	0,15 - 0,60 mm
SRB30.15	0,40 - 1,00 mm
SRB30.20	0,60 - 1,50 mm
SRB30.25	0,80 - 2,00 mm
SRB30.30	1,00 - 3,00 mm

HQ35P / HQ35P-SA

Handheld stripping machine for wires from 1.5 to 6 mm and flat wires from 1.00 to 6.00 mm
 230 V(115 V) 50 Hz,
 Weight 2.4 kg, brushes 35 mm

Brush Type	for Wire Diameter
SRB35.10	1,00 - 2,00 mm
SRB35.15	1,50 - 2,50 mm
SRB35.20	2,00 - 3,00 mm
SRB35.25	2,50 - 4,00 mm
SRB35.30	3,00 - 6,00 mm

ABISOBRUSH**ST30.L / ST30.L-SA**

Stationary stripping machine for round wires from 0.15 to 3 mm. For recurring work and serial processes.

Brush Type	for Wire Diameter
SRB30.10	0,15 - 0,60 mm
SRB30.15	0,40 - 1,00 mm
SRB30.20	0,60 - 1,50 mm
SRB30.25	0,80 - 2,00 mm
SRB30.30	1,00 - 3,00 mm

ST35.L / ST35.L-SA

Stationary stripping machine for round wires from 1.5 to 6 mm and flat copper from 1 to 6 mm.

Brush Type	for Wire Diameter
SRB35.10	1,00 - 2,00 mm
SRB35.15	1,50 - 2,50 mm
SRB35.20	2,00 - 3,00 mm
SRB35.25	2,50 - 4,00 mm
SRB35.30	3,00 - 6,00 mm

ABISOBRUSH**ST40.L / ST40.D**

Stationary stripping machine for round wires from 1.5 to 8 mm and flat copper up to 8 x 20 mm. Also available as an SA version with extraction adapter.

Brush Type	for Wire Diameter
SRB40.10	1,00 - 2,00 mm
SRB40.15	1,50 - 2,50 mm
SRB40.20	2,00 - 3,00 mm
SRB40.25	2,50 - 4,00 mm
SRB40.30	3,00 - 8,00 mm

Note: Extraction unit and brush selection

Many ABISOBRUSH devices are available with an extraction adapter. The suffix -SA is used when ordering. The recommended wire ranges are guide values; additional brush sizes can be checked on request.

Contact & Enquiry



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