







# **GENERATION SAFETY PLUS**

Battery-operated crimping, cutting and universal tools











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# Safety Plus – a generation with a real added value

#### The new standard

Battery powered Crimping- and Cutting Tools from Klauke have always represented the most comfortable and efficient solutions when it comes to reliable crimping of connecting material and cutting cables. However, outstanding results are no reason for us to rest on our laurels. On the contrary, we are always committed to improve the good and make it even better.

The result: our new tool generation Safety Plus.

The well established and successful **Klauke® mini-series** and the new model range **Klauke® mini+, ultra and ultra+** have set a new benchmark for Crimping and Cutting Tools when it comes to intelligence, efficiency and ergonomics and render electrical connection technology safer than ever before.

Excellent and progressive technology – with optimal results

The generation Safety Plus makes it possible'



# More intelligence

The new tools feature an integrated pressure sensor which automatically identifies the achieved crimping force during every crimping operation: **Intelligent Pressing System.** If a deviation from the set operation pressure is identified, an acoustic signal sounds and a red display flashes.

#### Safety Plus – a generation for clear and safe operations

- On-site control: Control and Inspection; electronics with integrated pressure test provides an immediate error display without the use of additional equipment
- Final record: Analysis of data via optical interface and USB adapter for written documentation of correct function
- Efficiency control: Multifunctional LED indicates maintenance and battery control
- Automatic retraction stop (ARS) after completed crimping: stops at the correct position to secure further multiple parallel crimps of similar type



### More power

The new tools of the generation Safety Plus include impressive powerful heavy duty Makita batteries offering a 50% higher capacity compared with present models. The automatic motor cut off after the crimping operation also increases the battery lifetime.

#### Safety Plus – a generation for powerful and efficient operations

- High performance 18 V Lithium-Ion Batteries offering 50% higher capacity
- Extremely short charging time utilising Makita MAKSTAR technology
- One charger for all new tools
- Significantly stronger motors for maximum performance
- Power save function through motor stop feature (automatic stop) once operation cycle is completed.
- Mains adapter NG2 for mains operation of mini+, ultra, ultra+ and multi tools





# Large comfort, small package

Only weighing approx. 1.6 kg including the battery the **Klauke® mini** is a highly portable battery powered crimping and cutting tool. In addition the in-line design design facilitates an easy one hand operation.

An ideal condition that every individual operation will be an easy one — even in hard to reach areas.



Crimping tools:	Kjauke	Kiauke	50 Klauke	Klauke'er
Technical data	EK 35/4	EK 15/50G	EK 15/50	EKP 1
Crimping force:	35 kN	13 kN	13 kN	10 kN
Stroke / opening width:	9 mm	9 mm	9 mm	9 mm
Crimp range (Cu / Al):	150 / 70 mm²	10 mm² /	10 mm² /	10 mm² /
Number of crimps:	approx. 150 @ 120 mm² Cu	approx. 220 @ 10 mm² Cu	approx. 220 @ 10 mm² Cu	approx. 220 @ 10 mm² Cu
Integrated pressure test with error display:				
Autom. control of crimp position (ARS):				
Weight incl. battery:	1.7 kg	1.6 kg	1.7 kg	1.3 kg
Part-No.:	EK354	EK1550G	EK1550	EKP1



#### Effortless crimping:

The Klauke® mini is the ideal solution for a crimping range up to 150 mm<sup>2</sup>.

#### Effortless cutting:

Even Cu- and Al-cables up to 32 mm Ø can be cut without any difficulty with the Klauke® mini.



#### **Characteristics:**

- Ergonomic design for ideal one hand operation
- One-push button operational concept for easy handling
- Low weight from 1.3 kg incl. battery, for fatigue-proof operation
- Quick crimping cycles of 2 4 seconds ensure efficient operation
- Crimping and cutting heads rotate
- Quick motor stop guarantees highest safety for the operator
- · Automatic retraction once crimp is completed
- · Manual retraction in case of need















- · Multifunctional LED indicates maintenance and battery control
- Powerful NiMH batteries of 2.0 Ah (optional: 3.0 Ah)
- · Sturdy plastic housing
- Environment-friendly hydraulic oil, quickly bio-degradable
- The sound pressure level of all Klauke® mini tools is close to 70.6 db (A) metered in 1 m distance. Vibrations are considerably below 2.5 m/s<sup>2</sup>.

#### Scope of supply:



- · Sturdy plastic box for storage of tool and accessories
- · Battery RAM2, 9.6V Ah, NiMH
- Battery charger LG4F for NiCd and NiMH batteries Charging time for RAM2: 40 min

#### Accessory:



• Battery RAM3, 9.6V 3.0Ah NiMH

#### **Cutting tools:**



Ø 20 mm Cu. Al. AI/St (ACSR)



Ø 32 mm Cu



Ø 8 mm St solid



	457		(No.)		
Technical data	ES 20	ES 32	ES 32 F	EBS 8	EBS 12
Shape of head:	open scissor	open scissor	open scissor	open	open
Cutting range:	20 mm	32 mm	32 mm	8 mm	12 mm
Type of cables:	Al/St-ropes, Cu flexible bus-bars	Cu- and Al-cable	finest stranded Cu-cable	cabel channels, studs, steel wire	cabel channels, studs, steel wire
Number of cuts:	approx. 180 @ ACSR conductor 120/20	approx. 90 @ 1x240 mm² NYY	approx. 90 @ 1x240 mm² NYY	approx. 300 @ Ø 5 mm	approx. 60 @ Ø 12 mm
Man. stoppage of retraction (MRS):					
Weight incl. battery:	2.0 kg	1.9 kg	1.9 kg	1.3 kg	1.9 kg
Part-No.:	ES20	ES32	ES32F	EBS8	EBS12



# Mini measures, maxi power

The **Klauke® mini+** is clear evidence that small size and a low weight can generate high power and performance. The powerful motor, amazing high battery capacity and the automatic feedback of the crimping cycle deliver a performance which in many cases exceeds that of the 5-ton tool series.







#### Hightech crimping with 5 tons:

Crimping of connecting material up to 240 mm<sup>2</sup> cross section is easily accomplished by the small Klauke® mini+.

#### The all-purpose cutting tool:

The Klauke® mini+ cuts effortless copper, aluminium, ACSR cables and constructional steel.



#### **Characteristics:**

- · Electronic control and inspection of the crimping cycle
- Integrated pressure test with optical and acoustical signal in case of failure
- · Analysis of data via optical interface and USB adapter
- Ergonomic design for ideal one hand operation
- One-push button operational concept for easy handling
- Two-components plastic housing with soft-filler conveys a comfortable and safe feeling
- LED zur Illumination of working space
- Powerful motors for fast pressing cycles and efficient work
- Power save function by motor stop (automatic stop)
- · Crimping and cutting heads rotate

- · Quick motor stop guarantees highest safety for the operator
- Automatic retraction once crimp is completed
- · Manual retraction in case of need
- Manual retraction stop (MRS) for cutting tools
- Multifunctional LED indicates maintenance and battery control
- High performance 18 V Lithium-Ion Batteries offering 50% higher capacity and extremely short charging times
- Environment-friendly hydraulic oil, quickly bio-degradable
- The sound pressure level of all **Klauke® mini+** tools undercuts significantly 70.6 db (A) metered in 1 m distance. Vibrations are considerably below 2.5 m/s<sup>2</sup>.



































Special feature: EKM60/22-L and EK50/18-L with automatic retraction stop (ARS) for multiple crimps

#### Scope of supply:



- accessories
- Battery RAL1, 18V, 1.5 Ah, Makita Lithium-Ion
- Battery charger LGL1 Makita MAKSTAR technology

#### **Accessory:**



- Battery RAL2, 18V, 3.0 Ah, Makita Lithium-lon
- Mains adapter NG2, compatible with all tools (mini+, ultra, ultra+, multi)
- USB adapter PGA1

#### **Cutting tools:**



Ø 25 mm Cu, AI, AI/St (ACSR)





Ø 32 mm Cu. Al





Ø 32 mm finest stranded



Technical data	ESG 25-L	ES 32-L	ES 32F-L
Shape of head:	closed	open scissor	open scissor
Cutting range:	max. 25 mm	max. 32 mm	max. 32 mm
Type of cables:	constructional steel, various cables	Cu- and Al-cable	finest stranded Cu-cable
Number of cuts:	depending on material	approx. 150 @ H07V-R 1x240 mm <sup>2</sup>	approx. 120 @ Ø 15 mm Cu
Man. stoppage of retraction (MRS):	<b>⋄</b>	~	~
Weight incl. battery:	2.1 kg	2.0 kg	2.0 kg
Part-No.:	ESG25L	ES32L	ES32FL



# Ultra safe, ultra strong

Because of its well-balanced position of centre of gravity the new **Klauke® ultra** lies well in the hand and enables a comfortable handling and a fatigue-proof operation over a longer period even during overhead operations. In case of a faulty crimp operation an optical and acoustical signal warns immediately.

Where absolute safety is concerned you do very well with the Klauke® ultra.







#### Precise crimping with 6 tons:

The Klauke® ultra is the ideal solution for a crimp range up to 300 mm<sup>2</sup>.

#### **Effortless cutting:**

The Klauke® ultra cuts Armoured Cu and Al cables and even Al/St ropes up to 45mm Ø without any problem.



#### **Characteristics:**

- · Electronic control and inspection of the crimping cycle
- Integrated pressure test with optical and acoustical signal in case of failure
- · Analysis of data via optical interface and USB adapter
- Ergonomic design with two-component handle area and optimized position of centre of gravity
- One-push button operational concept for easy handling
- LED zur Illumination of working space
- Powerful motors for fast pressing cycles and efficient work
- Two stage hydraulic system with quick feed and power stroke
- Power save function by motor stop (automatic stop)
- · Crimping and cutting heads rotate

- · Quick motor stop guarantees highest safety for the operator
- Automatic retraction once crimp is completed
- · Manual retraction in case of need
- Manual retraction stop (MRS) for cutting tools
- Automatic retraction stop (ARS) for multiple crimps (depending on model)
- Multifunctional LED indicates maintenance and battery control
- High performance 18 V Lithium-Ion Batteries offering 50% higher capacity and extremely short charging times
- Environment-friendly hydraulic oil, quickly bio-degradable
- The sound pressure level of all **Klauke® ultra** tools undercuts significantly 70.6 db (A) metered in 1 m distance. Vibrations are considerably below 2.5 m/s<sup>2</sup>.























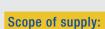




















- · Sturdy plastic box for storage of tool and accessories
- Battery RAL2, 18V, 3.0 Ah, Makita Lithium-Ion
- Battery charger LGL1 Makita MAKSTAR technology

#### Accessory:



- Mains adapter NG2, compatible with all tools (mini+, ultra, ultra+, multi)
- USB adapter PGA1

### **Cutting tools:**









Technical data	ESG 45-L	ESG 50-L	ES 65-L
Shape of head:	guillotine closed	guillotine closed	guillotine open
Cutting range:	45 mm	50 mm	65 mm
Type of cables:	armoured Cu- and Al-cable, Al/St-steel	light armoured Cu- and Al-cable	light armoured Cu- and Al-cable
Number of cuts:	approx. 150 @ ACSR conductor 570/40	approx. 140 @ 4x120 mm² NYY	approx. 140 @ 4x120 mm² NYY
Man. stoppage of retraction (MRS):	~	•	•
Weight incl. battery:	5.7 kg	4.7 kg	6.3 kg
Part-No.:	ESG45L	ESG50L	ES65L



# The Power-plus-package

When top efficiency is being required for crimp operations there is no alternative to the **Klauke® ultra+**. Crimp operations requiring high efforts and force will become very easy because of the outstanding centre of gravity of the tool. In addition the automatic retract stop (ARS) facilitates further rapid multiple crimps.







#### Wide crimping with 12 tons:

The Klauke® ultra+ is the ideal solution for crimp ranges up to 400 mm<sup>2</sup>.

#### **Effortless cutting:**

The power pack from Klauke: Only the Klauke® ultra+ cuts Armoured cables of up to 105 mm Ø smoothly with a cutting force of up to 120 kN.



#### **Characteristics:**

- · Electronic control and inspection of the crimping cycle
- Integrated pressure test with optical and acoustical signal in case of failure
- · Analysis of data via optical interface and USB adapter
- Ergonomic design with two-component handle area and optimized position of centre of gravity
- One-push button operational concept for easy handling
- LED zur Illumination of working space
- · Powerful motors for fast pressing cycles and efficient work
- Two stage hydraulic system with quick feed and power stroke
- Power save function by motor stop (automatic stop)
- · Crimping and cutting heads rotate

- · Quick motor stop guarantees highest safety for the operator
- Automatic retraction once crimp is completed
- · Manual retraction in case of need
- Automatic retraction stop (ARS) for multiple crimps
- Manual retraction stop (MRS) for cutting tools
- · Multifunctional LED indicates maintenance and battery control
- High performance 18 V Lithium-Ion Batteries offering 50% higher capacity and extremely short charging times
- Environment-friendly hydraulic oil, quickly bio-degradable
- The sound pressure level of all **Klauke® ultra+** tools undercuts significantly 70.6 db (A) metered in 1 m distance. Vibrations are considerably below 2.5 m/s<sup>2</sup>.

































### Scope of supply:



Part-No.:



ESG55L





- · Sturdy plastic box for storage of tool and accessories
- Battery RAL2, 18V, 3.0 Ah, Makita Lithium-lon
- Battery charger LGL1 Makita MAKSTAR technology

ES85L

#### Accessory:



ES105L

- · Mains adapter NG2, compatible with all tools (mini+, ultra, ultra+, multi)
- USB adapter PGA1



ESG85L

ESG105L



# The All-Rounder

For operations requiring varied applications the Klauke® multi as a universal tool offers the most practical solution.

Exchangeable adapters and dies enable crimping, cutting and punching operations with just one single tool.

The weight advantage is particularly appreciated by maintenance and service teams.

The Klauke® multi is available as a 6 ton and 12 ton designed tool.

















Crimping, cutting and punching with just one single tool:

Without much effort a crimping tool will be converted into a cutting or punching tool.





Crimping

Cutting





**Cutting Punching** 

#### **Characteristics:**

- One head for crimping, cutting and punching operations
- Adapter for crimping dies for the most common Klauke tool series
- Diverse cutting dies for aluminium and copper conductors with and without armouring
- Special dies for cutting threaded rods and DIN rails
- · Punching adapter for Greenlee punching tools
- Die for punching DIN rails
- Electronic control and inspection of the crimping cycle
- · Analysis of data via optical interface and USB adapter
- · Ergonomic design with two-component handle area and optimized position of centre of gravity
- One-push button operational concept for easy handling
- LED zur Illumination of working space
- Two stage hydraulic system with quick feed and power stroke

- Power save function by motor stop (automatic stop)
- Universal head rotates
- Quick motor stop guarantees highest safety for the operator
- · Automatic retraction once crimp is completed
- · Manual retraction in case of need
- Manual retraction stop with "teach in" (MRS+)
- Multifunctional LED indicates maintenance and battery control
- High performance 18 V Lithium-Ion Batteries offering 50% higher capacity and extremely short charging times
- Environment-friendly hydraulic oil, quickly bio-degradable
- The sound pressure level of all Klauke® multi tools undercuts significantly 70.6 db (A) metered in 1 m distance. Vibrations are considerably below 2.5 m/s2.





































#### Scope of supply:











- Sturdy plastic box for storage of tool and accessories
- Battery RAL2, 18V, 3.0 Ah, Makita Lithium-Ion
- Battery charger LGL1 Makita MAKSTAR technology
- · Adapter for crimping dies

#### Accessory:



- · Mains adapter NG2, compatible with all tools (mini+, ultra, ultra+, multi)
- USB adapter PGA1

# All tools at a glance

# Crimping















**Crimping:** 

**Article:** Crimping force: Crimping range: EK 35/4 35 kN 6 - 150 mm<sup>2</sup>

EK 15/50 G 13 kN 0.75 - 10 mm<sup>2</sup> EK 15/50 13 kN 0.75 - 10 mm<sup>2</sup> EKP 1 10 kN

0.5 - 10 mm<sup>2</sup>

Klauke mini+











**Crimping:** 

**Article:** Crimping force: Crimping range: EK 35/4-L 35 kN

6 - 150 mm<sup>2</sup>

EK 50/5-L 50 kN 6 - 240 mm<sup>2</sup>

EK 50/18-L 50 kN 6 - 185 mm<sup>2</sup>

EKM 60/22-L

60 kN

6 - 300 mm<sup>2</sup> 6 - 240 mm<sup>2</sup>

50 kN

KlauKe ultra







Crimping:

**Article:** Crimping force: Crimping range: EK 60/22-L 60 kN

6 - 300 mm<sup>2</sup>

**EK 60 VP-L** 55 kN

10 - 240 mm<sup>2</sup>

EK 60 VP/FT-L

55 kN 16 - 300 mm<sup>2</sup>

KlauKe ultra+









**Crimping:** 

Crimping force: Crimping range:

Article:

EK 120/30-L

120 kN 10 - 400 mm<sup>2</sup> EK 120/42-L

120 kN 10 - 400 mm<sup>2</sup> EK 120 U-L

120 kN 10 - 400 mm<sup>2</sup> **EK 120 ID-L** 

108 kN 35 - 500 mm<sup>2</sup>

Klauke multi







Crimping, Cutting, **Punching:** 

EKM 60 UNV-L EK 60 UNV-L **EK 120 UNV-L Article:** 60 kN 60 kN 108 kN Crimping force: Crimping range: 6 - 300 mm<sup>2</sup> 10 - 400 mm<sup>2</sup> 6 - 300 mm<sup>2</sup> Cutting range: max. Ø 25 mm max. Ø 40 mm max. Ø 40 mm Punching capacity: up to Ø 64 mm round, up to Ø 64 mm round, up to Ø 144 mm round, up to 92 x 92 mm square up to 92 x 92 mm square up to 138 x 138 mm square

# Cutting











**Cutting:** 

**Article:** Cutting range: **ES 20** max. Ø 20 mm **ES 32** max. Ø 32 mm

Cu, Al

max. Ø 32 mm Cu (finest stranded)

**ES 32 F** 

max. Ø 8 mm solid steel

**EBS 8** 

max. Ø 12 mm solid steel

Cable type / material: Cu, Al, Al/St (ACSR)









**Cutting:** 

**Article: Cutting range:** 

Cable type / material:

**ESG 25-L** max. Ø 25 mm

Cu, Al, Al/St (ACSR)

**ES 32-L** 

Cu, Al

max. Ø 32 mm

**ES 32F-L** 

max. Ø 15 mm

Cu (finest stranded)







**Cutting:** 

**Article: ESG 45-L Cutting range:** max. Ø 45 mm Cable type / material: Cu, Al, Al/St (ACSR) **ESG 50-L** max. Ø 50 mm

Cu, Al

**ES 65-L** max. Ø 65 mm Cu, Al











**Cutting:** 

**Article: ESG 55-L ES 85-L ESG 85-L** ES 105-L **ESG 105-L** Cutting range: max. Ø 55 mm max. Ø 85 mm max. Ø 85 mm max. Ø 105 mm max. Ø 105 mm Cable type / material: Cu, Al, Al/St (ACSR) Cu, Al Cu, Al Cu, Al Cu, Al (armoured)











**Battery Charger** LG4F 40 min. for RAM2

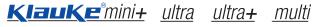
### **Accessory**:

Mains adapter

NG2

NG2115 Version 115V

NG2230 Version 230V



**Battery** 

RAL1

18V/1.5 Ah,

Li-lon







**Battery** RAL2 18V/3.0 Ah, Li-Ion



**Battery Charger** LGL1 15 min. for RAL1 22 min. for RAL2



PGA<sub>1</sub> USB adapter



Strong brands for your success:







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