

# Application Tooling

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# 6.1 Automatic Cable Tying System

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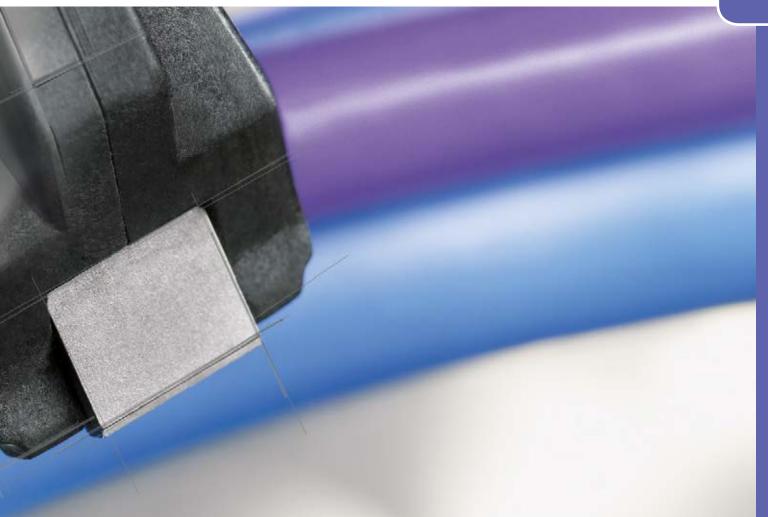
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#### Automatic bundling up to Ø 20 mm Autotool 2000 CPK

The reliability, ergonomics, simple handling and flexibility makes the Autotool 2000 CPK ideal for a variety of high volume applications, e.g. in cable assemblies for automotive, brown and white goods industry, electronics, TV and domestics appliances, sealing of bags and the bundling of parts. Overall the Autotool 2000 CPK gives full, flexible and cost effective utilization of labour and maximises efficiency.

With the Bench Mount Kit CPK or the Overhead Suspension CPK the Autotool 2000 CPK can be used stationary or mobile, depending on the customer's application.

Another option is to integrate the AT2000 CPK into a fully automated production line by using the Power Pack with integrated Control Box, which is the interface between the AT2000 CPK and your production line.

#### **Features and Benefits**

- Evolutionary model combining long-term customer experience
  and requirements
- · Electronically operated automatic bundling system
- Speeds up the bundling process
- Consistency and quality in the process of threating, tensioning
  and cutting
- Bundling with flush cut off / optional with excess tail
- Several languages available
- Service Software Extensive data analysis with included PC software possible, Production Data Acquisition (PDA)
- Tensioning drive completely controlled and monitored electronically
- High reproducibility of the bundling results
- Adjustable cycle time settings between 0.8 1.4 sec.
- Removable handle for full automation
- Troubleshooting via menu navigation



One Step to the Web!



Autotool 2000 CPK.



AT2000 CPK Service Software.



Power Pack for Autotool 2000 CPK.

Power Supply	Electronically, with Power Pack CPK
Cycle Time	adjustable 0.8 sec to 1.4 sec.
Weight	1.8 kg
Tension Force	adjustable

ТҮРЕ	Article-No.		
Autotool 2000 CPK	106-00000		

Subject to technical changes.

# Application Tooling Automatic Cable Tying System

6.1

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#### Automatic bundling up to Ø 20 mm

#### Accessories for Autotool 2000 CPK

#### Features and Benefits

- Supports the main features of the Autotool 2000 CPK
- Power Pack Input 100-240 V a.c. 50/60 Hz; Output 25,2 V d.c., max. 150 W
- Bench Mount Kit CPK for stationary usage
- Overhead Suspension CPK for flexible usage
- Power Pack CPK with Control Box for full automation usage
- Stand-off HH20 used as a spacer for optimal bundling support

ТҮРЕ	Article-No.		
Bench Mount Kit CPK	106-00040		
Overhead Suspension CPK	106-00050		
Power Pack CPK	106-00100		
Power Pack CPK with Control Box	106-00110		
HH20	120-00080		

Subject to technical changes.



Application with the Bench Mount Kit CPK.



Bench Mount Kit CPK included Foot Pedal, Autotool 2000 CPK, Power Pack CPK and T18RA3500.



Overhead Suspension CPK, Autotool 2000 CPK, Power Pack CPK and T18RA3500.



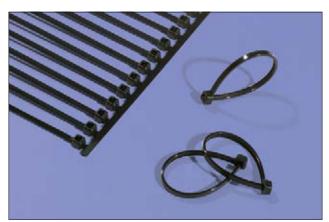
#### Automatic bundling up to Ø 20 mm

Cable ties for Autotool 2000 Series

For bundling and securing cables, pipes and hoses, especially in applications that require high volumes of cable ties, e.g. in cable assembly, automotive, industrial equipment and the packaging sector.

#### **Features and Benefits**

- Made from 100% high quality plastic, can be easily recycled
- Provides a secure hold around bundles
- Available in natural and black
- Other colours available on request
- Bandoleers of 50 cable ties or reels of 3,500 available



Cable ties for Autotool 2000 Series.

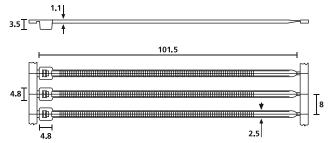
HF

LFH

MATERIAL	Polyamide 6.6, heat Polyamide 6.6, heat and stabilised (PA66HS) 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		UL94 V2, Limited Fire Hazard, Low generation of toxic gases and corrosive acid, Low smoke generation	

HF<sup><</sup>

RoHS



Bandoleer T18RA

ТҮРЕ	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
TIORASSUU	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)

RoHS



#### Automatic bundling

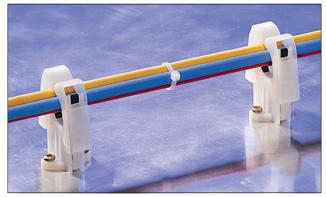
Bundling Clips for Automatic Cable Tying Systems

#### **Features and Benefits**

- Optimized for Automatic Cable Tying Systems
- Easy to fix



Bundling Clips ATSBCFT6LG.



Harness board accessory HH20.

ТҮРЕ	Drawing	Panel Thickness	Hole Ø (FH)	Colour	Material	Article-No.
ATSBCEC35		1.5 - 4.0	-	Black (BK)	PA66HIRHS	102-68355
ATSBCSFT6.5	(Derseef Person)	2.3 - 3.3	6.3 - 6.7	Black (BK)	PA66HIRHS	102-69066
ATSBCSFT6.5-MD	Contraction of the second seco	2.0 - 3.0	6.3 - 6.7	Black (BK)	PA66HIRHS	102-69065
ATSBCEC36		1.5 - 4.0	-	Black (BK)	PA66HIRHS	102-68365
ATSBCEC37		1.5 - 4.0	-	Black (BK)	PA66HIRHS	102-68375
ATSBCFT6LG		0.6 - 5.1	6.3 - 7.0	Black (BK)	PA66HIRHS	102-67065
ATSBCEC38		1.5 - 4.0	-	Black (BK)	PA66	102-68385
ATSBC2KSFT6,5	Jame J. Canada	1.7 - 2.3	6.3 - 6.7	Black (BK)	PA66HIRHS	102-69068
ATSBCKSFT6,5	James Johnson	0.7 - 1.3	6.3 - 6.7	Black (BK)	PA66HIRHS	102-69067
ATSBCOWSFT6,5	Content of the second	2.3 - 3.3	6.3 - 6.7	Grey (GY)	PA46	102-69070
ATSBCSFT6,5PT2,3-3,3	and the second s	2.3 - 3.3	6.3 - 6.7	Grey (GY)	PA46	102-69069



#### Waste free bindings up to Ø 80 mm Autotool System 3080

By assembling the ATS3080 into different devices, the tool can be customised for various customer applications. For example, with the horizontal bench mount kit, plastic bags can be closed in seconds. Also, because of the unique closing mechanism, the plastic tie closing the bag can serve as a tamper evident seal and is compatible material for recycling.

HellermannTyton developed an innovative solution for harnesses in the Automotive industry. With the ATS3080, it is now possible to fasten fixings, also known as foot parts, at the same time as the automatic binding. This simplifies the final assembly of harnesses, because the pre-assembled harness can be fixed directly to the metal edge or into a hole! This means that you can now produce a complex harness completely automatically.

#### **Features and Benefits**

- Electrical bundling system from HellermannTyton
- Waste free fastenings every time with a completely flush cut
- · No lost time for emptying or cleaning waste boxes
- Bundling diameter up to 80 mm
- Processes outside serrated Nylon 6.6 strap and closures on "endless reels"
- Outstanding innovation: double play between tool and material
- Usable with overhead dispenser or bench mount system
- Can be integrated into fully automated production line
- Flexible tool especially for automotive, packaging and white and brown goods industries
- High-capacity tool
- Short cycle time (0.8 1.3 sec. depending on bundle diameter)
- Jaws available in 3 different diameters: 30, 50, 80 mm
- Material available in reels of 500 m straps and 5000 pcs closures

ТҮРЕ	Article-No.	
Autotool System 3080	102-00000	

Subject to technical changes.



Autotool System 3080.



Autotool System 3080 with three Jaw sizes - to optimise the cycle time for the different bundling diameters.



Switching Power Pack for ATS3080.

Power Supply	Electrical, with Switching Power Pack
Cycle Time	approx. 1.3 sec. (50 mm jaw)
Weight	1.9 kg
Tension Force	Continuously adjustable



One Step to the Web!

# Application Tooling

Automatic Cable Tying System



#### Waste free bindings up to Ø 80 mm

Accessories for Autotool System 3080

#### **Features and Benefits**

- For stationary or mobile use of the ATS3080 in bench mount kit or overhead dispenser
- Integrates ATS3080 into a fully automated production line
- Switching Power Pack Input: 230/150 VAC, 50/60 Hz; Output: 48 VDC, max. 50 W
- Bench Mount Kit tool and tie reel stand including foot pedal
- · Overhead dispenser and tie reel stand including balancer



Optional: Bench Mount Kit with plate.



Packaging application with the Bench Mount Kit Horizontal.

Article-No.

102-00042

102-00041

102-00040 102-00050

102-00100



Bench Mount Kit with ATS3080, Switching Power Pack, Foot Pedal and consumables.



Overhead Suspension with ATS3080 and consumables.

TYPE

**Bench Mount Kit Automatic** 

**Bench Mount Kit Horizontal** 

**Bench Mount Kit Movable** 

Overhead Suspension Switching Power Pack

Subject to technical changes.

Further information at www.HellermannTyton.co.uk/tools

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#### Waste free bindings up to Ø 80 mm

Cable ties for Autotool System 3080

For bundling and securing cables, hoses and pipes or closing plastic bags. Ideal for applications where large volumes of cable ties are required, e.g. in cable assembly, automotive, industrial equipment and packaging sectors.

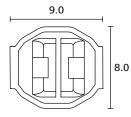
#### **Features and Benefits**

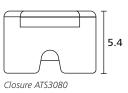
- Innovative strap and closures
- Two-piece consumable parts
- · Waste-free and optimised material utilisation guaranteed
- No time lost through emptying and cleaning waste boxes
- Mechanically detected bundle diameter
- Flush cut-off of fastenings
- Outside serrated strap prevents damage to wire insulation
- Available in reels of 500 m strap and 5000 pcs closures

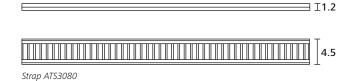


Closures and strap for ATS3080.

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)		-40 °C to +105 °C, (+145 °C, 500 h)
Flammability	UL94 HB	UL94 V2







Bundle $\ensuremath{\mathbb{N}}$ ColourMaterialPackØ max.NColourMaterialCont.

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

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



Please find the corresponding Bundling Clips on page 503.



# Autotool 2000 – automated solutions





For more information please contact us!



#### **Tensioning Tools for Cable Ties**



MK10-SB. See page 513



See page 515





See page 516

MK20, MK21.

See page 513

1



See page 514

MK7P.

See page 517

2, 3



See page 514





МК9. See page 518





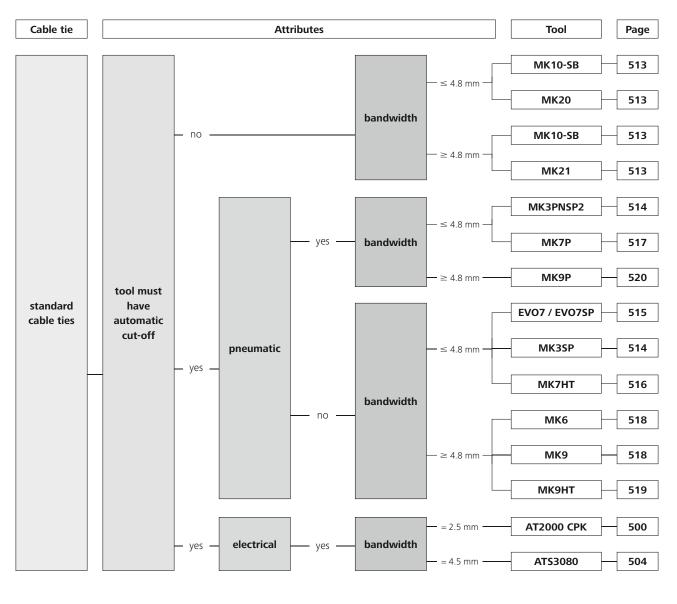
MK6. 8 See page 518

#### **Tensioning Tools for Cable Ties KR-Series**





#### Flowchart for optimum tool selection



cable ties KR		yes	KR8PNSE	521	]
series	pneumatic	no	KR6/8	521	]



#### **Tensioning Tools for Metal Ties**



See page 522



See page 524



MK9PSST. See page 522



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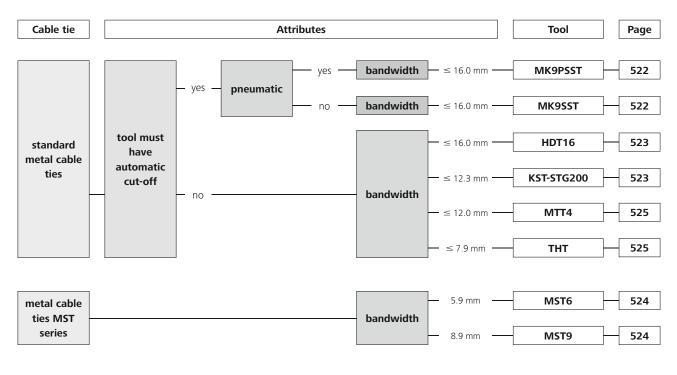




See page 525

See page 523

#### Flowchart for optimum tool selection



#### 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. Fasten a nylon HellermannTyton cable tie around the bundle.



3. Insert strap of cable tie 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 a 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, e.g. the size and cross-section of the cable ties and 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:

 $\frac{\text{Min. tensile strength}}{2} = \text{rec. tensile force}$ Example:

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

T50R =  $\frac{225 \text{ N min. tensile strength}}{225 \text{ N min. tensile strength}}$ 

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 against manipulation or unintentional maladjustment after it has been adjusted using the force meter, HellermannTyton offers an adjustment safety cap (Art. No.: 110-07200 for MK7HT, MK7P, MK9, MK9HT, 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 and PE-Series cable ties
- · Tensions and cuts off pre-looped cable ties flush at the head



MK10-SB.

ТҮРЕ	Strap Width max. (G)	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.

E.R.D.F.

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

#### 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 HellermannTyton standard cable ties 4.8 - 7.6 mm wide
- MK20 and MK21 ideal for on-site assembly
- · Mounted and pre-tensioned ties are cut off by twisting the tool









Tension.



Strap Width Strap Thickness TYPE Article-No. max. Weight max. **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.



Further information at www.HellermannTyton.co.uk/tools



#### Manual Tensioning Tool with Metal Housing MK3SP up to 4.8 mm strap width

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

#### **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 tensioning force
- Reliable and low maintenance



*МКЗЅР*.

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

All dimensions in mm. Subject to technical changes.

#### Pneumatic Tensioning Tool with 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



MK3PNSP2.

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
Specifications	CE, GS



ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK3PNSP2	4.8	1.5	0.56 kg	110-03400
SP compressed air hose	-	-	0.35 kg	110-30002
SP MK3PNSP2 cutting blade	-	-	0.01 kg	110-30101

All dimensions in mm. Subject to technical changes.



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



#### Manual Tensioning Tool with Plastic Housing

#### EVO7 up to 4.8 mm strap width

#### 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



EVO7.

ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Article-No.
EVO7	4.8	1.5	0.28 kg	110-70129
EVO7SP	4.8	1.5	0.28 kg	110-70130
BLADEKT	-	-	-	110-70106

All dimensions in mm. Subject to technical changes.

#### TLC-Technology: Tension – Lock – Cut

The new EVO7 protects muscles and joints and increases effectiveness

- · Less recoil shock reduces impact to the operator's hand
- Application of force is significantly reduced





Application video: EVO7



- 1. Tension: Tie is tensioned as usual.
- 2. Lock: When the desired tension is met the locking mechanism locks the tie in place.



3. Cut: Innovative, effortless and less recoil shock cut-off function.



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



#### Manual Processing Tool with Plastic Housing MK7HT up to 4.8 mm strap width

MK7HT application tool is mainly used to apply cable ties in harness making industries.

#### **Features and Benefits**

- Light glass-fibre-reinforced housing
- Ergonomic design
- For cable ties up to 4.8 mm width
- MK7 HighTension version with higher tension force than MK7
- Consistent tensioning and automatically flush cutting
- Infinitely adjustable tension force combined with three-step quick adjustment



MK7HT.

ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Article-No.
МК7НТ	4.8	1.5	0.29 kg	110-07000
SP MK7HT replacement blade	-	-	0.01 kg	110-07511
SP lock cap tensioning knob	-	-	0.01 kg	110-07200

# 6.2

### Pneumatic Tensioning Tool with 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



MK7P.



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
Specifications	CE, GS



ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Article-No.
МК7Р	4.8	1.5	0.43 kg	110-07100
SP compressed air hose	-	-	0.35 kg	110-30002
SP MK7P replacement blade	-	-	0.01 kg	110-07111
SP lock cap tensioning knob	-	-	0.01 kg	110-07200





#### Manual Tensioning Tool with 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.

ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Article-No.
МКб	9.0	2.0	0.52 kg	110-06000
SP MK6 replacement blade	-	-	0.01 kg	110-06026

All dimensions in mm. Subject to technical changes.

#### Manual Tensioning Tool with Plastic Housing MK9 up to 13.5 mm strap width

MK9 tool is used to apply bigger cable ties as they are used in trucks and busses. MIL and VG certification allows the use of MK9 for military vehicle and aviation construction.

#### **Features and Benefits**

- Glass-fibre-reinforced housing
- Ergonomic design
- For HellermannTyton plastic cable ties up to 13.5 mm width
- Consistent tensioning and automatically flush cutting
- · Infinitely adjustable tension force combined with two-step quick adjustment
- · MIL and VG approved



ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Article-No.
МК9	13.5	2.0	0.39 kg	110-09500
SP MK9 replacement blade	-	-	0.01 kg	110-09511
SP lock cap tensioning knob	-	-	0.01 kg	110-07200







#### Manual Tensioning Tool with Plastic Housing

#### MK9HT up to 13.5 mm strap width

The MK9HT boasts especially high tensioning forces. Ideal for applications where larger cable ties need to be securely fastened, such as in truck and bus construction.

#### Features and Benefits

- Glass-fibre-reinforced housing
- Ergonomic design
- For cable ties up to 13.5 mm width
- MK9 HighTension version with higher tension force than MK9
- Consistent tensioning and automatically flush cutting
- Infinitely adjustable tension force combined with two-step quick adjustment



МК9НТ.

ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Article-No.
МК9НТ	13.5	2.0	0.39 kg	110-09000
SP MK9 replacement blade	-	-	0.01 kg	110-09511
SP lock cap tensioning knob	-	-	0.01 kg	110-07200



### **Pneumatic Tensioning Tool with 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 that are used in vehicle construction such as 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
- Option of lower or upper air attachment



МК9Р.



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
Specifications	CE, GS



ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Air att. Position	Article-No.
МК9Р	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 compressed air hose	-	-	0.35 kg	-	110-30002
SP lock cap tensioning knob	-	-	0.01 kg	-	110-07200
SP MK9P replacement blade	-	-	0.01 kg	-	110-09111

All dimensions in mm. Subject to technical changes.



HellermannTyton Further information at www.HellermannTyton.co.uk/tools 520



#### 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 permanent connection.

#### 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 two different strap widths: 6 mm and 8 mm



KR6/8.

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

All dimensions in mm. Subject to technical changes.

#### **Pneumatic Tensioning Tool for KR-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 permanent connection.

#### **Features and Benefits**

- Tough metal tool
- Pneumatic
- For applying KR-cable ties only
- For tensioning, fixing and automatically cutting KR-cable ties
- Tensioning force can be adapted with the air pressure
- Holding ring for a balancer



KR8PNSE.

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
Specifications	CE, GS



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

All dimensions in mm. Subject to technical changes.



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

#### 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 those found on board ships, oil rigs, construction sites or in nuclear power stations.

#### **Features and Benefits**

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



MK9SST.

ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK9SST	16.0	0.3	0.60 kg	110-95000
SP MK9SST 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 MK9 Pneumatic Stainless Steel Tool (MK9PSST) is constructed with heavy-duty parts to ensure optimum performance in demanding environments. It is ideally designed to apply stainless steel MBT-Series (Metal Ball Tie Series) 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
- 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



ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Article-No.
МК9РЅЅТ	16.0	0.7	0.91 kg	110-95350
SP MK9PSST replacement blade	-	-	0.01 kg	110-95307
SP lock cap tensioning knob	-	-	0.01 kg	110-07200



# 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.

ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Article-No.
HDT16	16.0	0.4	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.

ТҮРЕ	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.

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#### Manual Tensioning Tool for Metal Ties MST-S Series

MST6 for 5.9 mm strap width

The MST6 tool has been specially developed for reliably applying HellermannTyton MST-Series metal cable ties. The punch-lock mechanism mechanically crimps the tie ensuring 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.

ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MST6	5.9	0.3	0.53 kg	110-61000
SP MST6-P29 (blade)	-	-	0.01 kg	110-61001
SP MST6-P30 (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-M 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.The punch-lock mechanism mechanically crimps the tie ensuring 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 automatic cutting of metal ties
- Designed for use with MST-M Series ties (8.9 mm)



MST9.

ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MST9	8.9	0.4	0.54 kg	110-13000
SP MST9-P29 (blade)	-	-	0.01 kg	110-13001
SP MST9-P30 (punch)	-	-	0.01 kg	110-13002



#### 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 at 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.

ТҮРЕ	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.

#### Manual Tensioning Tool for Metal Ties MBT-Series THT up to 7.9 mm strap width

The THT Tool is ideal for occasional users of stainless steel MBT cable ties. The THT Tool allows simple hand tensioning of MBT ties for quick and easy installations, coiling the tail for a safe, neat finish.

#### **Features and Benefits**

- Ergonomic T-Handle design with rubber grip
- Suitable for MBT cable ties (4.6 mm and 7.9 mm)
- Simple tensioning mechanism coils the strap tail quickly without cut off



THT.

ТҮРЕ	Strap Width max.	Strap Thickness max.	Weight	Article-No.
THT Tool	7.9	1.0	0.15 kg	110-09970



#### Manual Cutting tool for plastic ties

**CUTties** 

The CUTties is a cutting tool for removing plastic cable ties. It ensures the strap of the tie is cut while preserving the wires and harnesses from being damaged in the process. Its use is recommended in many applications for which wires and harnesses have a high added value, in particular for railway and aviation industries.

#### **Features and Benefits**

- Cutting tool for plastic ties
- Tie can be cut off at any part of the strap
- Ensures the cable isolation from being damaged
- · Light-weight aluminium housing, ergonomically designed
- Single-handed operation
- Three tools for cable tie width from 2.3 to 4.8 mm
- Coloured push rods allows their identification



The CUTties is a precise cutting tool for plastic ties.





Bring the tool perpendicular to the tie...

... apply light pressure...



... press on the button whilst maintaining pressure on the tool ...



release the button and remove the tool, the tie is cut.

ТҮРЕ	For Cable Tie Width	Colour	Weight	Article-No.
CUTties-1	2.3 - 2.8	Blue (BU), Yellow (YE)	0.075 kg	110-05000
CUTties-3	3.3 - 3.8	Blue (BU), Green (GN)	0.085 kg	110-05001
CUTties-5	4.0 - 4.8	Blue (BU), Red (RD)	0.089 kg	110-05002



#### **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. The retaining screw limits the draw-in area and prevents overstretching of the snapper



Snapper Application Tools MSNP1-70 and ASNP24-70.



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

Snapper hose clips for tubes and harnesses see page 174.



Snapper Application Tool ASNP2-22.

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

Subject to technical changes.

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#### Processing tool for heat shrinkable products ShrinkPad 110

The ShrinkPad 110 provides a fast and reliable process for the recovery of thinwalled heat shrinkable products with or without an adhesive liner. The heat process takes place through a direct contact method. The key components are the two specially heated elastic pads, which encapsulate the shrinkable product whilst transferring heat effectively with minimal heat loss. The electrically heated and pneumatically controlled pads can process material to a maximum diameter of 10 mm and a maximum length of 110 mm.

#### **Features and Benefits**

- Processing by direct-contact method with specially heated, elastic pads
- Minimal lost of heat due to direct contact with the shrinking object
- Reduces the shrinking time
- Increased process security in the shrinking process due to a temperature-controlled heat source
- · Good integration into automated workflows possible
- · Very high level of job security
- Long life span of the pads



Heat shrink processing tool ShrinkPad 110 - control unit, shrink press unit, power cable and foot switch.





ShrinkPad 110 - for fast and reliable heat shrink processing.

Power Supply	230V AC / 50 Hz
Air Supply	Non oiled / oiled
Air Pressure (max.)	6 Bar
Hose Internal Diameter	6.0 mm
Weight	12.5 kg
Operating Temperature	+100 °C to +300 °C
Cycle Time	0.5 to 10 sec.
Operation Type	foot switch
LxHxW	Control unit approx. 205 x 210 x 160 mm, Shrink press unit approx. 140 x 130 x 220 mm, Pad approx. 110 x 7 x 20 mm
Specifications	CE



Shrink pads: Max. processing dimensions

max. 110 mm

ТҮРЕ	Carton Quantity	Article-No.
ShrinkPad 110	1 pcs.	391-30000
Pad for ShrinkPad 110	2 pcs.	391-30001

max. 15 mm

Subject to technical changes.

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

Application video. ShrinkPad 110

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#### 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

One Step to the Web!

- · 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-H with heat protecting spring.





Practical hot air gun kit E4500 with accessories.

Gas cartridge P445.

ТҮРЕ	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 walled 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.

ТҮРЕ	Air Flow I/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.

ТҮРЕ	Air Flow I/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.



# 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

Replacement prong NA0/1

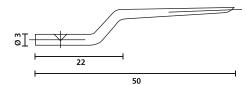
04

Replacement prong NA4/5

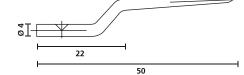
- To easy affix expandable sleeves of every type onto cables/connectors
- Sleeve simply slide onto the prongs
- Push pliers and pull over cable
- Close pliers, sleeve is placed easily
- Hellerine lubricant recommended for easy operation



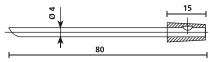
Fast, secure application with the NA three-pronged pliers.



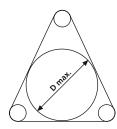
80



Replacement prong NA1K/3



Replacement prong NA8/10



*Three-prong pliers max. application diameter* 

ТҮРЕ	Bundle Ø min.	Bundle Ø max.	Ø D max.	Max. length of marker	Article-No.
NA/01	1.3	1.8	10.5	28	621-10001
NA1K/3	2.5	5.0	11.0	28	621-10103
NA4/5	7.5	10.0	15.5	50	621-10405
NA8/10	12.0	17.0	25.5	60	621-10810
NA/01 PRONG	1.3	1.8	-	28	621-60001
NA1K/3 PRONG	2.5	5.0	-	28	621-60103
NA4/5 PRONG	7.5	10.0	-	50	621-60405
NA8/10 PRONG	12.0	17.0	-	60	621-60810

All dimensions in mm. Subject to technical changes.



#### **Three-Pronged Pliers for Sleeves and Grommets**

#### VA2,5/5 - Reinforced

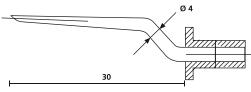
Expansion tools are used to ensure speedy and precise application of expandable markers and sleeves.

#### **Features and Benefits**

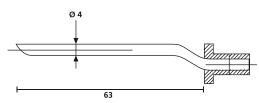
- Suitable for expanding tubing cut lengths and rubber parts
- Withstands high loading
- Set of 3 2.5/5 pins
- Replacement pins available in sizes 8 and 18

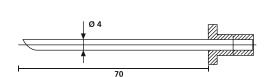


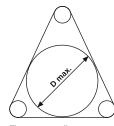
VA2.5/5.



Replacement prong size 2.5/5







Three-prong pliers max. application diameter

Replacement prong size 8

ТҮРЕ	Bundle Ø min.	Bundle Ø max.	Ø D max.	Article-No.
VA2.5/5	2.5	5.0	26.0	621-00200
VA-2.5/5 PRONG	2.5	5.0	26.0	621-01200
VA2.5/5 PRONG 8	8.0	10.0	28.0	621-02200
VA2.5/5 PRONG 18	18.0	20.0	30.0	621-03200

Replacement prong size 18



#### Three-Pronged Pliers for Sleeves and Grommets

K, S, SS

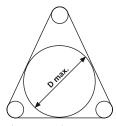
Three-pronged expansion tools are used to ensure speedy and precise application of expandable markers and sleeves.

#### **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 max application diameter

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

All dimensions in mm. Subject to technical changes.

# Application Tooling

Application Tooling for Braided Sleeves

#### Hot cutting tool

#### HSG0

The HSGO 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

# A replacement blade is available with the item number 170-99002.



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

ТҮРЕ	Weight	Colour	Article-No.
HSG0	1.15 kg	Blue (BU)	170-99001

Subject to technical changes



**Helafix Tool** 

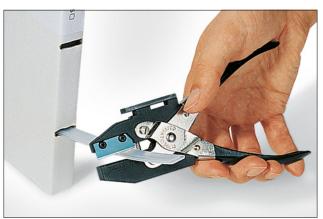
HCT1 for carrier size HCR09

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.

ТҮРЕ	For Carrier Width	For Size	ØD	Article-No.
HCT1	10.0	HCR09	2.5	525-00010
HCT2	13.0	HCR12	2.5	525-00013



# Manual and pneumatic processing tools: The professional way to fasten metal cable ties

