



MIRA

340/340 Q

wire stripper



reddot award 2017
winner

EN

komax

MIRA 340/340 Q

The programmable Mira 340 and 340 Q are designed for universal use while maintaining maximum precision. They are perfect for processing wires and insulation material with demanding requirements. The rotary head with 4X blades offers unique functions designed to reduce production time and increase quality. The patented ACD incision monitoring avoids conductor damage and complies with requirements in the automotive or aerospace industry. As a result, a single machine can be used for a huge range of applications. Thanks to sequential processing, multi-conductor cables and multi-layer insulation materials can be processed quickly, thereby saving time. Meanwhile, its ease of use also increases productivity.

Outstanding range of wire types – machines for demanding wires

- Ideal for difficult-to-process wires
- Processes a broad range of insulation types and materials
- Processes wires up to 16 mm² conductor cross section (AWG 5) and up to 72 mm strip length

Excellent stripping quality

- Incision/quality monitoring and automatic adjustment, patented ACD technology for rotary incision
- 4X rotary blades for precise processing and high pull-off force
- Incision monitoring ACD and functions to minimize damage to conductors
- Article library and barcode scanning prevent input errors

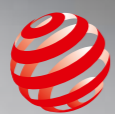
High productivity

- Sequential processing functions for convenient and time-saving processing of multi-conductor and multi-layer cables
- Barcode scanning to quickly select articles
- Quick mode when rotary incision is disabled

HIGH STANDARDS
IN PRECISION, PRODUCTIVITY AND
RANGE OF APPLICATION

Rotary cutting, 4X blades and incision monitoring offer top results when it comes to wire stripping.

PREMIUM QUALITY WITH ACD FOR DEMANDING WIRES



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

Broad range of applications

The Mira 340 and 340 Q cover a large range of wire specifications up to 16 mm² conductor cross section (AWG 5) and up to 72 mm strip length. They strip, cut and twist wires and cables with maximum precision. Even demanding insulating materials such as tough Teflon®, strong Kapton® and pliable silicon can be processed.

Outstanding stripping quality

Both models feature a rotary cutting head. This is combined with 4X blades to provide a strong and balanced grip when pulling off insulation and a high level of stripping quality. Both machines offer special functions such as offset pull-off with pre-pull-off to protect the conductor. Every wire and every sequence can be stored in the article library. Search and filter functions allow users to access the processing parameters and reproduce required articles error-free at any time.

Outstanding design

Operation via the large touchscreen is as simple and intuitive as on a smartphone. Users can set their preferred language and the operating steps are quick and easy to learn. All functions are displayed graphically and clarified via help texts. Barcode scanning enables articles to be loaded error-free and parameters can be changed using the dial. The ergonomic hand rest ensures effortless operation and the LED lighting provides good visibility. The safety cover can be removed easily to allow cleaning and maintenance and any required devices taken from the accessory drawer. An ergonomic carry handle makes the smart wire stripper perfectly mobile.

MIRA 340 Q

Mira 340 Q with ACD – patented and useful in more ways than one

The ACD (Automatic Conductor Detector) on the Mira 340 Q is the first application worldwide with rotary incision. This innovation is protected internationally by multiple patents. ACD detects and signals even the slightest contact between the blade and the conductor and is an important monitoring function, particularly for difficult wires where the blades cut close to the conductor. This function can be activated for quality assurance purposes during incision or pulling-off. The user specifies whether defective wires that need to be rejected should be cut or if the gripper release needs to be manually approved. The Mira 340 Q also uses ACD technology for automatic adjustment. The blade incision values are modified based on the measured conductor diameter.

01 Article selection via the barcode scanning saves time.

02 Processing of a large span of leads and demanding insulation like tough Teflon®, pliable silicon and braided fibers (from left to right).

03 The ACD incision monitoring detects and indicates even the slightest contact between the blade and the strands.



01






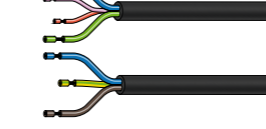

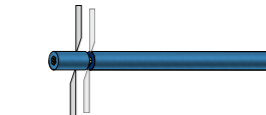







02



03

Processing examples and functions

Full stripping		Multi-conductor cables – full stripping	
Half stripping		Multi-conductor cables – half stripping	
Multi-step stripping		Multi-conductor cables – various cross-sections, stripping lengths and core length, in sequences with multi-trigger setting	
Shortening, trimming wires			
Offset pull-off with pre-pull-off		Multi-layer cables – stripping in sequences and in single trigger setting	
Wayback for pull-off		Twist strands	
Cleaning cut		ACD (Automatic Conductor Detector) for Mira 340 Q	



The rotary incision with 4X-blades (below) achieves a higher cutting ratio and a smoother surface than a V-blade incision (above).

Technical data

Conductor cross section (stripping)	0.013 – 16 mm ² (AWG 36 – 5 ¹)
Conductor cross section (twisting)	0.14 – 2.5 mm ² (AWG 26 – 13)
Max. conductor cross section for cutting	2 mm ² (AWG 14 / OD 1.6 mm)
Max. outer diameter (OD)	8 mm (0.315 in.)
Strip length (StrL)	OD ≤ 7.5 mm (0.29 in.) 0.01 – 72 mm (0.0004 – 2.8 in.) OD 7.5 – 8 mm (0.29 in. – 0.31 in.) 0.01 – 50.8 mm (0.0004 – 2 in.)
Strip length with cutting and single trigger mode	Mira 340: 32mm (1.26 in.) - CL, Mira 340 Q: 29mm (1.14 in.) - CL
Cut length (CL)	Mira 340: 32mm (1.26 in.)-StrL, Mira 340 Q: 29mm (1.14 in.)- StrL
Pull-off length	Mira 340: 0.01 – 32 mm (0.0004 – 1.26 in.) Mira 340 Q: 0.01 – 29 mm (0.0004 – 1.14 in.)
Increment for incision diameter	0.01 mm (0.0004 in.)
Increment for strip length	0.1 mm (0.004 in.)
Min. insertion depth	Mira 340 12 mm (0.47 in.), Mira 340 Q 15 mm (0.59 in.)
Gripper force	programmable
Blade type	Rotary 4X-blades
Trigger	Sensor, touchscreen, optional foot pedal
Data interface	USB port for data backup, barcode scanner
Article library: Max. number of articles	3000
Sequence function: Max. number of steps	100
Sequence library: Max. number of entries	1000
Incision monitoring	ACD (Automatic Conductor Detector) for Mira 340 Q, patented
Typical cycle time	~ 2.3 s
Electrical connection	50/60 Hz, 100 – 240 V AC, < 120 VA
Compressed air connection (air jet for cleaning)	5 – 7 bar
User interface	5" touch screen with swipe function + dial
Switch-on time from standby mode	< 1 s
Ambient temperature for operation	5 – 40 °C
Dimensions (W × H × D)	141 × 290 × 473 mm (5.6 × 11.4 × 18.6 in.)
Weight	11 kg (24 lbs.)
CE conformity	Conforms to the CE directives on machine safety and electromagnetic compatibility.

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

Options and accessories

V-shaped diamond coated grippers	Prevents rotation of the wire in the gripper
Flat diamond coated grippers	Non marking, e.g. for halogen free leads
Flat thin diamond coated grippers	For shorter inner wires in multi-core cables (only Mira 340) Breakout length: StrL + 8 mm (0.31 in.)
Wire feeding guide and holder	For wire diameters from 0.5 to 3 mm (0.02 – 0.12 in.)
Foot pedal switch Mira	Instead of using the cable trigger sensor

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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