



# MIRA

## 440 SERIES

wire stripper



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winner

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**komax**

## MIRA 440 SERIES

The Mira 440 wire stripper is a great choice for wire harnesses with a large proportion of coaxial or triaxial cables. It is particularly suitable for small to medium-sized series runs. The rotary flat blades ensure the high level of precision required for coaxial connectors. The Mira 440 processes single-conductor wire and multi-core cable, as well as semiflex cables in the Mira 440 SF model. The comprehensive functions, simple operation and smart design make the machine a specialist for coaxial cable processing.

### Wide processing range

- Coaxial, triaxial and other multi-layer cables with an outer diameter of up to 9 mm
- Single-conductor wires measuring 0.02 – 13 mm<sup>2</sup> / AWG 36 – 6
- Strip length up to 40 mm

### Precise coaxial processing

- Rotary incision, centering and flat blades for the smoothest cut
- Process up to 9 wire layers

### High productivity

- Automatic trigger via sensor
- Time-saving sequential processing of multi-core, multi-coaxial and hybrid cables
- Article library and barcode scanning for quick item selection

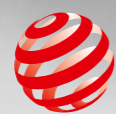
## THREE VERSIONS THE RIGHT ONE FOR EVERY NEED

	Mira 440	Mira 440 SF	Mira 440 3B
Standard cables	•	•	•
Coaxial, triaxial and hybrid cables	•	•	•
Semiflex cables		•	
Flexible coaxial cables with hard insulation			•
Zero cut	•	•	

**PRECISE QUALITY**  
FOR COAXIAL, TRIAXIAL AND HYBRID CABLES

▲ Rotary incision unit with two flat blades and centralizer

# SMART OPERATION FOR A BROAD SPECTRUM OF WIRES



**reddot award 2017  
winner**

The hallmark of quality recognized across the world for the perfect embodiment of functionality and outstanding design.

## MIRA 440

### Special discipline: Coaxial, triaxial and hybrid cables

The stripping of coaxial cables places high demands on the machine. Several thin, concentric layers are removed with a single gripper closure: insulation, metal braiding, foil and dielectric. The strip length must be exceptionally accurate as the tolerance ranges of coaxial connectors are very narrow. The Mira 440 models are perfect for these special requirements. They are also suitable for processing most wires and multi-core cables with and without shield.

### Wide processing range

Covering outer diameters of up to 9 mm and strip lengths of 40 mm, the Mira models offer a very wide processing range for their class. The wire range is equally wide at 0.02 to 13 mm<sup>2</sup> and AWG 36 – 6. Thanks to the rotary incision, the machines are also suitable for most insulations such as cross-linked plastics, PVC or Teflon®. In all cases, the focus is always kept on precision.

### Coaxial processing with the highest level of precision

Rotary incision has established itself as the best solution for coaxial cables. The Mira 440 series wire stripper rotary incision unit is equipped with centralizers that keep the wire precisely centered during the incision process. The smooth cutting surface of the blades is directed towards the

dielectric to ensure perfect cutting quality. The strip length and incision diameter can be adjusted with a high level of precision in 0.01 mm increments.

### Highly productive, fast and functional

When the wire is inserted, the trigger sensor starts each process automatically. Versatile functions, such as trimming, offset pull-off, stripping in several steps and twisting the strands, increase the standard of quality and productivity.

The sequence function enables the time-saving processing of multi-coaxial and hybrid cables, which consist of a combination of single-conductor and multi-core cables, and coaxial cables, where the components can be processed one after the other.

The Mira 440 series wire strippers have an article library. All leads can thus be processed with reproducible quality. Intelligent search and filter functions find the articles quickly – and the barcode scanner provides even faster results. Password protection prevents unintentional modifications.

### Cutting-edge, ergonomic design and a user-friendly interface

A high-resolution touch screen in smartphone-style provides quick access to all the machine's features. Supported by a dial and help texts, the intuitive user interface is fun to use and simplifies training. The user interface, including hint texts, is provided in a variety of languages, so operators with different preferred languages can use the

same machine. The comfortable wrist cushion enables a relaxed working posture. Since the safety cover can be quickly removed without tools, cleaning and maintenance is much faster and easier. An ergonomic handle makes the compact wire strippers highly portable.

## MIRA 440 SF

Semiflex cables usually have a dip-tinned outer conductor. This outer conductor behaves differently during cutting than braid or foil layers of coaxial cables. To meet the special requirements of semiflex cables, the Mira 440 SF comes with an optimized cutting geometry.

## MIRA 440 3B

The latest model of the Mira series is specialized on coaxial cables with high flexibility in combination with hard insulation surfaces. These cables are very demanding, as they can bend or deform during the normal cutting process with a 2-blade coaxial stripping machine, resulting in damage to one side of the insulation. The 3B however has three cutting blades to ensure better fixation of the cable and thus provide more stability during cutting. In addition, the cutting force is distributed better during stripping. Please note that, because of its three blades, the Mira 440 3B is limited to a minimum core diameter of 0.5 mm. Also it cannot do zero cut or cleaning cut.

**01 Article selection via the barcode scanning saves time.**

**02 Ergonomic work position thanks to hand rest and low wire line.**

**03 Wide range of wire types, such as semiflex and shielded multi-conductor cables, wires with braided fibers and coaxial cables, can be processed.**



01







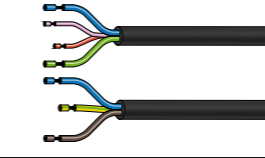
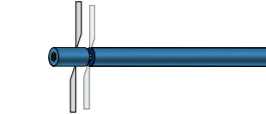

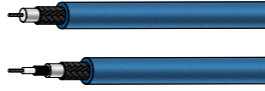

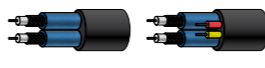



02



03

## Processing examples and functions

Full stripping		Multi-conductor cables – full stripping	
Half stripping			
Multi-step stripping		Multi-conductor cables – half stripping	
Shortening, trimming wires		Multi-conductor cables – various cross-sections, stripping lengths and core length, in sequences with multi-trigger setting	
Offset pull-off with pre-pull-off			
Wayback for pull-off		Stripping coaxial, triaxial, semiflex, other multi-layer cables	
Cleaning cut*		Stripping multi-coaxial, hybrid cables in sequences	
		Twist strands	

\* not possible with Mira 440 3B



## Technical data

### Coaxial cable

Max. outer diameter <sup>1</sup>	9 mm (0.354 in.)
Min. conductor diameter <sup>1</sup>	0.15 mm (0.059 in.) Mira 440 3B = 0.5 mm (0.0197 in.)
Max. number of layers	9

### Single-conductor wire

Conductor cross section (stripping) <sup>1</sup>	0.02 – 13 mm <sup>2</sup> (AWG 36 – 6) Mira 440 3B = 0.2 – 13 mm <sup>2</sup> (AWG 24 – 6)
Max. cutting diameter for zero cut <sup>1</sup>	2 mm (0.08 in.)

### General

Max. strip length <sup>2</sup>	40 mm (1.575 in)
Max. pull-off length	44 mm (1.732 in)
Min. breakout length	26 mm (1.024 in)
Increment for incision diameter	0.01 mm (0.0004 in)
Increment for strip length	0.01 mm (0.0004 in)
Gripper force	Programmable
Blades	Rotary flat blades
Trigger	Sensor, touch screen, optional foot pedal
Data interface	USB port for data backup, barcode scanner
Article library: Max. number of articles	1000
Sequence function: Max. number of steps	100
Sequence library: Max. number of entries	1000
Typical cycle time	≥ 5.6 sec. <sup>3</sup>
Production rate	650 pcs/h <sup>3</sup>
Electrical connection	50/60 Hz, 100 – 240 V AC, < 130 VA
User interface	5" color touch screen, multi-touch function + dial
Ambient temperature for operation	5 – 40 °C
Dimensions (B × H × T)	141 × 290 × 473 mm (5.5 × 11.4 × 18.6 in)
Weight	14 kg (31 lbs)
CE conformity	Conforms to the CE directives on machine safety and electromagnetic compatibility.

<sup>1)</sup> We recommend using sampling for wires that are difficult to process and wires at the limits of the specifications.

<sup>2)</sup> The maximum strip length is reduced by the length cut from the end.

<sup>3)</sup> In practice, production rate and cycle time depend on the settings and the operator's experience.

### Accessories

Foot pedal Mira	Instead of wire sensor tripping
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## Komax – leading the field now and in the future

As a pioneer and market leader in automated wire processing, Komax provides its customers with innovative solutions. Komax manufactures series and customer-specific machinery, catering to every degree of automation and customization. Its range of quality tools, test systems, and intelligent software and networking solutions complete the portfolio, and ensure safe, flexible, and efficient production.

Komax is a globally active Swiss company with highly qualified employees and development and production facilities on several continents. It provides local support to customers worldwide through its unique sales and service network and offers services that help them get the most out of their investments.

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