Inspired by automation

Highly automated production processes you can count on, which is why our employers have systematically enhanced our automated bundling techniques. The current top model is the Autotool 2000 CPK (see page 584). It offers high reproductibility and binding results, individual control and complete documentation.
Bulk quantities - such as in cable confectioning, the automotive industry and the packaging sector - can be processed more quick and reliably as a result.

6.1 Automatic Cable Tying System

6.2 Application Tooling for Cable Ties

HellermannTyton

6.3 Application Tooling for Snappers

6.3 Application Tooling for Heat Shrinkable Tubing

6.3 Application Tooling for Non Shrinkable Tubing

6.3 Application Tooling for Braided Sleeves

6.3 Application Tooling for Identification

HellermannTyton

Automatic bundling up to Ø 20 mm

Autotool 2000 CPK

The Autotool 2000 CPK is an electrically operated and automated cable tying system. It has been developed to speed up bundling processes and to make the production more efficient. Besides the high speed bundling, this cable tying system is characterized by its simple operation and user-friendly ergonomics. The Autotool 2000 CPK offers a display for the settings and user information in 20 languages. One main feature of the Autotool 2000 CPK is the software "HT Data Management CPK".

This feature enables the easy parameterization of the tool for customers applications. The parameterization can easily be carried out via computer. Additionally the "HT Data Management CPK" offers an export function for the saved manufacturing data as well as further service functions. Therefore it ensures a consistent documentation for every binding process through the tool. The Autotool 2000 CPK is ideally suited for handling high volume applications in wire harness facilities, automotive and industrial companies and in the packaging sector. With either the Bench mount kit CPK or the Overhead suspension CPK, the Autotool 2000 CPK is suitable for both stationary and flexible applications.

By using the optional Power pack CPK with control box the Autotool 2000 CPK can be integrated into fully automated production lines through a serial interface. Due to the removable handle less assembly space is needed.

Bandoleers of 50 cable ties as well as reels of 3,500 cable ties can be used.

Features and benefits
- Electrically operated cable tying system (Power pack CPK or Power pack CPK with control box necessary)
- Cycle time 0.8-1.2 sec. depending on quality and force
- Stationary and flexible use with devices possible
- Integration into fully automated production lines (Power pack CPK with control box necessary)
- HT Data Management CPK software (included) - for extensive data evaluation and monitoring of the tensioning process
- User-friendly menu in various languages included
- Process-reliable, constant and reproducable bundling and cutting up to Ø 20 mm
- Removable handle for space-saving integration

One Step to the Web!

Autotool 2000 CPK.

HT Data Management CPK - software for Autotool 2000 CPK.

Power pack CPK for Autotool 2000 CPK.

TYPE	Article-No.
Autotool 2000 CPK	106-00000

Subject to technical changes.

Power Supply	Electronically operated
Cycle Time	0.8-1.2 sec. depending on quality and force
Weight	1.8 kg
Tension Force	Adjustable

Date of issue: 01/2018
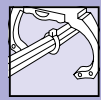
Automatic bundling up to Ø 20 mm

Accessories for Autotool 2000 CPK

Features and benefits
- Bench mount kit CPK for stationary use
- Overhead suspension CPK for flexible use
- Power pack CPK with control box for fully automated production lines
- Power pack CPK - Input: 100-240 V a.c., 50/60 Hz;
  Output: 25.2 V d.c., max. 150 W
- Wire retainer HH20 raises the bundle off the harness board at optimum height and allows the operator to eliminate handling the bundle when applying ties
- Force measurement device CPK to measure the linear tensile force of the Autotool 2000 CPK. Available with grip mount or robot adapter

Bench mount kit CPK with foot pedal (also shown: Autotool 2000 CPK, Power pack CPK and T18RA3500).

TYPE	Article-No.
Bench mount kit CPK	106-00040
Force measurement device with grip mount CPK	106-29010
Force measurement device with robot adapter CPK	106-29011
HH20	120-00080
Overhead suspension CPK	106-00050
Power pack CPK	106-00100
Power pack CPK with control box	106-00110

Subject to technical changes.

Overhead suspension CPK (also shown: Autotool 2000 CPK, Power pack CPK and T18RA3500).

Harness board accessory HH20.

Application with the Bench mount kit CPK.

Automatic bundling up to Ø 20 mm

Cable ties for Autotool 2000 systems

The inside-serrated cable ties are designed for use specifically in the automatic cable tying systems. The Autotool 2000 CPK is ideally suited for handling high volumes applications in wire harness facilities, automotive and industrial companies as wells as the packaging sector.

Features and benefits
- Available in bandoleers of 50 cable ties or reels of 3,500 cable ties
- Available in natural and black
- Repetitive tension on the bundles
- Easily recyclable

Cable ties for Autotool 2000 systems.

MATERIAL	Polyamide 6.6, heat stabilised (PA66HS)	Polyamide 6.6, heat and UV-resistant (PA66HSW)	Polyamide 4.6 (PA46)
Operating Temperature	-40 °C to +105 °C, (+145 °C, 500 h)		-40 °C to +150 °C, (+195 °C, 500 h)
Flammability	UL94 V2		

HF ✓   RoHS ✓   HF ✓   LFH ✓   RoHS ✓
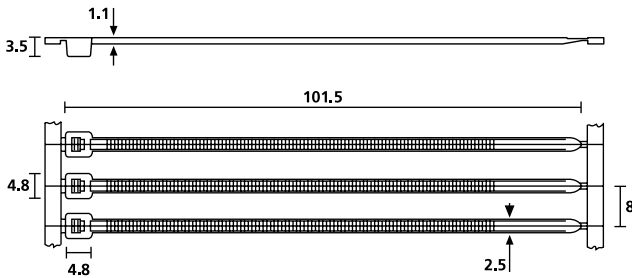
Bandoleer T18RA

Please find the corresponding Bundling Clips on page 180.

TYPE	Bundle Ø max.	N	Colour	Material	Pack Cont.	Article-No.
T18RA50	20.0	80	Black (BK)	PA66HSW	2,000 pcs.	120-40020
T18RA3500	20.0	80	Black (BK)	PA66HSW	3,500 pcs.	120-50010
	20.0	80	Natural (NA)	PA46	3,500 pcs.	120-46009
T18RA50	20.0	80	Natural (NA)	PA66HS	2,000 pcs.	120-40019
T18RA3500	20.0	80	Natural (NA)	PA66HS	3,500 pcs.	120-50009

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content.
More colours on request. Please contact us.

Halogen-free according to the interdictions of the GADSL list and compulsory registration of the SVHC list.

N = **Minimum Loop Tensile Strength for Cable Ties (Newton)**

For product specific approvals and specifications please refer to the Appendix.
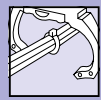
Waste-free bundling up to Ø 80 mm

Autotool System 3080

The Autotool System 3080 is an automated and electric cable tying system. It has been developed to speed up bundling processes and operates waste-free.

The advantage of three quick-changeable jaw sizes allows the Autotool System 3080 to adapt perfectly to different bundle diameters up to Ø 80 mm.

With either the Bench mount kit 3080 or the Overhead suspension 3080, the Autoool System 3080 is suitable for both stationary and flexible applications. The Autotool System 3080 can also be integrated into fully automated production lines.

Custom designed jaws are available to enable bundling of foot parts on production lines.

Features and benefits

- Electrically operated cable tying system (Power pack 3080 necessary)
- High quality, waste-free bundling up to Ø 80 mm with flush cut off
- Jaws with diameters of 30, 50 and 80 mm - included in delivery
- Cycle time 1.1-2.4 seconds depending on bundle diameter
- Bundle diameter mechanically detected
- Integration into Bench mount kit 3080 or Overhead suspension 3080 possible
- Integration into fully automated production lines possible
- Foot part bundling with custom jaw design Ø 50 mm

Autotool System 3080.

Autotool System 3080 with three different jaws - to optimize the cycle time for different bundle diameters.

One Step to the Web!

Power pack 3080.

TYPE	Article-No.
Autotool System 3080	102-00000

Subject to technical changes.

Power Supply	Electrically operated
Cycle Time	1.1-2.4 sec. depending on bundle diameter
Weight	1.9 kg
Tension Force	Adjustable
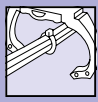
Waste-free bundling up to Ø 80 mm

Accessories for Autotool System 3080

Features and benefits

- Bench mount kit automatic 3080 in fully automated production lines
- Bench mount kit horizontal 3080 for horizontal use in fully automated production lines
- Bench mount kit 3080 for stationary use, foot pedal included
- Overhead suspension 3080 for flexible use
- Power pack 3080 - Input: 240/150 V a.c., 50/60 Hz; Output: 48 V d.c., max. 150 W

Bench mount kit 3080 with foot pedal (also shown: Autotool System 3080, Power pack 3080 and consumables).

Optional: Bench mount kit 3080 with table board.

Packaging application with Bench mount kit horizontal 3080.
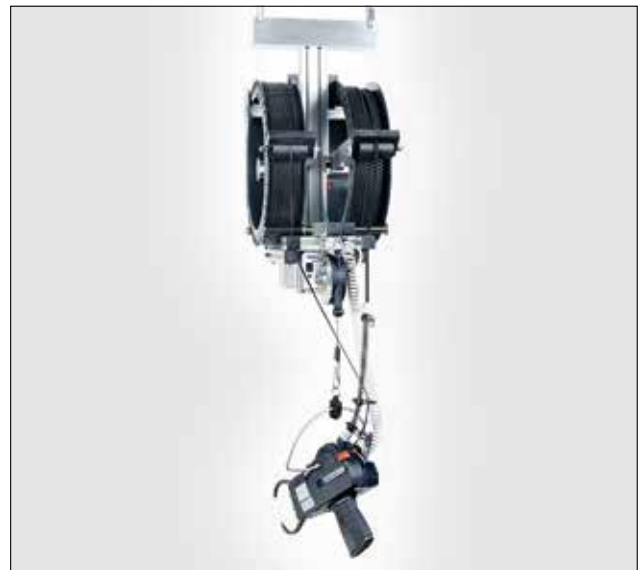
Overhead suspension 3080 (also shown: Autotool System 3080 and consumables).

TYPE	Article-No.
Bench mount kit 3080	102-00040
Bench mount kit automatic 3080	102-00042
Bench mount kit horizontal 3080	102-00041
Overhead suspension 3080	102-00050
Power pack 3080	102-00100

Subject to technical changes.

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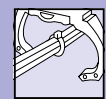
Waste-free bundling up to Ø 80 mm

Cable ties for Autotool System 3080

The outside serrated strap is perfectly suitable for sensitive surfaces and can be used for bundling and fixing of cables, pipes and hoses, as well as for bag sealing. The materials are particularly appropriate for high volume bundling applications in cable assembly, automotive, industrial and packaging applications.

Features and benefits
- Innovative two-piece consumables: closure and strap
- Outside serrated strap protects the bundle
- Available on reels of 500 m strap and 5,000 pcs. closures

Closures and strap for Autotool System 3080.

MATERIAL	Polyamide 6.6, high impact modified, heat and UV stabilised (PA66HIRHSUV)	Polyamide 6.6, heat and UV stabilised (PA66HSUV)
Operating Temperature	-40 °C to +95 °C, (+105 °C, 5000 h; +145 °C, 500 h)	-40 °C to +105 °C, (+145 °C, 500 h)
Flammability	UL94 HB	UL94 V2

RoHS✓   RoHS✓

Closure   *Strap*
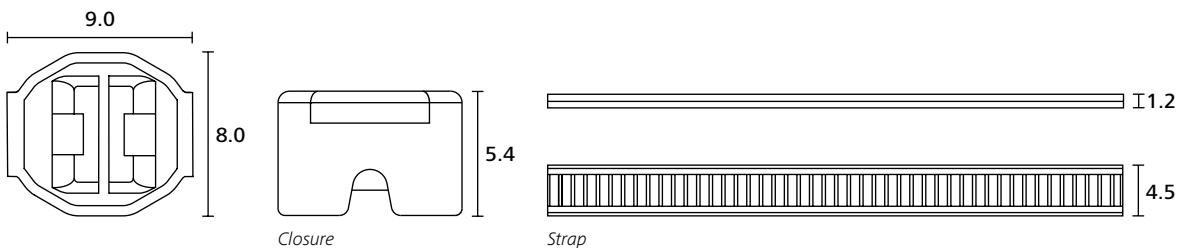
TYPE	Description	Bundle Ø max.	N	Colour	Material	Pack Cont.	Article-No.
Closures Black ATS3080	Closures Black ATS3080	80.0	225	Black (BK)	PA66HSUV	5,000 pcs.	102-66210
Closures Natural ATS3080	Closures Natural ATS3080	80.0	225	Natural (NA)	PA66HSUV	5,000 pcs.	102-66209
Strap Black ATS3080	Strap Black ATS3080	80.0	225	Black (BK)	PA66HIRHSUV	500 m	102-66110
Strap Natural ATS3080	Strap Natural ATS3080	80.0	225	Natural (NA)	PA66HIRHSUV	500 m	102-66109

All dimensions in mm. Subject to technical changes.
Minimum Order Quantity (MOQ) may differ from package content.

N = **Minimum Loop Tensile Strength for Cable Ties (Newton)**

Tensioning Tools for Cable Ties

MK10-SB.
See page 595

1

MK20, MK21.
See page 595

2, 3

MK3SP.
See page 596

4

MK3PNSP2.
See page 596

5

EVO7/EVO7SP.
See page 598

6

EVO9/EVO9SP.
See page 599

10

EVO9HT.
See page 599

11

MK7P
See page 601

8

MK6
See page 600

9

MK9P
See page 602

12

Tensioning Tools for Cable Ties KR-Series

KR6/8.
See page 603

13

KR8PNSE.
See page 603

14

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Flowchart for optimum tool selection

Manual and pneumatic tensioning tools for conventional plastic cable ties			

≤ 4.8 mm		≥ 4.8 mm	

Manual tools	Page	Pneumatic tools	Page	Manual tools	Page	Pneumatic tools	Page
EVO7 / EVO7SP		MK3PNSP2		EVO9 / EVO9SP, EVO9HT		MK9P	
MK7HT		MK7P		MK6		MK7P	
MK3SP				MK10-SB			
MK10-SB				MK21			
MK20							

Manual and pneumatic tensioning tools for KR-Series cable ties			

= 6.0 mm		= 8.0 mm	

Manual tools	Page	Manual tools	Page	Pneumatic tools	Page
KR6/8		KR6/8		KR8PNSE	

Electrically operated and automated tensioning tools for plastic cable ties	

= 2.5 mm		= 4.5 mm	

Automatic tools	Page	Automatic tools	Page
Autotool 2000 CPK		Autotool System 3080	

Tensioning Tools for Metal Ties

MK9SST.
See page 604
15

MK9PSST.
See page 604
16

HDT16.
See page 605
17

KST-STG200.
See page 605
18

MST6.
See page 606
19

MST9.
See page 606
20

MTT4.
See page 607
21

Flowchart for optimum tool selection

Manual and pneumatic tensioning tools for metal cable ties MBT-Series

≤ 12.3 mm	≤ 16.0 mm

Manual tools	Page
KST-STG200	

Manual tools	Page
MK9SST	
HDT16	

Pneumatic tools	Page
MK9PSST	

Manual tensioning tools for metal cable ties AMT- and MLT-Series

≤ 12.0 mm	≤ 16.0 mm

Manual tools	Page
MTT4	

Manual tools	Page
HDT16	

Manual tensioning tools for metal cable ties MST-Series

= 5.9 mm	= 8.9 mm

Manual tools	Page
MST6	

Manual tools	Page
MST9	

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How to use a cable tie tool (using an EVO7 as an example)

1. Use tension adjustment knob to select your desired tension setting.
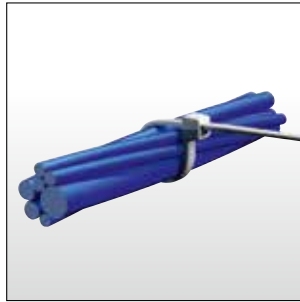
2. Cinch a nylon HellermannTyton cable tie around the bundle.
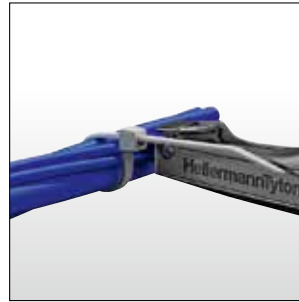
3. Insert strap of cable ties through side opening of nosepiece.
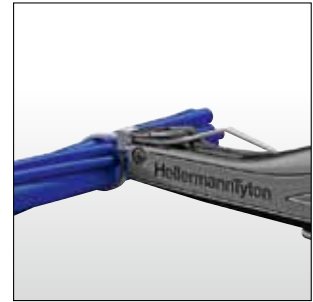
4. Place front of nosepiece flush to the head of the cable tie.

5. Pull trigger until cable tie tensions and cuts.

Tool testing - Determination of tensions

To date, no generally applicable test method has been established on the market. The companies within the HellermannTyton group work with an usual force meter with minimum 10 kHz frequency of data sampling to determine the tensile forces of the tools and to guarantee the quality of the tools.

It is more difficult to test cable tie tools than would appear at first glance. It is of supreme importance to comply with a standardised test procedure and consistent test conditions. This means for instance the size and thus the cross-section of the cable ties, but also the water content of the tie. A test using different ties and / or different conditioning can easily lead to different values.

In general, the speed of cut-off, the position of the tool with respect to the cable tie, the condition of the wearing parts in the tool and the state of the cable tie play a fundamental role in the determination of tensile forces.

Therefore we must point out that any values we provide must only ever be regarded as guide values for your information. The values cannot be transferred into practice "one for one".

In our user instructions, we specify an adjustment range for each type of cable tie. If tension values must be documented or comply with a specification, we recommend that you adjust them with the aid of the

force meter. Also, as a guideline, half the minimum holding strength of the cable tie should be used as tensile force.

The minimum tensile strength (also referred to as minimum unlocking strength) is the least force which the cable tie can withstand before it tears or stretches. This strength is determined using a threaded tie, hence the following formula should be used for guidance as to the correct tensile force of the tool:

$$\frac{\text{Min. tensile strength}}{2} = \text{recommended tensile force}$$

Example:

$$\text{T50R} = \frac{225 \text{ N minimum tensile strength}}{2}$$

$$\frac{225 \text{ N}}{2} = 112.5 \text{ N recommended tensile force according to formula}$$

The tensile force can of course be adjusted up or down, in line with the corresponding application.

Please bear in mind that this statement applies only to HellermannTyton products. Cable ties from other manufacturers may require a higher or lower force setting.

In order to secure the device after it has been adjusted using the force meter against manipulation or unintentional maladjustment, HellermannTyton offers an adjustment safety cap (Art. No.: 110-07200 for MK7HT, MK7P, MK9SST, MK9P) which you can push onto the device after removing the adjustment unit (loosening a screw is all it takes to remove).

After a period of time, to be defined, you test the device again and if necessary re-adjust it. The problem of determination of forces depends on the individual case and has no direct connection with the quality of our product. An exact value for each setting (e. g. in Newtons), without stating a tolerance, cannot be confirmed.

Test set-up with a usual force meter and EVO7 cable tie tool.

The following describes how to check the tension force of a manual tensioning tool.

1. Lay the cable tie (green) into the fixture (A).

2. Bring the nose piece of the tensioning tool (B) flush to the test block (C).

3. Insert the strap of the cable tie into the tensioning tool and pull the strap flush against the fixture (A).

4. Re-set the force meter (D) to zero.

5. Pull the trigger of the tensioning tool continuously until the cable tie is cut.

6. The tension force achieved at the cut off point is determined.

Manual tensioning tool for cable ties with low profile head

MK10-SB up to 9.5 mm strap width

Features and benefits
- Ideal for easy handling of entire HellermannTyton RPE, PE and LPH series
- Tensions and cuts off prelooped cable ties flush at the head

MK10-SB.

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK10-SB	9.5	2.5	0.33 kg	110-10001

All dimensions in mm. Subject to technical changes.

Manual tensioning tool for cable ties, simple version

MK20 up to 4.8 mm strap width

MK21 up to 7.6 mm strap width

Features and benefits
- Lightweight, ergonomic tools
- For tensioning and cutting standard cable ties 4.8 - 7.6 mm width
- MK20 and MK21 ideal for on-site assembly
- Mounted and pretensioned ties are cut off by twisting tool
- Simply apply cable tie, tension and twist to cut

MK20, MK21.

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK20	4.8	1.5	0.05 kg	110-20006
MK21	7.6	2.5	0.05 kg	110-21016

All dimensions in mm. Subject to technical changes.

Manual tensioning tool metal housing

MK3SP up to 4.8 mm strap width

This tough metal tool MK3SP is used by harness makers for automotive industry and white goods as well as in the aerospace, railway and medical industry.

Features and benefits
- Tough metal tool for HellermannTyton plastic cable ties up to 4.8 mm width
- For consistent tensioning and automatically flush cutting
- Infinitely adjustable tension force
- Reliable and low maintenance

MK3SP.

TYPE	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK3SP	MK3SP	4.8	1.5	0.33 kg	110-03500
SP MK3SP replacement blade	Replacement Blade	-	-	0.01 kg	110-03524

All dimensions in mm. Subject to technical changes.

Pneumatic tensioning tool metal housing

MK3PNSP2 up to 4.8 mm strap width

Features and benefits
- Pneumatic tensioning tool
- Tough metal housing
- For cable ties up to 4.8 mm width
- For consistent tensioning and automatically flush cutting
- Infinitely adjustable tension force
- High application speed
- Reliable and low maintenance

The pneumatic tensioning tool MK3PNSP2 for plastic cable ties with max. width of 4,8 mm.

Air Supply	non oiled / oiled
Air Pressure (min.)	3 Bar
Air Pressure (max.)	6 Bar
Hose Internal Diameter	4.0 mm
L x H x W	approx. 225 x 140 x 40 mm

RoHS ✓

TYPE	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK3PNSP2	MK3PNSP2	4.8	1.5	0.56 kg	110-03400
SP MK3PNSP2 air hose 3 meters	Air hose, complete	-	-	0.35 kg	110-30002
SP MK3PNSP2 cutting blade	Replacement Blade	-	-	0.01 kg	110-30101

All dimensions in mm. Subject to technical changes.

CE GS   For product specific approvals and specifications please refer to the Appendix.

The EVO family delivers maximum performance whilst protecting muscles and joints.

The next generation of application tools impresses with its advanced technology.

With the EVO family, HellermannTyton has developed a truly ergonomic cable tie application tool that is unique in the market, perfectly combining convenience with function. **The heart of the EVO family is the innovative and patent-pending TLC technology (Tension / Lock / Cut).** This is designed to revolutionise the application of cable ties by reducing the effort required for cutting. The EVO family cuts cable ties with ease, delivering a flush clean finish with no excess strap, whilst significantly reducing physical strain on the user.

The patent-pending TLC technology delivers increased productivity:

- Application force and effort is significantly reduced
- Precise cutting of the cable tie right at the head
- Smooth fastening of the cable tie without recoil
- Reduced long-term health issues due to lower recoil shock on the operator and reduced effort

Perfect cutting made easy with the EVO family:

From precise preliminary settings to the perfect cut, the EVO family allows for an even lighter, gentler and easier cable tie application than ever before. The patent-pending TLC technology makes all the difference!

1. Tension
Tension the cable tie as usual.
Use the tension adjustment knob to select the desired tension setting.

2. Lock
The patent-pending locking mechanism detects when the desired tension is reached, locking the tie in place prior to cutting. No manual pressure is required to hold the cable tie in place.

3. Cut
For the final cut, very little effort is needed. By simply pulling the trigger enough to cut the tie, a precise finish can be achieved without excessive strain on the user.

One Step to the Web!

Manual tensioning tool plastic housing

EVO7 up to 4.8 mm strap width

HellermannTyton's EVO7 mechanical hand tool was ergonomically designed to reduce the risks of repetitive stress injuries to operators while concurrently increasing productivity. The EVO7 Tension/Lock/Cut Technology delivers performance, safety and comfort for the operators. Available in a standard grip span (EVO7) or short grip span (EVO7SP), for smaller hands. Additional accessories are available.

Features and benefits
- Ergonomic, slip-proof handle for a comfortable and secure grip
- Extremely low maintenance
- Fast and precise application with minimum effort (TLC mechanism)
- Convenient and simple tension adjustment
- Extended, slim nose for use in narrow spaces
- Housing made of resilient and lightweight glass fibre-reinforced polyester
- Standard grip span (90 mm) and short grip span (80 mm) available

The EVO7: Maximum performance with minimum effort.

TYPE	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
EVO7	EVO7	4.8	1.5	0.28 kg	110-70129
EVO7SP	EVO7SP	4.8	1.5	0.28 kg	110-70130
BLADEKIT	Blade-Kit	-	-	-	110-70106

All dimensions in mm. Subject to technical changes.

MIL SAE®   For product specific approvals and specifications please refer to the Appendix.

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Manual tensioning tool plastic housing

EVO9 up to 13 mm strap width

The EVO9 is available in a standard grip span 90 mm (EVO9) or short grip span 80 mm (EVO9SP), for smaller hands. Both tools perform between 53N and 307N. The EVO9HT is the "high tension" version of the EVO9 family. Developed for maximum tensile strength this tool performs between 120N and more than 516N. The EVO9 family was designed to apply HellermannTyton cable ties with a maximum width of 13 mm.

Features and benefits

- Standard grip span (90 mm) and short grip span (80 mm) available
- Ergonomic, slip-proof handle for a comfortable and secure grip
- Extremely low maintenance
- Fast and precise application with minimum effort (TLC mechanism)
- Convenient and simple tension adjustment
- Integrated 3 position quick adjustment override
- Housing made of resilient and lightweight glass fibre-reinforced polyester

The EVO9 with TLC-Technology.

The EVO9HT with TLC-Technology.

TYPE	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
EVO9	EVO9	13.0	2.0	0.36 kg	110-80002
EVO9SP	EVO9SP	13.0	2.0	0.36 kg	110-80003
EVO9HT	EVO9HT	13.0	2.0	0.36 kg	110-80017
Replacement Blade	EVO9 Blade	-	-	-	110-80037

All dimensions in mm. Subject to technical changes.

Manual tensioning tool metal housing

MK6 up to 9.0 mm strap width

Features and benefits
- Tough metal tool
- For cable ties up to 9.0 mm width
- For consistent tensioning and automatically flush cutting
- Infinitely adjustable tension force
- Reliable and low maintenance

MK6.

TYPE	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK6	MK6	9.0	2.0	0.52 kg	110-06000
SP MK6 replacement blade	Replacement Blade	-	-	0.01 kg	110-06026

All dimensions in mm. Subject to technical changes.

HellermannTyton   Further information at **www.HellermannTyton.com.sg/competences/cable-tools**

Date of issue: 01/2018

Pneumatic tensioning tool plastic housing

MK7P up to 4.8 mm strap width

The MK7P pneumatic bundling tool sets a new benchmark for the rational application of ties in the industrial production process. Improved compressed air supply moves the tensioning piston faster than in comparable tools.

Features and benefits

- Pneumatic tensioning tool
- Light glass-fibre-reinforced housing
- For cable ties up to 4.8 mm width
- For consistent tensioning and automatically flush cutting
- Infinitely adjustable tension force
- High application speed

The pneumatic tensioning tool MK7P for plastic cable ties with max. width of 4,8 mm.

The easy to use quick-set-knob.

Air Supply	non oiled / oiled
Air Pressure (min.)	3 Bar
Air Pressure (max.)	6 Bar
Hose Internal Diameter	4.0 mm
L x H x W	approx. 220 x 170 x 40 mm

RoHS ✓

TYPE	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK7P	MK7P	4.8	1.5	0.43 kg	110-07100
SP MK3PNSP2 air hose 3 meters	Air hose, complete	-	-	0.35 kg	110-30002
SP MK7P replacement blade	Replacement Blade	-	-	0.01 kg	110-07111
SP lock cap tensioning knob	Lock cap tensioning knob	-	-	0.01 kg	110-07200

All dimensions in mm. Subject to technical changes.

For product specific approvals and specifications please refer to the Appendix.

Pneumatic tensioning tool plastic housing

MK9P up to 13.5 mm strap width

The MK9P is constructed with heavy duty parts to ensure optimum performance. It is ideally designed to apply heavy-duty ties like they are used in vehicle construction like trucks, busses and railways.

Features and benefits

- Pneumatic tensioning tool
- Glass-fibre-reinforced housing
- For cable ties up to 13.5 mm width
- For consistent tensioning and automatically flush cutting
- Infinitely adjustable tension force
- High application speed
- Holding ring for a balancer
- Optional with lower or upper air attachment

The pneumatic tensioning tool MK9P for plastic cable ties with max. width of 13,5 mm.

MK9P is also available with upper air attachment.

Air Supply	non oiled / oiled
Air Pressure (min.)	3 Bar
Air Pressure (max.)	6 Bar
Hose Internal Diameter	4.0 mm
L x H x W	approx. 280 x 200 x 55 mm

RoHS ✓

TYPE	Description	Strap Width max.	Strap Thickness max.	Weight	Air att. Position	Article-No.
MK9P	MK9P	13.5	2.5	0.91 kg	lower air connection	110-09100
	MK9P	13.5	2.5	0.91 kg	top air connection	110-09110
SP MK3PNSP2 air hose 3 meters	Air hose, complete	-	-	0.35 kg	-	110-30002
SP lock cap tensioning knob	Lock cap tensioning knob	-	-	0.01 kg	-	110-07200
SP MK9P replacement blade	Replacement Blade	-	-	0.01 kg	-	110-09111

All dimensions in mm. Subject to technical changes.

For product specific approvals and specifications please refer to the Appendix.

Manual tensioning tool for KR-Series

KR6/8

Application tool KR6/8 crimps the glass-fibre-reinforced locking pin of the KR seal and leads to plastic deformation of the tie ends. This produces a very proof permanent connection. In combination with KR cable ties this system offers high vibration resistance. One reason for customers in the railway and automotive industry to take this system as a preffered solution.

Features and benefits
- Tough metal tool for applying KR cable ties only
- For tensioning, fixing and cutting KR cable ties
- Simply change the front plate to apply 6 mm or 8 mm straps

The manual tensioning tool KR6/8 for KR-Series cable ties.

TYPE	Description	For Ties	Strap Width max.	Weight	Article-No.
KR6/8	KR6/8	KR6, KR8	8.0	0.52 kg	121-00680
SP KR6/8 replacement blade	Replacement blade	KR6, KR8	-	0.01 kg	122-68019

All dimensions in mm. Subject to technical changes.

Pneumatic tensioning tool for KR8-Series

KR8PNSE

Application tool KR8PNSE crimps the glass-fibre-reinforced locking pin of the KR seal and leads to plastic deformation of the tie ends. This produces a very proof permanent connection.

Features and benefits
- Pneumatic tool with tough metal housing
- For applying KR8 cable ties only
- For tensioning, fixing and automatically cutting KR8 cable ties
- Tension force can be adapted in reliance on air pressure
- Holding ring for a balancer

The pneumatic tensioning tool KR8PNSE for KR-Series cable ties.

Air Supply	non oiled / oiled
Air Pressure (min.)	3 Bar
Air Pressure (max.)	4 Bar
Hose Internal Diameter	6.0 mm
L x H x W	approx. 320 x 210 x 50 mm

RoHS ✓

TYPE	Description	For Ties	Strap Width max.	Weight	Article-No.
KR8PNSE	KR8PNSE	KR8	8.0	1.56 kg	121-00889
SP KR8PNSE replacement blade	Replacement Blade	KR8	-	0.01 kg	122-80032

All dimensions in mm. Subject to technical changes.

CE GS   For product specific approvals and specifications please refer to the Appendix.

Date of issue: 01/2018

Manual tensioning tool for metal ties MBT-Series

MK9SST up to 16.0 mm strap width

The MK9SST is constructed with heavy duty parts to ensure optimum performance. It is designed to apply our MBT cable ties with a strap width of up to 16 mm. The tool is ideally suited for use in most arduous environments such as found on board ships, oil rigs, constructions or in nuclear power stations.

Features and benefits
- Glass-fibre-reinforced housing
- Ergonomic design
- Consistent tensioning and automatically cutting of metal ties MBT-Series
- Infinitely adjustable tension force combined with two-step quick adjustment

MK9SST.

TYPE	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK9SST	MK9SST	16.0	0.5	0.60 kg	110-95000
SP MK9SST replacement blade	Replacement Blade	-	-	0.01 kg	110-95273

All dimensions in mm. Subject to technical changes.

Pneumatic tensioning tool for metal ties MBT-Series

MK9PSST up to 16.0 mm strap width

The MK9PSST pneumatic stainless steel tool is constructed with heavy-duty parts to ensure optimum performance in demanding environments. It is ideally designed to apply stainless steel metal ball tie series (MBT) up to 16.0 mm width.

Features and benefits
- Unique levels of repeatability and accuracy
- High application speed and low maintenance
- Improved compressed air supply for faster tensioning piston movement
- Shorter processing time and greater volume of connecting tie application
- Ergonomic design
- Automatic ejection of cut-off cable tie end
- Ideally designed to apply stainless steel MBT-Series up to 16.0 mm width
- On air pressure between 3 and 6 bar

MK9PSST.

Air Supply	non oiled / oiled
Air Pressure (min.)	3 Bar
Air Pressure (max.)	6 Bar
Hose Internal Diameter	4.0 mm
L x H x W	approx. 280 x 200 x 55 mm

RoHS ✓

TYPE	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK9PSST	MK9PSST	16.0	0.5	0.91 kg	110-95350
SP MK9PSST replacement blade	Replacement Blade	-	-	0.01 kg	110-95307
SP lock cap tensioning knob	Lock cap tensioning knob	-	-	0.01 kg	110-07200

All dimensions in mm. Subject to technical changes.

Date of issue: 01/2018

Manual tensioning tool for metal ties MBT-, MLT- and AMT-Series

HDT16 up to 16.0 mm strap width

The HDT16 application tool is designed for installing heavy duty stainless steel cable ties within a range of industries such as shipbuilding, oil rigs, mining and mass transit. The tool can easily be adjusted making it suitable for applying both MBT, MLT and AMT cable ties with a strap width of up to 16 mm.

Features and benefits
- Two way nose piece for use with MBT-Series and AMT-, MLT-Series stainless steel cable ties
- Easy adjustment of the handles to ensure the most ergonomic position for the operator
- Integrated cutting mechanism delivering a flush cut and professional finish every time
- The ideal tool for achieving a perfect installation of MBT, MLT and AMT cable ties

HDT16.

Application video: HDT16 Tool

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
HDT16	16.0	0.8	1.00 kg	110-40000

All dimensions in mm. Subject to technical changes.

Manual tensioning tool for metal ties MBT-Series

KST-STG200 up to 12.3 mm strap width

The KST-STG200 application tool is designed for installing heavy duty stainless steel cable ties within a range of industries such as shipbuilding, oil rigs, mining and mass transit. The tensioning strength can be adjusted while pulling the trigger. The tool is easy to handle and far more reliable than trying to tension the ties by hand.

Features and benefits
- Tough metal tool
- Operator controlled tensioning
- Cut off by pulling the hand lever

KST-STG200.

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
KST-STG200	12.3	0.3	0.56 kg	110-09950

All dimensions in mm. Subject to technical changes.

Manual tensioning tool for metal ties MST-Series

MST6 for 5.9 mm strap width

The MST6 tool has been specially developed for reliably applying HellermannTyton metal cable ties of the MST-S series. Due to the punch-lock mechanism the tie is mechanically crimped and leads to metal deformation of the tie ends. This punch-lock mechanism ensures a reliable bundling with perfect resistance to vibration. The tension force is freely adjustable by the operator.

Features and benefits
- Tough metal tool
- Ergonomic design
- Consistent tensioning and automatically cutting of metal ties
- Designed for use with MST-S Series ties (5.9 mm)
- For tensioning, fixing and cutting MST-S metal ties only

MST6.

TYPE	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MST6	MST6	5.9	0.3	0.53 kg	110-61000
SP MST6-P29 (Blade)	Replacement Blade	-	-	0.01 kg	110-61001
SP MST6-P30 (Punch)	Replacement Punch	-	-	0.01 kg	110-61002

All dimensions in mm. Subject to technical changes.

One Step to the Web!

Manual tensioning tool for metal ties MST-Series

MST9 for 8.9 mm strap width

The MST9 tool has been specially developed for reliably applying HellermannTyton metal cable ties of the MST-M series. Due to the punch-lock mechanism the tie is mechanically crimped and leads to metal deformation of the tie ends. This punch-lock mechanism ensures a reliable bundling with perfect resistance to vibration. The tension force is freely adjustable by the operator.

Features and benefits
- Tough metal tool
- Ergonomic design
- Consistent tensioning and automatically cutting of metal ties
- Designed for use with MST-M Series ties (8.9 mm)
- For tensioning, fixing and cutting MST-M metal ties only

MST9.

TYPE	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MST9	MST9	8.9	0.4	0.54 kg	110-13000
SP MST9-P29 (Blade)	Replacement Blade	-	-	0.01 kg	110-13001
SP MST9-P30 (Punch)	Replacement Punch	-	-	0.01 kg	110-13002

All dimensions in mm. Subject to technical changes.

Date of issue: 01/2018

Manual tensioning tool for metal ties MLT-Series

MTT4 up to 12.0 mm strap width

The MTT4 tensioning tool is a lightweight manual processing tool which is easy to use for application of the MLT (releasable) series. The extended nose piece ensures the fixing length of the MLT cable tie. While using the ratchet system, the operator can easily cut off the tie on the correct length with the long cutter lever.

Features and benefits
• Tough metal tool
• Simple ratchet operation, easy to use
• Operator controlled tensioning and cutting facility

MTT4.

TYPE	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MTT4	12.0	0.7	0.78 kg	110-04000

All dimensions in mm. Subject to technical changes.

Application Tooling for Snappers

MSNP, ASNP.
See page 609

ASNP.
See page 609

Application Tooling for Heat Shrinkable Tubing

H5002.
See page 611
30

H5004.
See page 611
31

E4500.
See page 610
32

Application Tooling for Non Shrinkable Tubing

NA.
See page 612
35–38

VA.
See page 613
39–41

K, S, SS.
See page 614

Application Tooling for Braided Sleeves

HSG0.
See page 614
45

Application Tooling for Identification

HCT1, HCT2.
See page 615
50–51

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Snapper Tools

MSNP1-70 for Snapper Size 1 to 70

ASNP2-22 for Snapper Size 2 to 22

ASNP24-70 for Snapper Size 24 to 70

Features and benefits

- For efficient fixing of the snapper hose clips
- MSNP tool: handy for installation on site
- ASNP tool: suitable for series production. Retaining screw limits the draw-in area prevents overstretching of the snapper

Snapper Application Tools MSNP1-70 and ASNP24-70.

i **Pneumatic Tools for Snapper are available on request. Contact us!**

Snapper hose clips for tubes and harnesses see page 203.

Snapper Application Tool ASNP2-22.

TYPE	Application	Weight	Material	Colour	Article-No.
MSNP1-70	SNP-Series 1 up to 70	0.18 kg	Metal (MET), Plastic (PL)	Yellow (YE)	191-01700
ASNP2-22	SNP-Series 2 up to 22	0.20 kg	Metal (MET), Plastic (PL)	Blue (BU)	191-02220
ASNP24-70	SNP-Series 24 up to 70	0.25 kg	Metal (MET), Plastic (PL)	Red (RD)	191-24700

Subject to technical changes.

Gas powered hot air tool

E4500

The E4500 hot air gun starter kit is ideal for working in cramped spaces or where there is no power supply. The kit includes a E4500 hot air tool with protective spring, gas cartridge P445, reflector nozzle Z2 and flat nozzle Z3. The hot air tool is suitable for shrinking all types of heat shrink products including tubing, shapes and cable repair sleeves. It can also be used for the bending and shaping of PVC pipes, soft soldering of copper pipes, drying, defrosting (of locks), heating and paint stripping.

Features and benefits

- Cordless hot air gun works with special gas cartridge
- Does not need any power supply
- Suitable for outdoor use
- Designed for heat shrink tubing, end caps and moulded shapes
- Supplied with protective spring, two nozzles and a gas cartridge
- Allows precise working in any position even in restricted spaces
- Can be operated on its stand for hands free use
- Light weight tool
- Operating time of cartridige: approx. 1.5 hours
- With easy Piezo ignition

E4500 with heat protecting spring.

Practical hot air gun kit E4500 with accessories.

Gas cartridge P445.

One Step to the Web!

TYPE	Description	Article-No.
E4500	Hot air gun with protective spring incl. gas cartridge, reflector nozzle Z2 and flat nozzle Z3	391-90002
P445	P445 Refill Gas Cartridge (Butane, Propane, Propene)	391-90101

Subject to technical changes.

Electrical hot air tool

H5002 - handy tool

For applying heat shrinkable products like thin wall shrink tubing and Moulded Shapes.

Features and benefits
- Lightweight and compact hot air tool
- Enables comfortable, fatigue-free work
- Temperature electronically controlled from 100-600 °C, cold air step of 50 °C
- Air-flow regulation adjusted in two stages (300 l/min and 500 l/min)

H5002 - The light, convenient hot air tool.

TYPE	Air Flow l/min	Operating Temperature	Standby Temp. °C	Wattage	Operational Voltage	Weight	Article-No.
H5002	300 - 500 l/min	+100 °C to +600 °C	50 °C	2,000 W	230 V AC ~ / 230-240 V	0.9 kg	391-50200

Subject to technical changes.

Electrical hot air tool

H5004 - for professional use

H5004 electrical hot air tool is designed for shrinking down many heat shrinkable products like thin wall tubing, with and without adhesive, end caps and moulded shapes.

Features and benefits
- Professional hot air gun
- Temperature electronically controlled
- Air flow regulation
- Equipped with LED temperature indication enabling precise temperature adjustment

H5004 - for professional use.

TYPE	Air Flow l/min	Operating Temperature	Standby Temp. °C	Wattage	Operational Voltage	Weight	Article-No.
H5004	150 - 500 l/min	+50 °C to +650 °C	50 °C	2,300 W	230-240V, 50Hz	1.13 kg	391-50400

Subject to technical changes.

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## Three-pronged pliers for sleeves and grommets

NA

Three-pronged expansion tools are used to ensure speedy and precise application of expandable markers and sleeves.
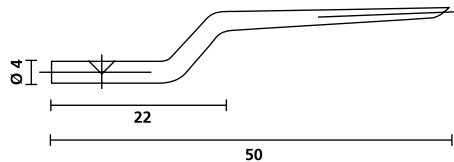
Features and benefits

- To easy affix expandable sleeves of every type onto cables/connectors
- Push pliers and pull over cable
- Close pliers, sleeve is placed easily
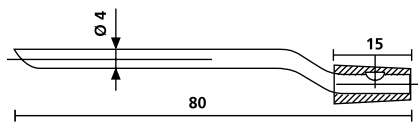- Hellerine lubricant recommended for easy operation

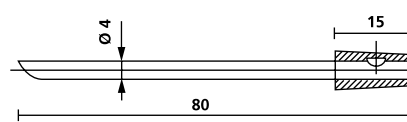*Fast, secure application with the NA three-pronged pliers.*
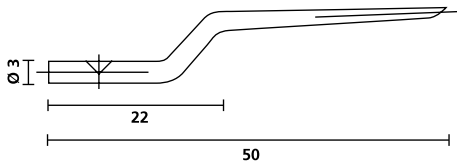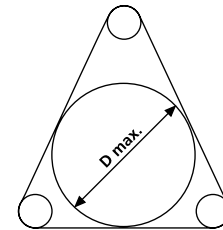
Replacement prong NA0/1
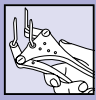
Replacement prong NA1K/3

Replacement prong NA4/5

Replacement prong NA8/10

Three-prong pliers D = max. application diameter

TYPE	Description	Bundle Ø min.	Bundle Ø max.	Ø D max.	Max. length of marker	Article-No.
NA0/1	Expansion tool NA0/1	1.3	1.8	10.5	28	621-10001
NA1K/3	Expansion tool NA1/3	2.5	5.0	11.0	28	621-10103
NA4/5	Expansion tool NA4/5	7.5	10.0	15.5	50	621-10405
NA8/10	Expansion tool NA8/10	12.0	17.0	25.5	60	621-10810
NA0/1 PRONG	Replacement prongs for NA0/1	1.3	1.8	-	28	621-60001
NA1K/3 PRONG	Replacement prongs for NA1K/3	2.5	5.0	-	28	621-60103
NA4/5 PRONG	Replacement prongs for NA4/5	7.5	10.0	-	50	621-60405
NA8/10 PRONG	Replacement prongs for NA8/10	12.0	17.0	-	60	621-60810

All dimensions in mm. Subject to technical changes.

Date of issue: 01/2018

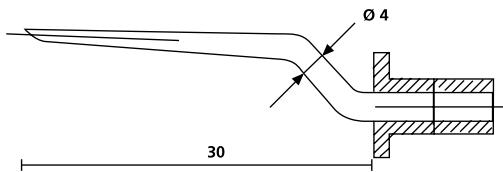## Three-pronged pliers for sleeves and grommets

VA2.5/5 - reinforced

Expansion tools are used to ensure speedy and precise application of expandable markers and sleeves.
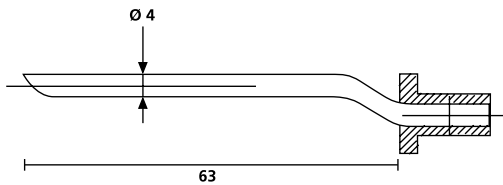
Features and benefits

- Suitable for expanding tubing cut lengths and rubber parts
- Withstands high loading
- Set of 3 2.5/5 pins
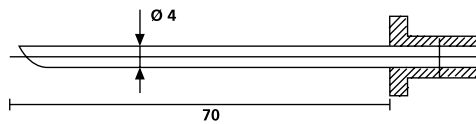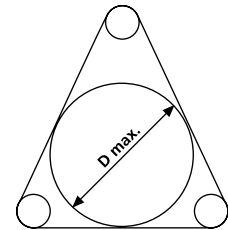- Replacement pins available in sizes 8 and 18

VA2.5/5.

Ø 4

30

Replacement prong size 2.5/5

Ø 4

63

Replacement prong size 8

Ø 4

70

Replacement prong size 18

D max.

Three-prong pliers D = max. application diameter

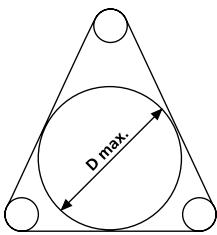| TYPE	Description	Bundle Ø min.	Bundle Ø max.	Ø D max.	Article-No.
VA2.5/5	Expansion tool VA2.5/5	2.5	5.0	26.0	621-00200
VA-2.5/5 PRONG	Replacement prongs size 2.5/5	2.5	5.0	26.0	621-01200
VA2.5/5 PRONG 8	Replacement prongs size 8	8.0	10.0	28.0	621-02200
VA2.5/5 PRONG 18	Replacement prongs size 18	18.0	20.0	30.0	621-03200

All dimensions in mm. Subject to technical changes.

Three-pronged pliers for sleeves and grommets

K, S, SS

Three-pronged expansion tools are used to ensure speedy and precise application of expandable markers and sleeves.

Features and benefits

- For speedy application of markers and sleeves
- Hellerine lubricant recommended for easy operation
- Handy D KIT contains a tool body, a range of prongs and small bottle of Hellerine lubricant.

Fast, secure application with the three-pronged expansion tools.

Three-prong pliers D = max. application diameter

TYPE	Bundle Ø min.	Bundle Ø max.	Ø D max.	Max. length of marker	Article-No.
SS TOOL	1.2	2.0	15.0	20	621-80008
S TOOL	2.5	4.0	15.0	20	621-80009
K TOOL	5.0	10.0	17.0	32	621-80007
D KIT	1.2	11.5	17.0	32	621-80005

All dimensions in mm. Subject to technical changes.

Hot cutting tool

HSG0

The HSG0 hand tool is used to cut braided sleeving cleanly and without fraying.

Features and benefits

- Light and sturdy
- Heats up quickly with the press of button and cuts in seconds
- The yarn melts and fuses together
- No fraying of the sleeving

The HSG0 hot cutting tool prevents the braided sleeving from fraying.

TYPE	Description	Weight	Colour	Article-No.
HSG0	Hot cutting tool	1.15 kg	Blue (BU)	170-99001
HSG0BLADE	Replacement blade	0.027 kg	Metal (ML)	170-99002

Subject to technical changes.

Date of issue: 01/2018

Helafix Tool

HCT1 for carrier size HCR09

HCT2 for carrier size HCR12

HCT1 and HCT2 tools are ideal for cleanly cutting the carrier strip as well as punching out the securing holes. For HCR06, HCR18 and HCR24, the front part of the pliers can be used. To fix the character holders HC and HCR simply use the T18 range of cable ties, fixings or rivets.

Features and benefits

- Cleanly cut Helafix HCR carrier tubing
- Punch securing holes on edges of HCR09 (HCT1) and HCR12 (HCT2)
- Apply punched HCR09 and HCR12 with T18 range of cable ties
- Suitable for punching rivet holes in HCR06, HCR18 and HCR24 tubing
- Punch hole diameter 2.5 mm
- Fix with T18 range of cable ties or suitable rivets

Any length can be used…

…just cut to suit.

TYPE	For Carrier Width	For Size	Ø (D)	Article-No.
HCT1	10.0	HCR09	2.5	525-00010
HCT2	13.0	HCR12	2.5	525-00013

All dimensions in mm. Subject to technical changes.