



## Inspired by downsizing

M-BOSS Compact allows stainless steel to be embossed in a way that is practicable for office use. Its innovative embossing system applies pressure from both above and below, making it much quieter than hammering and also saving considerable space. Measuring just 480 mm in width, M-BOSS Compact is not much larger than a desktop printer and can be deployed virtually anywhere. It offers just enough space to rest a laptop on it. The print speed is no less impressive, with the M-BOSS Compact (see page 520) can emboss one character per second in SS316 stainless steel.

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**Label and marker selection guide**

Use our flowchart to find the right label or identification material.

Select the object to be identified (flat or curved surface) and its surface quality (smooth or rough). Depending on what you require from our identification systems, you will be guided through the flowchart to the end. Please note that we have highlighted the respective printer technology (thermal transfer, matrix or laser printer, etc.) in colour.

When selecting the material, the general rule is that a higher quality material can of course be used for lower requirements (e.g. a material for operating temperatures of over +90 °C can also be used for temperatures below +90 °C). And you can, of course, always ring us on our usual telephone numbers.

Labels - surface smooth							
Temperature	Attributes	Certifications	Material Code	Page			
up to +90 °C	permanent		892	496			
			1211	499			
			1213	513			
			1216	500			
			1220*	505			
			1221*	506			
			270	503/504			
over +90 °C	permanent	UL	1101	502/512			
			1102	501/511			
			1103*	510			
			1204*	507/508			
			1206*	508/509			
			323	528			
		special UV-stabilised	ESD safe	UL	823	514	
					951*	524	
					UL/CSA	1203*	522
						1208*	523
					tamper evident		

Labels - surface rough				
Temperature	Attributes	Certifications	Material Code	Page
up to +90 °C	permanent		892	496
			1211	499
			1213	513
			1216	500
			1220*	505
			1221*	506
			270	503/504
			880	499
	removable			

**Labelling material for:**

- TT printer
- Laser printer
- Matrix printer
- Handwritten identification

**Approvals:**

1. UL: Underwriter Laboratories
2. CSA: Canadian Standards Association
3. NF F: Norme Française Ferroviaire
4. EN: European Normative

\* For this labelling material you can also use laser beam.

Labels - cables/tubes smooth				
Temperature	Attributes	Certifications	Material Code	Page
up to +90 °C	permanent		101	480
			1209*	475/476
	removable		1401	481
			1402	482
over +90 °C	permanent		270	503/504
			323*	477
			1104	478
			1105	479

Heat shrink marker					
Temperature	Attributes/Application	Certifications	Material Code	Page	
over +90 °C	for Electronics	UL/CSA/MIL STD	TCGT*	448/449	
			TULT*	450/451	
			TULT DS*	452/453	
	for Rail	EN45545-2		TLFX*	454/455
				TLFX DS*	456/457
				TLFD DS	461/462
		EN50343		TDRT*	458
				TDRT DS*	459/460
				THTT*	463/464
	for Aerospace high temperature			THTT DS*	465/466

TIPTAG					
Temperature	Attributes/Application	Certifications	Material Code	Page	
over +90 °C	special UV-stabilised		TIPTAG PU*	468	
	for Electronics		TAGUL*	470	
	for Rail	EN45545-2		TAGLF*	472
				TAGDR*	473
	for Aerospace high temperature		NF F 00-608/ EN50343	TAGHT*	474
	up to +90 °C	for Rail	EN45545-2	TIPTAG HF*	467
for Food and Pharma			TIPTAG MC	469	
special UV-stabilised			TAGPU*	471	

## Bonding properties of labels

The great variety of places where adhesive labels can be used require a broad range of different materials and adhesives. The information given below will explain all the important aspects of this adhesion.

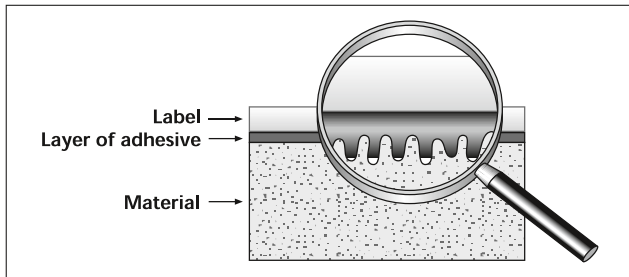
To enable you to make the right choice for your particular application quickly and efficiently, we have set out the most important selection criteria diagrammatically in our flowchart.

### Initial and final bonding

In principle there are two different bonding conditions for labels: The initial bonding which occurs immediately after the label and surface are brought together and the final bonding which represents the permanent bonding status between label and surface following the application, pressing on and curing of the adhesive. The bonding of labels is measured in a defined test process (FINAT FTM) and stated in N/mm.

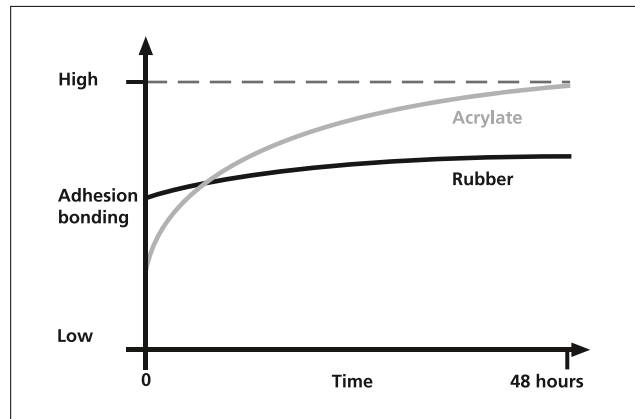
The initial bonding (or tack) describes the bonding ability of the label after it has been applied to the surface, without being pressed down.

The final bonding of labels is ultimately affected by the combined factors of material quality, adhesive basis, curing time, pressure applied and surface tension.



### Adhesion: powers of attraction between two materials

Adhesion can be described, in principle, as the ability of the adhesive to form a bond with the substrate; the substrate is the surface of the material you need the label applied to. The influencing factors for optimum bonding are the quality of the material's surface and the creep ability of the adhesive. The crucial factor is the proportion of the surface which is actually to be 'wetted' by the adhesive. Most surfaces appear – from a microscopic point of view – like a mountain range with peaks and valleys; i.e. the effective surface is much bigger than that seen by the naked eye. No matter how smooth and flat a substrate may appear to be, there is always some roughness. The better the adhesive flows into the valleys, the more bonding points it can form and the better the adhesive will bond to the surface. A thicker layer of adhesive does allow these uneven areas to be filled in better, but a thicker coat of adhesive has negative effects when labels are processed by machine (e.g. leakage of the adhesive or limited storage life).



### Adhesive basis

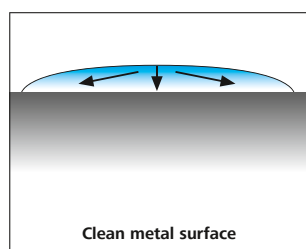
HellermannTyton currently uses acrylate and synthetic rubber as adhesive bases. Acrylate adhesives belong to the family of thermoplastic resins and at normal temperatures they provide high and lasting adhesion. When considering the final bonding of acrylate adhesives, however, it must be noted that the relatively high final bonding is only attained after a certain curing period. This is especially true of labelling materials which may be used for rating plates. Normally you must wait for at least 48 hours in a dry office environment.

Synthetic rubber-based adhesives, unlike acrylate-based adhesives, are distinguished by their high initial bonding. But this adhesive technology does not achieve a final bonding comparable to acrylate adhesives (see graph). Special mixtures of synthetic rubber are used in labelling technology, for example for removable labels, e.g. HellermannTyton material type 270.

## Effect of surface energy on bonding properties

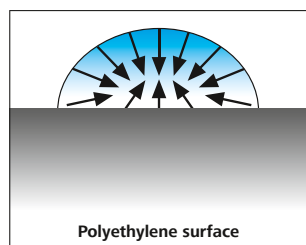
The surface energy (also known as surface tension) is an important factor in the selection of the right adhesive. Because of their chemical formulation, all surfaces have their own polarity and surface tension. The cause of surface tensions is the tendency of liquids to reduce their surface as far as possible, thus to form drops. When a surface which is to be marked (substrate) is wetted with an adhesive, in addition to the adhesive formulation and the surface quality (material, roughness, dampness etc.) the surface energy is also a decisive factor in the maximum attainable bonding force of the adhesive.

As a basic rule, it can be noted that the surface energy of the adhesive must be less than the surface energy of the material to be bonded (substrate). The adhesive should completely wet the substrate and not form any drops.



### Flat drops

- High surface energy
- Good wetting
- Good bonding properties



### Rounded drops

- Low surface energy
- Poor wetting
- Weak bonding properties

### The material combination is the decisive factor

An acrylate-based adhesive is polar and therefore has a relatively high surface energy. Acrylate-based adhesives achieve optimum final bonding on polar substrates (e.g. glass or metals) with a high surface energy. More critical is the application of labels using acrylate-based adhesives on materials with low surface energy (apolar substrates) such as, for example, silicone, polyethylene and polypropylene. The surface tensions of an acrylate-based adhesive can be reduced for particular applications by the addition of specific additives. However, this step brings with it some drawbacks, for example, a free-flowing adhesive and thus a limited life and storage ability of the labels.

The lower bonding force of low-energy surfaces must therefore be taken into account of when considering the end use. For optimum marking using acrylate-based adhesive labels, HellermannTyton uses an improved adhesive formulation, which is co-ordinated to the most common materials in industry. In most cases it is possible to guarantee very good application of these labels. In borderline cases, a modified adhesive formulation may be necessary.

Talk to us, we'll be delighted to advise you.

### Surface energies of different materials

MATERIAL	Surface energy [mN/m]*
Polytetrafluorethylene (PTFE)	18
Silicon (Si)	24
Polyvinyl fluoride (PVF)	25
Natural rubber (CR)	25
Polypropylene (PP)	29
Polyethylene (PE)	35
Polymethyl methacrylate, Acryl (PMMA)	36
Epoxy (EP)	36
Polyoxymethylene, Acetal (POM)	36
Polystyrene (PS)	38
Polyvinyl chloride (PVC)	39
Vinylidene chloride (VC)	40
Polyester (PET)	41
Polyimide (PI)	41
Polyarylsulfone (PAS)	41
Phenolic resin	42
Polyurethane (PUR)	43
Polyamide 6 (PA 6)	43
Polycarbonate (PC)	46
Lead (Pb)	450
Aluminium (Al)	840
Copper (Cu)	1100
Chromium (Cr)	2400
Iron (Fe)	2550

\*The values stated are non-binding reference values and for guidance purposes only.



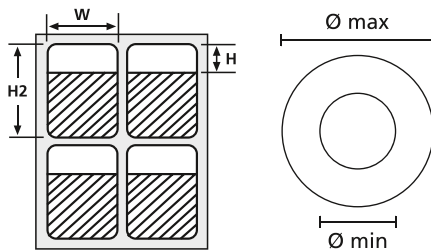
## Instructions for using labels with protective laminate

Labels with protective laminate (also known as cable laminators) have a white or coloured label field which can be written on either manually using a marker pen (see RiteOn and HELASIGN) or using a matrix, laser or thermal transfer printer (see Helatag). Depending on the design for the respective type of printing, the title block has a special surface finish to achieve the optimum print anchorage to the label substrate. This results in long-lasting, clear, sharp writing with text, graphics or barcode. A special feature is that most of the HellermannTyton protective laminate labels come with rounded corners. This achieves greater final adhesion of the protective laminate and counteracts any undesirable removal of the label, especially with cables of small diameter and in heavy-duty applications.

When calculating the minimum and maximum diameters, the following formula has been used:

$$\text{Diameter} = \frac{\text{Length of laminate}}{\pi}$$

Pi ( $\pi$ ) is the constant 3.14.



Helatag self-laminating labels.

### Minimum diameter:

To save time, when wrapping the cable with the cable laminator, a limit of max. 2 windings has been set. The protective laminate length is calculated from: Height  $H_2$  – height  $H$

By applying the “diameter” formula this produces the approx. minimum diameter:

$$\text{Diameter}_{\min} = \frac{H_2 - H}{2 \cdot \pi}$$

Example: TAG136LA4 ( $H = 19.05$  mm;  $H_2 = 67.7$  mm)

$$\text{Diameter}_{\min} = \frac{67.7 - 19.05}{2 \cdot 3.14}$$

### Maximum diameter:

In this case the minimum requirement is complete coverage of the label field with the protective laminate with a single winding. The length of the protective laminate is again obtained from the formula:  $H_2 - H$ .

By applying the “diameter” formula this produces the approx. maximum diameter, which also corresponds to double the minimum diameter:

$$\text{Diameter}_{\max} = \frac{H_2 - H}{\pi} = 2 \cdot \text{Diameter}_{\min}$$

Example: TAG136LA4 ( $H = 19.05$  mm;  $H_2 = 67.7$  mm)

$$\text{Diameter}_{\max} = \frac{67.7 - 19.05}{3.14} = 2 \cdot \text{Diameter}_{\min}$$

## Interesting facts about thermal transfer films (colour ribbons)

The thermal transfer ribbon is perhaps the most important consumable that is used in this printing system - using the right ribbon for a particular application is extremely important.

Not every transfer ribbon is equally suited to any purpose. Depending on the printing requirements (e.g. smudge or scratchproof) to be met, what type of labels will be used, an appropriate thermal transfer ribbon must be used.

Another important consideration for the thermal transfer ribbon is the electrostatic charging which can arise during the printing process. Some transfer ribbons become statically charged during the printing process, which can damage an ESD-sensitive printer head in the long run.

To clarify: The thermal transfer printer head is in physical contact with the back of the thermal transfer ribbon and consists solely of electronic, voltage-sensitive elements, which are known as dots.

These can become damaged when the thermal transfer ribbon causes discharges, which usually results in dot drop-outs. At points where the print head is damaged, no more colour is transferred. This leaves gaps on the label.

Thermal transfer films usually consist of three layers:

- A polyester strip as supporting material
- A protective, gliding backing layer on one side
- A colour layer on the other side.

The colour remains solid at room temperature, but liquefies under the effect of heat. To manufacture the colour ribbons, the polyester ribbon is coated with a special backing and then the respective coloured ink is applied. Print characteristics and bonding ability on various materials depend mainly on the chemical composition of this colour ink.

The main distinguishing feature of thermal transfer ribbons is the so-called quality of the coating. There are two basic types of thermal transfer ribbons:

### Wax-resin-based films – good synthesis

With this quality of a wax-resin mixture, the good print characteristics of the wax are essentially retained, but the resin content increases mechanical strength. The print image produced has high resistance to heat, solvents, abrasion and scratching and high print quality, e.g. for barcodes. These colour ribbons are suitable for use on synthetic materials. They can be used for most applications at standard print temperatures.

- TT932DOUT
- TT822OUT8

### Resin-based films – for very heavy-duty purposes

The colour layer at this quality level is based entirely on synthetic resins, developed for industrial applications and extreme conditions. Resin-based colour ribbons guarantee maximum readability, even on the most difficult materials (e.g. barcodes). Depending on the backing material, medium to high print temperatures and slow print speeds are necessary when using these thermal transfer films. In return, a print image is obtained which stands out for its high resistance to abrasion and scratching and great solvent and heat resistance.

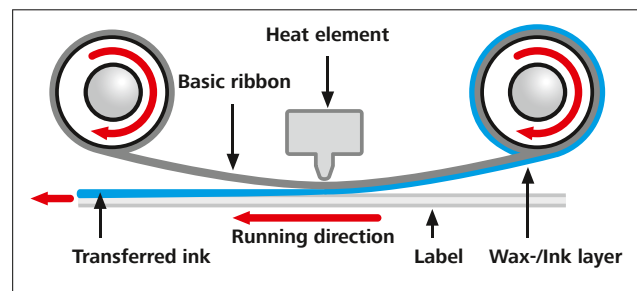
- TT822OUT
- TTRW
- TTRH
- TTRC+
- TTRR
- TT122OUT
- TTRC+

## Interesting facts about thermal transfer printing

Thermal transfer printing plays a central role, especially in the field of printing variable data, single-proofs and even for small series. This is largely due to the fact that thermal transfer printing is a non-impact printing (NIP) process. Unlike traditional printing processes, such as offset-printing, a NIP printing process does not require a fixed printing block and can therefore print out different data with consistent quality from print to print.

Due to the increasing spread and importance of one and two-dimensional barcodes in goods inventory systems, logistics and in the field of component identification, the market potential of thermal transfer printing is growing all the time. The same is also true of incremental serial numbers, inventory designations, entrance tickets, rating plates, wine labels and many more.

Good print quality, high print speeds and the option of printing almost all backing materials permanently – these are the critical advantages of thermal transfer printing. It's good readability, resistance and abrasion resistance allow thermal transfer printing to be put to use in applications where the print results from laser, inkjet or dot matrix printers are not satisfactory.



Heated dots strike a special colour ribbon, the thermal transfer film, which transfers liquefied colour ink at exactly that point onto the backing material (labels, tubes, rating plates). Our modern printers use what is known as "thin film technology", in which the very brief liquid phase of the ink produces faster print speeds and better and more precise images than with the "thick film technology" formerly used.

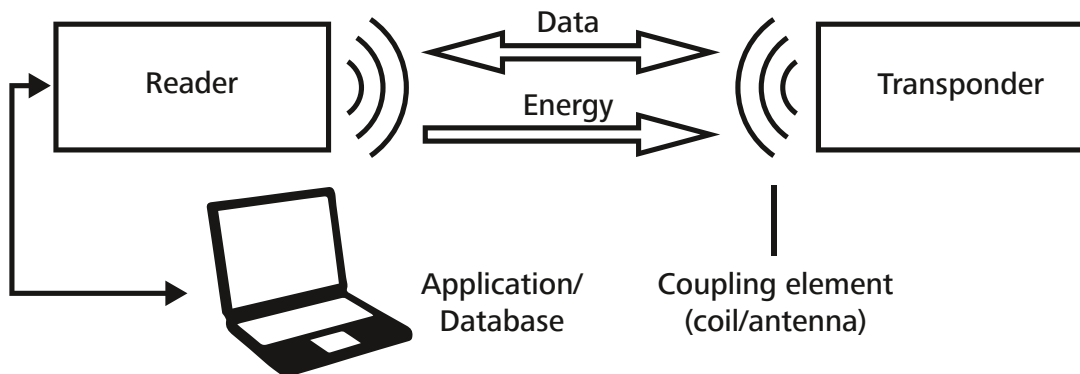
Moreover, the linear orientation of the labels or of the heatshrink tubing makes it possible to print on demand. The printing is then carried out as required. This is especially useful in the production of rating plates in series production.

In thermal transfer printing, the print image is defined by the three components: printer, label material and thermal transfer film (colour ribbon).

### The advantages at a glance:

- High print quality with a resolution of 8-12 dots/mm (12 dots/mm corresponds to approx. 300 dpi)
- Barcode printing in excellent quality, hence good optical readability
- High print speeds of between 30mm/sec and 150mm/sec
- Individual graphics capability
- Problem free and rapid realisation of self designed drafts
- Quiet and service friendly printers
- Prints are UV fast and permanent with high definition and contrast and good resistance to mechanical and chemical influences.

### What is RFID?



Radio frequency identification, for short RFID, simply means the identification by radio waves. The data transfer is affected by means of electromagnetic waves. This technology allows a contactless storing and reading of data and makes a communication between devices possible. There are several methods of identification, but the most common is to store a serial number that identifies a person or object, and perhaps other information, on a microchip that is attached to an antenna (the chip and the antenna together are called an RFID transponder or an RFID tag). With an RFID reader the stored information can be evaluated.

HellermannTyton offers a range of RFID cable ties complete with choice of transponders which can be read with HellermannTyton RFID readers to deliver quick and accurate reporting.

RFID (Radio Frequency Identification) is a digital system to manage equipment inspections and reporting for business that are still using paper based systems and wants to improve resource performance.

#### The benefits of RFID cable ties and accessories are:

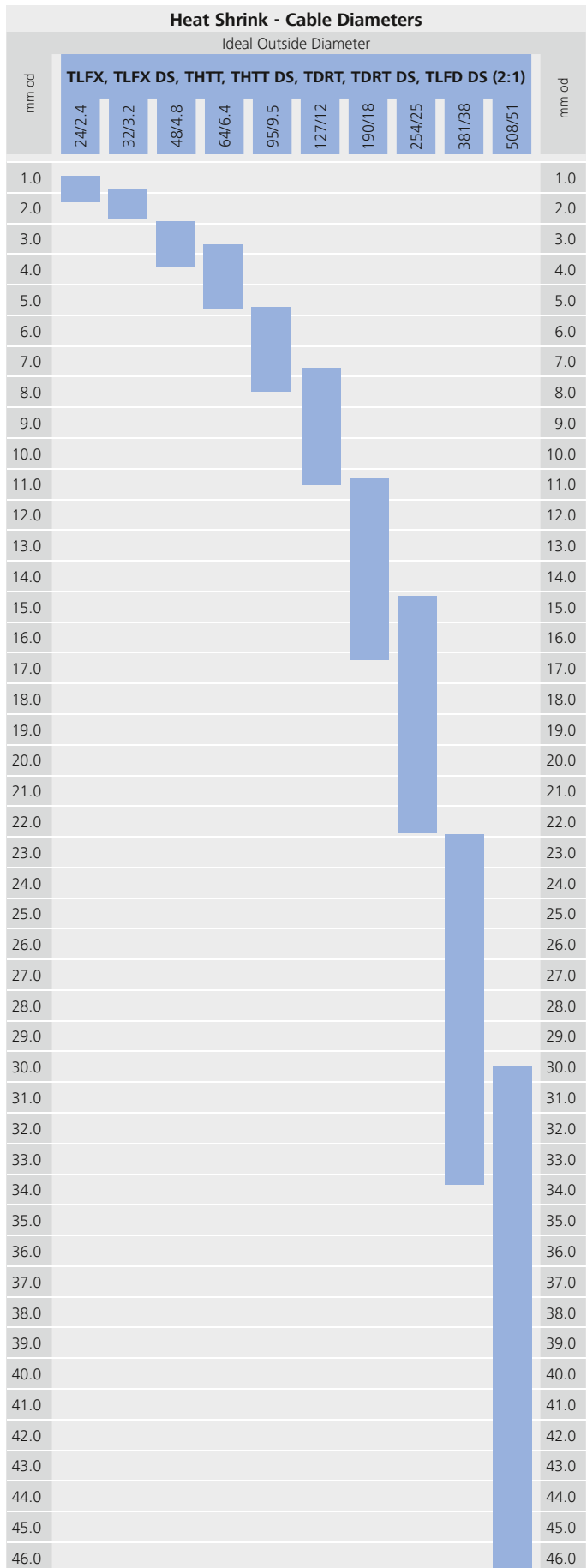
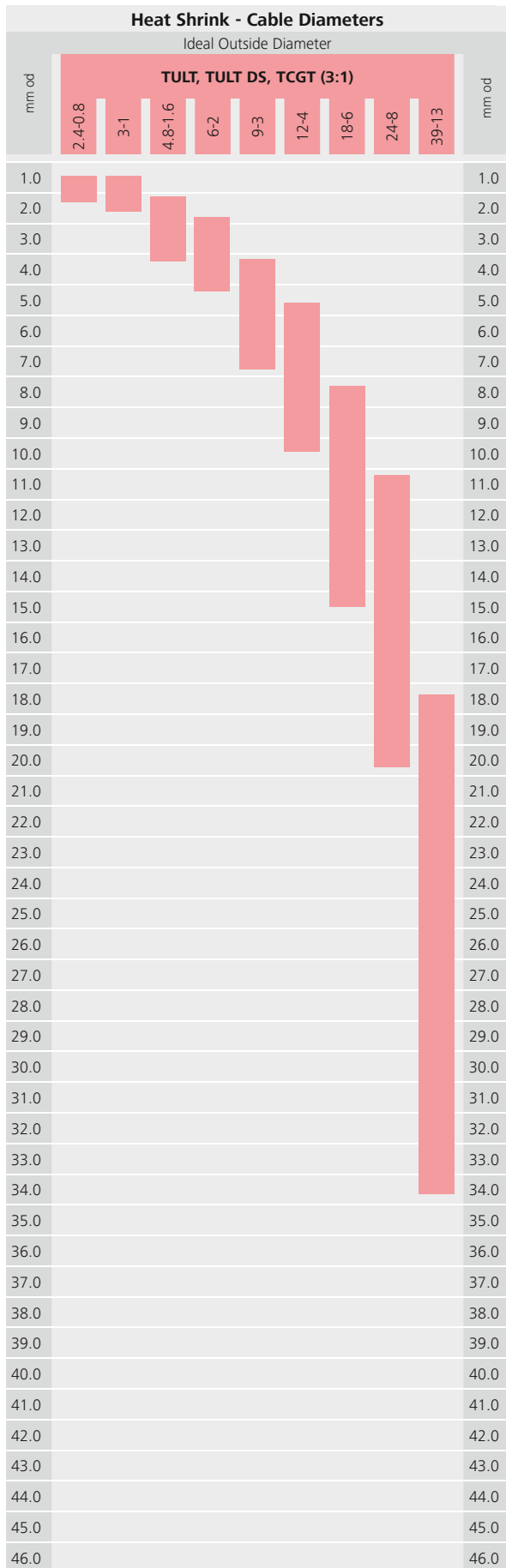
- Fast and paperless data collection
- Elimination of typing errors in reports
- Reduction of working hours due to reduction of paper work
- Controlled administration of devices and warehouse
- Comply with legislation
- Easy to share up-to-date information
- Reliable operation in harsh environments, for example wet, dusty, dirty conditions; corrosive environments; vibration and shock
- No need for contact or line-of-sight

HellermannTyton has developed a range of cable ties to host RFID transponders to enable users to easily fix the RFID tag to equipment that needs to carry a serial number for tracking and identification purposes.

Applications for RFID include:

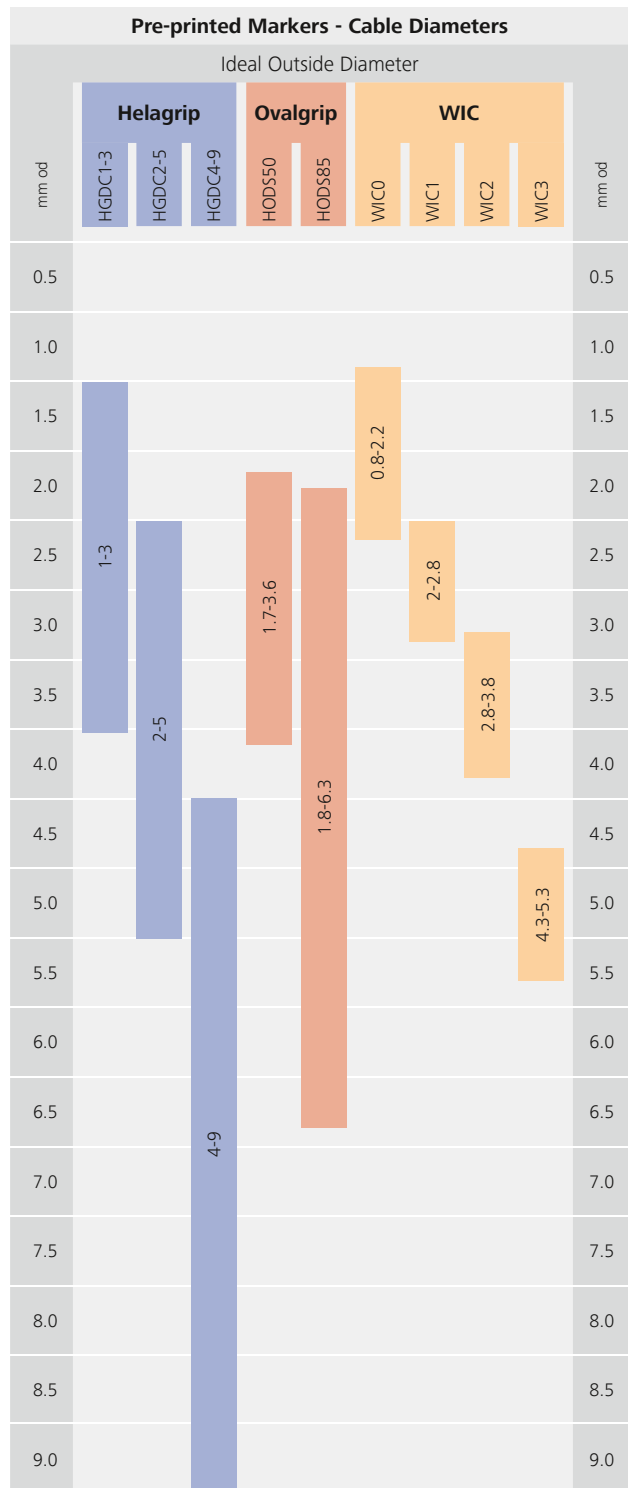
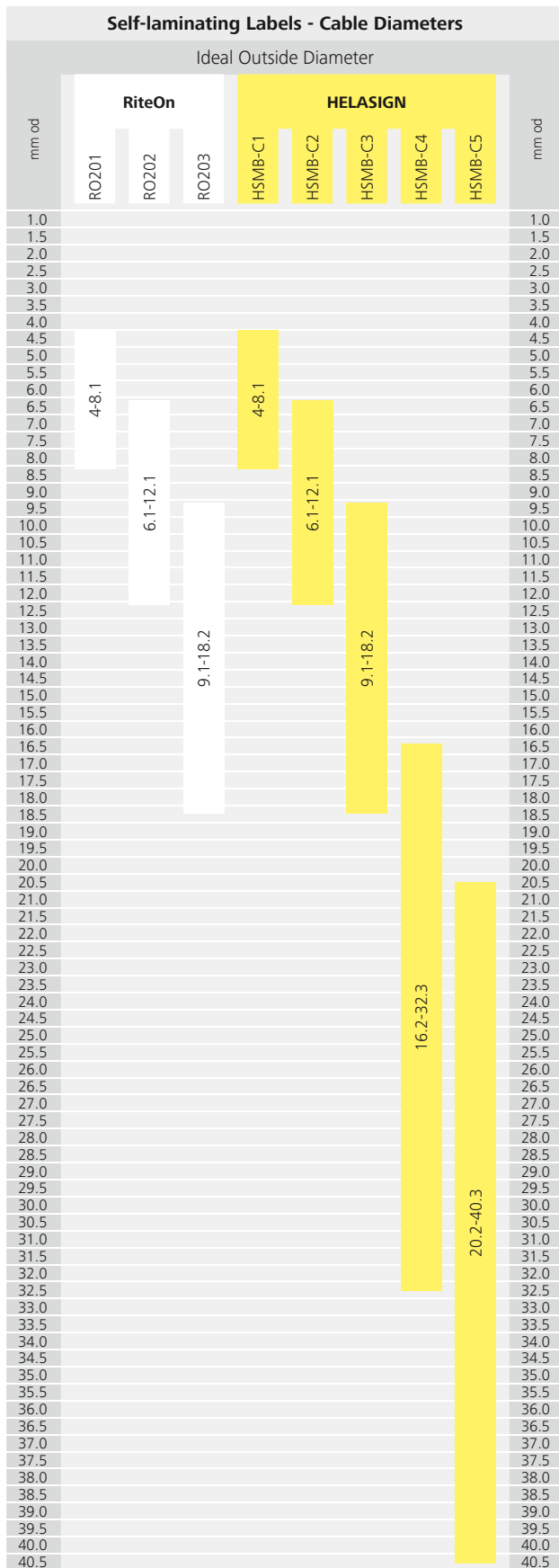
- Resource and asset management
- Theft preventing and traceability
- Security tagging
- Essential maintenance
- Attendance verification and time recording
- Leak detection
- Baggage tagging
- Vehicle identification
- Automation processes

## Size Selection Guide

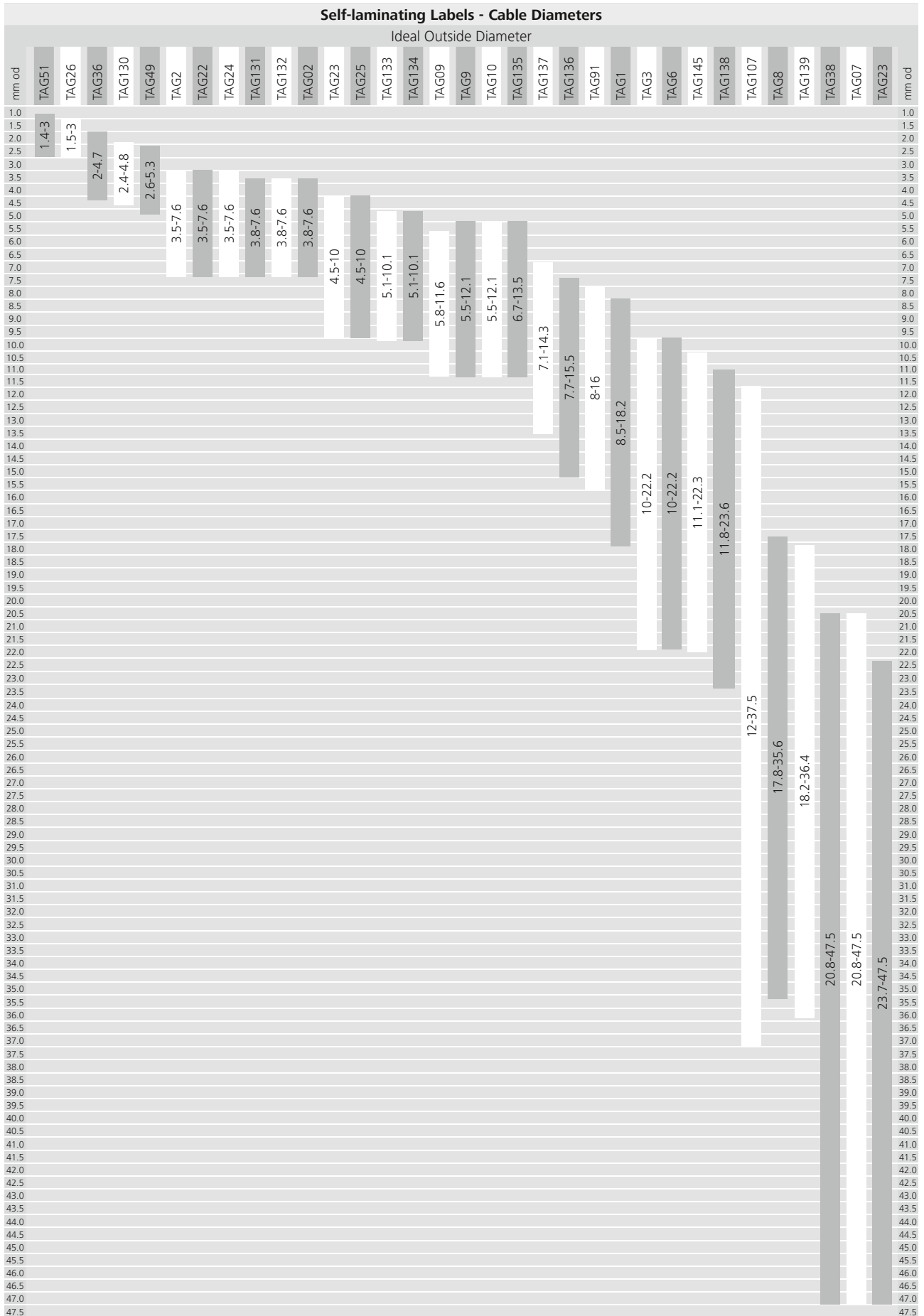




## Size Selection Guide



## Size Selection Guide



## Printing chart

TrakMark DS  
(Double sided printing)

TT4030



TT430

Material	Label type	Printing method	TagPrint Pro 3.0			Ribbon	Page
			TrakMark DS (Double sided printing)	TT4030	TT430		
TCGT			•	•	•	TTRC+ TTDTHOUT TTRW TT822OUT8	448/449
TULT			•	•	•	TTRC+ TTDTHOUT TTRW TT822OUT8	450/451
TULT DS			•	•	•	TTDTHOUT	452/453
TLFX			•	•	•	TTDTHOUT	454/455
TLFX DS			•	•	•	TTDTHOUT	456/457
TDRT			•	•	•	TTDTHOUT	458
TDRT DS			•	•	•	TTDTHOUT	459/460
THTT			•	•	•	TTRHT	463/464
THTT DS			•	•	•	TTRHT	465/466
TLFD DS			•	•	•	TTDTHOUT	461/462
TIPTAG HF			-	•	•	TTDTHOUT	467
TIPTAG PU			-	•	•	TTRC+	468
TIPTAG MC			-	•	•	TTDTHOUT TTRW	469
TAGUL			-	•	•	TTDTHOUT	470
TAGPU			-	•	•	TTRHT	471
TAGLF			-	•	•	TTDTHOUT	472
TAGDR			-	•	•	TTDTHOUT	473
TAGHT			-	•	•	TTRHT	474
Helatag 1209			-	•	•	TT932DOUT	475/476
Helatag 323			-	•	•	TT932DOUT	477
Helatag 323			-	•	•	TT822OUT	528
Helatag 892			-	•	•	TT822OUT	496
Helatag 1211			-	•	•	TT822OUT	499

## Printing chart



**TrakMark DS**  
(Double sided printing)



**TT4030**



**TT430**

Material	Label type	Printing method	TagPrint Pro 3.0		Ribbon	Page
			TrakMark DS (Double sided printing)	TT4030		
Helatag 880			-	•	TT822OUT	499
Helatag 1216			-	•	TT822OUT	500
Helatag 1220			-	•	TT822OUT TT122OUT	505
Helatag 1221			-	•	TT822OUT TT122OUT	506
Helatag 1204			-	•	TT822OUT	507/508
Helatag 1206			-	•	TT822OUT	508/509
Helatag 1213			-	•	TT822OUT TTRW	513
Helatag 823			-	•	TT822OUT	514
Helatag 1203			-	•	TT822OUT	522
Helatag 1208			-	•	TT822OUT	523
Helatag 951			-	•	TT822OUT	524

Material	Label type	Printing method	Page	Material	Label type	Printing method	Page
Helatag 1104			478	Helatag 1103			510
Helatag 1105			479	Helatag 101			480
Helafix HFX			498	RiteOn material 1401			481
Helatag 1102			501/511	Helasign material 1402			482
Helatag 1101			502/512	Helasign material 270			503/504



Thermal printing process



Laser printing



Laser beam



Dot matrix printing



Manual writing/marking



Self-lamination label



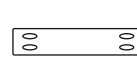
Plain label



Continuous roll



Shrinkable marker



Identification tag



## Label Material Specifications

### Laser printer



Material	1101	1102	1103	1104	1105
<b>Material Description</b>	Polyester, white (WH)	Polyester, yellow (YE)	Polyester, silver (SR)	Polyester self-laminating, transparent with white write on area (WHCL)	
<b>Material Application</b>	Permanent identification of assets and components, particularly suitable for identification of switch panels.		Permanent identification of assets and components. Particularly suitable for type- and nameplates.	Self-laminating wire and cable marking, also suitable for flat cables.	
<b>Thickness of Foil (TF)</b>	55 µm		53 µm	25 µm	50 µm
<b>Operating Temperature</b>	-40 °C to +150 °C				
<b>Curing Temperature</b>	from 0 °C			from +10 °C	from +2 °C
<b>Adhesive</b>	Acrylic				
<b>Material Durability</b>	2 years external weathering (central European climate)				
<b>Label Type</b>					
<b>Certification / Specification</b>					
<b>Page</b>	502, 512	501, 511	510	478	479

### Dot-matrix



Material	101
<b>Material Description</b>	A self-laminating transparent vinyl material with acrylic adhesive. Write on area is white (WHCL).
<b>Material Application</b>	Used for wire marking round and flat ribbon cable.
<b>Thickness of Foil (TF)</b>	80 µm
<b>Operating Temperature</b>	-40 °C to +80 °C
<b>Curing Temperature</b>	from +10 °C
<b>Adhesive</b>	Acrylic
<b>Material Durability</b>	2 years external weathering (central European climate)
<b>Label Type</b>	
<b>Page</b>	480



Plain labels



Self-laminating labels

## Label Material Specifications

### Manual



Material	270	1401	1402
<b>Material Description</b>	Yellow cotton cloth material (YE)	Self-laminating super transparent vinyl with write on area	
<b>Material Application</b>	Temporary/permanent identification of assets and components, particularly suitable for switch panels.	Self-laminating cable and wire marking (also suitable for flat ribbon cables).	
<b>Thickness of Foil (TF)</b>	150 µm	80 µm	
<b>Operating Temperature</b>	-29 °C to +80 °C	-40 °C to +80 °C	
<b>Curing Temperature</b>	from +10 °C		from +8 °C
<b>Adhesive</b>	Synthetic rubber	Acrylic	
<b>Material Durability</b>	1 year external weathering (central European climate)	2 years external weathering (central European climate)	3 years external weathering (central European climate)
<b>Label Type</b>			
<b>Page</b>	503, 504	481	482

### Thermal transfer



Material	323		823	880
<b>Material Description</b>	Polyvinylidene Fluoride, transparent with white or yellow write on area (WHCL/YECL), chemical resistant	Transparent polyvinylidene fluoride foil. The foil is excellent resistant against a big variety of chemicals and solvents.	Type 823 is a white label material (WH) suitable for printing with thermal transfer printers.	Vinyl, matt yellow (YE)
<b>Material Application</b>	Self-laminating wire and cable identification for extremely dirty environments.	Protective laminate for labels in extreme dirty environments. Especially designed for military and aeronautic applications.	Electrostatic sensitive applications.	General identification. Suitable for temporary and permanent identification.
<b>Mech. Material Properties</b>	Permanent adhesive, extremely scratch resistant	Use as protective over-laminate or clear printable label.	According to ESD requirements of EIA 625 and 541.	Adhesive removable without traces.
<b>Thickness of Foil (TF)</b>	25 µm		51 µm	80 µm
<b>Operating Temperature</b>	-40 °C to +140 °C		-40 °C to +150 °C	-40 °C to +80 °C
<b>Curing Temperature</b>	from +10 °C			
<b>Adhesive</b>	Acrylic			
<b>Material Durability</b>	5 years external weathering (central European climate). Excellent indoor use.		2 years external weathering (central European climate). Foil becomes slightly yellow when exposed to direct sunlight.	2 years external weathering (central European climate)
<b>Label Type</b>				
<b>Certification / Specification</b>				
<b>Page</b>	477	528	514	499

## Label Material Specifications

## Thermal transfer



Material	892	951	1203
<b>Material Description</b>	A smooth, white (WH) vinyl foil. Adhesive suitable for critical surfaces.	Polyester, silver (SR), tamper-proof (951A) and polyester, transparent (CL) as overlamine (951B). Set out of 2 materials.	Polyester, silver (SR), tamper-proof, adhesive suitable for critical surfaces
<b>Material Application</b>	Use with IT identification ties, Q-tags and AT/IMP plates.	For automotive and electric industries for tamper-proof applications. Particularly suitable as type label according to norms of German Kraftfahrtbundesamt (KBA).	Electro and electronic identification. Security and warranty identification of components, housings and name plates.
<b>Mech. Material Properties</b>	Permanent adhesive, suitable for critical surfaces like low energy surfaces.	Tamper-proof identification, leaves small checkboard traces.	
<b>Thickness of Foil (TF)</b>	83 µm	36 µm, 25 µm	53 µm
<b>Operating Temperature</b>	-40 °C to +80 °C	-40 °C to +150 °C	-40 °C to +120 °C
<b>Curing Temperature</b>	from 0 °C	from 0 °C (label), from +4 °C (lamine)	from +7 °C
<b>Adhesive</b>	Acrylic		
<b>Material Durability</b>	3 years external weathering (central European climate)	2 years external weathering (central European climate)	
<b>Label Type</b>			
<b>Certification / Specification</b>			
<b>Page</b>	496	524	522




Material	1204	1206	1208	1209
<b>Material Description</b>	Polyester, silver-aluminised (SR), temperature resistant	Polyester, white (WH), temperature resistant with high adhesiveness	Acetate foil, white (WH), tamper-proof	Vinyl, transparent with white write on area (WHCL)
<b>Material Application</b>	Electro and electronic identification. Permanent identification of components and housings with type labels.	Electro and electronic identification. Permanent identification of components with type labels.	General identification with need of manipulation detection.	Self-laminating cable and wire identification, also suitable for flat ribbon cables.
<b>Mech. Material Properties</b>	Adhesive suitable for critical surfaces.		Tamper-proof, material will easily fragment if removed.	Due to its flexibility particularly suitable for identification of cables.
<b>Thickness of Foil (TF)</b>	55 µm	50 µm	56 µm	90 µm
<b>Operating Temperature</b>	-40 °C to +150 °C			-20 °C to +80 °C
<b>Curing Temperature</b>	from 0 °C		from +4 °C	from 0 °C
<b>Adhesive</b>	Acrylic			
<b>Material Durability</b>	2 years external weathering (central European climate)			
<b>Label Type</b>				
<b>Certification / Specification</b>				
<b>Page</b>	507, 508	508, 509	523	475, 476


### Label Material Specifications

#### Thermal transfer



Material	1211	1213
<b>Material Description</b>	A smooth, gloss yellow (GSYE) painted vinyl foil. Adhesive suitable for critical surfaces.	Type 1213 is a coloured and very smooth vinyl material with excellent outdoor properties. It has nearly endless shelf life when used indoors.
<b>Material Application</b>	Identification of control panels.	General identification (e.g. warehouse labelling or pipemarking).
<b>Mech. Material Properties</b>	Permanent adhesive, suitable for critical surfaces.	Due to its flexibility and adhesiveness the material is also suitable for rough surfaces.
<b>Thickness of Foil (TF)</b>	84 µm	66 µm
<b>Operating Temperature</b>	-20 °C to +80 °C	-40 °C to +90 °C
<b>Curing Temperature</b>	from +5 °C	from +8 °C
<b>Adhesive</b>	Acrylic	
<b>Material Durability</b>	2 years external weathering (central European climate)	7 years external weathering (central European climate)
<b>Label Type</b>		
<b>Page</b>	499	513



Material	1216	1220	1221
<b>Material Description</b>	Polyethylene, matt white (WH)	A white (WH), glossy polyester label mounted with a compressible foam carrier	A silver (SR), polyester label mounted with a compressible foam carrier
<b>Material Application</b>	Permanent identification of components and preassembled units within electrical industry as well as asset identification.	Suitable for indoor and outdoor applications on smooth and slightly rough surfaces. Especially used for the identification of electrical cabinets and electrical components.	
<b>Mech. Material Properties</b>	Permanent adhesive, suitable for critical surfaces.	Permanent adhesive with an elastic foam carrier.	
<b>Thickness of Foil (TF)</b>	110 µm	625 µm	
<b>Operating Temperature</b>	-30 °C to +60 °C	-40 °C to +90 °C	
<b>Curing Temperature</b>	from 0 °C	from +4 °C	
<b>Adhesive</b>	Acrylic		
<b>Material Durability</b>	2 years external weathering (central European climate)		
<b>Label Type</b>			
<b>Page</b>	500	505	506





## Shrinkable markers, "Continuous Tube", thermal transfer

### TCGT – 3:1 Commercial Grade

TCGT is a commercial grade 3:1 heat shrink marker material supplied as a continuous tube and printable on both sides. TCGT's polyolefin compound has good mechanical strength and resistance to organic solvents and chemicals. The surface of the tubing has been especially prepared so that print performance is excellent at all times. HellermannTyton's printer range allow users to create a high quality print. In addition it is possible to either perforate the tubing at pre-determined lengths or fully sever the markers.

#### Features and benefits

- Shrink ratio 3:1
- Available in black, blue, red, white and yellow
- Cable range from 39 mm to 1 mm
- Good mechanical strength and resistance to organic solvents and chemicals
- Highly flexible
- Delivery in convenient storage boxes



TCGT – 5 colours of printable tube to cover a wide range of diameters.

<b>MATERIAL</b>	Polyolefin, cross-linked (PO-X)
<b>Operating Temperature</b>	-55 °C to +135 °C
<b>Min. Shrink Temperature</b>	+90 °C
<b>Shrink Ratio</b>	3:1
<b>Recommended Ribbon Type</b>	TTRC+, TTDTHOUT, TTRW, TT822OUT8
<b>Thermal Transfer Printer</b>	TT430, TT4030, TrakMark DS



For size matrix please refer to page 439.

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
TCGT3-1BK	3.0	1.0	0.60	176 m	Black (BK)	553-30352
TCGT3-1BU	3.0	1.0	0.60	176 m	Blue (BU)	553-30353
TCGT3-1RD	3.0	1.0	0.60	176 m	Red (RD)	553-30354
TCGT3-1WH	3.0	1.0	0.60	176 m	White (WH)	553-30351
TCGT3-1YE	3.0	1.0	0.60	176 m	Yellow (YE)	553-30350
TCGT4.8-1.6BK	4.8	1.6	0.65	110 m	Black (BK)	553-30452
TCGT4.8-1.6BU	4.8	1.6	0.65	110 m	Blue (BU)	553-30453
TCGT4.8-1.6RD	4.8	1.6	0.65	110 m	Red (RD)	553-30454
TCGT4.8-1.6WH	4.8	1.6	0.65	110 m	White (WH)	553-30451
TCGT4.8-1.6YE	4.8	1.6	0.65	110 m	Yellow (YE)	553-30450
TCGT6-2BK	6.0	2.0	0.70	110 m	Black (BK)	553-30652
TCGT6-2BU	6.0	2.0	0.70	110 m	Blue (BU)	553-30653
TCGT6-2RD	6.0	2.0	0.70	110 m	Red (RD)	553-30654

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.



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

### Shrinkable markers, "Continuous Tube", thermal transfer

#### TCGT – 3:1 Commercial Grade



TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
TCGT6-2WH	6.0	2.0	0.70	110 m	White (WH)	553-30651
TCGT6-2YE	6.0	2.0	0.70	110 m	Yellow (YE)	553-30650
TCGT9-3BK	9.0	3.0	0.80	72 m	Black (BK)	553-30952
TCGT9-3BU	9.0	3.0	0.80	72 m	Blue (BU)	553-30953
TCGT9-3RD	9.0	3.0	0.80	72 m	Red (RD)	553-30954
TCGT9-3WH	9.0	3.0	0.80	72 m	White (WH)	553-30951
TCGT9-3YE	9.0	3.0	0.80	72 m	Yellow (YE)	553-30950
TCGT12-4BK	12.0	4.0	0.85	54 m	Black (BK)	553-31252
TCGT12-4BU	12.0	4.0	0.85	54 m	Blue (BU)	553-31253
TCGT12-4RD	12.0	4.0	0.85	54 m	Red (RD)	553-31254
TCGT12-4WH	12.0	4.0	0.85	54 m	White (WH)	553-31251
TCGT12-4YE	12.0	4.0	0.85	54 m	Yellow (YE)	553-31250
TCGT18-6BK	18.0	6.0	1.00	26 m	Black (BK)	553-31852
TCGT18-6BU	18.0	6.0	1.00	26 m	Blue (BU)	553-31853
TCGT18-6RD	18.0	6.0	1.00	26 m	Red (RD)	553-31854
TCGT18-6WH	18.0	6.0	1.00	26 m	White (WH)	553-31851
TCGT18-6YE	18.0	6.0	1.00	26 m	Yellow (YE)	553-31850
TCGT24-8BK	24.0	8.0	1.20	26 m	Black (BK)	553-32452
TCGT24-8BU	24.0	8.0	1.20	26 m	Blue (BU)	553-32453
TCGT24-8RD	24.0	8.0	1.20	26 m	Red (RD)	553-32454
TCGT24-8WH	24.0	8.0	1.20	26 m	White (WH)	553-32451
TCGT24-8YE	24.0	8.0	1.20	26 m	Yellow (YE)	553-32450
TCGT39-13BK	39.0	13.0	1.25	10 m	Black (BK)	553-33952
TCGT39-13BU	39.0	13.0	1.25	10 m	Blue (BU)	553-33953
TCGT39-13RD	39.0	13.0	1.25	10 m	Red (RD)	553-33954
TCGT39-13WH	39.0	13.0	1.25	10 m	White (WH)	553-33951
TCGT39-13YE	39.0	13.0	1.25	10 m	Yellow (YE)	553-33950

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.



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



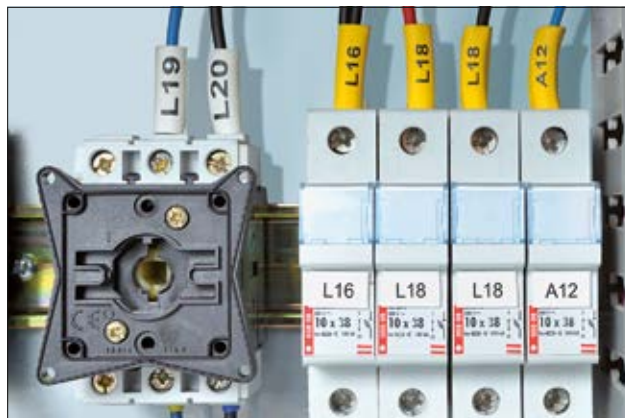
### Shrinkable markers "Continuous Tube", thermal transfer

#### TULT – 3:1 Military and Electronics

TULT is a UL recognized 3:1 heat shrink marker material supplied as a continuous tube and printable on both sides. TULT's polyolefin compound has good mechanical strength and resistance to organic solvents and chemicals. The surface of the tubing has been especially prepared so that print performance is excellent at all times. HellermannTyton's printer range allow users to create a high quality print. In addition it is possible to either perforate the tubing at pre-determined lengths or fully sever the markers.

#### Features and benefits

- Shrink ratio 3:1
- Available in black, blue, red, white and yellow
- Cable range from 39 mm to 1 mm
- Good mechanical strength and resistance to organic solvents and chemicals
- Highly flexible
- Delivery in convenient storage boxes



TULT – 5 colours of UL recognised printable tube to cover a wide range of diameters.

<b>MATERIAL</b>	Polyolefin, cross-linked (PO-X)
<b>Operating Temperature</b>	-55 °C to +135 °C
<b>Min. Shrink Temperature</b>	+90 °C
<b>Shrink Ratio</b>	3:1
<b>Recommended Ribbon Type</b>	TTRC+, TTDTHOUT, TTRW, TT822OUT8
<b>Thermal Transfer Printer</b>	TT430, TT4030, TrakMark DS

RoHS



For size matrix please refer to page 439.

TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
TULT3-1BK	3.0	1.0	0.60	176 m	Black (BK)	553-40352
TULT3-1BU	3.0	1.0	0.60	176 m	Blue (BU)	553-40353
TULT3-1RD	3.0	1.0	0.60	176 m	Red (RD)	553-40354
TULT3-1WH	3.0	1.0	0.60	176 m	White (WH)	553-40351
TULT3-1YE	3.0	1.0	0.60	176 m	Yellow (YE)	553-40350
TULT4.8-1.6BK	4.8	1.6	0.65	110 m	Black (BK)	553-40452
TULT4.8-1.6BU	4.8	1.6	0.65	110 m	Blue (BU)	553-40453
TULT4.8-1.6RD	4.8	1.6	0.65	110 m	Red (RD)	553-40454
TULT4.8-1.6WH	4.8	1.6	0.65	110 m	White (WH)	553-40451
TULT4.8-1.6YE	4.8	1.6	0.65	110 m	Yellow (YE)	553-40450
TULT6-2BK	6.0	2.0	0.70	110 m	Black (BK)	553-40652
TULT6-2BU	6.0	2.0	0.70	110 m	Blue (BU)	553-40653
TULT6-2RD	6.0	2.0	0.70	110 m	Red (RD)	553-40654
TULT6-2WH	6.0	2.0	0.70	110 m	White (WH)	553-40651
TULT6-2YE	6.0	2.0	0.70	110 m	Yellow (YE)	553-40650
TULT9-3BK	9.0	3.0	0.80	72 m	Black (BK)	553-40952

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



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

### Shrinkable markers "Continuous Tube", thermal transfer

TULT – 3:1 Military and Electronics

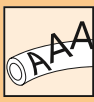


TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
TULT9-3BU	9.0	3.0	0.80	72 m	Blue (BU)	553-40953
TULT9-3RD	9.0	3.0	0.80	72 m	Red (RD)	553-40954
TULT9-3WH	9.0	3.0	0.80	72 m	White (WH)	553-40951
TULT9-3YE	9.0	3.0	0.80	72 m	Yellow (YE)	553-40950
TULT12-4BK	12.0	4.0	0.85	54 m	Black (BK)	553-41252
TULT12-4BU	12.0	4.0	0.85	54 m	Blue (BU)	553-41253
TULT12-4RD	12.0	4.0	0.85	54 m	Red (RD)	553-41254
TULT12-4WH	12.0	4.0	0.85	54 m	White (WH)	553-41251
TULT12-4YE	12.0	4.0	0.85	54 m	Yellow (YE)	553-41250
TULT18-6BK	18.0	6.0	1.00	26 m	Black (BK)	553-41852
TULT18-6BU	18.0	6.0	1.00	26 m	Blue (BU)	553-41853
TULT18-6RD	18.0	6.0	1.00	26 m	Red (RD)	553-41854
TULT18-6WH	18.0	6.0	1.00	26 m	White (WH)	553-41851
TULT18-6YE	18.0	6.0	1.00	26 m	Yellow (YE)	553-41850
TULT24-8BK	24.0	8.0	1.20	26 m	Black (BK)	553-42452
TULT24-8BU	24.0	8.0	1.20	26 m	Blue (BU)	553-42453
TULT24-8RD	24.0	8.0	1.20	26 m	Red (RD)	553-42454
TULT24-8WH	24.0	8.0	1.20	26 m	White (WH)	553-42451
TULT24-8YE	24.0	8.0	1.20	26 m	Yellow (YE)	553-42450
TULT39-13BK	39.0	13.0	1.25	10 m	Black (BK)	553-43952
TULT39-13BU	39.0	13.0	1.25	10 m	Blue (BU)	553-43953
TULT39-13RD	39.0	13.0	1.25	10 m	Red (RD)	553-43954
TULT39-13WH	39.0	13.0	1.25	10 m	White (WH)	553-43951
TULT39-13YE	39.0	13.0	1.25	10 m	Yellow (YE)	553-43950

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



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



### Shrinkable markers "Ladder Style", thermal transfer

#### TULT DS – 3:1 Military and Electronics "Ladder Style"

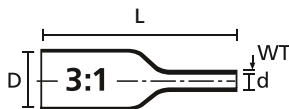
TULT DS is a UL recognised 3:1 heat shrink marker material pre-cut and formatted into a convenient "ladder" system. This pre-cut format not only allows printing on both sides of the marker but the user can also easily choose and pick each required marker. TULT's polyolefin compound has good mechanical strength and resistance to organic solvents and chemicals. The surface of the tubing has been especially prepared so that print performance is excellent at all times using HellermannTyton's printer range.

#### Features and benefits

- Shrink ratio 3:1
- 50 mm, 25 mm and 16 mm pre-cut marker options as standard, other lengths available on request
- Available in white or yellow
- Good mechanical strength and resistance to organic solvents and chemicals
- Highly flexible
- Delivery in convenient storage boxes



One Step to the Web!



Shrinkable markers TULT DS for military and electronics industry.

<b>MATERIAL</b>	Polyolefin, cross-linked (PO-X)
<b>Operating Temperature</b>	-55 °C to +135 °C
<b>Min. Shrink Temperature</b>	+90 °C
<b>Shrink Ratio</b>	3:1
<b>Recommended Ribbon Type</b>	TTDTHOUT
<b>Thermal Transfer Printer</b>	TT430, TT4030, TrakMark DS



For size matrix please refer to page 439.

TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TULT2.4-0.8DS-2x25WH	2.4	0.8	25.0	0.73	2,000 pcs.	White (WH)	553-71002
TULT2.4-0.8DS-2x25YE	2.4	0.8	25.0	0.73	2,000 pcs.	Yellow (YE)	553-71003
TULT2.4-0.8DS-1x50WH	2.4	0.8	50.0	0.73	1,000 pcs.	White (WH)	553-71000
TULT2.4-0.8DS-1x50YE	2.4	0.8	50.0	0.73	1,000 pcs.	Yellow (YE)	553-71001
TULT3-1DS-2x25WH	3.0	1.0	25.0	0.60	2,000 pcs.	White (WH)	553-71008
TULT3-1DS-2x25YE	3.0	1.0	25.0	0.60	2,000 pcs.	Yellow (YE)	553-71009
TULT3-1DS-1x50WH	3.0	1.0	50.0	0.60	1,000 pcs.	White (WH)	553-71006
TULT3-1DS-1x50YE	3.0	1.0	50.0	0.60	1,000 pcs.	Yellow (YE)	553-71007

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

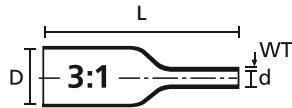


For product specific approvals and specifications please refer to the Appendix.



### Shrinkable markers "Ladder Style", thermal transfer

**TULT DS – 3:1 Military and Electronics "Ladder Style"**



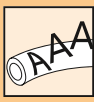
TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TULT4.8-1.6DS-2x25WH	4.8	1.6	25.0	0.66	2,000 pcs.	White (WH)	553-71014
TULT4.8-1.6DS-2x25YE	4.8	1.6	25.0	0.66	2,000 pcs.	Yellow (YE)	553-71015
TULT4.8-1.6DS-1x50WH	4.8	1.6	50.0	0.66	1,000 pcs.	White (WH)	553-71012
TULT4.8-1.6DS-1x50YE	4.8	1.6	50.0	0.66	1,000 pcs.	Yellow (YE)	553-71013
TULT6-2DS-2x25WH	6.0	2.0	25.0	0.69	2,000 pcs.	White (WH)	553-71020
TULT6-2DS-2x25YE	6.0	2.0	25.0	0.69	2,000 pcs.	Yellow (YE)	553-71021
TULT6-2DS-1x50WH	6.0	2.0	50.0	0.69	1,000 pcs.	White (WH)	553-71018
TULT6-2DS-1x50YE	6.0	2.0	50.0	0.69	1,000 pcs.	Yellow (YE)	553-71019
TULT9-3DS-2x25WH	9.0	3.0	25.0	0.79	1,000 pcs.	White (WH)	553-71026
TULT9-3DS-2x25YE	9.0	3.0	25.0	0.79	1,000 pcs.	Yellow (YE)	553-71027
TULT9-3DS-1x50WH	9.0	3.0	50.0	0.79	500 pcs.	White (WH)	553-71024
TULT9-3DS-1x50YE	9.0	3.0	50.0	0.79	500 pcs.	Yellow (YE)	553-71025
TULT12-4DS-2x25WH	12.0	4.0	25.0	0.84	1,000 pcs.	White (WH)	553-71032
TULT12-4DS-2x25YE	12.0	4.0	25.0	0.84	1,000 pcs.	Yellow (YE)	553-71033
TULT12-4DS-1x50WH	12.0	4.0	50.0	0.84	500 pcs.	White (WH)	553-71030
TULT12-4DS-1x50YE	12.0	4.0	50.0	0.84	500 pcs.	Yellow (YE)	553-71031
TULT18-6DS-2x25WH	18.0	6.0	25.0	1.00	1,000 pcs.	White (WH)	553-71038
TULT18-6DS-2x25YE	18.0	6.0	25.0	1.00	1,000 pcs.	Yellow (YE)	553-71039
TULT18-6DS-1x50WH	18.0	6.0	50.0	1.00	500 pcs.	White (WH)	553-71036
TULT18-6DS-1x50YE	18.0	6.0	50.0	1.00	500 pcs.	Yellow (YE)	553-71037
TULT24-8DS-2x25WH	24.0	8.0	25.0	1.20	500 pcs.	White (WH)	553-71044
TULT24-8DS-2x25YE	24.0	8.0	25.0	1.20	500 pcs.	Yellow (YE)	553-71045
TULT24-8DS-1x50WH	24.0	8.0	50.0	1.20	250 pcs.	White (WH)	553-71042
TULT24-8DS-1x50YE	24.0	8.0	50.0	1.20	250 pcs.	Yellow (YE)	553-71043
TULT39-13DS-2x25WH	39.0	13.0	25.0	1.25	500 pcs.	White (WH)	553-71050
TULT39-13DS-2x25YE	39.0	13.0	25.0	1.25	500 pcs.	Yellow (YE)	553-71051
TULT39-13DS-1x50WH	39.0	13.0	50.0	1.25	250 pcs.	White (WH)	553-71048
TULT39-13DS-1x50YE	39.0	13.0	50.0	1.25	250 pcs.	Yellow (YE)	553-71049

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



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





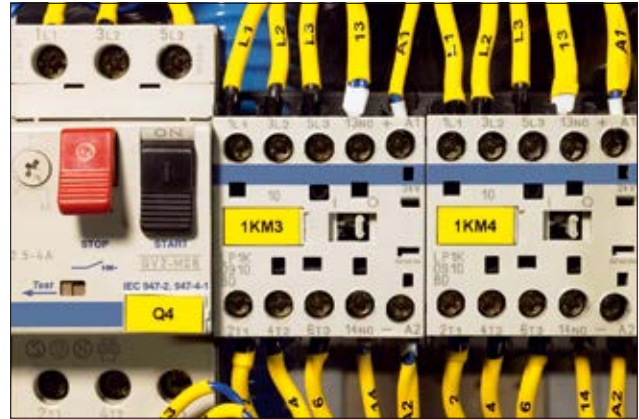
### Shrinkable markers "Continuous Tube", thermal transfer

**TLFX – 2:1 Rail Limited Fire Hazard**

TLFX is a halogen free European rail approved 2:1 heat shrink marker material supplied as a continuous tube and printable on both sides. Special material properties show low smoke propagation, density and toxicity. The tubing has been especially prepared so that print performance is excellent at all times. HellermannTyton's printer range allow users to create a high quality print. In addition it is possible to either perforate the tubing at pre-determined lengths or fully sever the markers.

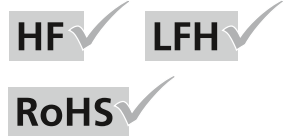
#### Features and benefits

- Shrink ratio 2:1
- Halogen Free
- Low smoke propagation, density and toxicity
- High Oxygen Index value (36.5 %)
- Available in yellow or white
- Cable range 50.8 mm to 1.2 mm
- Delivery in convenient storage boxes



TLFX- high performance halogen free heatshrink tubing.

<b>MATERIAL</b>	Polyolefin, cross-linked (PO-X)
<b>Operating Temperature</b>	-55 °C to +105 °C
<b>Min. Shrink Temperature</b>	+100 °C
<b>Shrink Ratio</b>	2:1
<b>Recommended Ribbon Type</b>	TTDTHOUT
<b>Thermal Transfer Printer</b>	TT430, TT4030, TrakMark DS



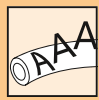
TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
TLFX24WH	2.4	1.2	0.57	144 m	White (WH)	554-51000
TLFX24YE	2.4	1.2	0.57	144 m	Yellow (YE)	554-51001
TLFX32WH	3.2	1.6	0.58	126 m	White (WH)	554-51100
TLFX32YE	3.2	1.6	0.58	126 m	Yellow (YE)	554-51101
TLFX48WH	4.8	2.4	0.61	108 m	White (WH)	554-51200
TLFX48YE	4.8	2.4	0.61	108 m	Yellow (YE)	554-51201

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

**EN 45545-2**

**NF F**

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



### Shrinkable markers "Continuous Tube", thermal transfer

TLFX – 2:1 Rail Limited Fire Hazard



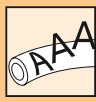
TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
TLFX64WH	6.4	3.2	0.61	90 m	White (WH)	554-51300
TLFX64YE	6.4	3.2	0.61	90 m	Yellow (YE)	554-51301
TLFX95WH	9.5	4.8	0.66	72 m	White (WH)	554-51400
TLFX95YE	9.5	4.8	0.66	72 m	Yellow (YE)	554-51401
TLFX127WH	12.7	6.4	0.68	54 m	White (WH)	554-51500
TLFX127YE	12.7	6.4	0.68	54 m	Yellow (YE)	554-51501
TLFX190WH	19.0	9.5	0.69	30 m	White (WH)	554-51600
TLFX190YE	19.0	9.5	0.69	30 m	Yellow (YE)	554-51601
TLFX254WH	25.4	12.7	0.69	30 m	White (WH)	554-51700
TLFX254YE	25.4	12.7	0.69	30 m	Yellow (YE)	554-51701
TLFX381WH	38.1	19.0	0.70	13 m	White (WH)	554-51800
TLFX381YE	38.1	19.0	0.70	13 m	Yellow (YE)	554-51801
TLFX508WH	50.8	25.4	0.73	10 m	White (WH)	554-50900
TLFX508YE	50.8	25.4	0.73	10 m	Yellow (YE)	554-50901

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

**EN 45545-2**

**NF F**

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



### Shrinkable markers "Ladder Style", thermal transfer

#### TLFX DS – 2:1 Rail Limited Fire Hazard "Ladder Style"

TLFX DS is a halogen free European rail approved 2:1 heat shrink marker material supplied pre-cut and formatted into a convenient "ladder" system. Special material properties show low smoke propagation, density and toxicity. This pre-cut format not only allows printing on both sides of the marker but the user can also easily choose and pick each required marker. Special material properties show low smoke propagation, density and toxicity. The tubing has been especially prepared so that the print performance is excellent at all times using HellermannTyton's printer range.

#### Features and benefits

- Shrink ratio 2:1
- Halogen Free
- Low smoke propagation, density and toxicity
- High Oxygen Index value (35.4%)
- 50 mm, 25 mm and 16 mm pre-cut marker options as standard, other lengths available on request
- Available in yellow or white
- Cable range 38.1 mm to 1.2 mm
- Delivery in convenient storage boxes

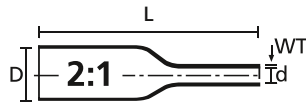


Shrinkable rail approved markers TLFX DS.

<b>MATERIAL</b>	Polyolefin, cross-linked (PO-X)
<b>Operating Temperature</b>	-55 °C to +105 °C
<b>Min. Shrink Temperature</b>	+100 °C
<b>Shrink Ratio</b>	2:1
<b>Recommended Ribbon Type</b>	TTDTHOUT
<b>Thermal Transfer Printer</b>	TT430, TT4030, TrakMark DS



One Step to the Web!



For size matrix please refer to page 439.

TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TLFX24DS-2x25WH	2.4	1.2	25.0	0.52	10,000 pcs.	White (WH)	553-60020
TLFX24DS-2x25YE	2.4	1.2	25.0	0.52	10,000 pcs.	Yellow (YE)	553-60029
TLFX24DS-1x50WH	2.4	1.2	50.0	0.52	5,000 pcs.	White (WH)	553-60000
TLFX24DS-1x50YE	2.4	1.2	50.0	0.52	5,000 pcs.	Yellow (YE)	553-60010
TLFX32DS-2x25WH	3.2	1.6	25.0	0.64	10,000 pcs.	White (WH)	553-60021
TLFX32DS-2x25YE	3.2	1.6	25.0	0.64	10,000 pcs.	Yellow (YE)	553-60030
TLFX32DS-1x50WH	3.2	1.6	50.0	0.64	5,000 pcs.	White (WH)	553-60001
TLFX32DS-1x50YE	3.2	1.6	50.0	0.64	5,000 pcs.	Yellow (YE)	553-60011
TLFX48DS-2x25WH	4.8	2.4	25.0	0.64	10,000 pcs.	White (WH)	553-60022
TLFX48DS-2x25YE	4.8	2.4	25.0	0.64	10,000 pcs.	Yellow (YE)	553-60031
TLFX48DS-1x50WH	4.8	2.4	50.0	0.64	5,000 pcs.	White (WH)	553-60002

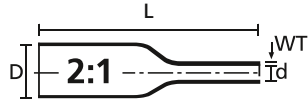
All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content.



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

### Shrinkable markers "Ladder Style", thermal transfer

TLFX DS – 2:1 Rail Limited Fire Hazard "Ladder Style"



TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TLFX48DS-1x50YE	4.8	2.4	50.0	0.64	5,000 pcs.	Yellow (YE)	553-60012
TLFX64DS-2x25WH	6.4	3.2	25.0	0.73	6,000 pcs.	White (WH)	553-60023
TLFX64DS-2x25YE	6.4	3.2	25.0	0.73	6,000 pcs.	Yellow (YE)	553-60032
TLFX64DS-1x50WH	6.4	3.2	50.0	0.73	3,000 pcs.	White (WH)	553-60003
TLFX64DS-1x50YE	6.4	3.2	50.0	0.73	3,000 pcs.	Yellow (YE)	553-60013
TLFX95DS-2x25WH	9.5	4.8	25.0	0.70	5,000 pcs.	White (WH)	553-60024
TLFX95DS-2x25YE	9.5	4.8	25.0	0.70	5,000 pcs.	Yellow (YE)	553-60033
TLFX95DS-1x50WH	9.5	4.8	50.0	0.70	2,500 pcs.	White (WH)	553-60004
TLFX95DS-1x50YE	9.5	4.8	50.0	0.70	2,500 pcs.	Yellow (YE)	553-60014
TLFX127DS-2x25WH	12.7	6.4	25.0	0.70	3,000 pcs.	White (WH)	553-60025
TLFX127DS-2x25YE	12.7	6.4	25.0	0.70	3,000 pcs.	Yellow (YE)	553-60034
TLFX127DS-1x50WH	12.7	6.4	50.0	0.70	1,500 pcs.	White (WH)	553-60005
TLFX127DS-1x50YE	12.7	6.4	50.0	0.70	1,500 pcs.	Yellow (YE)	553-60015
TLFX190DS-2x25WH	19.0	9.5	25.0	0.78	3,000 pcs.	White (WH)	553-60026
TLFX190DS-2x25YE	19.0	9.5	25.0	0.78	3,000 pcs.	Yellow (YE)	553-60035
TLFX190DS-1x50WH	19.0	9.5	50.0	0.78	1,500 pcs.	White (WH)	553-60006
TLFX190DS-1x50YE	19.0	9.5	50.0	0.78	1,500 pcs.	Yellow (YE)	553-60016
TLFX254DS-2x25WH	25.4	12.7	25.0	0.93	2,000 pcs.	White (WH)	553-60027
TLFX254DS-2x25YE	25.4	12.7	25.0	0.93	2,000 pcs.	Yellow (YE)	553-60036
TLFX254DS-1x50WH	25.4	12.7	50.0	0.93	1,000 pcs.	White (WH)	553-60007
TLFX254DS-1x50YE	25.4	12.7	50.0	0.93	1,000 pcs.	Yellow (YE)	553-60017
TLFX381DS-2x25WH	38.1	19.1	25.0	0.98	1,000 pcs.	White (WH)	553-60028
TLFX381DS-2x25YE	38.1	19.1	25.0	0.98	1,000 pcs.	Yellow (YE)	553-60037
TLFX381DS-1x50WH	38.1	19.1	50.0	0.98	500 pcs.	White (WH)	553-60008
TLFX381DS-1x50YE	38.1	19.1	50.0	0.98	500 pcs.	Yellow (YE)	553-60018

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

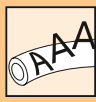
EN 45545-2

ASTM

NF F

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



### Shrinkable markers "Continuous Tube", thermal transfer

#### TDRT – 2:1 Rail Diesel Resistant

TDRT is a diesel resistant 2:1 heat shrink material which is rail approved. It is supplied as a continuous tube and printable on both sides.

The TDRT material is ideal where resistance to diesel, organic fluids, common fuels, lubricants and solvents properties are required, e.g. in mass transit, aerospace, marine and industrial installations. The tubing has been especially prepared so that the print performance is excellent at all times using HellermannTyton's printer range. In addition it is possible to either perforate the tubing at pre-determined lengths or fully sever the markers.

The material is also especially formulated to be printable with laser beam printers.

#### Features and benefits

- Shrink ratio 2:1
- Resistant to diesel and common fluids
- Available in yellow as standard and white on request
- Delivery in convenient storage boxes



Certified diesel resistant heatshrink markers TDRT.

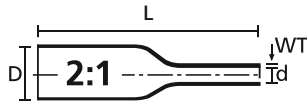
<b>MATERIAL</b>	Polyolefin, cross-linked (PO-X)
<b>Operating Temperature</b>	-55 °C to +135 °C
<b>Min. Shrink Temperature</b>	+120 °C
<b>Shrink Ratio</b>	2:1
<b>Recommended Ribbon Type</b>	TTDTHOUT
<b>Thermal Transfer Printer</b>	TT430, TT4030, TrakMark DS



For size matrix please refer to page 439.

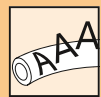
LFH ✓

RoHS ✓



TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
TDRT2.4YE	2.8	1.2	0.49	110 m	Yellow (YE)	553-62020
TDRT3.2YE	3.6	1.6	0.51	110 m	Yellow (YE)	553-62021
TDRT4.8YE	5.3	2.4	0.54	110 m	Yellow (YE)	553-62022
TDRT6.4YE	6.9	3.2	0.56	110 m	Yellow (YE)	553-62023
TDRT9.5YE	10.2	4.8	0.59	72 m	Yellow (YE)	553-62024
TDRT12YE	13.5	6.4	0.60	54 m	Yellow (YE)	553-62030
TDRT18YE	20.1	9.5	0.62	26 m	Yellow (YE)	553-62031
TDRT25YE	26.7	12.7	0.63	26 m	Yellow (YE)	553-62032
TDRT38YE	39.8	19.1	0.64	13 m	Yellow (YE)	553-62033
TDRT51YE	53.8	25.4	0.64	10 m	Yellow (YE)	553-62034

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



### Shrinkable markers "Ladder Style", thermal transfer

#### TDRT DS – 2:1 Rail Diesel Resistant "Ladder Style"

TDRT DS is a diesel resistant 2:1 heat shrink material which is rail approved. The material is pre-cut and formatted into a convenient "ladder" system that allows printing on both sides of the marker.

The TDRT DS material is ideal where resistance to diesel, organic fluids, common fuels, lubricants and solvents properties are required, e.g. in mass transit, aerospace, marine and industrial installations. This pre-cut format not only allows printing on both sides of the marker but the user can also easily choose and pick each required marker. The tubing has been especially prepared so that the print performance is excellent at all times using HellermannTyton's printer range.

The material is also especially formulated to be printable with laser beam printers.

#### Features and benefits

- Shrink ratio 2:1
- Resistant to diesel and common fluids
- 50 mm and 25 mm lengths are standard, other lengths available on request
- Available in yellow as standard and white on request
- Delivery in convenient storage boxes



Shrinkable rail diesel resistant markers TDRT DS.

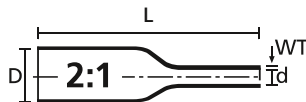
<b>MATERIAL</b>	Polyolefin, cross-linked (PO-X)
<b>Operating Temperature</b>	-55 °C to +135 °C
<b>Min. Shrink Temperature</b>	+120 °C
<b>Shrink Ratio</b>	2:1
<b>Recommended Ribbon Type</b>	TTDTHOUT
<b>Thermal Transfer Printer</b>	TT430, TT4030, TrakMark DS

LFH ✓

RoHS ✓



For size matrix please refer to page 439.



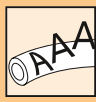
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TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TDRT2.4DS-2X25YE	2.8	1.2	25.0	0.49	10,000 pcs.	Yellow (YE)	553-70101
TDRT2.4DS-1X50YE	2.8	1.2	50.0	0.49	5,000 pcs.	Yellow (YE)	553-70100
TDRT3.2DS-2X25YE	3.6	1.6	25.0	0.51	10,000 pcs.	Yellow (YE)	553-70103
TDRT3.2DS-1X50YE	3.6	1.6	50.0	0.51	5,000 pcs.	Yellow (YE)	553-70102
TDRT4.8DS-2X25YE	5.3	2.4	25.0	0.54	10,000 pcs.	Yellow (YE)	553-70105
TDRT4.8DS-1X50YE	5.3	2.4	50.0	0.54	5,000 pcs.	Yellow (YE)	553-70104
TDRT6.4DS-2X25YE	6.9	3.2	25.0	0.56	6,000 pcs.	Yellow (YE)	553-70107
TDRT6.4DS-1X50YE	6.9	3.2	50.0	0.56	3,000 pcs.	Yellow (YE)	553-70106
TDRT9.5DS-2X25YE	10.2	4.8	25.0	0.59	5,000 pcs.	Yellow (YE)	553-70109
TDRT9.5DS-1X50YE	10.2	4.8	50.0	0.59	2,500 pcs.	Yellow (YE)	553-70108

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

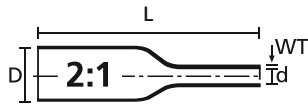






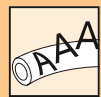
### Shrinkable markers "Ladder Style", thermal transfer

**TDRT DS – 2:1 Rail Diesel Resistant "Ladder Style"**



TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TDRT12DS-2X25YE	13.5	6.4	25.0	0.60	3,000 pcs.	Yellow (YE)	553-70111
TDRT12DS-1X50YE	13.5	6.4	50.0	0.60	1,500 pcs.	Yellow (YE)	553-70110
TDRT18DS-2X25YE	20.1	9.5	25.0	0.62	3,000 pcs.	Yellow (YE)	553-70113
TDRT18DS-1X50YE	20.1	9.5	50.0	0.62	1,500 pcs.	Yellow (YE)	553-70112
TDRT25DS-2X25YE	26.7	12.7	25.0	0.63	2,000 pcs.	Yellow (YE)	553-70115
TDRT25DS-1X50YE	26.7	12.7	50.0	0.63	1,000 pcs.	Yellow (YE)	553-70114
TDRT38DS-2X25YE	39.8	19.1	25.0	0.64	1,000 pcs.	Yellow (YE)	553-70117
TDRT38DS-1X50YE	39.8	19.1	50.0	0.64	500 pcs.	Yellow (YE)	553-70116
TDRT51DS-2X25YE	53.8	25.4	25.0	0.64	1,000 pcs.	Yellow (YE)	553-70119
TDRT51DS-1X50YE	53.8	25.4	50.0	0.64	500 pcs.	Yellow (YE)	553-70118

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



### Shrinkable markers: "Ladder Style", thermal transfer

**TLFD DS – 2:1 Rail Limited Fire Hazard, fluid resistant "Ladder Style"**

TLFD DS is an innovative 2:1 heat shrink marker which is halogen free, low fire hazard and fluid resistant. This rail and EN approved material is supplied pre-cut and formatted into a convenient "ladder" system.

The TLFD DS marker's material properties are ideal for applications where fire protection is of great importance. TLFD DS shows low smoke propagation, density and toxicity and is also ideal for applications where resistance to organic fluids, common fuels, lubricants and solvents properties are required.

The pre-cut format not only allows printing on both sides of the marker but the user can also easily choose and pick each required marker. The tubing has been especially prepared so that the print performance is excellent at all times using HellermannTyton's printer range.

#### Features and benefits

- Shrink ratio 2:1
- Halogen free and fluid resistant
- Low smoke propagation and toxicity
- Fluid resistant
- "Ladder Style" format for ease of use
- Available in yellow and white
- 50 mm and 25 mm pre-cut markers as standard



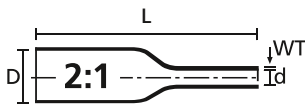
TLFD DS shrinkable markers – Halogen-free and fluid resistant.

<b>MATERIAL</b>	Polyolefin, cross-linked (PO-X)
<b>Operating Temperature</b>	-55 °C to +125 °C
<b>Min. Shrink Temperature</b>	+120 °C
<b>Shrink Ratio</b>	2:1
<b>Recommended Ribbon Type</b>	TTDTHOUT
<b>Thermal Transfer Printer</b>	TT430, TT4030, TrakMark DS

HF ✓

LFH ✓

RoHS ✓



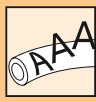
TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TLFD24DS-2X25WH	2.4	1.2	25.0	0.49	10,000 pcs.	White (WH)	533-65001
TLFD24DS-2X25YE	2.4	1.2	25.0	0.49	10,000 pcs.	Yellow (YE)	533-65019
TLFD24DS-1X50WH	2.4	1.2	50.0	0.49	5,000 pcs.	White (WH)	533-65000
TLFD24DS-1X50YE	2.4	1.2	50.0	0.49	5,000 pcs.	Yellow (YE)	533-65018
TLFD32DS-2X25WH	3.2	1.6	25.0	0.51	10,000 pcs.	White (WH)	533-65003
TLFD32DS-2X25YE	3.2	1.6	25.0	0.51	10,000 pcs.	Yellow (YE)	533-65021
TLFD32DS-1X50WH	3.2	1.6	50.0	0.51	5,000 pcs.	White (WH)	533-65002
TLFD32DS-1X50YE	3.2	1.6	50.0	0.51	5,000 pcs.	Yellow (YE)	533-65020
TLFD48DS-2X25WH	4.8	2.4	25.0	0.54	10,000 pcs.	White (WH)	533-65005
TLFD48DS-2X25YE	4.8	2.4	25.0	0.54	10,000 pcs.	Yellow (YE)	533-65023
TLFD48DS-1X50WH	4.8	2.4	50.0	0.54	5,000 pcs.	White (WH)	533-65004
TLFD48DS-1X50YE	4.8	2.4	50.0	0.54	5,000 pcs.	Yellow (YE)	533-65022
TLFD64DS-2X25WH	6.4	3.2	25.0	0.56	6,000 pcs.	White (WH)	533-65007
TLFD64DS-2X25YE	6.4	3.2	25.0	0.56	6,000 pcs.	Yellow (YE)	533-65025
TLFD64DS-1X50WH	6.4	3.2	50.0	0.56	3,000 pcs.	White (WH)	533-65006
TLFD64DS-1X50YE	6.4	3.2	50.0	0.56	3,000 pcs.	Yellow (YE)	533-65024
TLFD95DS-2X25WH	9.5	4.8	25.0	0.59	5,000 pcs.	White (WH)	533-65009

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

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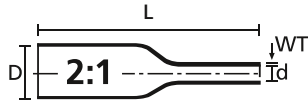
EN 50343 App. H

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



### Shrinkable markers: "Ladder Style", thermal transfer

TLFD DS – 2:1 Rail Limited Fire Hazard, fluid resistant "Ladder Style"



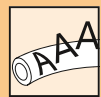
TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
TLFD95DS-2X25YE	9.5	4.8	25.0	0.59	5,000 pcs.	Yellow (YE)	533-65027
TLFD95DS-1X50WH	9.5	4.8	50.0	0.59	2,500 pcs.	White (WH)	533-65008
TLFD95DS-1X50YE	9.5	4.8	50.0	0.59	2,500 pcs.	Yellow (YE)	533-65026
TLFD127DS-2X25WH	12.7	6.4	25.0	0.60	3,000 pcs.	White (WH)	533-65011
TLFD127DS-2X25YE	12.7	6.4	25.0	0.60	3,000 pcs.	Yellow (YE)	533-65029
TLFD127DS-1X50WH	12.7	6.4	50.0	0.60	1,500 pcs.	White (WH)	533-65010
TLFD127DS-1X50YE	12.7	6.4	50.0	0.60	1,500 pcs.	Yellow (YE)	533-65028
TLFD190DS-2X25WH	19.0	9.5	25.0	0.62	3,000 pcs.	White (WH)	533-65013
TLFD190DS-2X25YE	19.0	9.5	25.0	0.62	3,000 pcs.	Yellow (YE)	533-65031
TLFD190DS-1X50WH	19.0	9.5	50.0	0.62	1,500 pcs.	White (WH)	533-65012
TLFD190DS-1X50YE	19.0	9.5	50.0	0.62	1,500 pcs.	Yellow (YE)	533-65030
TLFD254DS-2X25WH	25.4	12.7	25.0	0.63	2,000 pcs.	White (WH)	533-65015
TLFD254DS-2X25YE	25.4	12.7	25.0	0.63	2,000 pcs.	Yellow (YE)	533-65033
TLFD254DS-1X50WH	25.4	12.7	50.0	0.63	1,000 pcs.	White (WH)	533-65014
TLFD254DS-1X50YE	25.4	12.7	50.0	0.63	1,000 pcs.	Yellow (YE)	533-65032
TLFD381DS-2X25WH	38.1	19.1	25.0	0.64	1,000 pcs.	White (WH)	533-65017
TLFD381DS-2X25YE	38.1	19.1	25.0	0.64	1,000 pcs.	Yellow (YE)	533-65035
TLFD381DS-1X50WH	38.1	19.1	50.0	0.64	500 pcs.	White (WH)	533-65016
TLFD381DS-1X50YE	38.1	19.1	50.0	0.64	500 pcs.	Yellow (YE)	533-65034

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

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



### Shrinkable markers "Continuous Tube", thermal transfer

#### THTT – 2:1 Aerospace High Temperature

THTT is a 2:1 high temperature, flame retardant heat shrink marker supplied in continuous tube and on convenient reels that allows printing on both sides if required. The printed marker is ideal for use in applications where high temperature and exposure to aggressive solutions are found. The tubing has been especially prepared so that the print performance is excellent at all times using HellermannTyton's printer range. A standard heat gun with reflector is used to shrink the sleeves onto the wire or cable to achieve a permanent mark. In addition it is possible to either perforate the tubing at pre-determined lengths or fully sever the markers.

The material is also especially formulated to be printable with laser beam printers.

#### Features and benefits

- Shrink ratio 2:1
- PVDFX high temperature tube
- Thermal transfer or laser beam printable
- Available in white and black as standard
- Good mechanical strength and highly flexible
- Delivery in convenient storage boxes



THTT - High temperature tube in black and white.

<b>MATERIAL</b>	Polyvinylidene Fluoride cross-linked (PVDFX)
<b>Operating Temperature</b>	-55 °C to +225 °C
<b>Min. Shrink Temperature</b>	+120 °C
<b>Shrink Ratio</b>	2:1
<b>Recommended Ribbon Type</b>	TTRHT
<b>Thermal Transfer Printer</b>	TT430, TT4030, TrakMark DS



For size matrix please refer to page 439.

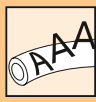


TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
THTT24BK	2.4	1.2	0.41	110 m	Black (BK)	551-41109
THTT24WH	2.4	1.2	0.41	110 m	White (WH)	551-41100
THTT32BK	3.2	1.6	0.27	110 m	Black (BK)	551-41110
THTT32WH	3.2	1.6	0.27	110 m	White (WH)	551-41101
THTT48BK	4.8	2.4	0.27	110 m	Black (BK)	551-41111
THTT48WH	4.8	2.4	0.27	110 m	White (WH)	551-41102
THTT64BK	6.4	3.2	0.33	110 m	Black (BK)	551-41112
THTT64WH	6.4	3.2	0.33	110 m	White (WH)	551-41103
THTT95BK	9.5	4.8	0.33	72 m	Black (BK)	551-41113
THTT95WH	9.5	4.8	0.33	72 m	White (WH)	551-41104
THTT127BK	12.7	6.4	0.33	54 m	Black (BK)	551-41114

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



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



### Shrinkable markers "Continuous Tube", thermal transfer

THTT – 2:1 Aerospace High Temperature



TYPE	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Colour	Article-No.
THTT127WH	12.7	6.4	0.33	54 m	White (WH)	551-41105
THTT190BK	19.0	9.5	0.43	26 m	Black (BK)	551-41115
THTT190WH	19.0	9.5	0.43	26 m	White (WH)	551-41106
THTT254BK	25.4	12.7	0.48	26 m	Black (BK)	551-41116
THTT254WH	25.4	12.7	0.48	26 m	White (WH)	551-41107
THTT381BK	38.1	19.1	0.50	10 m	Black (BK)	551-41117
THTT381WH	38.1	19.1	0.50	10 m	White (WH)	551-41108

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



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



### Shrinkable markers "Ladder Style", thermal transfer

#### THTT DS – 2:1 Aerospace High Temperature "Ladder Style"

THTT is a 2:1 high temperature, flame retardant heat shrink marker. The material is pre-cut and formatted into a convenient "ladder" system that allows printing on both sides of the marker.

The printed marker is ideal for use in applications where high temperature and exposure to aggressive solutions are found. The pre-cut format not only allows printing on both sides of the marker but the user can also easily choose and pick each required marker. The tubing has been especially prepared so that the print performance is excellent at all times using HellermannTyton's printer range.

The material is also especially formulated to be printable with laser beam printers.

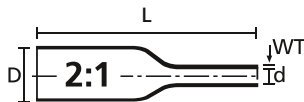
#### Features and benefits

- Shrink ratio 2:1
- PVDFX high temperature marker
- Thermal transfer or laser beam printable
- 50 mm and 25 mm pre-cut marker options as standard, other lengths available on request
- Available in black and white as standard
- Good mechanical strength and highly flexible
- Delivery in convenient storage boxes



THTT DS - High temperature heatshrink printable marker.

<b>MATERIAL</b>	Polyvinylidene Fluoride cross-linked (PVDFX)
<b>Operating Temperature</b>	-55 °C to +225 °C
<b>Min. Shrink Temperature</b>	+120 °C
<b>Shrink Ratio</b>	2:1
<b>Recommended Ribbon Type</b>	TTRHT
<b>Thermal Transfer Printer</b>	TT430, TT4030, TrakMark DS



For size matrix please refer to page 439.

TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
THTT24DS-2X25BK	2.4	1.2	25.0	0.41	2,000 pcs.	Black (BK)	553-72519
THTT24DS-2X25WH	2.4	1.2	25.0	0.41	2,000 pcs.	White (WH)	553-72501
THTT24DS-1X50BK	2.4	1.2	50.0	0.41	1,000 pcs.	Black (BK)	553-72518
THTT24DS-1X50WH	2.4	1.2	50.0	0.41	1,000 pcs.	White (WH)	553-72500
THTT32DS-2X25BK	3.2	1.6	25.0	0.27	2,000 pcs.	Black (BK)	553-72521
THTT32DS-2X25WH	3.2	1.6	25.0	0.27	2,000 pcs.	White (WH)	553-72503
THTT32DS-1X50BK	3.2	1.6	50.0	0.27	1,000 pcs.	Black (BK)	553-72520
THTT32DS-1X50WH	3.2	1.6	50.0	0.27	1,000 pcs.	White (WH)	553-72502

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



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





### Shrinkable markers "Ladder Style", thermal transfer

**THTT DS – 2:1 Aerospace High Temperature "Ladder Style"**



TYPE	Supplied Ø D min.	Recov. Ø d max.	Length (L)	Wall (WT)	Pack Cont.	Colour	Article-No.
THTT48DS-2X25BK	4.8	2.4	25.0	0.27	2,000 pcs.	Black (BK)	553-72523
THTT48DS-2X25WH	4.8	2.4	25.0	0.27	2,000 pcs.	White (WH)	553-72505
THTT48DS-1X50BK	4.8	2.4	50.0	0.27	1,000 pcs.	Black (BK)	553-72522
THTT48DS-1X50WH	4.8	2.4	50.0	0.27	1,000 pcs.	White (WH)	553-72504
THTT64DS-2X25BK	6.4	3.2	25.0	0.33	2,000 pcs.	Black (BK)	553-72525
THTT64DS-2X25WH	6.4	3.2	25.0	0.33	2,000 pcs.	White (WH)	553-72507
THTT64DS-1X50BK	6.4	3.2	50.0	0.33	1,000 pcs.	Black (BK)	553-72524
THTT64DS-1X50WH	6.4	3.2	50.0	0.33	1,000 pcs.	White (WH)	553-72506
THTT95DS-2X25BK	9.5	4.8	25.0	0.33	1,000 pcs.	Black (BK)	553-72527
THTT95DS-2X25WH	9.5	4.8	25.0	0.33	1,000 pcs.	White (WH)	553-72509
THTT95DS-1X50BK	9.5	4.8	50.0	0.33	500 pcs.	Black (BK)	553-72526
THTT95DS-1X50WH	9.5	4.8	50.0	0.33	500 pcs.	White (WH)	553-72508
THTT127DS-2X25BK	12.7	6.4	25.0	0.33	1,000 pcs.	Black (BK)	553-72529
THTT127DS-2X25WH	12.7	6.4	25.0	0.33	1,000 pcs.	White (WH)	553-72511
THTT127DS-1X50BK	12.7	6.4	50.0	0.33	500 pcs.	Black (BK)	553-72528
THTT127DS-1X50WH	12.7	6.4	50.0	0.33	500 pcs.	White (WH)	553-72510
THTT190DS-2X25BK	19.1	9.5	25.0	0.43	1,000 pcs.	Black (BK)	553-72531
THTT190DS-2X25WH	19.1	9.5	25.0	0.43	1,000 pcs.	White (WH)	553-72513
THTT190DS-1X50BK	19.1	9.5	50.0	0.43	500 pcs.	Black (BK)	553-72530
THTT190DS-1X50WH	19.1	9.5	50.0	0.43	500 pcs.	White (WH)	553-72512
THTT254DS-2X25BK	25.4	12.7	25.0	0.48	600 pcs.	Black (BK)	553-72533
THTT254DS-2X25WH	25.4	12.7	25.0	0.48	600 pcs.	White (WH)	553-72515
THTT254DS-1X50BK	25.4	12.7	50.0	0.48	300 pcs.	Black (BK)	553-72532
THTT254DS-1X50WH	25.4	12.7	50.0	0.48	300 pcs.	White (WH)	553-72514
THTT381DS-2X25BK	38.1	19.1	25.0	0.50	200 pcs.	Black (BK)	553-72535
THTT381DS-2X25WH	38.1	19.1	25.0	0.50	200 pcs.	White (WH)	553-72517
THTT381DS-1X50BK	38.1	19.1	50.0	0.50	100 pcs.	Black (BK)	553-72534
THTT381DS-1X50WH	38.1	19.1	50.0	0.50	100 pcs.	White (WH)	553-72516

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



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



### Identification tags for cable bundle, thermal transfer

#### TIPTAG HF – Rail Limited Fire Hazard, Halogen free

The Tiptag HF cable markers have been designed to identify larger wires and cable bundles not only in the electronics and general cabling environments but also in the railway industry. Tiptag HF is halogen free and its material properties show low smoke propagation, density and toxicity. Tiptags are presented in a special perforated format which includes fastening slots for cable ties. They are also suitable for retrofit purposes.

Print from the reel with HellermannTyton's premium range of thermal transfer printers and ribbons for optimum print quality and longevity.

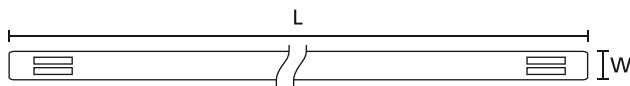
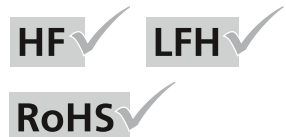
#### Features and benefits

- Ideal for marking larger wire and cable bundles
- Halogen free
- Low smoke propagation and toxicity
- Perforated format that includes fastening slots for cable ties
- Available in white, yellow, blue and red



TIPTAG - High performance cable bundle marking.

<b>MATERIAL</b>	Polyolefin (PO)
<b>Operating Temperature</b>	-40 °C to +90 °C
<b>Flammability</b>	Limited Fire Hazard, low generation of toxic gases and corrosive acid, low smoke generation, halogen free
<b>Recommended Ribbon Type</b>	TTDTHOUT
<b>Thermal Transfer Printer</b>	TT430, TT4030

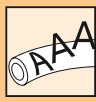


TYPE	Length (L)	Width (W)	Pack Cont.	Colour	Article-No.
TIPTAG11X65BU	65.0	11.0	190 pcs.	Blue (BU)	556-20066
TIPTAG11X65RD	65.0	11.0	190 pcs.	Red (RD)	556-20062
TIPTAG11X65WH	65.0	11.0	190 pcs.	White (WH)	556-20069
TIPTAG11X65YE	65.0	11.0	190 pcs.	Yellow (YE)	556-20064
TIPTAG15X65WH	65.0	15.0	190 pcs.	White (WH)	556-21069
TIPTAG15X65YE	65.0	15.0	190 pcs.	Yellow (YE)	556-21064
TIPTAG11X100BU	100.0	11.0	120 pcs.	Blue (BU)	556-20080
TIPTAG11X100RD	100.0	11.0	120 pcs.	Red (RD)	556-20091
TIPTAG11X100WH	100.0	11.0	120 pcs.	White (WH)	556-20079
TIPTAG11X100YE	100.0	11.0	120 pcs.	Yellow (YE)	556-20074
TIPTAG15X100RD	100.0	15.0	120 pcs.	Red (RD)	556-21096
TIPTAG15X100WH	100.0	15.0	120 pcs.	White (WH)	556-21079
TIPTAG15X100YE	100.0	15.0	120 pcs.	Yellow (YE)	556-21074

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

**EN 45545-2**

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



## Identification tags for cable bundle, thermal transfer

### TIPTAG – UV-stabilised Tiptags, Polyurethane

The Tiptag PU cable markers consist of a robust and flexible polyurethane material. It is especially suited for harsh environments where the material is exposed to chemical, fluids or abrasion. Tiptag PUs are presented in a special perforated format which include fastening slots for easy fitting with cable ties. They are also suitable for retrofit purposes.

Print from the reel with HellermannTyton's premium range of thermal transfer printers.

A special ribbon has been developed for Tiptag PU to create a "tattoo" effect so that the marking cannot be rubbed off and is particularly durable and resistant to harsh abrasion.

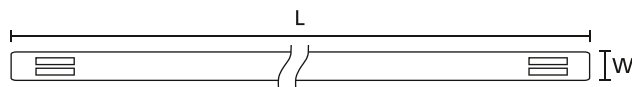
### Features and benefits

- Durable and robust polyurethane material
- For large cable bundles and wires
- Flame retardant
- Weather resistant
- Abrasion resistant
- Good resistance to chemicals
- Available in white and yellow as standard
- Perforated format with fastening slots for cable ties



TIPTAG PU – The printed mark has a tattoo-like permanency.

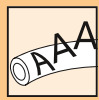
<b>MATERIAL</b>	Polyurethane resin DS (PUR DS)
<b>Operating Temperature</b>	-65 °C to +120 °C, intermittent +150 °C
<b>Flammability</b>	self-extinguishing, UL 94 V0 (3mm)
<b>Recommended Ribbon Type</b>	TTRC+
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Length (L)	Width (W)	Pack Cont.	Colour	Article-No.
TTAGPU11X65WH	65.0	11.0	190 pcs.	White (WH)	556-25012
TTAGPU11X65YE	65.0	11.0	190 pcs.	Yellow (YE)	556-25019
TTAGPU15X65WH	65.0	15.0	190 pcs.	White (WH)	556-25007
TTAGPU15X65YE	65.0	15.0	190 pcs.	Yellow (YE)	556-25011
TTAGPU11X100WH	100.0	11.0	125 pcs.	White (WH)	556-25021
TTAGPU11X100YE	100.0	11.0	125 pcs.	Yellow (YE)	556-25020
TTAGPU15X100WH	100.0	15.0	125 pcs.	White (WH)	556-25006
TTAGPU15X100YE	100.0	15.0	125 pcs.	Yellow (YE)	556-25010

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.



### Identification tags for cable bundles, thermal transfer

#### TIPTAG MC – Metal content

The TIPTAG MC cable markers have been especially designed for applications where materials need to be metal detectable. Small metal particles have been included into the entire length of the marker making it ideal for marking larger cables, wires and bundles in the food and pharmaceutical industries. TIPTAG MCs come in a special perforated format that includes holes for fastening with cables ties (MCT).

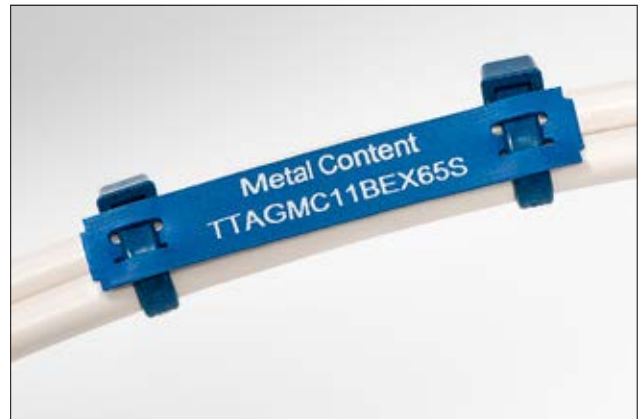
Print from the reel with HellermannTyton's premium range of thermal transfer printers.

#### Features and benefits

- Metal detectable
- For marking larger cables in food and pharma industries
- Outstanding chemical resistance
- High temperature resistant
- Non-burning

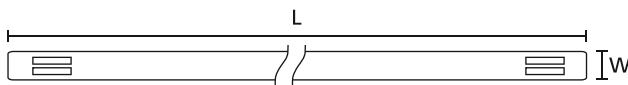


**Can support quality assurance in the production of food stuffs, for example HACCP.**



*Metal content identification tags TIPTAG MC for a safe and clean production process.*

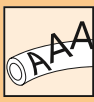
<b>MATERIAL</b>	Polyolefin (PO), Metal (MET)
<b>Operating Temperature</b>	-40 °C to +85 °C
<b>Recommended Ribbon Type</b>	TTDTHOUT, TTRW
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Length (L)	Width (W)	Pack Cont.	Colour	Article-No.
<b>TTAGMC11BEX65S</b>	65.0	11.0	190 pcs.	Blue (BU)	556-26500
<b>TTAGMC15BEX65S</b>	65.0	15.0	190 pcs.	Blue (BU)	556-26502
<b>TTAGMC11BEX100S</b>	100.0	11.0	120 pcs.	Blue (BU)	556-26501
<b>TTAGMC15BEX100S</b>	100.0	15.0	120 pcs.	Blue (BU)	556-26503

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.



### Identification tags for cable bundle "Ladder Style", thermal transfer

#### TAGUL – Standard Tiptags

The TAGUL cable markers have been designed to identify larger wires and cable bundles in the electronics and general cabling environments and is supplied pre-cut and formatted into a convenient "ladder" system. The labels are applied to cables and harness assemblies with cable ties, and are also suitable for retrofit purposes. The material has been conditioned for printing on both thermal transfer and laser beam printers. Simply print and press out the required Tiptag and apply with cable ties.

Print with HellermannTyton's premium range of thermal printers and ribbons or a laser beam marking device.

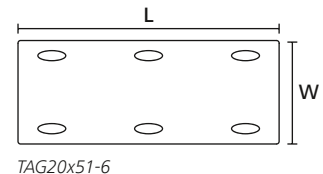
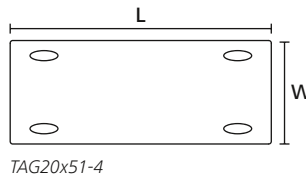
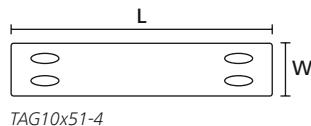
#### Features and benefits

- General purpose cable marker
- For larger cables and wires
- Convenient "Ladder Style" format
- Good mechanical strength and highly flexible
- Delivered in convenient storage boxes



Identification tags TAGUL for electronics and general cabling environments.

<b>MATERIAL</b>	Polyolefin, cross-linked (PO-X)
<b>Operating Temperature</b>	-55 °C to +135 °C
<b>Flammability</b>	ASTM D2671 B
<b>Recommended Ribbon Type</b>	TTDTHOUT
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Length (L)	Width (W)	Pack Cont.	Colour	Article-No.
TAGUL10X51-4WH	51.0	10.0	400 pcs.	White (WH)	556-82010
	51.0	10.0	2,000 pcs.	White (WH)	556-82000
TAGUL10X51-4YE	51.0	10.0	400 pcs.	Yellow (YE)	556-82011
	51.0	10.0	2,000 pcs.	Yellow (YE)	556-82001
TAGUL20X51-4WH	51.0	20.0	200 pcs.	White (WH)	556-82012
	51.0	20.0	1,000 pcs.	White (WH)	556-82005
TAGUL20X51-4YE	51.0	20.0	200 pcs.	Yellow (YE)	556-82013
	51.0	20.0	1,000 pcs.	Yellow (YE)	556-82004
TAGUL20X51-6WH	51.0	20.0	200 pcs.	White (WH)	556-82014
	51.0	20.0	1,000 pcs.	White (WH)	556-82002
TAGUL20X51-6YE	51.0	20.0	200 pcs.	Yellow (YE)	556-82015
	51.0	20.0	1,000 pcs.	Yellow (YE)	556-82003

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



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



### Identification tags for cable bundle, "Ladder Style", thermal transfer

#### TAGPU – UV-stabilised Tiptags

TAGPU is a specially designed cable marker for identifying larger wire and cable bundles, where a permanently legible and UV resistant marking is required. The cable markers consist of a robust and flexible polyurethane material and are especially suited for harsh environments. They are supplied pre-cut and have been formatted into a convenient "ladder" system. The markers are applied to cable and harness assemblies with cable ties, and are also suitable for retrofit purposes. The material has been conditioned for printing on both thermal transfer and laser beam printers. Simply print and press out the required TAGPU and apply with cable ties.

Print with HellermannTyton's premium range of thermal printers and ribbons or a laser beam marking device.

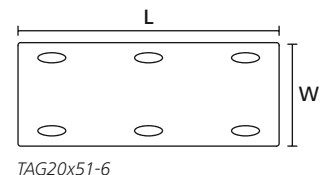
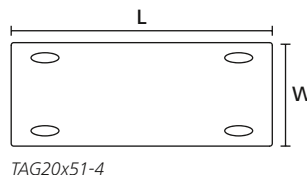
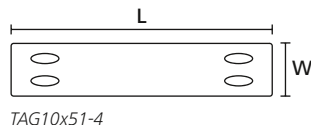
#### Features and benefits

- UV-stabilised
- For larger cables and wires, bundles
- Robust and flexible material
- Thermal transfer or laser beam printable
- Available in white or yellow
- Halogen Free
- Good mechanical strength and highly flexible
- Delivery in convenient storage boxes



TAGPU - Tiptags "Ladder Style".

<b>MATERIAL</b>	Polyurethane (PUR)
<b>Operating Temperature</b>	-25 °C to +80 °C
<b>Recommended Ribbon Type</b>	TTRHT
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Length (L)	Width (W)	Pack Cont.	Colour	Article-No.
TAGPU10X51-4WH	51.0	10.0	400 pcs.	White (WH)	556-80506
	51.0	10.0	2,000 pcs.	White (WH)	556-80500
TAGPU10X51-4YE	51.0	10.0	400 pcs.	Yellow (YE)	556-80507
	51.0	10.0	2,000 pcs.	Yellow (YE)	556-80501
TAGPU20X51-4WH	51.0	20.0	200 pcs.	White (WH)	556-80508
	51.0	20.0	1,000 pcs.	White (WH)	556-80504
TAGPU20X51-4YE	51.0	20.0	200 pcs.	Yellow (YE)	556-80509
	51.0	20.0	1,000 pcs.	Yellow (YE)	556-80505
TAGPU20X51-6WH	51.0	20.0	200 pcs.	White (WH)	556-80510
	51.0	20.0	1,000 pcs.	White (WH)	556-80502
TAGPU20X51-6YE	51.0	20.0	200 pcs.	Yellow (YE)	556-80511
	51.0	20.0	1,000 pcs.	Yellow (YE)	556-80503

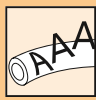
All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.



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





### Identification tags for cable bundle "Ladder Style", thermal transfer

#### TAGLF – Rail - Limited Fire Hazard Tiptags

TAGLF is a halogen free cable marker for mass transit applications specifically in the railway industry or for all areas where limited fire hazard material is needed. TAGLF's material properties show low smoke propagation, density and toxicity. They are supplied pre-cut and have been formatted into a convenient "ladder" system. Simply print and press out the required TAGLF and apply with cable ties, they are also suitable for retrofit purposes.

Print with HellermannTyton's premium range of thermal printers and ribbons or a laser beam marking device.

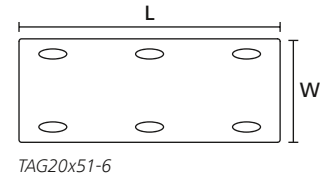
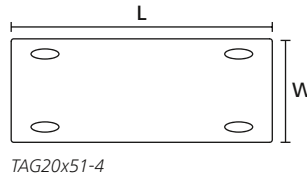
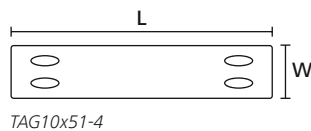
#### Features and benefits

- Limited fire hazard cable marker
- Halogen free
- For larger cables and wires, bundles
- Thermal transfer or laser beam printable
- Good mechanical strength and highly flexible
- Delivered on reel in convenient storage boxes



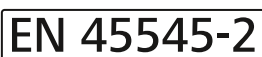
Limited fire hazard identification tags TAGLF.

<b>MATERIAL</b>	Polyolefin, cross-linked (PO-X)
<b>Operating Temperature</b>	-40 °C to +105 °C
<b>Flammability</b>	self-extinguishing
<b>Recommended Ribbon Type</b>	TTDTHOUT
<b>Thermal Transfer Printer</b>	TT430, TT4030
<b>Oxygen Index</b>	34.4 %

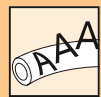


TYPE	Length (L)	Width (W)	Pack Cont.	Colour	Article-No.
TAGLF10X51-4WH	51.0	10.0	400 pcs.	White (WH)	556-83006
	51.0	10.0	2,000 pcs.	White (WH)	556-83000
TAGLF10X51-4YE	51.0	10.0	400 pcs.	Yellow (YE)	556-83007
	51.0	10.0	2,000 pcs.	Yellow (YE)	556-83001
TAGLF20X51-4WH	51.0	20.0	200 pcs.	White (WH)	556-83008
	51.0	20.0	1,000 pcs.	White (WH)	556-83002
TAGLF20X51-4YE	51.0	20.0	200 pcs.	Yellow (YE)	556-83009
	51.0	20.0	1,000 pcs.	Yellow (YE)	556-83003
TAGLF20X51-6WH	51.0	20.0	200 pcs.	White (WH)	556-83010
	51.0	20.0	1,000 pcs.	White (WH)	556-83004
TAGLF20X51-6YE	51.0	20.0	200 pcs.	Yellow (YE)	556-83011
	51.0	20.0	1,000 pcs.	Yellow (YE)	556-83005

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



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



### Identification tags for cable bundle "Ladder Style", thermal transfer

#### TAGDR – Rail - Diesel Resistant Tiptags

TAGDR is a cable marker designed for environments where identification is exposed to organic fluids and oils for long periods at high temperatures. The diesel resistant marker is ideal for rail applications. They are supplied pre-cut and have been formatted into a convenient "ladder" system. Simply print and press out the required TAGDR and apply to cables and harness assemblies with cable ties, they are also suitable for retrofit purposes.

Print with HellermannTyton's premium range of thermal printers and ribbons or a laser beam marking device.

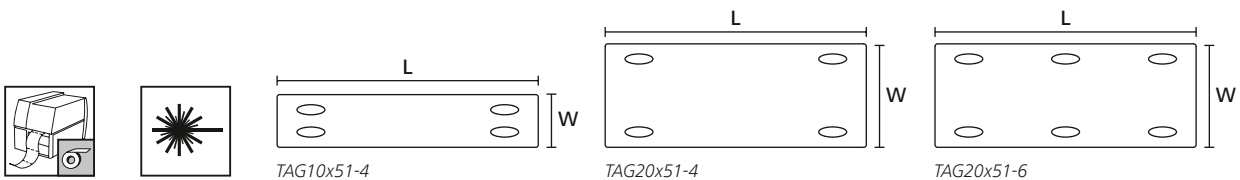
#### Features and benefits

- Fluid resistant cable marker
- For larger cables and wires, bundles
- Thermal transfer or laser beam printable
- Good mechanical strength and highly flexible
- Delivered on reel in convenient storage boxes



Diesel resistant identification tags TAGDR.

<b>MATERIAL</b>	Polyolefin, cross-linked (PO-X)
<b>Operating Temperature</b>	-55 °C to +135 °C
<b>Flammability</b>	ASTM D2671 B
<b>Recommended Ribbon Type</b>	TTDTHOUT, TTDTHOUTSM, TT822OUT, TT822OUTSM
<b>Thermal Transfer Printer</b>	TT430, TT4030

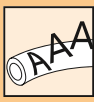


TYPE	Length (L)	Width (W)	Pack Cont.	Colour	Article-No.
TAGDR10X51-4WH	51.0	10.0	2,000 pcs.	White (WH)	556-83500
TAGDR10X51-4YE	51.0	10.0	2,000 pcs.	Yellow (YE)	556-83501
TAGDR20X51-4WH	51.0	20.0	1,000 pcs.	White (WH)	556-83504
TAGDR20X51-4YE	51.0	20.0	1,000 pcs.	Yellow (YE)	556-83505
TAGDR20X51-6WH	51.0	20.0	1,000 pcs.	White (WH)	556-83502
TAGDR20X51-6YE	51.0	20.0	1,000 pcs.	Yellow (YE)	556-83503

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



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



### Identification tags for cable bundle "Ladder Style", thermal transfer

#### TAGHT – Aerospace - High Temperature Tiptags

TAGHT is a high temperature, flame retardant cable marker used to identify larger cables and wire harnesses. The marker is ideal for applications where high temperatures and exposure to aggressive solutions are found, e.g. in the aerospace industry. They are supplied pre-cut and have been formatted into a convenient "ladder" system. Simply print and press out the required TAGHT and apply to cables and harness assemblies with cable ties, they are also suitable for retrofit purposes.

Print with HellermannTyton's premium range of thermal printers and ribbons or a laser beam marking device.

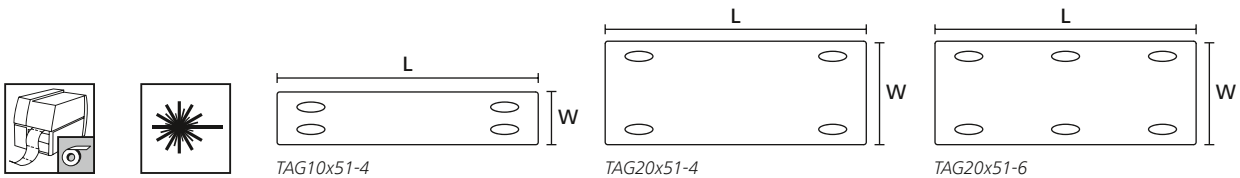
#### Features and benefits

- High temperature cable marker
- For larger cables, bundles and harnesses
- Thermal transfer or laser beam printable
- Good mechanical strength and highly flexible
- Delivery in convenient storage boxes



TAGHT – High temperature tag to identify cables and wire harnesses.

<b>MATERIAL</b>	Polyvinylidene Fluoride cross-linked (PVDFX)
<b>Operating Temperature</b>	-55 °C to +225 °C
<b>Flammability</b>	UL 224 VW-1
<b>Recommended Ribbon Type</b>	TTRHT
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Length (L)	Width (W)	Pack Cont.	Colour	Article-No.
TAGHT10X51-4WH	51.0	10.0	2,000 pcs.	White (WH)	556-80000
TAGHT20X51-4WH	51.0	20.0	1,000 pcs.	White (WH)	556-80004
TAGHT20X51-6WH	51.0	20.0	1,000 pcs.	White (WH)	556-80002

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



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

### Self-laminating labels, thermal transfer

#### Helatag 1209 (White-Transparent)

These labels are ideal identifying cables and wire. They consist of a printable area plus a lamination function for protection of print text against humidity, dirt, debris and mechanical abrasion. Due to its flexibility these labels are also suitable for flat ribbon cables.

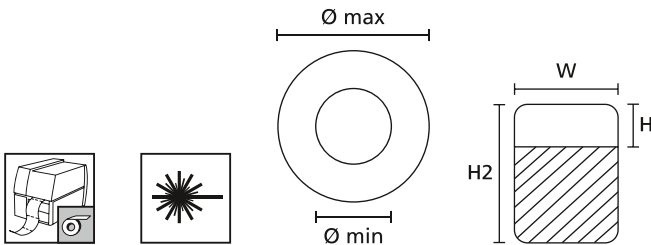
#### Features and benefits

- High-quality self-laminating labels
- Suitable for marking of wires and cables
- Laminating function gives excellent protection against humidity and mechanical abrasion
- Rounded edge design gives additional bonding strength



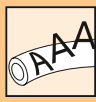
Self-laminating labels offer an excellent protection against abrasion and environmental impact.

<b>MATERIAL</b>	Type 1209, Vinyl (PVC), white-transparent (WH/CL)
<b>Operating Temperature</b>	-20 °C to +80 °C
<b>Curing Temperature</b>	from 0 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	90 µm
<b>Chem. Material Properties</b>	Resistant to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.
<b>Recommended Ribbon Type</b>	TT932DOUT
<b>Thermal Transfer Printer</b>	TT430, TT4030



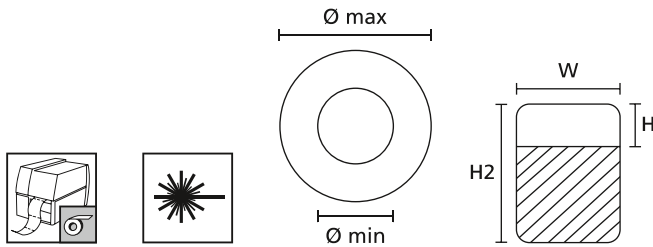
TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG51TD3-1209-WHCL	1.4	3.0	25.4	8.8	19.1	85.0	3 pcs.	5,000 pcs.	White (WH), Transparent (CL)	596-12091
TAG26TD6-1209-WHCL	1.5	3.0	12.7	9.5	19.1	85.0	6 pcs.	10,000 pcs.	White (WH), Transparent (CL)	596-12096
TAG36TD7-1209-WHCL	2.0	4.7	12.7	9.0	23.8	95.0	7 pcs.	10,000 pcs.	White (WH), Transparent (CL)	596-12097
TAG2TD6-1209-WHCL	3.5	7.6	12.7	12.7	36.5	82.0	6 pcs.	5,000 pcs.	White (WH), Transparent (CL)	596-61209
TAG22TD3-1209-WHCL	3.5	7.6	25.4	12.7	36.5	82.0	3 pcs.	2,500 pcs.	White (WH), Transparent (CL)	596-32091
TAG24TD1-1209-WHCL	3.5	7.6	50.8	12.7	36.5	55.0	1 pc.	1,000 pcs.	White (WH), Transparent (CL)	596-12094
TAG23TD5-1209-WHCL	4.5	10.0	19.1	12.7	44.5	101.6	5 pcs.	5,000 pcs.	White (WH), Transparent (CL)	596-12095
TAG25TD3-1209-WHCL	4.5	10.0	25.4	12.7	44.5	82.0	3 pcs.	2,500 pcs.	White (WH), Transparent (CL)	596-51209

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.



## Self-laminating labels, thermal transfer

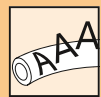
## Helatag 1209 (White-Transparent)



TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG9TD3-1209-WHCL	5.5	12.1	25.4	19.1	57.1	82.0	3 pcs.	2,500 pcs.	White (WH), Transparent (CL)	596-91209
TAG10TD2-1209-WHCL	5.5	12.1	49.5	19.1	57.1	101.6	2 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-12090
TAG91TD1-1209-WHCL	8.0	16.0	70.0	35.0	85.0	74.0	1 pc.	500 pcs.	White (WH), Transparent (CL)	596-41209
TAG1TD2-1209-WHCL	8.5	18.2	48.2	19.1	79.2	101.6	2 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-21209
TAG3TD3-1209-WHCL	10.0	22.2	25.4	25.4	95.3	82.0	3 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-31209
TAG6TD1-1209-WHCL	10.0	22.2	50.8	25.4	95.3	55.0	1 pc.	500 pcs.	White (WH), Transparent (CL)	596-11209
TAG107TD3-1209-WHCL	12.0	37.5	25.4	31.8	149.9	82.0	3 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-01209
TAG38TD3-1209-WHCL	20.8	47.5	25.4	38.1	187.2	82.0	3 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-12098
TAG07TD1-1209-WHCL	20.8	47.5	50.8	25.4	187.2	55.0	1 pc.	250 pcs.	White (WH), Transparent (CL)	596-71209

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.



### Self-laminating labels, thermal transfer

#### Helatag 323 (White-Transparent), high temperature

This self-laminating label consists of a printable area plus a lamination function for protection of print text against humidity, dirt, debris and mechanical abrasion. It is ideally suited for wire and cable marking in both high temperature and outside environments, particular used in industry as well as military technology.

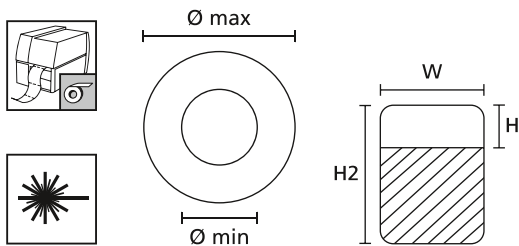
#### Features and benefits

- High temperature self-laminating labels with an inscription field
- Extremely scratch and chemical resistant
- Protective laminating foil ensures optimal protection against humidity, dirt, debris, and mechanical abrasion
- Survives 5 years external weathering in central European climate



Easy marking of flexible, semi-rigid and rigid cables and wires.

<b>MATERIAL</b>	Type 323, Polyvinylidene Fluoride (PVDF)
<b>Operating Temperature</b>	-40 °C to +140 °C
<b>Curing Temperature</b>	from +10 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	25 µm
<b>Chem. Material Properties</b>	Excellent resistance against water, UV radiation, weather influence and solvents based on petroleum.
<b>Recommended Ribbon Type</b>	TT932DOUT
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG51TD3-323-WHCL	1.4	3.0	25.4	8.8	19.1	85.0	3 pcs.	5,000 pcs.	White (WH), Transparent (CL)	596-51320
TAG26TD6-323-WHCL	1.5	3.0	12.7	9.5	19.1	85.0	6 pcs.	10,000 pcs.	White (WH), Transparent (CL)	596-26320
TAG36TD7-323-WHCL	2.0	4.7	12.7	9.0	23.8	95.0	7 pcs.	10,000 pcs.	White (WH), Transparent (CL)	596-36320
TAG2TD6-323-WHCL	3.5	7.6	12.7	12.7	36.5	82.0	6 pcs.	5,000 pcs.	White (WH), Transparent (CL)	596-02320
TAG22TD3-323-WHCL	3.5	7.6	25.4	12.7	36.5	82.0	3 pcs.	2,500 pcs.	White (WH), Transparent (CL)	596-22320
TAG24TD1-323-WHCL	3.5	7.6	50.8	12.7	36.5	55.0	1 pc.	1,000 pcs.	White (WH), Transparent (CL)	596-24320
TAG23TD5-323-WHCL	4.5	10.0	19.1	12.7	44.5	101.6	5 pcs.	5,000 pcs.	White (WH), Transparent (CL)	596-23320
TAG25TD3-323-WHCL	4.5	10.0	25.4	12.7	44.5	82.0	3 pcs.	2,500 pcs.	White (WH), Transparent (CL)	596-25320
TAG9TD3-323-WHCL	5.5	12.1	25.4	19.1	57.1	82.0	3 pcs.	2,500 pcs.	White (WH), Transparent (CL)	596-09320
TAG10TD2-323-WHCL	5.5	12.1	49.5	19.1	57.1	101.6	2 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-10320
TAG1TD2-323-WHCL	8.5	18.2	48.2	19.1	79.2	101.6	2 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-01320
TAG3TD3-323-WHCL	10.0	22.2	25.4	25.4	95.3	82.0	3 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-03320
TAG6TD1-323-WHCL	10.0	22.2	50.8	25.4	95.3	55.0	1 pc.	500 pcs.	White (WH), Transparent (CL)	596-06320
TAG107TD3-323-WHCL	12.0	37.5	25.4	31.8	149.9	82.0	3 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-10732
TAG38TD3-323-WHCL	20.8	47.5	25.4	38.1	187.2	82.0	3 pcs.	1,000 pcs.	White (WH), Transparent (CL)	596-38320
TAG07TD1-323-WHCL	20.8	47.5	50.8	25.4	187.2	55.0	1 pc.	250 pcs.	White (WH), Transparent (CL)	596-07320

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.





### Self-laminating labels, laser printer

#### Helatag 1104 (White-Transparent)

A specially developed material for use in labels required to wrap around cables and wires. The conformable structure of the label ensures that once the label is applied to the wire it remains in place without lifting. The rounded edge construction gives additional bonding features not found in straight edge label designs.

The information is printed onto the white inscription area. The printed information area is placed onto the wire and the transparent tail is wrapped around the wire and covers the text; this gives excellent protection from abrasion, dust and debris.

TagPrint Pro labelling program comes pre-loaded with all our labels. Designing labels is simply done; just choose inbuilt graphics or download your own and add data from ERP system or standard office programs such as Excel. Barcodes are created in a couple of clicks.

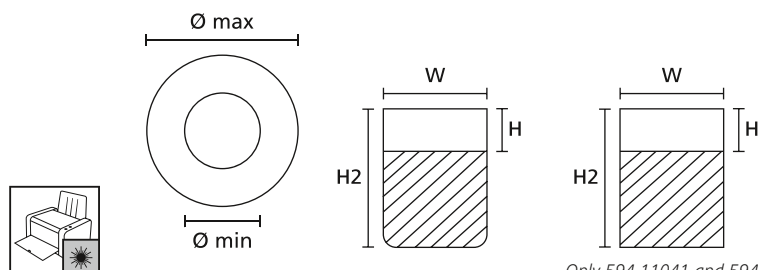
#### Features and benefits

- High-quality self-laminating labels
- Suitable for marking of wires and cables
- Laminating function gives excellent protection against humidity and mechanical abrasion
- Rounded edge design gives additional bonding strength
- Standard material (25 micron) for standard labels
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available from [www.hellermannnyton.com](http://www.hellermannnyton.com) for those wishing to use MS Word
- Clear protective box to ensure labels stay as good as new



Laminating the mark gives long-term print survivability.

<b>MATERIAL</b>	Type 1104, Polyester (PET), white-transparent (WH/CL), self-laminating
<b>Operating Temperature</b>	-40 °C to +150 °C
<b>Curing Temperature</b>	from +10 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil (µm)</b>	25 µm
<b>Chem. Material Properties</b>	Excellent resistance to alcohol, gasoline, cleaning solvents, butanol, ethyl and Butylcellosolve solvent, battery acid.



Only 594-11041 and 594-11040



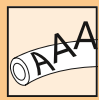
**Software TagPrint Pro for troublefree printing see page 529. For MS-Windows Word design templates for simple applications please refer to [www.HellermannTyton.com](http://www.HellermannTyton.com) (Media Centre).**

TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Labels per Sheet	Pack Cont.	Colour	Article-No.
TAG26LA4-1104-WHCL	1.5	3.0	12.7	9.5	19.1	180 pcs.	5,000 pcs.	White (WH), Transparent (CL)	594-11041
TAG130LA4-1104-WHCL	2.4	4.8	12.7	9.0	24.0	165 pcs.	5,000 pcs.	White (WH), Transparent (CL)	594-21104
TAG49LA4-1104-WHCL	2.6	5.3	25.4	8.8	25.4	70 pcs.	2,500 pcs.	White (WH), Transparent (CL)	594-11042
TAG131LA4-1104-WHCL	3.8	7.6	12.7	12.7	36.5	105 pcs.	2,500 pcs.	White (WH), Transparent (CL)	594-31104
TAG132LA4-1104-WHCL	3.8	7.6	20.3	12.7	36.5	63 pcs.	2,500 pcs.	White (WH), Transparent (CL)	594-41104
TAG02LA4-1104-WHCL	3.8	7.6	25.4	12.7	36.5	49 pcs.	2,450 pcs.	White (WH), Transparent (CL)	594-01104
TAG133LA4-1104-WHCL	5.1	10.1	19.1	12.7	44.5	60 pcs.	2,500 pcs.	White (WH), Transparent (CL)	594-51104
TAG134LA4-1104-WHCL	5.1	10.1	25.4	12.7	44.5	42 pcs.	1,000 pcs.	White (WH), Transparent (CL)	594-61104
TAG09LA4-1104-WHCL	5.8	11.6	25.4	19.1	55.5	35 pcs.	1,000 pcs.	White (WH), Transparent (CL)	594-11104
TAG135LA4-1104-WHCL	6.7	13.5	48.5	12.7	55.0	20 pcs.	500 pcs.	White (WH), Transparent (CL)	594-71104
TAG137LA4-1104-WHCL	7.1	14.3	31.8	22.9	67.7	24 pcs.	1,000 pcs.	White (WH), Transparent (CL)	594-91104
TAG136LA4-1104-WHCL	7.7	15.5	25.4	19.1	67.7	28 pcs.	1,000 pcs.	White (WH), Transparent (CL)	594-81104
TAG145LA4-1104-WHCL	11.1	22.3	25.4	25.4	95.3	21 pcs.	1,000 pcs.	White (WH), Transparent (CL)	594-11040

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.





### Self-laminating labels, laser printer

#### Helatag 1105 (White-Transparent)

These labels are ideal for marking cables of a larger diameter. The type 1105 self-laminating labels exceed the length of 100 mm and are made of a thicker material than type 1104.

Because of its greater material rigidity these labels can be easily removed from the sheet and applied by hand to larger cables and hoses.

#### Features and benefits

- High-quality self-laminating labels
- Suitable for marking of wires and cables
- Laminating function gives excellent protection against humidity and mechanical abrasion
- Rounded edge design gives additional bonding strength
- Thicker material (50 micron) for longer labels
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available from [www.hellermanntyton.com](http://www.hellermanntyton.com) for those wishing to use MS Word
- Clear protective box to ensure labels stay as good as new



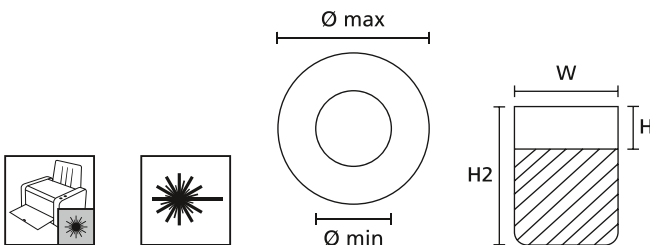
Laminating the mark gives long-term print survivability.

<b>MATERIAL</b>	Type 1105, Polyester (PET), white-transparent (WH/CL), self-laminating
<b>Operating Temperature</b>	-40 °C to +150 °C
<b>Curing Temperature</b>	from +2 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	50 µm
<b>Chem. Material Properties</b>	Excellent resistance to alcohol, gasoline, cleaning solvents, butanol, ethyl and Butylcellosolve solvent, battery acid.



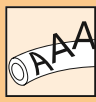
**Software TagPrint Pro for troublefree printing see page 529.**

For MS-Windows Word design templates for simple applications please refer to [www.HellermannTyton.com](http://www.HellermannTyton.com) (Media Centre).



TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Labels per Sheet	Pack Cont.	Colour	Article-No.
<b>TAG138LA4-1105-WHCL</b>	11.8	23.6	38.1	19.1	93.1	15 pcs.	500 pcs.	White (WH), Transparent (CL)	594-13876
<b>TAG139LA4-1105-WHCL</b>	18.2	36.4	38.1	25.4	139.7	10 pcs.	500 pcs.	White (WH), Transparent (CL)	594-13976

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



## Self-laminating labels, dot matrix

### Helatag 101 (White-Transparent)

Helatag self-laminating wire markers are used in industries ranging from automotive for wire and pipe identification to electrical panels.

#### Features and benefits

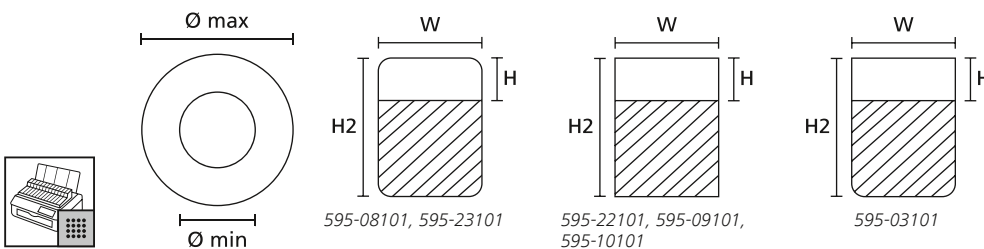
- Print industrial grade labels using standard dot matrix printers
- For low to medium print volumes
- Self-laminating wire markers for automotive and other industries
- Simple and efficient label design and printing with TagPrint Pro software
- Clear protective box to ensure labels stay as good as new



Unique packaging ensures outstanding label protection.

<b>MATERIAL</b>	Type 101, Vinyl (PVC), white-transparent (WH/CL), self-laminating
<b>Operating Temperature</b>	-40 °C to +80 °C
<b>Curing Temperature</b>	from +10 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	80 µm
<b>Chem. Material Properties</b>	Good resistance to water, oils and many solvents.

RoHS



TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Labels per Sheet	Pack Cont.	Colour	Article-No.
TAG22-101-WHCL	3.5	7.6	25.4	12.7	36.5	64 pcs.	2,500 pcs.	White (WH), Transparent (CL)	595-22101
TAG9-101-WHCL	5.5	12.1	25.4	19.1	57.2	32 pcs.	1,000 pcs.	White (WH), Transparent (CL)	595-09101
TAG10-101-WHCL	5.5	12.1	50.8	19.1	57.2	20 pcs.	1,000 pcs.	White (WH), Transparent (CL)	595-10101
TAG3-101-WHCL	10.0	22.2	25.4	25.4	95.3	24 pcs.	1,000 pcs.	White (WH), Transparent (CL)	595-03101
TAG8-101-WHCL	17.8	35.6	25.4	38.1	149.8	14 pcs.	500 pcs.	White (WH), Transparent (CL)	595-08101
TAG23-101-WHCL	23.7	47.5	25.4	38.1	187.9	7 pcs.	250 pcs.	White (WH), Transparent (CL)	595-23101

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Self-laminating labels, manual marking

#### RiteOn, Starter Pack, Material 1401 Dispenser

A specially developed material for use in labels required to wrap around cables and wires. The conformable structure of the label ensures that once the label is applied to the wire it remains in place without lifting. The SPRO200-1401-WH Starter Pack contains all you need to start work identifying your wires,

- 1 x RiteOn dispenser
- 1 x RO202 reel of 150 self-laminating labels for cable diameters ranging from 6 mm to 12 mm
- 1 x T82S-BK black indelible ink marker pen

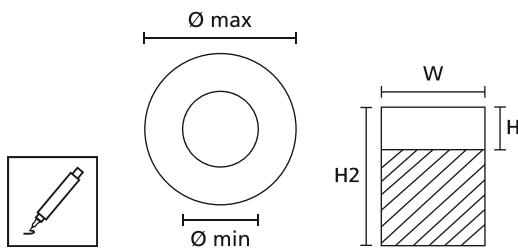
#### Features and benefits

- Palm sized hand held self-laminating label dispenser
- Easy to write on and dispense labels
- Wide range of wire diameters covered as standard
- Ideal for low volume maintenance and repair work
- Write text with specially formulated fast-drying ink T82 pens



Easy to write and dispense labels with RiteOn label dispenser.

<b>MATERIAL</b>	Type 1401, Vinyl (PVC)
<b>Operating Temperature</b>	-40 °C to +80 °C
<b>Curing Temperature</b>	from +10 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	80 µm
<b>Chem. Material Properties</b>	Resistant to water, oil and many solvents.



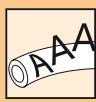
Application video: RiteOn

TYPE	Description	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Pack Cont.	Colour	Article-No.
RO201-1401-WH	Filled dispenser	4.0	8.1	12.7	12.7	38.1	200 pcs.	White (WH), Transparent (CL)	550-14011
RO202-1401-WH		6.1	12.1	19.1	12.7	50.8	150 pcs.	White (WH), Transparent (CL)	550-14012
RO203-1401-WH		9.1	18.2	19.1	25.4	76.2	100 pcs.	White (WH), Transparent (CL)	550-14013
RO201REF-1401-WH	Refill packs	4.0	8.1	12.7	12.7	38.1	200 pcs.	White (WH), Transparent (CL)	550-14014
RO202REF-1401-WH		6.1	12.1	19.1	12.7	50.8	150 pcs.	White (WH), Transparent (CL)	550-11401
RO203REF-1401-WH		9.1	18.2	19.1	25.4	76.2	100 pcs.	White (WH), Transparent (CL)	550-71401
SPRO200-1401-WH	Starter pack	6.1	12.1	19.1	12.7	50.8	150 pcs.	White (WH), Transparent (CL)	550-14010

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



## Self-laminating labels, manual marking

### HELASIGN, Material 1402, Booklet

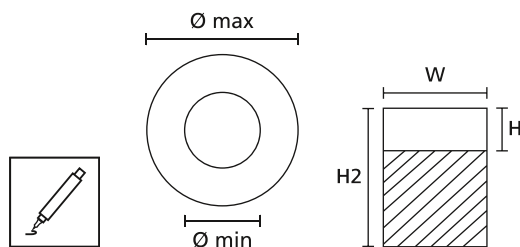
A quick and simple on-site solution, for either permanent or temporary marking of wires, cables and pipes.

#### Features and benefits

- Self-laminating labels supplied in handy pocket-sized booklets
- Booklet cover protects labels when stored
- Ideal for low volume maintenance and repair work
- Easy to write on and dispense labels
- Laminating function gives excellent protection against humidity and mechanical abrasion
- Applicator tool for clean application enclosed
- Write text with specially formulated fast-drying ink T82 pens



Always on hand: Labels in a convenient, pocket sized and lightweight booklet.



<b>MATERIAL</b>	Type 1402, Vinyl (PVC)
<b>Operating Temperature</b>	-40 °C to +80 °C
<b>Curing Temperature</b>	from +8 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	80 µm
<b>Chem. Material Properties</b>	Resistant to water, oil and many solvents.

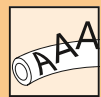
RoHS ✓

TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Height (H2)	Pack Cont.	Colour	Article-No.
HSMB-C1-1402-BU	4.0	8.1	12.7	12.7	38.1	240 pcs.	Blue (BU), Transparent (CL)	598-14025
HSMB-C1-1402-GN	4.0	8.1	12.7	12.7	38.1	240 pcs.	Green (GN), Transparent (CL)	598-14024
HSMB-C1-1402-OG	4.0	8.1	12.7	12.7	38.1	240 pcs.	Orange (OG), Transparent (CL)	598-14022
HSMB-C1-1402-RD	4.0	8.1	12.7	12.7	38.1	240 pcs.	Red (RD), Transparent (CL)	598-14021
HSMB-C1-1402-WH	4.0	8.1	12.7	12.7	38.1	240 pcs.	White (WH), Transparent (CL)	598-14020
HSMB-C1-1402-YE	4.0	8.1	12.7	12.7	38.1	240 pcs.	Yellow (YE), Transparent (CL)	598-14023
HSMB-C2-1402-BU	6.1	12.1	19.1	12.7	50.8	120 pcs.	Blue (BU), Transparent (CL)	598-11402
HSMB-C2-1402-GN	6.1	12.1	19.1	12.7	50.8	120 pcs.	Green (GN), Transparent (CL)	598-01402
HSMB-C2-1402-OG	6.1	12.1	19.1	12.7	50.8	120 pcs.	Orange (OG), Transparent (CL)	598-14028
HSMB-C2-1402-RD	6.1	12.1	19.1	12.7	50.8	120 pcs.	Red (RD), Transparent (CL)	598-14027
HSMB-C2-1402-WH	6.1	12.1	19.1	12.7	50.8	120 pcs.	White (WH), Transparent (CL)	598-14026
HSMB-C2-1402-YE	6.1	12.1	19.1	12.7	50.8	120 pcs.	Yellow (YE), Transparent (CL)	598-14029
HSMB-C3-1402-BU	9.1	18.2	25.4	19.1	76.2	60 pcs.	Blue (BU), Transparent (CL)	598-71402
HSMB-C3-1402-GN	9.1	18.2	25.4	19.1	76.2	60 pcs.	Green (GN), Transparent (CL)	598-61402
HSMB-C3-1402-OG	9.1	18.2	25.4	19.1	76.2	60 pcs.	Orange (OG), Transparent (CL)	598-41402
HSMB-C3-1402-RD	9.1	18.2	25.4	19.1	76.2	60 pcs.	Red (RD), Transparent (CL)	598-31402
HSMB-C3-1402-WH	9.1	18.2	25.4	19.1	76.2	60 pcs.	White (WH), Transparent (CL)	598-21402
HSMB-C3-1402-YE	9.1	18.2	25.4	19.1	76.2	60 pcs.	Yellow (YE), Transparent (CL)	598-51402
HSMB-C4-1402-WH	16.2	32.3	25.4	25.4	127.0	30 pcs.	White (WH), Transparent (CL)	598-40402
HSMB-C5-1402-WH	20.2	40.3	25.4	25.4	152.4	30 pcs.	White (WH), Transparent (CL)	598-50402

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Pre-printed cable markers

#### Helagrip, slide on, chevron cut

The Helagrip range consists of pre-printed markers that slide easily onto cables and wires. The anti-skew chevron-cut ensures that markers are locked together and stay in place.

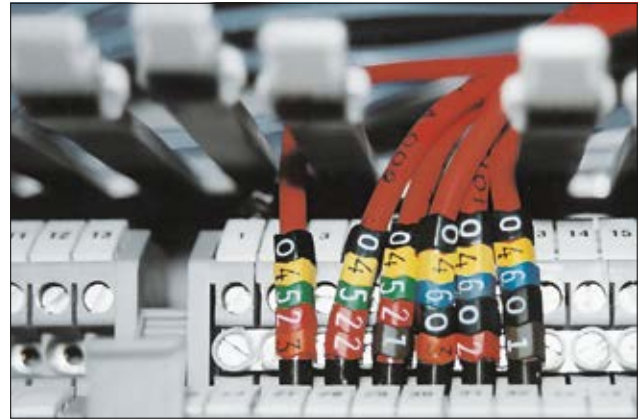
The markers are ideally suited for panel building, mass transit, utilities, telecommunications and electrical contracting.

Markers are available as standard in international resistor colour code and yellow material marked in black. White material marked in black is available to special order.

Characters are 0-9, A-Z and standard electrical symbols.

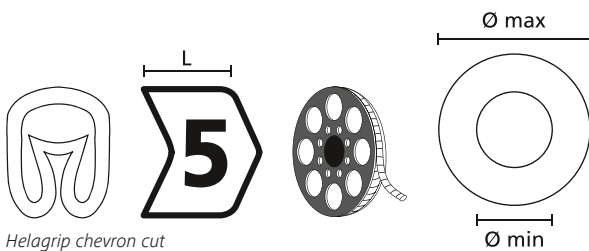
#### Features and benefits

- Easily apply one size marker to wide range of cables
- Markers are applied before termination takes place
- Chevron cut to lock markers together ensuring text remains in place
- Traditional wire marking available in yellow, white and colour code
- Flexible material so product returns securely on the wire
- Applicator tool TJC available



Clearly a better way to identify in confined spaces.

<b>MATERIAL</b>	Flexible Polyvinyl Chloride, cadmium free (PVC)
<b>Operating Temperature</b>	-65 °C to +105 °C, intermittent +135 °C
<b>Flammability</b>	UL94 V0 (3mm)



Helagrip chevron cut

**i** The products have been tested in-house according to UL224.

TYPE	Bundle Ø min.	Bundle Ø max.	Length (L)	Pack Cont.
HGDC1-3	1.0	3.0	3.5	1,000 pcs.
HGDC2-5	2.0	5.0	3.5	1,000 pcs.
HGDC4-9	4.0	9.0	5.0	250 pcs.

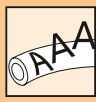
All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.

TYPE	Description	For Size	Article-No.
TJC1-3	Applicator tool TJC1-3	Helagrip 1-3	518-00113
TJC2-5	Applicator tool TJC2-5	Helagrip 2-5	518-00125
TJC4-9	Applicator tool TJC4-9	Helagrip 4-9	518-00149

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content.



## Pre-printed cable markers

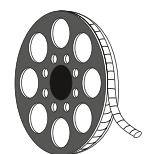
Helagrip, slide on, chevron cut

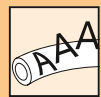
HGDC1-3	
	Article-No.
A	515-01014
B	515-01024
C	515-01034
D	515-01044
E	515-01054
F	515-01064
G	515-01074
H	515-01084
I	515-01094
J	515-01104
K	515-01114
L	515-01124
M	515-01134
N	515-01144
O	515-01154
P	515-01164
Q	515-01174
R	515-01184
S	515-01194
T	515-01204
U	515-01214
V	515-01224
W	515-01234
X	515-01244
Y	515-01254
Z	515-01264

HGDC1-3	
	Article-No.
0	515-01604
1	515-01614
2	515-01624
3	515-01634
4	515-01644
5	515-01654
6	515-01664
7	515-01674
8	515-01684
9	515-01694
+	515-01704
-	515-01714
∫	515-01724
≠	515-01734
•	515-01804
0	515-01600
1	515-01611
2	515-01622
3	515-01633
4	515-01644
5	515-01655
6	515-01666
7	515-01677
8	515-01688
9	515-01699

HGDC2-5	
	Article-No.
A	515-02014
B	515-02024
C	515-02034
D	515-02044
E	515-02054
F	515-02064
G	515-02074
H	515-02084
I	515-02094
J	515-02104
K	515-02114
L	515-02124
M	515-02134
N	515-02144
O	515-02154
P	515-02164
Q	515-02174
R	515-02184
S	515-02194
T	515-02204
U	515-02214
V	515-02224
W	515-02234
X	515-02244
Y	515-02254
Z	515-02264

HGDC2-5	
	Article-No.
0	515-02604
1	515-02614
2	515-02624
3	515-02634
4	515-02644
5	515-02654
6	515-02664
7	515-02674
8	515-02684
9	515-02694
+	515-02704
-	515-02714
∫	515-02715
≠	515-02724
•	515-02734
0	515-02600
1	515-02611
2	515-02622
3	515-02633
4	515-02644
5	515-02655
6	515-02666
7	515-02677
8	515-02688
9	515-02699





### Pre-printed cable markers

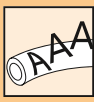
Helagrip, slide on, chevron cut

HGDC4-9	
	Article-No.
A	515-03014
B	515-03024
C	515-03034
D	515-03044
E	515-03054
F	515-03064
G	515-03074
H	515-03084
I	515-03094
J	515-03104
K	515-03114
L	515-03124
M	515-03134
N	515-03144
O	515-03154
P	515-03164
Q	515-03174
R	515-03184
S	515-03194
T	515-03204
U	515-03214
V	515-03224
W	515-03234
X	515-03244
Y	515-03254
Z	515-03264

HGDC4-9	
	Article-No.
0	515-03604
1	515-03614
2	515-03624
3	515-03634
4	515-03644
5	515-03654
6	515-03664
7	515-03674
8	515-03684
9	515-03694
+	515-03704
-	515-03714
∩	515-03724
∪	515-01946
≠	515-01947
∅	515-03600
∞	515-03611
∑	515-03622
∏	515-03633
∫	515-03644
∫	515-03655
∫	515-03666
∫	515-03677
∫	515-03688
∫	515-03699







### Pre-printed cable markers

#### Ovalgrip, slide on, straight cut

The Ovalgrip range consists of pre-printed markers that slide easily onto cables and wires. The markers are ideally suited to panel building, mass transit, utilities, telecommunications and electrical contracting.

These markers are supplied as standard on a disk / reel.

They are available as a standard in yellow material marked in black, and international resistor colour code. Characters are 0-9, A-Z and standard electrical symbols.

White material marked in black available on special request.

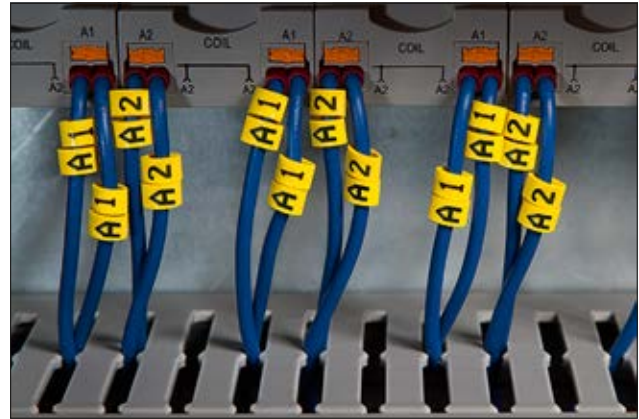
AT1 Arrowtags will fit 7 size 50 markers.

AT2 Arrowtags will fit 8 size 85 markers.

AT3 Arrowtags will fit 14 size 85 markers.

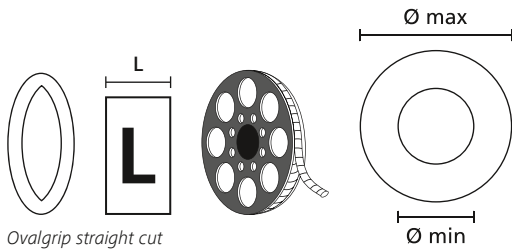
#### Features and benefits

- Oval shaped markers designed to fit AT1, AT2 or AT3 (depends on Ovalgrip size)
- Ideal for use in maintenance and repair and fixed with cable ties
- Direct application to wire and cable before termination is also recommended
- Traditional wire marking available in yellow, white and colour code



A simple idea for complex marking needs.

<b>MATERIAL</b>	Flexible Polyvinyl Chloride, cadmium free (PVC)
<b>Operating Temperature</b>	-65 °C to +105 °C, intermittent +135 °C
<b>Flammability</b>	UL 94 V0 (3 mm)



**i** The products have been tested in-house according to UL224.

**d** For details on Arrowtags please see page 491.

TYPE	Bundle Ø min.	Bundle Ø max.	Length (L)	Pack Cont.	For Size
HODS50	1.7	3.6	4.0	1,000 pcs.	AT1
HODS85	1.8	6.3	4.5	1,000 pcs.	AT2/AT3

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.



### Pre-printed cable markers

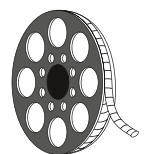
Ovalgrip, slide on, straight cut

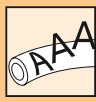
HODS50	
	Article-No.
A	531-15014
B	531-15024
C	531-15034
D	531-15044
E	531-15054
F	531-15064
G	531-15074
H	531-15084
I	531-15094
J	531-15104
K	531-15114
L	531-15124
M	531-15134
N	531-15144
O	531-15154
P	531-15164
Q	531-15174
R	531-15184
S	531-15194
T	531-15204
U	531-15214
V	531-15224
W	531-15234
X	531-15244
Y	531-15254
Z	531-15264

HODS50	
	Article-No.
0	531-15274
1	531-15284
2	531-15294
3	531-15304
4	531-15314
5	531-15324
6	531-15334
7	531-15344
8	531-15354
9	531-15364
.	531-00174
/	531-00175
⊥	531-00176
+	531-00451
-	531-00452
0	531-15365
1	531-15366
2	531-15367
3	531-15368
4	531-15314
5	531-15370
6	531-15371
7	531-15372
8	531-15373
9	531-15374

HODS85	
	Article-No.
A	531-07935
B	531-07936
C	531-07937
D	531-07938
E	531-07939
F	531-07940
G	531-07941
H	531-07942
I	531-07943
J	531-07944
K	531-07945
L	531-07946
M	531-07947
N	531-07948
O	531-07949
P	531-07950
Q	531-07951
R	531-07952
S	531-07953
T	531-07954
U	531-07955
V	531-07956
W	531-07957
X	531-07958
Y	531-07959
Z	531-07960

HODS85	
	Article-No.
0	531-07925
1	531-07926
2	531-07927
3	531-07928
4	531-07732
5	531-07930
6	531-07931
7	531-07932
8	531-07933
9	531-07934
.	531-00384
/	531-07961
⊥	531-00386
+	531-07924
-	531-07923
0	531-07728
1	531-07729
2	531-07730
3	531-07731
4	531-07732
5	531-07733
6	531-07734
7	531-07735
8	531-07736
9	531-07737





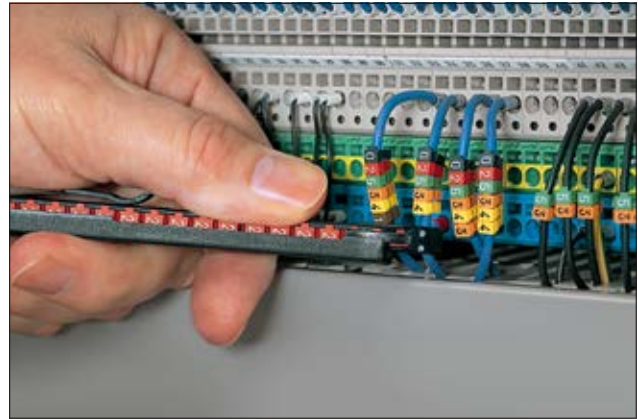
## Pre-printed cable markers

### WIC, snap on

The WIC range of pre-printed cable markers easily snap onto cables and wires. The WIC tool ensures an easy application of the markers – simply insert the markers into the tool, slide down and press the markers onto the wire while twisting. Markers for fibre cables should be applied by hand. All markers come with a locking mechanism to ensure perfect text alignment. The two WICA accessories are ideal for marking cables of larger diameters (6mm<sup>2</sup>-95mm<sup>2</sup>).

### Features and benefits

- Fast and easy to use pre-printed nylon snap-on marker
- Ideal where termination is completed or for maintenance and repair
- Markers lock together to give perfect text alignment
- Vibration resistant markers, WIC markers lock onto wire and cable tightly
- WIC tool holds 20 WIC markers in all four sizes
- Gripping system locks markers onto wire and resists rotation
- Available in yellow, white and international resistor colour code
- Popular 2 digit markings such as L1, L2, L3, PE are available in yellow or colour code
- Dispenser colour denotes marker size: WIC0 (green), WIC1 (red), WIC2 (blue), WIC3 (yellow)
- Two accessories available to identify cables from 6 mm<sup>2</sup> up to 25 mm<sup>2</sup> (WICA-AC10-25) and up to 95 mm<sup>2</sup> (WICA-ACT-BK)

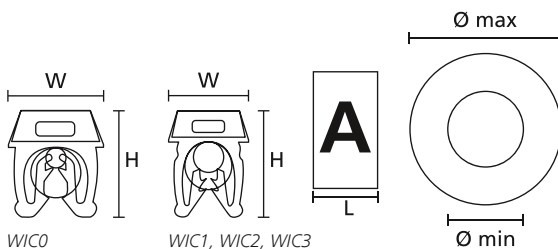


Use the applicator to simply snap the marker onto your cable.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-40 °C to +85 °C, (+105 °C, 500 h)
<b>Flammability</b>	UL 94 V0



### Customized marking on request

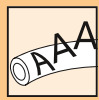


Application video:  
WIC

TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Length (L)	Wire Size Range (mm <sup>2</sup> )	Pack Cont.	Application Tool
WIC0	0.80	2.20	5.0	5.5	3.0	0.15-0.75 <sup>2</sup>	1,000 pcs.	WIC Tool
WIC1	2.00	2.80	5.0	6.4	3.0	0.50-1.50 <sup>2</sup>	1,000 pcs.	
WIC2	2.80	3.80	5.6	7.1	3.0	1.50-2.50 <sup>2</sup>	1,000 pcs.	
WIC3	4.30	5.30	8.0	9.6	3.0	4.00-6.00 <sup>2</sup>	500 pcs.	

All dimensions in mm. Subject to technical changes.

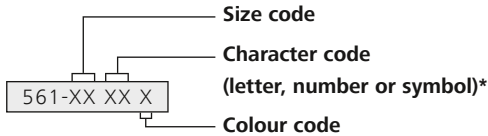
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available. More colours on request.



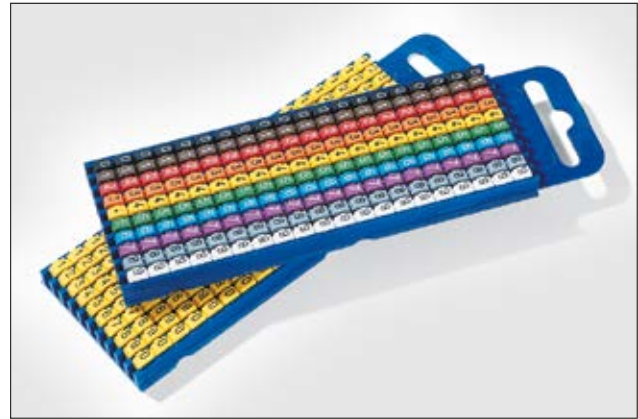
### Pre-printed cable markers

#### WIC, snap on

Use our coding system, to easily order the markers suitable for your use.



\* For the assortment and the symbols please use the code with three digits.

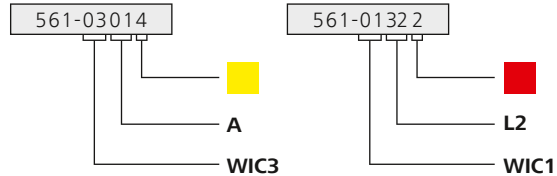


WIC – pre-printed wire and cable markers.

#### Step 1: Choose your size.

SIZE	WIC0	WIC1	WIC2	WIC3
Code	00	01	02	03

Example:



#### Step 2: Choose your letter, symbol, number or assortment.

LETTER	A	B	C	D	E	F	G	H	I	J	K
Code	01	02	03	04	05	06	07	08	09	10	11
LETTER	L	M	N	O	P	Q	R	S	T	U	V
Code	12	13	14	15	16	17	18	19	20	21	22
LETTER	W	X	Y	Z							
Code	23	24	25	26							

SYMBOL	L1	L2	L3	PE	+	-	/	↓	.
Code	31	32	33	34	70	71	72	73	74
SYMBOL									
Code	75	76	77	000	001				

NUMBER	0	1	2	3	4	5	6	7	8	9
Code	60	61	62	63	64	65	66	67	68	69

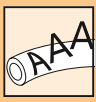
ASSORTMENT	0	1	2	3	4	5	6	7	8	9
Code	100									
ASSORTMENT	A	E	L	N	R	S	T	+	-	
Code	994									
ASSORTMENT	G	H	Y	Z	O	Q	J	K	X	L
Code	003									
ASSORTMENT	L1	L1	L2	L2	L3	L3	N	N	↓	↓
Code	300									
ASSORTMENT	L1	L1	L2	L2	L3	L3	N	N	↓	↓
Code	302									

ASSORTMENT	0	1	2	3	4	5	6	7	8	9
Code	101									
ASSORTMENT	B	C	U	V	W	P	D	F	I	M
Code	002									
ASSORTMENT	.	/	---	↓	+	-	~	=	*	
Code	004									
ASSORTMENT	L1	L1	L2	L2	L3	L3	N	N	↓	↓
Code	301									
ASSORTMENT	L1	L1	L2	L2	L3	L3	N	N	↓	↓
Code	303									

#### Step 3: Choose your colour.

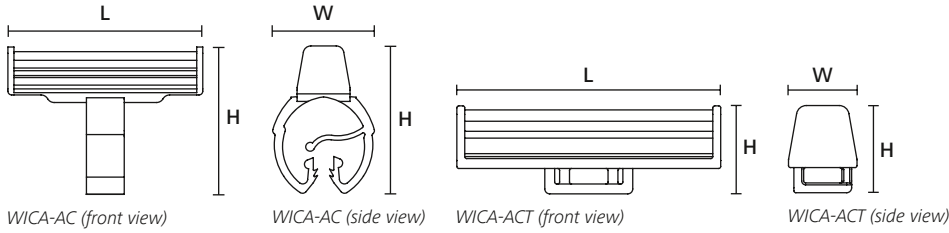
COLOUR										
Code	0	1	2	3	4	5	6	7	8	9

Customized marking on request

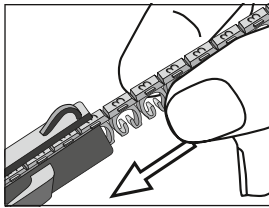


### Pre-printed cable markers

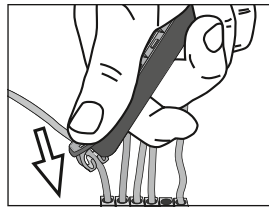
#### WIC Tool and accessories



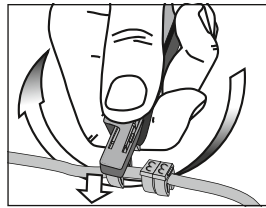
TYPE	Description	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Length (L)	Marker tiles per carrier	Pack Cont.	Article-No.
WICA-AC10-25	Snap-on accessory	5.5	9.5	13.5	19.4	25.8	8	100 pcs.	561-06001
WICA-ACT-BK	WIC adapter set for fixing with cable ties	3.0	38.0	7.0	8.9	26.7	8	100 pcs.	561-06000
WIC Tool	Applicator	-	-	-	-	-	-	5 pcs.	561-00001



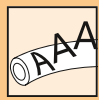
Step 1



Step 2



Step 3



### Identification ties and plates for marking cable bundles

#### Arrowtag

The plates are suitable for applying to larger pipes and cables before or after termination has taken place.

They can be marked with Ovalgrip markers or manually using the T82 series of indelible markers pens.

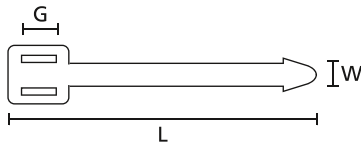
#### Features and benefits

- Blank nylon arrowhead shape plate fixed with a cable tie
- Identify with a T82 pen or Ovalgrip markers
- AT1 for 7 size 50 Ovalgrip markers
- AT2 for 8 size 85 Ovalgrip markers
- AT3 for 14 size 85 Ovalgrip markers
- Custom printed plaques are available on request



A clearly better way of identifying cables and pipes.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-40 °C to +85 °C, (+105 °C, 500 h)
<b>Flammability</b>	UL94 V2



AT1



AT2



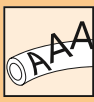
AT3

TYPE	Length (L)	Width (W)	Strap Width max. (G)	Pack Cont.	Colour	Article-No.
AT1	62.5	4.7	7.4	100 pcs.	Black (BK)	151-41110
	62.5	4.7	7.4	100 pcs.	Natural (NA)	151-41119
AT2	63.0	9.0	6.4	100 pcs.	Black (BK)	151-41210
	63.0	9.0	6.4	100 pcs.	Natural (NA)	151-41219
AT3	100.0	9.0	6.4	100 pcs.	Black (BK)	151-41310
	100.0	9.0	6.4	100 pcs.	Natural (NA)	151-41319

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Identification tags for marking cable bundles

#### Q-tags

Q-tags are used to identify a cable or a cable bundle and are secured with a Q-tie. The Q-tag's flag design allows the user to quickly read or scan the printed information.

#### Features and benefits

- Identify cable or cable bundle
- Quickly read or scan printed information
- Mark by hand with T82 series marker pen or use printed adhesive label
- HellermannTyton offers complete printing solution (printers, labels, ribbons)
- Perfect combination with Q-ties to safely secure and mark cables with highly visible text



The flagged orientation of Q-tags ensures that printed texts are easily visible.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-40 °C to +85 °C
<b>Flammability</b>	UL94 V2



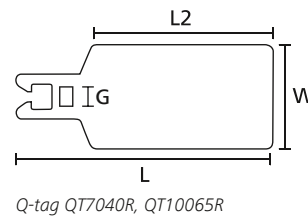
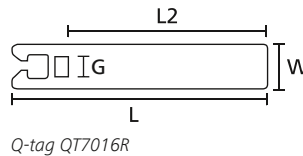
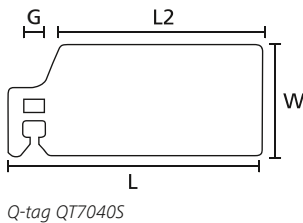
Application video:  
Q-Series



Please find the corresponding labels on page 496.



Please find more Q-Series products for your system solution on page 56 and 137.



TYPE	Length (L)	Length (L2)	Width (W)	Strap Width max. (G)	Pack Cont.	Colour	Recommended Labels	Article-No.
QT7040S	88.0	70.0	42.0	3.6	50 pcs.	White (WH)	TAG63TD1	151-10952
QT7016R	100.0	70.0	18.0	4.7	50 pcs.	White (WH)	TAG68-16TD1	151-10950
QT7040R	100.0	70.0	42.0	4.7	50 pcs.	White (WH)	TAG63TD1	151-10951
QT10065R	135.0	100.0	67.0	4.7	25 pcs.	White (WH)	TAG102-64TD1	151-10953

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Identification ties and plates for marking cable bundles

#### IMP and IT Plates

The IMP and IT range of marker plates are suitable for applying to large cable bundles before or after termination has taken place. The marker plates can also be riveted if required.

They are secured with cable ties of any length with a maximum width of 4.8 mm.

They can be written on by hand using either a black or red T82 indelible marker pen.

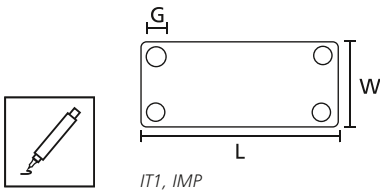
#### Features and benefits

- IT and IMP plates for identifying large cable bundles or flat surfaces
- Mark IT and IMP plates with printable labels or T82 pens
- Fix with cable ties or rivets
- Custom printed plaques are available on request



Unlimited cable bundle diameters can be securely identified.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-40 °C to +85 °C, (+105 °C, 500 h)
<b>Flammability</b>	UL94 V2



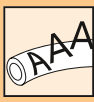
Please find the corresponding labels on page 496.

TYPE	Length (L)	Width (W)	Strap Width max. (G)	Pack Cont.	Colour	Recommended Labels	Article-No.
IMP1.5	38.1	19.1	4.8	100 pcs.	White (WH)	TAG18-16TD1	151-42159
IT1	44.0	19.0	4.8	100 pcs.	Natural (NA)	TAG28-16TD1	151-42119
IMP2	50.8	19.1	4.8	100 pcs.	White (WH)	TAG28-16TD1	151-42229
IMP2.5	63.5	19.1	4.8	100 pcs.	White (WH)	TAG43-16TD1	151-42259
	63.5	44.4	4.8	100 pcs.	White (WH)	TAG43-41TD1	151-42269
IMP3.5	88.9	19.1	4.8	100 pcs.	White (WH)	TAG68-16TD1	151-42359

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



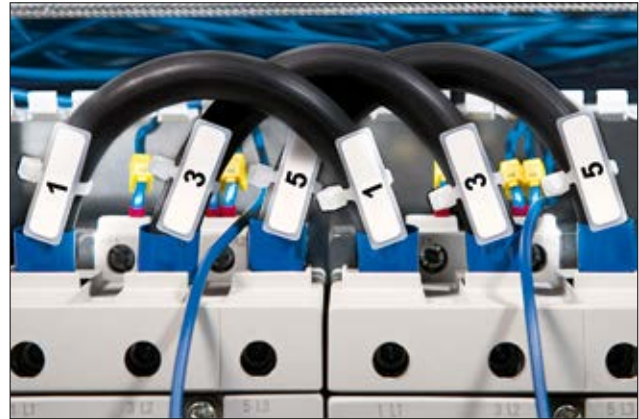
### Identification ties and plates for marking cable bundles

#### IT-Ties

One of the major benefits is the ability to both secure and identify cable bundles at different times.

#### Features and benefits

- Identification ties made of Polyamide 6.6
- For simple identification and securing of cable bundles in one step
- Printable labels are available for a professional finish
- Manual or temporary marking is possible with an indelible pen (T82S-BK / T82R-RD)

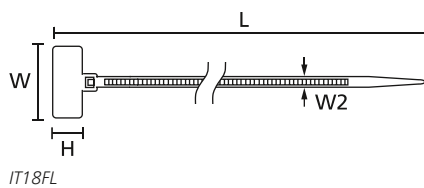


One operation with two user benefits.

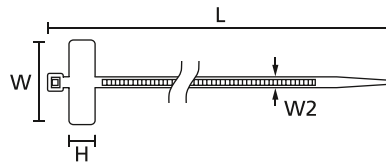


Please find the corresponding labels on page 496.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Operating Temperature</b>	-40 °C to +85 °C
<b>Flammability</b>	UL94 V2



IT18FL



IT18R

TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Length (L)	Width (W2)	N	Recommended Labels	Pack Cont.	Colour	Article-No.
IT18FL	1.5	19.0	20.5	9.0	110.0	2.5	80	TAG18-07TD1	100 pcs.	Natural (NA)	111-81919
IT18R	6.0	22.0	25.0	8.0	100.0	2.3	80	TAG23-06TD1	100 pcs.	Natural (NA)	111-81821

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content.  
Other packaging options may also be available. More colours on request.



= Minimum Loop Tensile Strength for Cable Ties (Newton)

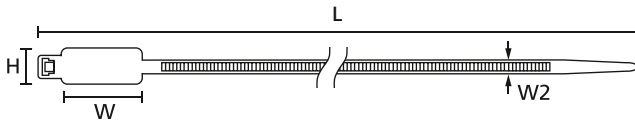


For product specific approvals and specifications please refer to the Appendix.

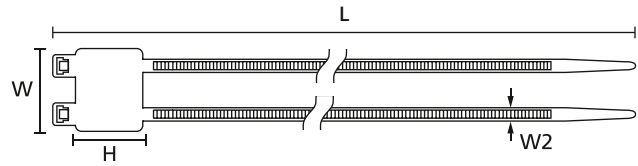


### Identification ties and plates for marking cable bundles

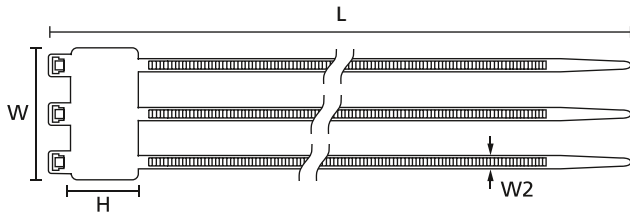
#### IT-Ties



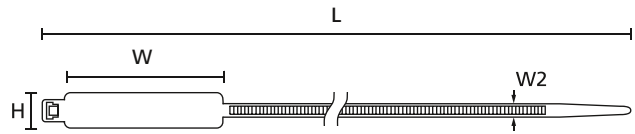
IT50R



IT50RD



IT50RT



IT50L



TYPE	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Length (L)	Width (W2)		Recommended Labels	Pack Cont.	Colour	Article-No.
IT50R	9.5	44.5	28.0	12.9	203.0	4.6	225	TAG23-10TD1	100 pcs.	Natural (NA)	111-85019
IT50RD	10.0	44.0	29.0	26.3	205.0	4.7	225	TAG26-21TD1	50 pcs.	Natural (NA)	111-85219
IT50RT	10.0	44.0	46.0	26.3	205.0	4.7	225	TAG43-21TD1	50 pcs.	Natural (NA)	111-85119
IT50L	19.0	100.0	56.0	12.8	390.0	4.7	225	TAG52-10TD1	100 pcs.	Natural (NA)	111-85319

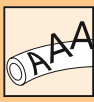
All dimensions in mm. Subject to technical changes.  
 Minimum Order Quantity (MOQ) may differ from package content.  
 Other packaging options may also be available. More colours on request.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.  
 Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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



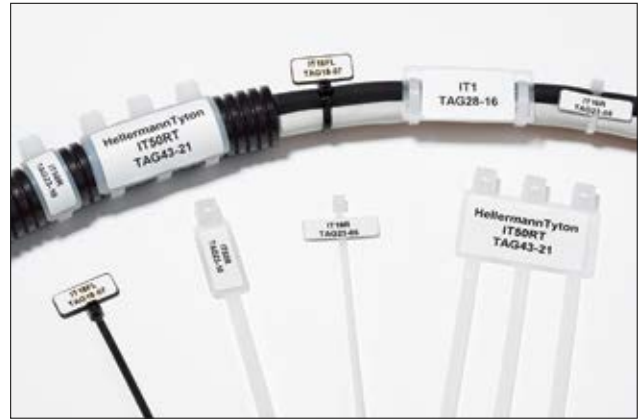
## Labels for IT ties, IMP plates and Q-tags, thermal transfer

### Helatag 892 (White)

These labels are specially tailored to the sizes used in the IT marking tie and IMP/IT as well as Q-tag range. The flexible material sticks to the marking tie or tag, even on rounded surfaces. Print with HellermannTyton's premium range of thermal transfer printers and ribbons for optimum print results. Using unique numbering, graphics or barcodes the labels give excellent asset identification possibilities. This solution produces professional marking of tubes, pipes, cables and other parts.

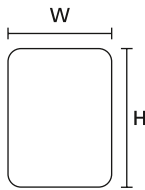
### Features and benefits

- Suited to the slightly rough surfaces of Q-tags, IT ties and IMP/IT plates
- Adheres to rounded surfaces
- Rounded corners ensure better long term durability of adhesion
- White labels give excellent contrast



Identification ties and tags.

<b>MATERIAL</b>	Type 892, Vinyl (PVC), white (WH)
<b>Operating Temperature</b>	-40 °C to +80 °C
<b>Curing Temperature</b>	from 0 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	83 µm
<b>Chem. Material Properties</b>	Good resistance against water, oils and most solvents.
<b>Recommended Ribbon Type</b>	TT822OUT
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	For Size	Pack Cont.	Colour	Article-No.
TAG18-07TD1-892-WH	18.0	7.0	24.0	1 pc.	IT18FL	5,000 pcs.	White (WH)	596-12253
TAG18-16TD1-892-WH	18.0	16.0	24.0	1 pc.	IMP1.5	2,500 pcs.	White (WH)	596-12254
TAG23-06TD1-892-WH	23.0	6.0	30.0	1 pc.	IT18R	5,000 pcs.	White (WH)	596-12255
TAG23-10TD1-892-WH	23.0	10.0	30.0	1 pc.	IT50R	5,000 pcs.	White (WH)	596-12256
TAG26-21TD2-892-WH	26.0	21.0	57.0	2 pcs.	IT50RD	2,500 pcs.	White (WH)	596-12257
TAG28-16TD1-892-WH	28.0	16.0	34.0	1 pc.	IT1, IMP2	2,500 pcs.	White (WH)	596-12258
TAG43-16TD1-892-WH	43.0	16.0	50.0	1 pc.	IMP2.5	2,500 pcs.	White (WH)	596-12259
TAG43-21TD1-892-WH	43.0	21.0	50.0	1 pc.	IT50RT	2,500 pcs.	White (WH)	596-12260
TAG43-41TD1-892-WH	43.0	41.0	50.0	1 pc.	IMP2.5W1.75	1,000 pcs.	White (WH)	596-12261
TAG52-10TD1-892-WH	52.0	10.0	58.0	1 pc.	IT50L	5,000 pcs.	White (WH)	596-12262
TAG63TD1-892-WH	63.5	38.1	70.0	1 pc.	QT7040R, QT7040S	1,000 pcs.	White (WH)	596-12263
TAG68-16TD1-892-WH	68.0	16.0	74.0	1 pc.	IMP3.5, QT7016R	2,500 pcs.	White (WH)	596-12264
TAG102-64TD1-892-WH	102.0	64.0	106.0	1 pc.	QT10065R	250 pcs.	White (WH)	596-12265

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

### Carrier marking system, laser printer

#### Helafix HC and HCR Carriers

Marking of cable looms, cables, pipes, transport systems, valves, sensors, for inventory marking on machines or other parts.

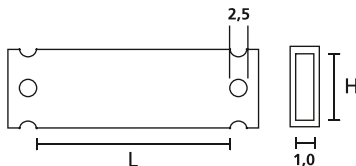
#### Features and benefits

- Versatile transparent carriers for HFX labels used for temporary or permanent marking
- Fixed in place using T18 series cable ties, screws or rivets (carrier HC06, no rivet hole)
- Protects inserted HFX label against damp, dirt, damage and UV radiation
- Helafix HC supplied as cut lengths in bags, pre-cut and pre-punched rivet hole (carrier HC06 has no punched hole)
- Helafix HCR supplied in continuous tube format and can be cut to size with HCT tool
- Helafix HFX labels designed to fit into HC and HCR carriers



Multi-purpose identification potential: Helafix HC and HCR.

<b>MATERIAL</b>	Polyethylene, UV-resistant (PEUV)
<b>Operating Temperature</b>	-60 °C to +65 °C
<b>Flammability</b>	UL94 HB
<b>Chem. Material Properties</b>	Resistance to UV light, water and a variety of solvents.

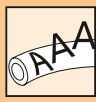


TYPE	Length (L)	Height (H)	Reel Length	Pack Cont.	Recommended Labels	Tools	Article-No.
HCR06	-	7.0	25 m	25 m	-	-	525-07003
HCR09	-	10.0	25 m	25 m	HFX9	50	525-10003
HCR12	-	13.0	25 m	25 m	HFX12	51	525-13003
HCR18	-	19.0	25 m	25 m	-	-	525-19003
HCR24	-	25.0	25 m	25 m	-	-	525-25003
HC06-17	17.5	7.0	-	50 pcs.	-	-	525-07173
HC09-17	17.5	10.0	-	50 pcs.	HFX9-17P	-	525-10173
HC12-17	17.5	13.0	-	50 pcs.	-	-	525-13173
HC06-35	35.0	7.0	-	50 pcs.	-	-	525-07353
HC09-35	35.0	10.0	-	50 pcs.	HFX9-35P	-	525-10353
HC12-35	35.0	13.0	-	50 pcs.	HFX12-35P	-	525-13353
HC18-35	35.0	19.0	-	50 pcs.	-	-	525-19353
HC09-52	52.0	10.0	-	50 pcs.	HFX9-52P	-	525-10523
HC12-52	52.0	13.0	-	50 pcs.	HFX12-52P	-	525-13523
HC18-52	52.0	19.0	-	50 pcs.	-	-	525-19523
HC24-52	52.0	25.0	-	50 pcs.	-	-	525-25523
HC12-70	70.0	13.0	-	50 pcs.	-	-	525-13703
HC18-70	70.0	19.0	-	50 pcs.	-	-	525-19703
HC24-70	70.0	25.0	-	50 pcs.	-	-	525-25703

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools		
	50	51
	HCT1	HCT2
	573	573

For more information on toolings please refer to the Application Tooling chapter.



## Carrier marking system, laser printer

### Helafix HFX Labels

Use marking pen T82 or print the labels with laser printer. For indoor use in bundle applications in machines, panel building or wherever flexible self marked marking is needed.

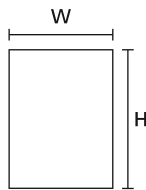
#### Features and benefits

- Laser printable non-adhesive labels for Helafix carrier strip (HC and HCR) range
- Every sheet in two colours (front yellow, back white)
- A4 format
- Simple and efficient label design and printing with TagPrint Pro software
- Mark manually with T82 series indelible markers pens
- Templates available from [www.hellermannntyton.com](http://www.hellermannntyton.com) for those wishing to use MS Word



A precise match for Helafix, for permanent identification coding.

<b>MATERIAL</b>	Polyester (SP)
<b>Operating Temperature</b>	-70 °C to +125 °C
<b>Chem. Material Properties</b>	Resistance to a variety of solvents. Good UV light resistance.



TYPE	Width (W)	Height (H)	Labels per Sheet	Sheets per Pack	Carton Quantity	Colour	Article-No.
HFX9-17P	17.5	9.0	319 pcs.	20 pcs.	6,380 pcs.	Yellow (YE), White (WH)	526-01014
HFX9-35P	35.0	9.0	145 pcs.	20 pcs.	2,900 pcs.	Yellow (YE), White (WH)	526-01514
HFX12-35P	35.0	12.0	110 pcs.	20 pcs.	2,200 pcs.	Yellow (YE), White (WH)	526-01714
HFX9-52P	52.5	9.0	124 pcs.	20 pcs.	2,480 pcs.	Yellow (YE), White (WH)	526-02014
HFX12-52P	52.5	12.0	92 pcs.	20 pcs.	1,840 pcs.	Yellow (YE), White (WH)	526-02214
HFX12-105P	105.0	12.0	44 pcs.	20 pcs.	880 pcs.	Yellow (YE), White (WH)	526-02514
HFX24-105P	105.0	24.0	22 pcs.	20 pcs.	440 pcs.	Yellow (YE), White (WH)	526-03014
HFX12-210P	210.0	12.0	22 pcs.	20 pcs.	440 pcs.	Yellow (YE), White (WH)	526-05014
HFX24-210P	210.0	24.0	11 pcs.	20 pcs.	220 pcs.	Yellow (YE), White (WH)	526-05514

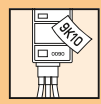
All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Description	Pack Cont.	Colour	Article-No.
T825-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Labels for control panel identification, thermal transfer

**Helatag 880 (Yellow matt), removable**

**Helatag 1211 (Yellow gloss)**

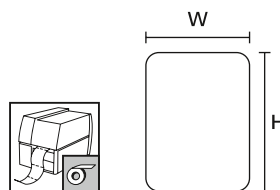
These labels are suitable for the permanent identification of components and preassembled units within electrical industry as well as asset identification. Print with HellermannTyton's premium range of thermal transfer printers and ribbons for optimum print results. They can also be used in the design and setup as well as in the repair and expansion of control cabinets and control units. Due to the structure of the vinyl label they are suitable for rougher surfaces.

#### Features and benefits

- Suited to labelling electrical panels
- Where high label visibility is required
- Partially suitable for critical surfaces
- Rounded corners ensure better long term durability of adhesion



Switchgear application.



<b>MATERIAL</b>	Type 880, Vinyl (PVC), yellow matt (MTYE), removable
<b>Operating Temperature</b>	-40 °C to +80 °C
<b>Curing Temperature</b>	from +10 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	80 µm
<b>Chem. Material Properties</b>	Good resistance to water, oil and most solvents.
<b>Recommended Ribbon Type</b>	TT822OUT
<b>Thermal Transfer Printer</b>	TT430, TT4030

<b>MATERIAL</b>	Type 1211, Vinyl (PVC), yellow gloss (GSYE)
<b>Operating Temperature</b>	-20 °C to +80 °C
<b>Curing Temperature</b>	from +5 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	84 µm
<b>Chem. Material Properties</b>	Resistant to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.
<b>Recommended Ribbon Type</b>	TT822OUT
<b>Thermal Transfer Printer</b>	TT430, TT4030

RoHS ✓

RoHS ✓

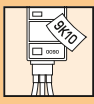
TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG15-09TE-880-YE	15.0	9.0	89.0	5 pcs.	10,000 pcs.	Yellow matt (MTYE)	596-12174
TAG16-06TE-880-YE	16.5	6.0	101.6	5 pcs.	20,000 pcs.	Yellow matt (MTYE)	596-12172
TAG19-11TE-880-YE	19.0	11.0	89.0	4 pcs.	10,000 pcs.	Yellow matt (MTYE)	596-12175
TAG20-08TE-880-YE	20.0	8.0	101.6	4 pcs.	10,000 pcs.	Yellow matt (MTYE)	596-12173
TAG38-11TE-880-YE	38.0	11.0	85.1	2 pcs.	5,000 pcs.	Yellow matt (MTYE)	596-12176
TAG56-22TE-880-YE	56.0	22.0	62.0	1 pc.	2,000 pcs.	Yellow matt (MTYE)	596-12177

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG15-09TE-1211-YE	15.0	9.0	89.0	5 pcs.	10,000 pcs.	Yellow gloss (GSYE)	596-21211
TAG16-06TE-1211-YE	16.5	6.0	101.6	5 pcs.	20,000 pcs.	Yellow gloss (GSYE)	596-01211
TAG20-08TE-1211-YE	20.0	8.0	101.6	4 pcs.	10,000 pcs.	Yellow gloss (GSYE)	596-11211
TAG38-11TE-1211-YE	38.0	11.0	85.1	2 pcs.	5,000 pcs.	Yellow gloss (GSYE)	596-41211
TAG56-22TE-1211-YE	56.0	22.0	62.0	1 pc.	2,000 pcs.	Yellow gloss (GSYE)	596-51211

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.





### Labels for control panel identification, thermal transfer

#### Helatag 1216 (White) for rough surfaces

These labels are suitable for the permanent identification of components and preassembled units within electrical industry as well as asset identification. Print with HellermannTyton's premium range of thermal transfer printers and ribbons for optimum print results. They can also be used in the design and setup as well as in the repair and expansion of control cabinets and control units.

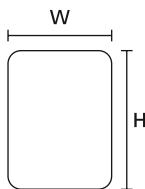
#### Features and benefits

- Suited to labelling electrical panels
- White labels give excellent contrast
- Also suitable for critical surfaces
- Rounded corners ensure better long term durability of adhesion



Clear and permanent identification of switch gears.

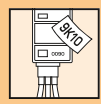
<b>MATERIAL</b>	Type 1216, Polyethylene (PE), white (WH)
<b>Operating Temperature</b>	-30 °C to +60 °C
<b>Curing Temperature</b>	from 0 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	110 µm
<b>Chem. Material Properties</b>	Resistant to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.
<b>Recommended Ribbon Type</b>	TT822OUT
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG05-08TC-1216-WH	5.0	8.0	85.0	16 pcs.	25,000 pcs.	White (WH)	596-12147
TAG05-15TC-1216-WH	5.0	15.0	85.0	16 pcs.	25,000 pcs.	White (WH)	596-12151
TAG06-10TC-1216-WH	6.0	10.0	85.0	13 pcs.	25,000 pcs.	White (WH)	596-12149
TAG08-15TC-1216-WH	8.0	15.0	85.0	10 pcs.	25,000 pcs.	White (WH)	596-12152

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Labels for control panel identification, laser printer

#### Helatag 1102 (Yellow)

These yellow labels come in various sizes and are ideal for marking flat surfaces inside control panels to ensure easy wire and cable management. The labels can be easily printed with office laser printers. All label templates are already stored in HellermannTyton's Tagprint Pro 3.0 software so label design including barcodes or logos has been made easy even with office printers.

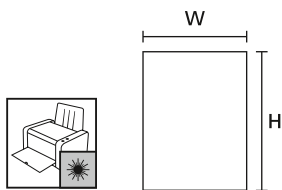
#### Features and benefits

- Yellow rating labels for component marking and control cabinets
- For use on flat and smooth surfaces
- Crisp and clear text, barcodes and graphics
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available from [www.HellermannTyton.com](http://www.HellermannTyton.com) for those wishing to use MS Word
- Clear protective box to ensures labels stay as good as new



Clearly identified labels ensure easy network wire and cable management.

<b>MATERIAL</b>	Type 1102, Polyester (PET), yellow (YE)
<b>Operating Temperature</b>	-40 °C to +150 °C
<b>Curing Temperature</b>	from 0 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	55 µm
<b>Chem. Material Properties</b>	Excellent resistance against water, alcohol, most oils, lubricants, fuels, aliphatic solvents, weak acid, salts, alkalis and UV light.

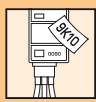


TYPE	Width (W)	Height (H)	Labels per Sheet	Sheets per Pack	Pack Cont.	Colour	Article-No.
TAG122LA4-1102-YE	15.0	9.0	372 pcs.	27 pcs.	10,000 pcs.	Yellow (YE)	594-21102
TAG120LA4-1102-YE	15.2	6.4	528 pcs.	19 pcs.	10,000 pcs.	Yellow (YE)	594-01102
TAG154LA4-1102-YE	17.0	9.0	341 pcs.	30 pcs.	10,000 pcs.	Yellow (YE)	594-51102
TAG124LA4-1102-YE	19.0	11.0	260 pcs.	20 pcs.	5,000 pcs.	Yellow (YE)	594-41102
TAG13LA4-1102-YE	19.1	6.4	440 pcs.	23 pcs.	10,000 pcs.	Yellow (YE)	594-31102
TAG121LA4-1102-YE	20.0	8.0	315 pcs.	32 pcs.	10,000 pcs.	Yellow (YE)	594-11102
TAG62LA4-1102-YE	31.8	9.5	180 pcs.	28 pcs.	5,000 pcs.	Yellow (YE)	594-81102

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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



### Labels for control panel identification, laser printer

#### Helatag 1101 (White)

These white labels come in various sizes and are ideal for marking flat surfaces inside control panels to ensure easy wire and cable management. The labels can be easily printed with office laser printers. All label templates are already stored in HellermannTyton's TagPrint Pro 3.0 software so label design including barcodes or logos has been made easy even with office printers.

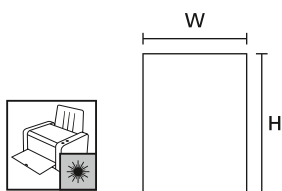
#### Features and benefits

- White rating labels for component marking as well as for control cabinets
- For use on flat and smooth surfaces
- Crisp and clear text, barcodes and graphics
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available from [www.HellermannTyton.com](http://www.HellermannTyton.com) for those wishing to use MS Word
- Clear protective box to ensure labels stay as good as new



Clearly identified labels ensure easy network wire and cable management.

<b>MATERIAL</b>	Type 1101, Polyester (PET), white (WH)
<b>Operating Temperature</b>	-40 °C to +150 °C
<b>Curing Temperature</b>	from 0 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	55 µm
<b>Chem. Material Properties</b>	Excellent resistance against water, alcohol, most oils, lubricants, fuels, aliphatic solvents, weak acid, salts, alkalis and UV light.



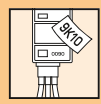
TYPE	Width (W)	Height (H)	Labels per Sheet	Sheets per Pack	Pack Cont.	Colour	Article-No.
TAG156LA4-1101-WH	10.2	10.2	532 pcs.	19 pcs.	10,000 pcs.	White (WH)	594-81101
TAG122LA4-1101-WH	15.0	9.0	372 pcs.	27 pcs.	10,000 pcs.	White (WH)	594-31101
TAG120LA4-1101-WH	15.2	6.4	528 pcs.	19 pcs.	10,000 pcs.	White (WH)	594-11101
TAG11LA4-1101-WH	16.5	5.1	605 pcs.	17 pcs.	10,000 pcs.	White (WH)	594-01101
TAG154LA4-1101-WH	17.0	9.0	341 pcs.	30 pcs.	10,000 pcs.	White (WH)	594-61101
TAG124LA4-1101-WH	19.0	11.0	260 pcs.	20 pcs.	5,000 pcs.	White (WH)	594-11017
TAG13LA4-1101-WH	19.1	6.4	440 pcs.	23 pcs.	10,000 pcs.	White (WH)	594-41101
TAG121LA4-1101-WH	20.0	8.0	315 pcs.	32 pcs.	10,000 pcs.	White (WH)	594-21101
TAG155LA4-1101-WH	25.4	8.5	231 pcs.	22 pcs.	5,000 pcs.	White (WH)	594-71101
TAG15LA4-1101-WH	25.4	12.7	154 pcs.	33 pcs.	5,000 pcs.	White (WH)	594-91101
TAG162LA4-1101-WH	38.1	12.7	110 pcs.	23 pcs.	2,500 pcs.	White (WH)	594-11010

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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



### Cotton cloth labels, manual marking

#### HELASIGN, Material 270 (Yellow), Booklet

These handwritten labels are made of yellow fabric and have been designed for fast on-site identification of component parts, switching devices and other operating equipment. The synthetic rubber adhesive allows the easy removal or repositioning of the label when needed. For professional handwriting we recommend the marking pen T82, equipped with a fast-drying and UV-resistant ink.

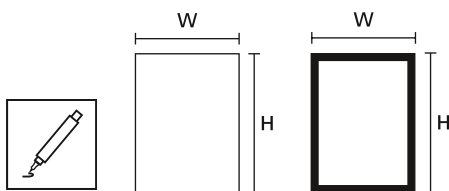
#### Features and benefits

- Yellow fabric adhesive labels
- Supplied in handy pocket-sized booklets
- Booklet cover protects labels when stored
- Easily remove or reposition labels as required
- No sticky residue on removal
- Labels available with or without black border
- Also suitable for difficult surfaces
- Use T82 marker pen for market leading mark endurance



Always on hand: Labels in a convenient, pocket sized and lightweight booklet.

<b>MATERIAL</b>	Type 270, Cotton cloth, yellow (YE)
<b>Operating Temperature</b>	-29 °C to +80 °C
<b>Curing Temperature</b>	from +10 °C
<b>Adhesive</b>	Synthetic rubber
<b>Thickness of Foil</b>	150 µm
<b>Chem. Material Properties</b>	Good resistance against water, oils and most solvents.

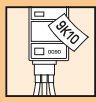


TYPE	Drawing	Width (W)	Height (H)	Labels per Sheet	Pack Cont.	Colour	Article-No.
TAG122B-270-YE		15.0	9.0	70 pcs.	700 pcs.	Yellow (YE)	598-12227
TAG120B-270-YE		15.0	6.0	105 pcs.	1,050 pcs.	Yellow (YE)	598-12027
TAG124B-270-YE		19.0	11.0	44 pcs.	440 pcs.	Yellow (YE)	598-12427
TAG121B-270-YE		20.0	8.0	60 pcs.	600 pcs.	Yellow (YE)	598-12127
TAG122FB-270-YE		15.0	9.0	70 pcs.	700 pcs.	Yellow (YE)	598-92227
TAG124FB-270-YE		19.0	11.0	44 pcs.	440 pcs.	Yellow (YE)	598-92427
TAG121FB-270-YE		20.0	8.0	60 pcs.	600 pcs.	Yellow (YE)	598-92127
TAG125FB-270-YE		38.0	11.0	22 pcs.	220 pcs.	Yellow (YE)	598-92527

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Cotton cloth labels, manual marking

**HELASIGN, Material 270 (Yellow), A4 Sheets**

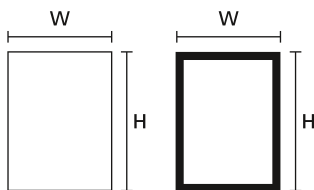
These handwritten labels are made of yellow fabric and have been designed for fast on-site identification of component parts, switching devices and other operating equipment. The synthetic rubber adhesive allows the easy removal or repositioning of the label when needed. For professional handwriting we recommend the marking pen T82, equipped with a fast-drying and UV-resistant ink.

#### Features and benefits

- Yellow fabric adhesive labels
- A4 sheets
- Easily remove or reposition labels as required
- No sticky residue on removal
- Labels available with or without black border
- Also suitable for difficult surfaces
- Use T82 marker pen for market leading mark endurance



**Please note: These labels are not suitable for laser printing.**



Cotton fabric labels will adhere to most surfaces and are repositionable.

<b>MATERIAL</b>	Type 270, Cotton cloth, yellow (YE)
<b>Operating Temperature</b>	-29 °C to +80 °C
<b>Curing Temperature</b>	from +10 °C
<b>Adhesive</b>	Synthetic rubber
<b>Thickness of Foil</b>	150 µm
<b>Chem. Material Properties</b>	Good resistance against water, oils and most solvents.

**RoHS** ✓

TYPE	Drawing	Width (W)	Height (H)	Labels per Sheet	Pack Cont.	Colour	Article-No.
TAG120A4-270-YE		15.0	6.0	611 pcs.	15,275 pcs.	Yellow (YE)	597-12027
TAG122A4-270-YE		15.0	9.0	348 pcs.	9,300 pcs.	Yellow (YE)	597-12227
TAG124A4-270-YE		19.0	11.0	240 pcs.	6,000 pcs.	Yellow (YE)	597-12427
TAG121A4-270-YE		20.0	8.0	315 pcs.	7,875 pcs.	Yellow (YE)	597-12127
TAG123A4-270-YE		26.0	10.0	196 pcs.	4,900 pcs.	Yellow (YE)	597-12327
TAG126A4-270-YE		30.0	20.0	36 pcs.	2,100 pcs.	Yellow (YE)	597-12627
TAG125A4-270-YE		38.0	11.0	130 pcs.	3,250 pcs.	Yellow (YE)	597-12527
TAG127A4-270-YE		56.0	22.0	39 pcs.	975 pcs.	Yellow (YE)	597-12727
TAG128A4-270-YE		60.0	35.0	24 pcs.	600 pcs.	Yellow (YE)	597-12827
TAG122FA4-270-YE		15.0	9.0	348 pcs.	9,300 pcs.	Yellow (YE)	597-92227
TAG124FA4-270-YE		19.0	11.0	240 pcs.	6,000 pcs.	Yellow (YE)	597-92427
TAG121FA4-270-YE		20.0	8.0	315 pcs.	7,875 pcs.	Yellow (YE)	597-92127
TAG125FA4-270-YE		38.0	11.0	130 pcs.	3,250 pcs.	Yellow (YE)	597-92527
TAG127FA4-270-YE		56.0	22.0	39 pcs.	975 pcs.	Yellow (YE)	597-92727
TAG128FA4-270-YE		60.0	35.0	24 pcs.	600 pcs.	Yellow (YE)	597-92827

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Description	Pack Cont.	Colour	Article-No.
T82S-BK	Indelible Marker Pen	2 pcs.	Black (BK)	500-50820
T82R-RD	Indelible Marker Pen	2 pcs.	Red (RD)	500-50822

Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Panel plate labels, thermal transfer

#### Helatag 1220 (White)

Panel labels are durable adhesive labels especially made from a thick material that is designed to replace traditional engraved plastic plates. The white glossy colour is suited to industrial control panels, switchgear, data racks and general equipment labelling.

Create crisp and clear professional looking labels by printing with HellermannTyton thermal transfer printers and ribbons.

Simple label design creation is easily achieved using TagPrint Pro.

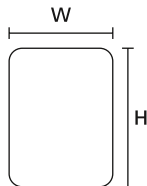
#### Features and benefits

- Cost-effective replacement for engraved plastic plates, no need for additional label holder
- High performance adhesive and compressible foam backing ensures optimal adhesion to uneven surfaces if required
- Rounded corners ensure better long term durability of adhesion
- Print high contrast text and barcodes
- Print 'On Site' not order 'Off Site'
- Special sizes and colours are possible on request
- For outstanding chemical resistance use TT1220OUT



Panel labels are an ideal replacement for engraved plates.

<b>MATERIAL</b>	Type 1220, Polyester (PET), white (WH)
<b>Operating Temperature</b>	-40 °C to +90 °C
<b>Curing Temperature</b>	from +4 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	625 µm
<b>Chem. Material Properties</b>	Excellent resistance to ageing, weathering and UV-radiation. Extensive resistance to the influence of chemicals and solvents.
<b>Recommended Ribbon Type</b>	TT1220OUT, TT8220OUT
<b>Thermal Transfer Printer</b>	TT430, TT4030



One Step to the Web!



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG13-07TDK1-1220-WH	13.0	7.0	21.0	1 pc.	1,000 pcs.	White (WH)	596-00560
TAG22-22TDK1-1220-WH	22.0	22.0	28.0	1 pc.	1,000 pcs.	White (WH)	596-00561
TAG27-08TDK1-1220-WH	27.0	8.0	33.0	1 pc.	1,000 pcs.	White (WH)	596-00562
TAG27-12.5TDK1-1220-WH	27.0	12.5	33.0	1 pc.	1,000 pcs.	White (WH)	596-00558
TAG27-15TDK1-1220-WH	27.0	15.0	33.0	1 pc.	1,000 pcs.	White (WH)	596-00563
TAG27-18TDK1-1220-WH	27.0	18.0	33.0	1 pc.	1,000 pcs.	White (WH)	596-00564
TAG27-27TDK1-1220-WH	27.0	27.0	33.0	1 pc.	1,000 pcs.	White (WH)	596-00565
TAG35-18TDK1-1220-WH	35.0	18.0	41.0	1 pc.	1,000 pcs.	White (WH)	596-00566
TAG45-15TDK1-1220-WH	45.0	15.0	51.0	1 pc.	1,000 pcs.	White (WH)	596-00567
TAG45-25TDK1-1220-WH	45.0	25.0	51.0	1 pc.	1,000 pcs.	White (WH)	596-00568
TAG60-30TDK1-1220-WH	60.0	30.0	66.0	1 pc.	500 pcs.	White (WH)	596-00569
TAG90-45TDK1-1220-WH	90.0	45.0	96.0	1 pc.	500 pcs.	White (WH)	596-00570
TAG100-30TDK1-1220-WH	100.0	30.0	106.0	1 pc.	250 pcs.	White (WH)	596-00571
TAG100-70TDK1-1220-WH	100.0	70.0	106.0	1 pc.	250 pcs.	White (WH)	596-00572

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.





## Panel plate labels, thermal transfer

### Helatag 1221 (Silver)

Panel labels are durable adhesive labels especially made from a thick material that is designed to replace traditional engraved plastic plates. The silver colour is suited to industrial control panels, switchgear, data racks and general equipment labelling.

Create crisp and clear professional looking labels by printing with HellermannTyton thermal transfer printers and ribbons.

Simple label design creation is easily achieved using TagPrint Pro.

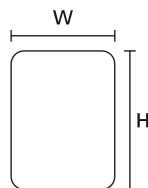
#### Features and benefits

- Cost-effective replacement for engraved plastic plates, no need for additional label holder
- High performance adhesive and compressible foam backing ensures optimal adhesion to uneven surfaces if required
- Rounded corners ensure better long term durability of adhesion
- Print high contrast text and barcodes
- Print 'On Site' not order 'Off Site'
- Special sizes and colours are possible on request
- For outstanding chemical resistance use TT122OUT



Panel labels are an ideal replacement for engraved plates.

<b>MATERIAL</b>	Type 1221, Polyester (PET), silver (SR)
<b>Operating Temperature</b>	-40 °C to +90 °C
<b>Curing Temperature</b>	from +4 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	625 µm
<b>Chem. Material Properties</b>	Excellent resistance to ageing, weathering and UV-radiation. Extensive resistance to the influence of chemicals and solvents.
<b>Recommended Ribbon Type</b>	TT122OUT, TT822OUT
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG13-07TDK1-1221-SR	13.0	7.0	21.0	1 pc.	1,000 pcs.	Silver (SR)	596-00573
TAG22-22TDK1-1221-SR	22.0	22.0	28.0	1 pc.	1,000 pcs.	Silver (SR)	596-00574
TAG27-08TDK1-1221-SR	27.0	8.0	33.0	1 pc.	1,000 pcs.	Silver (SR)	596-00575
TAG27-12.5TDK1-1221-SR	27.0	12.5	33.0	1 pc.	1,000 pcs.	Silver (SR)	596-00576
TAG27-15TDK1-1221-SR	27.0	15.0	33.0	1 pc.	1,000 pcs.	Silver (SR)	596-00577
TAG27-18TDK1-1221-SR	27.0	18.0	33.0	1 pc.	1,000 pcs.	Silver (SR)	596-00578
TAG27-27TDK1-1221-SR	27.0	27.0	33.0	1 pc.	1,000 pcs.	Silver (SR)	596-00579
TAG35-18TDK1-1221-SR	35.0	18.0	41.0	1 pc.	1,000 pcs.	Silver (SR)	596-00580
TAG45-15TDK1-1221-SR	45.0	15.0	51.0	1 pc.	1,000 pcs.	Silver (SR)	596-00581
TAG45-25TDK1-1221-SR	45.0	25.0	51.0	1 pc.	1,000 pcs.	Silver (SR)	596-00582
TAG60-30TDK1-1221-SR	60.0	30.0	66.0	1 pc.	500 pcs.	Silver (SR)	596-00583
TAG90-45TDK1-1221-SR	90.0	45.0	96.0	1 pc.	500 pcs.	Silver (SR)	596-00584
TAG100-30TDK1-1221-SR	100.0	30.0	106.0	1 pc.	250 pcs.	Silver (SR)	596-00585
TAG100-70TDK1-1221-SR	100.0	70.0	106.0	1 pc.	250 pcs.	Silver (SR)	596-00586

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.





### Type label identification, thermal transfer

#### Helatag 1204 (Silver-matt)

This silver-matt label is scratch-resistant and is ideal for usage as identification or name plate in industrial environments. The high temperature range suits a wide range of applications on flat surfaces. The adhesive is also suitable for critical surfaces like plastic and paint. Designing and printing labels is simple and users can quickly print out professional labels in a matter of moments when using TagPrint Pro labelling software.

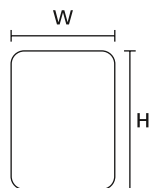
#### Features and benefits

- Replacement option for aluminium plates
- For applications on flat surfaces
- Allows the identification on critical surfaces, e.g. paints and plastic variants
- Print labels with customer unique references
- Use text, graphics and barcodes as required



Professional type plate on a heating unit.

<b>MATERIAL</b>	Type 1204, Polyester (PET)
<b>Operating Temperature</b>	-40 °C to +150 °C
<b>Curing Temperature</b>	from 0 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	55 µm
<b>Chem. Material Properties</b>	Excellent resistance to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.
<b>Recommended Ribbon Type</b>	TT822OUT
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG71TD6-1204-SR	12.7	11.1	101.6	6 pcs.	15,000 pcs.	Silver-matt (MTSR)	596-12071
TAG13TD4-1204-SR	19.1	6.4	101.6	4 pcs.	10,000 pcs.	Silver-matt (MTSR)	596-12043
TAG34TD3-1204-SR	25.4	9.5	85.1	3 pcs.	7,500 pcs.	Silver-matt (MTSR)	596-34120
TAG15TD3-1204-SR	25.4	12.7	85.1	3 pcs.	7,500 pcs.	Silver-matt (MTSR)	596-12045
TAG35TD3-1204-SR	31.8	9.5	101.6	3 pcs.	7,500 pcs.	Silver-matt (MTSR)	596-12035
TAG17TD2-1204-SR	38.1	6.4	85.1	2 pcs.	5,000 pcs.	Silver-matt (MTSR)	596-12047
TAG27TD2-1204-SR	38.1	19.1	85.1	2 pcs.	5,000 pcs.	Silver-matt (MTSR)	596-27120
TAG67TD2-1204-SR	38.1	31.8	85.1	2 pcs.	1,000 pcs.	Silver-matt (MTSR)	596-12067
TAG69TD2-1204-SR	40.6	22.9	89.0	2 pcs.	2,500 pcs.	Silver-matt (MTSR)	596-12069
TAG77TD1-1204-SR	50.8	22.9	55.0	1 pc.	2,000 pcs.	Silver-matt (MTSR)	596-12077
TAG73TD1-1204-SR	50.8	25.4	55.0	1 pc.	2,000 pcs.	Silver-matt (MTSR)	596-73124
TAG66TD1-1204-SR	50.8	36.5	56.8	1 pc.	1,000 pcs.	Silver-matt (MTSR)	596-12066
TAG63TD1-1204-SR	63.5	38.1	70.0	1 pc.	1,000 pcs.	Silver-matt (MTSR)	596-12063
TAG76TD1-1204-SR	63.5	50.8	70.0	1 pc.	500 pcs.	Silver-matt (MTSR)	596-12076
TAG72TD1-1204-SR	69.9	31.8	76.0	1 pc.	1,000 pcs.	Silver-matt (MTSR)	596-12072

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

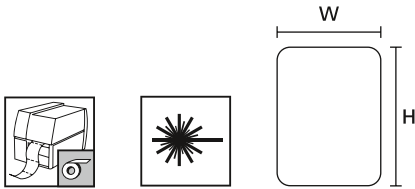


For product specific approvals and specifications please refer to the Appendix.



## Type label identification, thermal transfer

### Helatag 1204 (Silver-matt)



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG65TD1-1204-SR	76.2	36.5	82.0	1 pc.	1,000 pcs.	Silver-matt (MTSR)	596-12065
TAG62TD1-1204-SR	76.2	50.8	82.0	1 pc.	500 pcs.	Silver-matt (MTSR)	596-12062
TAG64TD1-1204-SR	88.9	36.5	95.0	1 pc.	1,000 pcs.	Silver-matt (MTSR)	596-12064
TAG97TD1-1204-SR	101.6	74.0	106.0	1 pc.	500 pcs.	Silver-matt (MTSR)	596-71204
TAG02TD1-1204-SR	104.0	12.0	104.0	1 pc.	5,000 pcs.	Silver-matt (MTSR)	596-21204
TAGR3TD1-1204-SR	104.0	75,000.0	108.0	1 pc.	75.0 m	Silver-matt (MTSR)	596-31204

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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

## Asset identification label, thermal transfer

### Helatag 1206 (White gloss)

This white label is scratch-resistant and is ideal for usage as identification or name plate in industrial environments. The high temperature range suits a wide range of applications on flat surfaces. The adhesive is also suitable for critical surfaces like plastic and paint.

Designing and printing labels is simple and users can quickly print out professional labels in a matter of moments when using TagPrint Pro labelling software.

#### Features and benefits

- Ideal for machinery operating in high temperature areas (up to +150 °C)
- For applications on flat surfaces
- Chemical resistant polyester foil
- For permanent and ageing-resistant identification
- Barcodes and alphanumeric text remain pin sharp on this high quality material
- White colour guarantees a suitable contrast for all barcode scanners to read printed barcodes



Helatag labels for permanent asset identification.

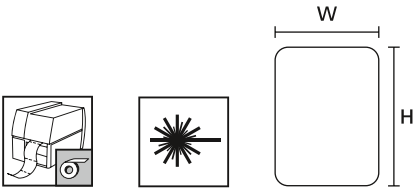
<b>MATERIAL</b>	Type 1206, Polyester (PET), white gloss (GSWH)
<b>Operating Temperature</b>	-40 °C to +150 °C
<b>Curing Temperature</b>	from 0 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	50 µm
<b>Chem. Material Properties</b>	Excellent resistance to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.
<b>Recommended Ribbon Type</b>	TT822OUT
<b>Thermal Transfer Printer</b>	TT430, TT4030





### Asset identification label, thermal transfer

Helatag 1206 (White gloss)



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG71TD6-1206-WH	12.7	11.1	101.6	6 pcs.	15,000 pcs.	White gloss (GSWH)	596-12671
TAG13TD4-1206-WH	19.1	6.4	101.6	4 pcs.	10,000 pcs.	White gloss (GSWH)	596-12061
TAG16TD3-1206-WH	22.9	6.4	80.0	3 pcs.	10,000 pcs.	White gloss (GSWH)	596-12616
TAG61TD3-1206-WH	25.4	4.8	89.0	3 pcs.	10,000 pcs.	White gloss (GSWH)	596-12661
TAG01TD3-1206-WH	25.4	6.4	89.0	3 pcs.	7,500 pcs.	White gloss (GSWH)	596-01120
TAG34TD3-1206-WH	25.4	9.5	85.1	3 pcs.	7,500 pcs.	White gloss (GSWH)	596-12634
TAG15TD3-1206-WH	25.4	12.7	85.1	3 pcs.	7,500 pcs.	White gloss (GSWH)	596-12615
TAG31TD3-1206-WH	25.4	19.1	85.1	3 pcs.	5,000 pcs.	White gloss (GSWH)	596-12631
TAG35TD3-1206-WH	31.8	9.5	101.6	3 pcs.	7,500 pcs.	White gloss (GSWH)	596-12635
TAG17TD2-1206-WH	38.1	6.4	85.1	2 pcs.	5,000 pcs.	White gloss (GSWH)	596-12617
TAG27TD2-1206-WH	38.1	19.1	85.1	2 pcs.	2,500 pcs.	White gloss (GSWH)	596-12627
TAG67TD2-1206-WH	38.1	31.8	85.1	2 pcs.	2,500 pcs.	White gloss (GSWH)	596-12667
TAG69TD2-1206-WH	40.6	22.9	89.0	2 pcs.	2,500 pcs.	White gloss (GSWH)	596-12669
TAG77TD1-1206-WH	50.8	22.9	55.0	1 pc.	2,000 pcs.	White gloss (GSWH)	596-71206
TAG73TD1-1206-WH	50.8	25.4	55.0	1 pc.	2,000 pcs.	White gloss (GSWH)	596-12673
TAG68TD1-1206-WH	63.5	25.4	69.0	1 pc.	2,000 pcs.	White gloss (GSWH)	596-12668
TAG63TD1-1206-WH	63.5	38.1	70.0	1 pc.	1,000 pcs.	White gloss (GSWH)	596-12663
TAG76TD1-1206-WH	63.5	50.8	70.0	1 pc.	500 pcs.	White gloss (GSWH)	596-61206
TAG4TD1-1206-WH	65.0	20.0	70.0	1 pc.	2,500 pcs.	White gloss (GSWH)	596-41206
TAG72TD1-1206-WH	69.9	31.8	76.0	1 pc.	1,000 pcs.	White gloss (GSWH)	596-12672
TAG65TD1-1206-WH	76.2	36.5	82.0	1 pc.	1,000 pcs.	White gloss (GSWH)	596-12665
TAG62TD1-1206-WH	76.2	50.8	82.0	1 pc.	500 pcs.	White gloss (GSWH)	596-12662
TAG64TD1-1206-WH	88.9	36.5	95.0	1 pc.	1,000 pcs.	White gloss (GSWH)	596-12664

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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



#### Type label identification, laser printer

##### Helatag 1103 (Silver)

These silver labels come in various sizes and are ideal for the identification of industrial assets.

The labels can be easily printed with office laser printers. All label templates are already stored in HellermannTyton's Tagprint Pro 3.0 software so label design including barcodes or logos has been made easy even with office printers.

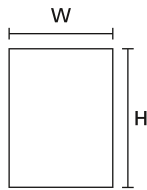
##### Features and benefits

- Matt-silver rating labels for component marking
- For use on flat and smooth surfaces
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available from [www.hellermanntyton.com](http://www.hellermanntyton.com) for those wishing to use MS Word
- Clear protective box to ensure labels stay as good as new



Highly visible and clearly printed labels identify quality assets.

<b>MATERIAL</b>	Type 1103, Polyester (PET), silver (SR)
<b>Operating Temperature</b>	-40 °C to +150 °C
<b>Curing Temperature</b>	from 0 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	53 µm
<b>Chem. Material Properties</b>	Excellent resistance against water, alcohol, most oils, lubricants, fuels, aliphatic solvents, weak acid, salts, alkalis and UV light.



TYPE	Width (W)	Height (H)	Labels per Sheet	Sheets per Pack	Pack Cont.	Colour	Article-No.
TAG155LA4-1103-SR	25.4	8.5	231 pcs.	22 pcs.	5,000 pcs.	Silver (SR)	594-01103
TAG151LA4-1103-SR	25.4	12.7	154 pcs.	33 pcs.	5,000 pcs.	Silver (SR)	594-11103
TAG162LA4-1103-SR	38.1	12.7	110 pcs.	23 pcs.	2,500 pcs.	Silver (SR)	594-21103
TAG165LA4-1103-SR	48.3	21.2	52 pcs.	20 pcs.	1,000 pcs.	Silver (SR)	594-31103
TAG169LA4-1103-SR	48.3	33.9	32 pcs.	32 pcs.	1,000 pcs.	Silver (SR)	594-41103
TAG170LA4-1103-SR	63.5	33.9	24 pcs.	21 pcs.	500 pcs.	Silver (SR)	594-51103
TAG171LA4-1103-SR	210.0	297.0	1 pc.	25 pcs.	25 pcs.	Silver (SR)	594-61103

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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



### Type label identification, laser printer

#### Helatag 1102 (Yellow)

These yellow labels come in various sizes and are ideal for the identification of industrial assets.

The labels can be easily printed with office laser printers. All label templates are already stored in HellermannTyton's Tagprint Pro 3.0 software so label design including barcodes or logos has been made easy even with office printers.

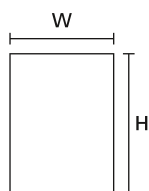
#### Features and benefits

- Yellow rating labels for component marking and control cabinets
- For use on flat and smooth surfaces
- Crisp and clear text, barcodes and graphics
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available from [www.hellermanntyton.com](http://www.hellermanntyton.com) for those wishing to use MS Word
- Clear protective box to ensure labels stay as good as new



Optimal print results with a range of office laser printers.

<b>MATERIAL</b>	Type 1102, Polyester (PET), yellow (YE)
<b>Operating Temperature</b>	-40 °C to +150 °C
<b>Curing Temperature</b>	from 0 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	55 µm
<b>Chem. Material Properties</b>	Excellent resistance against water, alcohol, most oils, lubricants, fuels, aliphatic solvents, weak acid, salts, alkalis and UV light.



TYPE	Width (W)	Height (H)	Labels per Sheet	Sheets per Pack	Pack Cont.	Colour	Article-No.
TAG156LA4-1102-YE	10.2	10.2	532 pcs.	19 pcs.	10,000 pcs.	Yellow (YE)	594-61102
TAG122LA4-1102-YE	15.0	9.0	372 pcs.	27 pcs.	10,000 pcs.	Yellow (YE)	594-21102
TAG120LA4-1102-YE	15.2	6.4	528 pcs.	19 pcs.	10,000 pcs.	Yellow (YE)	594-01102
TAG154LA4-1102-YE	17.0	9.0	341 pcs.	30 pcs.	10,000 pcs.	Yellow (YE)	594-51102
TAG124LA4-1102-YE	19.0	11.0	260 pcs.	20 pcs.	5,000 pcs.	Yellow (YE)	594-41102
TAG13LA4-1102-YE	19.1	6.4	440 pcs.	23 pcs.	10,000 pcs.	Yellow (YE)	594-31102
TAG121LA4-1102-YE	20.0	8.0	315 pcs.	32 pcs.	10,000 pcs.	Yellow (YE)	594-11102
TAG62LA4-1102-YE	31.8	9.5	180 pcs.	28 pcs.	5,000 pcs.	Yellow (YE)	594-81102
TAG171LA4-1102-YE	210.0	297.0	1 pc.	25 pcs.	25 pcs.	Yellow (YE)	594-71102

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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



## Type label identification, laser printer

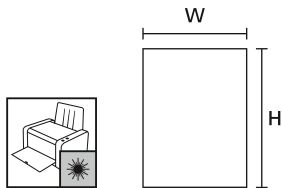
### Helatag 1101 (White)

These white labels come in various sizes and are ideal for the identification of industrial assets.

The labels can be easily printed with office laser printers. All label templates are already stored in HellermannTyton's Tagprint Pro 3.0 software so label design including barcodes or logos has been made easy even with office printers.

#### Features and benefits

- White rating labels for component marking as well as for control cabinets
- For use on flat and smooth surfaces
- Crisp and clear text, barcodes and graphics
- Simple and efficient label design and printing with TagPrint Pro labelling software
- Templates available from [www.HellermannTyton.com](http://www.HellermannTyton.com) for those wishing to use MS Word
- Clear protective box to ensure labels stay as good as new



Helatag label for permanent asset identification.

<b>MATERIAL</b>	Type 1101, Polyester (PET), white (WH)
<b>Operating Temperature</b>	-40 °C to +150 °C
<b>Curing Temperature</b>	from 0 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	55 µm
<b>Chem. Material Properties</b>	Excellent resistance against water, alcohol, most oils, lubricants, fuels, aliphatic solvents, weak acid, salts, alkalis and UV light.



TYPE	Width (W)	Height (H)	Labels per Sheet	Sheets per Pack	Pack Cont.	Colour	Article-No.
TAG156LA4-1101-WH	10.2	10.2	532 pcs.	19 pcs.	10,000 pcs.	White (WH)	594-81101
TAG122LA4-1101-WH	15.0	9.0	372 pcs.	27 pcs.	10,000 pcs.	White (WH)	594-31101
TAG120LA4-1101-WH	15.2	6.4	528 pcs.	19 pcs.	10,000 pcs.	White (WH)	594-11101
TAG111LA4-1101-WH	16.5	5.1	605 pcs.	17 pcs.	10,000 pcs.	White (WH)	594-01101
TAG154LA4-1101-WH	17.0	9.0	341 pcs.	30 pcs.	10,000 pcs.	White (WH)	594-61101
TAG124LA4-1101-WH	19.0	11.0	260 pcs.	20 pcs.	5,000 pcs.	White (WH)	594-11017
TAG131LA4-1101-WH	19.1	6.4	440 pcs.	23 pcs.	10,000 pcs.	White (WH)	594-41101
TAG121LA4-1101-WH	20.0	8.0	315 pcs.	32 pcs.	10,000 pcs.	White (WH)	594-21101
TAG155LA4-1101-WH	25.4	8.5	231 pcs.	22 pcs.	5,000 pcs.	White (WH)	594-71101
TAG151LA4-1101-WH	25.4	12.7	154 pcs.	33 pcs.	5,000 pcs.	White (WH)	594-91101
TAG62LA4-1101-WH	31.8	9.5	180 pcs.	28 pcs.	5,000 pcs.	White (WH)	594-11016
TAG162LA4-1101-WH	38.1	12.7	110 pcs.	23 pcs.	2,500 pcs.	White (WH)	594-11010
TAG150LA4-1101-WH	48.3	8.5	132 pcs.	19 pcs.	2,500 pcs.	White (WH)	594-51101
TAG163LA4-1101-WH	48.3	12.7	88 pcs.	29 pcs.	2,500 pcs.	White (WH)	594-11011
TAG165LA4-1101-WH	48.3	21.2	52 pcs.	20 pcs.	1,000 pcs.	White (WH)	594-11012
TAG169LA4-1101-WH	48.3	33.9	32 pcs.	32 pcs.	1,000 pcs.	White (WH)	594-11013
TAG170LA4-1101-WH	63.5	33.9	24 pcs.	21 pcs.	500 pcs.	White (WH)	594-11014
TAG171LA4-1101-WH	210.0	297.0	1 pc.	25 pcs.	25 pcs.	White (WH)	594-11015

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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



### Warehouse and pipe labelling, thermal transfer

#### Helatag 1213 (Various colours)

These coloured labels are used to identify storage systems with barcode and location information. They are also suitable for general marking of parts and components, samples and blocked goods in quality assurance, storage boxes and barrels.

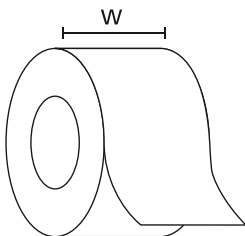
#### Features and benefits

- Pipe, warehouse and shelving label
- Supplied on a continuous roll and cut by hand or automated with printer cutters
- Also for rough surfaces
- Good resistance in outdoor applications



Large and highly visible pipe marking.

<b>MATERIAL</b>	Type 1213, Vinyl (PVC), glossy colours
<b>Operating Temperature</b>	-40 °C to +90 °C
<b>Curing Temperature</b>	from +8 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	66 µm
<b>Chem. Material Properties</b>	Resistant to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.
<b>Recommended Ribbon Type</b>	TT822OUT, TTRW
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Width (W)	Width of Liner (WL)	Pack Cont.	Colour	Article-No.
TAGR4TD1-1213-YE	25.0	25.0	50 m	Yellow gloss (GSYE)	596-03103
TAG108TD1-1213-BU	40.0	40.0	50 m	Blue (BU)	596-12181
TAG108TD1-1213-GY	40.0	40.0	50 m	Grey (GY)	596-12188
TAG108TD1-1213-PK	40.0	40.0	50 m	Pink (PK)	596-00971
TAG108TD1-1213-YE	40.0	40.0	50 m	Yellow gloss (GSYE)	596-12167
TAG108TD1-1213-GN	40.0	40.0	50 m	Green (GN)	596-12166
TAGR1TD-1213-GN	101.6	101.6	50 m	Green (GN)	596-12170
TAGR1TD-1213-RD	101.6	101.6	50 m	Red (RD)	596-12168
TAGR1TD-1213-WH	101.6	101.6	50 m	White (WH)	596-12171
TAGR1TD-1213-YE	101.6	101.6	50 m	Yellow gloss (GSYE)	596-12169

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.





### Printed circuit board labels (ESD), thermal transfer

#### Helatag 823 (White), PCB labelling

Helatag 823 labels have been designed to fit all areas when it comes to marking components on PCBs. The specially formulated adhesive labels give the highest quality print clarity when printed on thermal transfer printers. Designing and printing labels is simple and users can quickly print out professional labels in a matter of moments when using TagPrint Pro labelling software.

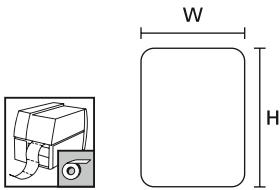
#### Features and benefits

- Labels for printed circuit boards
- Voltage rejecting adhesive properties
- Permanent and durable identification
- For electrostatic sensitive applications



Secure identification of component parts and circuit boards with Helatag.

<b>MATERIAL</b>	Type 823, Polyester (PET), white (WH)
<b>Operating Temperature</b>	-40 °C to +150 °C
<b>Curing Temperature</b>	from +10 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	51 µm
<b>Chem. Material Properties</b>	Excellent resistance against alcohol, petrol, solvents, butanol, etyl- and butylcellosolve solvents, battery acid.
<b>Recommended Ribbon Type</b>	TT822OUT
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG16TD3-823-WH	22.9	6.4	80.0	3 pcs.	10,000 pcs.	White (WH)	596-16823
TAG61TD3-823-WH	25.4	4.8	89.0	3 pcs.	10,000 pcs.	White (WH)	596-61823
TAG29TD3-823-WH	25.4	6.4	89.0	3 pcs.	7,500 pcs.	White (WH)	596-29823
TAG34TD3-823-WH	25.4	9.5	85.1	3 pcs.	7,500 pcs.	White (WH)	596-34823
TAG35TD3-823-WH	31.8	9.5	101.6	3 pcs.	7,500 pcs.	White (WH)	596-35823
TAG17TD2-823-WH	38.1	6.4	85.1	2 pcs.	5,000 pcs.	White (WH)	596-17823

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Cable ties complete with integrated RFID transponder

#### T50RFID – Low Frequency (LF) and High Frequency (HF)

RFID cable ties provide an innovative solution for clear and rapid product identification. The nylon cable ties are equipped with an RFID transponder and therefore combine the numerous advantages of a regular cable tie with RFID technology. The ties are especially suited for securing, serialisation, tracking and identification of products in the areas of resource management, electrical inspection, inventory, distribution and rental services as well as for easy management of maintenance and repair routines.

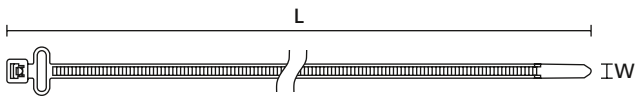
#### Features and benefits

- Flexible, contactless data communication
- Clear identification of objects through unique numbering
- Faster data management compared to paper solution
- More accurate documentation processes – prevention of human errors
- Robust and resistant to harsh environments and cleaning processes
- Low frequency (LF – 125 kHz) - Read only
- High frequency (HF – 13.56 MHz) - Rewritable



T50RFID – Cable ties with RFID transponder.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)	
<b>Frequency</b>	125 kHz (LF)	13.56 MHz (HF)
<b>Idle Temperature</b>	-40 °C to +85 °C	
<b>Operating Temperature</b>	-40 °C to +85 °C	-25 °C to +85 °C
<b>Flammability</b>	UL94 V2	



T50RFID, MCTRFID

TYPE	Frequency	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	N	Colour	Pack Cont.	Tools	Article-No.
T50RFIDCLA	125 kHz (LF)	1.5	50.0	4.6	200.0	225	Yellow (YE)	100 pcs.	6;54	111-01638
T50RFIDCHA	13.56 MHz (HF)	1.5	50.0	4.6	200.0	225	Yellow (YE)	100 pcs.	6;52-53	111-01639
	13.56 MHz (HF)	1.5	50.0	4.6	200.0	225	Black (BK)	100 pcs.	6;52-53	111-01591
	13.56 MHz (HF)	1.5	50.0	4.6	200.0	225	Light Blue (LTBU)	100 pcs.	6;52-53	111-01673

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.  
More colours on request.

= Minimum Loop Tensile Strength for Cable Ties (Newton)

Recommended Tools				
	6	52	53	54
	EVO7	RFID-DT22-HF	RFID-HS9BT-HF	RFID-HS9BT-LF
	554	521	520	520

For more information on toolings please refer to the Application Tooling chapter.



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



### Detectable cable ties with integrated RFID transponder

#### MCTRFID – Low Frequency (LF) and High Frequency (HF)

Metal content RFID cable ties offer an innovative solution for unique and fast product identification thanks to the fitting of a transponder directly to the cable tie. The metal content RFID cable ties are made with a percentage of a metallic trace element (magnet/X-Ray) and have been especially developed for industries where the potential for foreign body contamination is a problem. The ties can be used for securing, serialisation, tracking and identification of products e.g. in the food processing or pharmaceutical industry to support quality control effort.

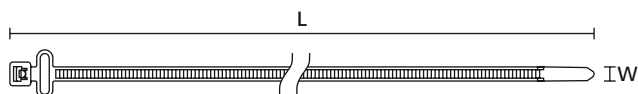
#### Features and benefits

- Magnetic or X-Ray detectable RFID cable ties (detection level depending on specific application)
- Total metal dispersion throughout the tie
- For safe handling of production processes
- Blue colour for easy visual detection
- Flexible, contactless data communication
- Clear identification of objects through unique numbering
- Faster data management compared to paper solution
- More accurate documentation processes – prevention of human errors
- Robust and resistant to harsh environments and cleaning processes
- Low frequency (LF – 125 kHz) - Read only
- High frequency (HF – 13.56 MHz) - Rewritable



MCTRFID – Detectable cable ties (metal content) with RFID transponder.

<b>MATERIAL</b>	Polyamide 6.6, with metal particles (PA66MP)	
<b>Frequency</b>	125 kHz (LF)	13.56 MHz (HF)
<b>Idle Temperature</b>	-40 °C to +85 °C	
<b>Operating Temperature</b>	-40 °C to +85 °C	-25 °C to +85 °C
<b>Flammability</b>	UL94 HB	



T50RFID, MCTRFID

TYPE	Frequency	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	N	Colour	Pack Cont.	Tools	Article-No.
MCTRFIDCLA	125 kHz (LF)	1.5	50.0	4.6	200.0	225	Blue (BU)	100 pcs.	6;54	111-01976
MCTRFIDCHA	13.56 MHz (HF)	1.5	50.0	4.6	200.0	225	Blue (BU)	100 pcs.	6;52-53	111-01676

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

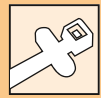
= Minimum Loop Tensile Strength for Cable Ties (Newton)

Recommended Tools				
	6	52	53	54
	EVO7	RFID-DT22-HF	RFID-HS9BT-HF	RFID-HS9BT-LF
	554	521	520	520

For more information on toolings please refer to the Application Tooling chapter.



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



### Stainless steel ties with RFID transponder

#### MBTRFID – High Frequency (HF) and Ultra High Frequency (UHF)

Stainless steel RFID cable ties are fitted with a slide-on carrier for a high frequency (HF) or an ultra-high frequency (UHF) RFID transponder. These ties are ideal for product identification in all areas of harsh environment where high tensile strength and durability is of importance. The ties are especially suited for securing, serialisation, tracking and identification of products in the areas of resource management, electrical inspection, inventory, distribution and rental services as well as for easy management of maintenance and repair routines.

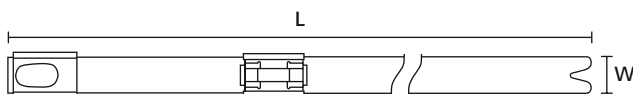
#### Features and benefits

- MBT stainless steel (316) tie complete with RFID transponder
- Especially suited for applications in harsh environments
- Patented non-releasable locking feature
- Flexible, contactless data communication
- Clear identification of objects through unique numbering
- Faster data management compared to paper solution
- More accurate documentation processes – prevention of human errors
- High frequency (HF – 13.56 MHz)
- Ultra high frequency (UHF – 869 MHz)
- Rewritable
- Standard colour red, black coating is also available as a special




MBTRFID – Stainless steel RFID cable ties for product identification in harsh environments.

<b>MATERIAL</b>	Stainless Steel (SS316), Polyester (SP)	
<b>Frequency</b>	13.56 MHz (HF)	869 MHz (UHF)
<b>Idle Temperature</b>	-25 °C to +70 °C	-40 °C to +85 °C
<b>Operating Temperature</b>	-25 °C to +70 °C	-40 °C to +85 °C
<b>Flammability</b>	non-burning (except coating)	




MBTRFID

TYPE	Frequency	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)		Colour	Pack Cont.	Tools	Article-No.
MBT8HFCRFID	13.56 MHz (HF)	12.0	17.0	7.9	201.0	1,020	Red (RD)	50 pcs.	15-18;53	156-01167
MBT14HFCRFID	13.56 MHz (HF)	17.0	102.0	7.9	362.0	1,020	Red (RD)	50 pcs.	15-18;53	111-01586
MBT20HFCRFID	13.56 MHz (HF)	17.0	152.0	7.9	521.0	1,020	Red (RD)	50 pcs.	15-18;53	111-01587
MBT27HFCRFID	13.56 MHz (HF)	17.0	203.0	7.9	681.0	1,020	Red (RD)	50 pcs.	15-18;53	111-01588
MBT33HFCRFID	13.56 MHz (HF)	17.0	254.0	7.9	838.0	1,020	Red (RD)	50 pcs.	15-18;53	111-01589
MBT8HHFRFID	869 MHz (UHF)	12.0	17.0	7.9	201.0	1,020	Red (RD)	50 pcs.	15-18;53	156-01565
MBT14HHFRFID	869 MHz (UHF)	12.0	102.0	7.9	362.0	1,020	Red (RD)	50 pcs.	15-18;53	156-01566
MBT20HHFRFID	869 MHz (UHF)	12.0	152.0	7.9	521.0	1,020	Red (RD)	50 pcs.	15-18;53	156-01567
MBT27HHFRFID	869 MHz (UHF)	12.0	203.0	7.9	681.0	1,020	Red (RD)	50 pcs.	15-18;53	156-01568
MBT33HHFRFID	869 MHz (UHF)	12.0	254.0	7.9	838.0	1,020	Red (RD)	50 pcs.	15-18;53	156-01569

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

 = Minimum Loop Tensile Strength for Cable Ties (Newton)

Recommended Tools					
	15	16	17	18	53
	MK9SST	MK9PSST	HDT16	KST-STG200	RFID-HS9BT-HF
	560	560	561	561	520

For more information on toolings please refer to the Application Tooling chapter.



### Accessories with RFID transponder

#### HEXTAG – High Frequency (HF)

The HEXTAG made from PA66 is equipped with a transponder of HF frequency. The central hole allows a simple mounting in applications where a RFID cable tie solution is not suitable. All HellermannTyton RFID products can be used for securing, serialisation, tracking and identification of products in the areas of resource management, electrical inspection, inventory, distribution and rental services as well as for easy management of maintenance and repair routines.

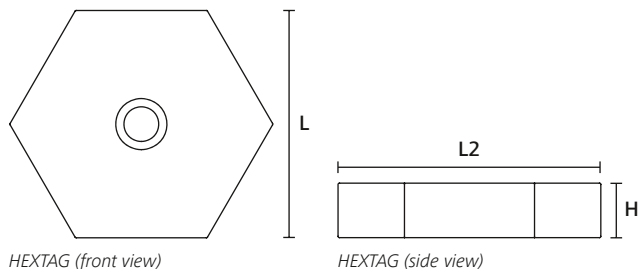
#### Features and benefits

- Can be fitted using a chosen fixing element through the centre hole
- Flexible, contactless data communication
- Clear identification of objects through unique numbering
- Faster data management compared to paper solution
- More accurate documentation processes – prevention of human errors
- Robust and resistant to harsh environments and cleaning processes
- High frequency (HF – 13.56 MHz)
- Rewritable
- Yellow colour for easy visual detection



RFID HEXTAG – For applications where a RFID cable tie solution is not suitable.

<b>MATERIAL</b>	Polyamide 6.6 (PA66)
<b>Frequency</b>	13.56 MHz (HF)
<b>Idle Temperature</b>	-40 °C to +85 °C
<b>Operating Temperature</b>	-40 °C to +85 °C
<b>Flammability</b>	UL 94 V2



TYPE	Frequency	Height (H)	Length (L)	Length (L2)	Colour	Pack Cont.	Tools	Article-No.
RFID HEXTAG	13.56 MHz (HF)	8.0	33.4	38.39	Yellow (YE)	100 pcs.	52-53	151-01582

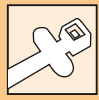
All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools		
	52	53
	RFID-DT22-HF	RFID-HS9BT-HF
	521	520

For more information on toolings please refer to the Application Tooling chapter.



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



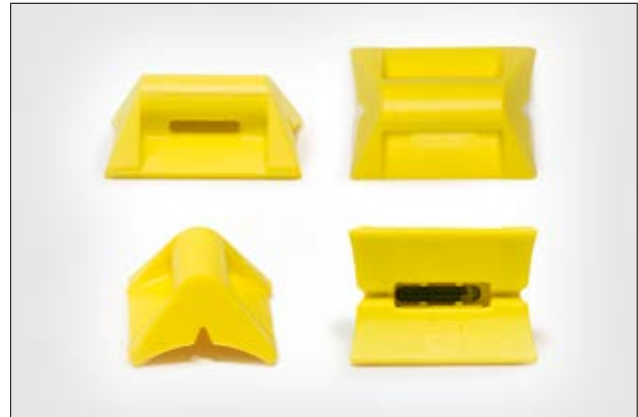
### Accessories with RFID transponder

#### CRADLE – High Frequency (HF)

The CRADLE equipped with a HF transponder can be used with standard HellermannTyton cable ties. All RFID products can be used for securing, serialisation, tracking and identification of products in the areas of resource management, electrical inspection, inventory, distribution and rental services as well as for easy management of maintenance and repair routines.

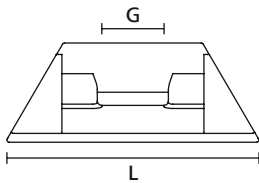
#### Features and benefits

- Cable tie slot to suit HellermannTyton's standard cable ties up to 7.9 mm wide
- Made from durable TPU and is suitable to be used in salt water conditions
- Flexible, contactless data communication
- Clear identification of objects through unique numbering
- Faster data management compared to paper solution
- More accurate documentation processes – prevention of human errors
- Robust and resistant to harsh environments and cleaning processes
- Date on RFID chip can be reprogrammed (HF) – no waste
- Yellow colour for easy visual detection
- Other colours and frequencies are available on request
- High frequency (HF – 13.56 MHz)
- Rewritable

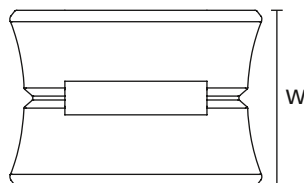


RFID CRADLE – Can be used with a standard HellermannTyton cable tie.

<b>MATERIAL</b>	Thermoplastic Polyurethane (TPU)
<b>Frequency</b>	13.56 MHz (HF)
<b>Idle Temperature</b>	-40 °C to +85 °C
<b>Operating Temperature</b>	-25 °C to +85 °C
<b>Flammability</b>	UL 94 V2



CRADLE (front view)



CRADLE (rear view)



CRADLE (side view)

TYPE	Frequency	Width (W)	Length (L)	Strap Width max. (G)	Colour	Pack Cont.	Tools	Article-No.
RFID CRADLE	13.56 MHz (HF)	19.8	27.9	7.9	Yellow (YE)	100 pcs.	52-53	151-01472

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

Recommended Tools		
	52	53
	RFID-DT22-HF	RFID-HS98T-HF
	521	520

For more information on toolings please refer to the Application Tooling chapter.



## RFID Readers

### RFID Handheld Reader

The HS9 handheld RFID readers are designed to read LF transponders and read/write to HF transponders fitted to HellermannTyton RFID cable ties and accessories. The readers act as an interface between the RFID transponder and computer systems or databases. Radio waves transmit the data from the RFID transponder to the reader, so that contactless reading and/or writing of information is possible. The HS9 reader is available for low frequency (LF, 125 kHz, read-only) and for high-frequency (HF, 13.56 MHz, read and write) transponders. RFID system solutions can make a significant contribution to improving the process reliability and quality in a variety of industries.

#### Features and benefits

- RFID handheld reader
- Rewrite function on request
- Low frequency (LF – 125 kHz)
- High frequency (HF – 13.56 MHz)
- USB, HID interface
- Wireless transmission via Bluetooth
- Operator convenience
- Lightweight and handy design
- Compatible with Android- and iOS-devices
- 9V alkaline battery included



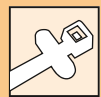
RFID-HS9 – Handheld readers for low frequency (LF) and high frequency (HF) transponders.

<b>Operating Temperature</b>	0 °C to +55 °C
<b>Interfaces</b>	USB, Bluetooth, HID
<b>L x W x H</b>	135 mm x 70 mm x 24 mm

TYPE	Frequency	Weight	Article-No.
<b>RFID-HS9BT-LF</b>	125 kHz (LF)	165 g	556-00701
<b>RFID-HS9BT-HF</b>	13.56 MHz (HF)	185 g	556-00700

Subject to technical changes.





### RFID Readers

#### RFID Desktop Reader

The RFID-DT22 desktop reader for stationary use has been designed to read and write from/to high frequency (HF 13.56 MHz) transponders fitted to HellermannTyton RFID cable ties and accessories. The reader acts as an interface to computer systems and databases. Radio waves transmit the data from the transponder to the reader, so that contactless reading of information is possible. RFID system solutions can make a significant contribution to improving the process reliability and quality in a variety of industries.

#### Features and benefits

- RFID desktop reader
- High frequency (HF – 13.56 MHz)
- For reading and writing of data
- USB, HID interface
- Operator convenience
- Lightweight and handy design



RFID-DT22 – Desktop reader for high frequency (HF) transponders.

<b>Operating Temperature</b>	-25 °C to +60 °C
<b>Interfaces</b>	USB, HID
<b>L x W x H</b>	110 mm x 110 mm x 30 mm

TYPE	Frequency	Weight	Article-No.
RFID-DT22-HF	13.56 MHz (HF)	200 g	556-00702

Subject to technical changes.



### Tamper-evident security labelling, thermal transfer

#### Helatag 1203 (Silver)

These labels are ideal for tamper-proof marking of valuable inventory items as well as for type labels, security and guarantee labels for components and housings.

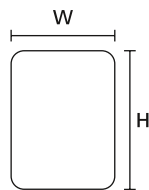
#### Features and benefits

- Tamper-evident labels leave clear reminder that label has been removed
- Mark assets securely and unambiguously
- Print labels with customer unique references
- Use text, graphics and barcodes as required
- Adhesive must set sufficiently long before a manipulation attempt can take place



Highly visible tamper evidence.

<b>MATERIAL</b>	Type 1203, Polyester (PET), silver matt (SR), tamper-proof
<b>Operating Temperature</b>	-40 °C to +120 °C
<b>Curing Temperature</b>	from +7 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	53 µm
<b>Chem. Material Properties</b>	Excellent resistance to water, alcohol, most oils, greases, fuel, freezing fluid, brake fluid, aliphatic solvents, weak acids, salts and alkalis.
<b>Recommended Ribbon Type</b>	TT822OUT
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG71TD6-1203-SR	12.7	11.1	101.6	6 pcs.	15,000 pcs.	Silver (SR)	596-71120
TAG15TD3-1203-SR	25.4	12.7	85.1	3 pcs.	7,500 pcs.	Silver (SR)	596-51203
TAG27TD2-1203-SR	38.1	19.1	85.1	2 pcs.	2,500 pcs.	Silver (SR)	596-71203
TAG67TD2-1203-SR	38.1	31.8	85.1	2 pcs.	1,000 pcs.	Silver (SR)	596-67120
TAG73TD1-1203-SR	50.8	25.4	55.0	1 pc.	2,000 pcs.	Silver (SR)	596-73120
TAG66TD1-1203-SR	50.8	36.5	56.8	1 pc.	1,000 pcs.	Silver (SR)	596-66120
TAG68TD1-1203-SR	63.5	25.4	69.0	1 pc.	2,000 pcs.	Silver (SR)	596-68120
TAG63TD1-1203-SR	63.5	38.1	70.0	1 pc.	1,000 pcs.	Silver (SR)	596-63120
TAG76TD1-1203-SR	63.5	50.8	70.0	1 pc.	500 pcs.	Silver (SR)	596-76120
TAG62TD1-1203-SR	76.2	50.8	82.0	1 pc.	500 pcs.	Silver (SR)	596-21203
TAG64TD1-1203-SR	88.9	36.5	95.0	1 pc.	1,000 pcs.	Silver (SR)	596-64120
TAG98TD1-1203-SR	101.0	160.0	105.0	1 pc.	250 pcs.	Silver (SR)	596-98120
TAG97TD1-1203-SR	101.6	74.0	106.0	1 pc.	500 pcs.	Silver (SR)	596-97120

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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



### Tamper-evident security labelling, thermal transfer

#### Helatag 1208 (White), fragmenting

These special labels are optimally suited for tamper-proof identification of valuable inventory items as well as a security and guarantee seal for components and housings.

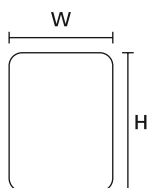
#### Features and benefits

- A security label that fragments on removal
- Designed weak spots makes label removal time consuming
- Adhesive must set sufficiently long before a manipulation attempt can take place



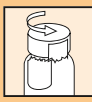
A secure way of identifying if an asset label has been tampered with.

<b>MATERIAL</b>	Type 1208, Acetate foil (CA), white (WH), tamper-proof
<b>Operating Temperature</b>	-40 °C to +150 °C
<b>Curing Temperature</b>	from +4 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	56 µm
<b>Chem. Material Properties</b>	Resistant to oils, water and solvents.
<b>Recommended Ribbon Type</b>	TT822OUT
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG71TD6-1208-WH	12.7	11.1	101.6	6 pcs.	15,000 pcs.	White (WH)	596-20871
TAG15TD3-1208-WH	25.4	12.7	85.1	3 pcs.	7,500 pcs.	White (WH)	596-12080
TAG27TD2-1208-WH	38.1	19.1	85.1	2 pcs.	2,500 pcs.	White (WH)	596-12082
TAG67TD2-1208-WH	38.1	31.8	85.1	2 pcs.	2,500 pcs.	White (WH)	596-12087
TAG69TD2-1208-WH	40.6	22.9	89.0	2 pcs.	2,500 pcs.	White (WH)	596-12089
TAG73TD1-1208-WH	50.8	25.4	55.0	1 pc.	2,000 pcs.	White (WH)	596-31208
TAG66TD1-1208-WH	50.8	36.5	56.8	1 pc.	1,000 pcs.	White (WH)	596-12086

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Tamper-evident security labelling, thermal transfer

#### Helatag 951 (Silver, Transparent), 2 parts

These labels are primarily used for tamper-proof type label applications in the automotive and electrical industries.

They are ideally suited for labelling flat surfaces, e.g. on vehicle frames and can be used as a replacement for conventional aluminium plates.

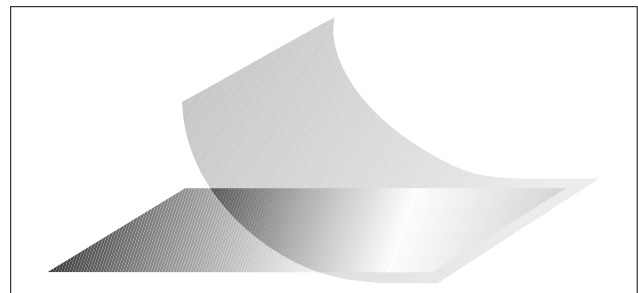
The transparent protective laminate guarantees good resistance to dirt and abrasion and can be easily applied by hand.

#### Features and benefits

- 2-part label, delivered on reel together with the protective label
- Designed for highly visible and rugged identification on trucks and trailers
- Tamper-evident, when pulled off a checkered pattern will be visible as evident
- High durability in outside use
- Meets requirements of the KBA (Kraftfahrtbundesamt [German Federal Motor Transport Authority])
- Thickness of 951A label 36 µm and 951B laminate 25 µm
- Particularly suitable as type label for vehicles



Type plate of an HGV trailer with protective laminate.

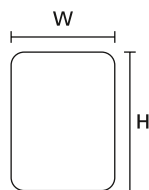


The printed silver type plate (Mat. 951A) is protected by the transparent laminate (Mat. 951B).



**Tested according to German Federal Motor Transport Authority (KBA) technical bulletin 412-205 (Testing of factory plates made of foil and the affixing thereof with adhesive).**

<b>MATERIAL</b>	Type 951, Polyester (PET), silver (SR) and Polyester (PET), transparent (CL)
<b>Operating Temperature</b>	-40 °C to +150 °C
<b>Curing Temperature</b>	from 0 °C (label), from +4 °C (laminate)
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	36 µm, 25 µm
<b>Chem. Material Properties</b>	Excellent resistance to water, alcohol, most oils, greases, fuel, aliphatic solvents, weak acids, salts and alkalis.
<b>Recommended Ribbon Type</b>	TT822OUT
<b>Thermal Transfer Printer</b>	TT430, TT4030



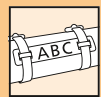
TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
<b>TAG25.4-12.7TD1-951 SET</b>	25.4	12.7	31.5	1 pc.	1,000 pcs.	Silver (SR)	596-44951
<b>TAG50.8-25.4TD1-951 SET</b>	50.8	25.4	56.8	1 pc.	1,000 pcs.	Silver (SR)	596-43951
<b>TAG63.5-50.8TD1-951 SET</b>	63.5	50.8	69.5	1 pc.	500 pcs.	Silver (SR)	596-42951
<b>TAG101-74TD1-951 SET</b>	101.6	74.0	107.0	1 pc.	250 pcs.	Silver (SR)	596-41951
<b>TAG101-160TD1-951 SET</b>	101.6	160.0	105.8	1 pc.	250 pcs.	Silver (SR)	596-40951

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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



### Stainless steel embossing system

#### M-BOSS Compact

M-BOSS Compact is a quiet easy-to-use metal plate embossing printer with a small production footprint. It is simple to install and operate and only needs a standard electrical supply and a PC. Texts are created with Tagprint Pro 3.0. Simply open the easy to use program to create print lists. Improved cooling system now ensures a continuous operation between 8-10 hours. Marker plates are attached to pipes and cables using 4.6 mm width MBT cable ties and a MK9SST hand tool.

#### Features and benefits

- Small and easy to use metal plate embosser
- Quiet embossing mechanism suited to production and office environments
- Embossed characters have been tested to withstand 1.5 million strikes each
- Improved cooling systems allows 8-10 hours continuous printing
- Use Tagprint Pro 3.0 labelling software with pre-loaded templates to simplify print jobs
- 45 piece character set as standard - can be upgraded to 60 characters
- Letters: A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
- Numbers: 0 1 2 3 4 5 6 7 8 9
- Symbols: & - / . , ' Ä, Ö, Ü
- Other symbols available on request



A quiet, durable, and easy to use metal plate embossing printer.

<b>Print Method</b>	Embossing
<b>Power Supply</b>	AC 110V-240V, 45/65 Hz, 1.5A-3A
<b>Cycle Time</b>	1 second per character
<b>Interfaces</b>	USB 2.0
<b>System Requirements</b>	MS Windows XP SP3, Vista SP1, Win 7, 8, 10
<b>Dimensions W x H x D</b>	480 mm x 360 mm x 570 mm
<b>Weight</b>	41 kg



**For problem-free printing we recommend TagPrint Pro, page 529.**

**RoHS** ✓

TYPE	Article-No.
M-BOSS Compact	544-20000

Subject to technical changes.



**1.5 million strikes per character without maintenance**

#### M-BOSS Compact including Organiser

The M-BOSS Compact with included Organiser system gives the added advantage of a self-contained storage system within the print unit.

The organiser is a 10 container carousel storage system that can be programmed to hold either an individual or a pre-defined set of marker plates. This means that users have the flexibility to manage how they work with the printed output. A simple input screen on the top of the machine is used to specify the quantity per container within the carousel. The carousel drawer when opened extends 430 mm from the front of the printer.

#### Features and benefits

- Ability to manage how the printed marker plates are organised
- Carousel system under the printer has 10 removable marker plate containers
- Flexible output means all marker plates or a set amount can be sent to each container
- Carousel system will hold up to 400 markers
- Each container can hold 40 marker plates



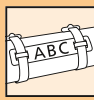
A simple solution to managing your printer output.

TYPE	Article-No.
M-BOSS Compact Organiser	544-21000

Subject to technical changes.



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



### Stainless steel printing system

#### M-BOSS Compact Markers

M-BOSS Markers are used in all areas where severe mechanical or chemical conditions occur e.g. offshore industry, marine engineering, petrochemical industry, mining, underground or on radio and cellular masts where mark permanence is critical.

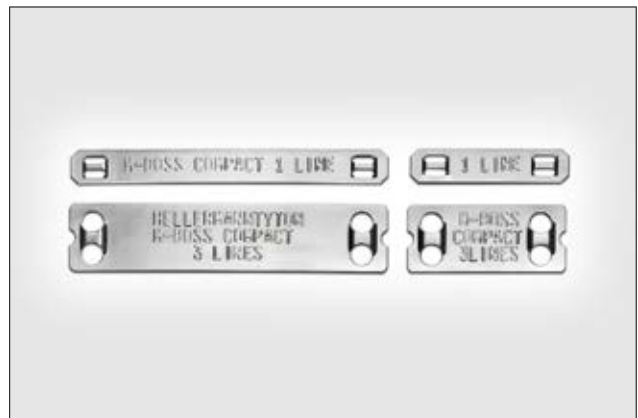
The raised surface of the embossed print ensures that the text remains visible even with dirt, grease, and paint cover the marker. The physical characteristics of the metal and the height of the embossed mark allows users to apply a stiff or metallic brush to the surface and remove excess layers of paint or grease without damaging the integrity of the text.

#### Features and benefits

- Raised marking ensure text visibility even when covered in dust, debris, grease and oil
- Stainless steel grade SS316 is suited for use in harsh environments
- Marker plates are designed for use with stainless steel cable ties with a 4.6 mm strap width
- Apply ties with a MK9SST



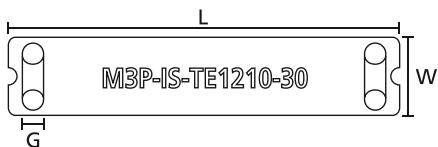
Marker plates designed to survive the harshest environments.



A range of metal plate sizes to suit your needs.

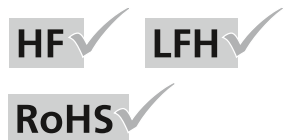


Application video:  
M-BOSS Compact



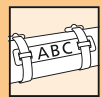
MBML

<b>MATERIAL</b>	Stainless Steel (SS316)
<b>Operating Temperature</b>	-80 °C to +538 °C



TYPE	Strap Width max. (G)	Number of lines	Characters per line	Number of characters	Width (W)	Length (L)	Pack Cont.	Article-No.
MBML10X45	4.6	1	8	8	10.0	45.0	1,000 pcs.	544-80101
MBML10X90	4.6	1	23	23	10.0	90.0	500 pcs.	544-80102
MBML20X45	4.6	3	8	24	20.0	45.0	1,000 pcs.	544-80201
MBML20X90	4.6	3	23	69	20.0	90.0	500 pcs.	544-80202

All dimensions in mm. Subject to technical changes.  
Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



### Stainless steel pre-embossed marking system, manual

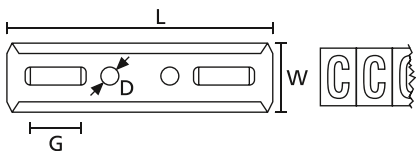
#### Hellermark SSC

#### Hellermark SSM

Hellermark is used in the rail, marine, offshore, petrochemical, food and construction industries, for the identification of cables, pipes and other equipment in harsh environments.

#### Features and benefits

- Stainless steel pre-embossed marker tiles
- Use in harsh and hazardous conditions
- Made of grade SS316 stainless steel for ideal use in aggressive environments
- Insert marker tiles (SSM) into fitting carrier (SSC) and close ends with pliers
- Fasten carriers using stainless steel cable ties with max. strap width of 8 mm
- Carrier can be riveted or screw-fixed using two 3 mm holes at each end



Hellermark SSC and SSM.

TYPE	Marking Text	Pack Cont.	Article-No.
SSM	+	200 pcs.	540-01700
	-	200 pcs.	540-01703
	,	200 pcs.	540-01702
	.	200 pcs.	540-01701
	/	200 pcs.	540-01720
	0	200 pcs.	540-01600
	1	200 pcs.	540-01610
	2	200 pcs.	540-01620
	3	200 pcs.	540-01630
	4	200 pcs.	540-01640
	5	200 pcs.	540-01650
	6	200 pcs.	540-01660
	7	200 pcs.	540-01670
	8	200 pcs.	540-01680
	9	200 pcs.	540-01690
	⊥	200 pcs.	540-01730

TYPE	Marking Text	Pack Cont.	Article-No.
SSM	A	200 pcs.	540-01010
	B	200 pcs.	540-01020
	C	200 pcs.	540-01030
	D	200 pcs.	540-01040
	E	200 pcs.	540-01050
	F	200 pcs.	540-01060
	G	200 pcs.	540-01070
	H	200 pcs.	540-01080
	I	200 pcs.	540-01090
	J	200 pcs.	540-01100
	K	200 pcs.	540-01110
	L	200 pcs.	540-01120
	M	200 pcs.	540-01130
	N	200 pcs.	540-01140
	O	200 pcs.	540-01150
	P	200 pcs.	540-01160
	Q	200 pcs.	540-01170
	R	200 pcs.	540-01180
	S	200 pcs.	540-01190
	T	200 pcs.	540-01200
	U	200 pcs.	540-01210
	V	200 pcs.	540-01220
	W	200 pcs.	540-01230
	X	200 pcs.	540-01240
	Y	200 pcs.	540-01250
	Z	200 pcs.	540-01260

Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

TYPE	Width (W)	Length (L)	Strap Width max. (G)	Ø (D)	Marker tiles per carrier	Pack Cont.	Article-No.
SSC46	11.0	46.0	7.9	3.0	5	10 pcs.	540-01046
SSC56	11.0	56.0	7.9	3.0	7	10 pcs.	540-01056
SSC82	11.0	82.0	7.9	3.0	11	10 pcs.	540-01082
SSC106	11.0	106.0	7.9	3.0	15	10 pcs.	540-01106
SSC134	11.0	134.0	7.9	3.0	20	10 pcs.	540-01134
SSC286	11.0	286.0	7.9	3.0	45	10 pcs.	540-01286
SSCPP (Plastic)	11.0	7.0	7.9	3.0	-	100 pcs.	540-02011

All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.





## Protective laminates, thermal transfer

### Helatag 323 (Transparent), high temperature

Protective laminates are used for the additional protection of printed type labels, for example in the automotive sector and for other outdoor installations. The protective laminates are also used if the contours of a label, for example on glass surfaces or backlit objects, should not be visible (no-label look).

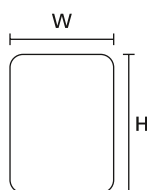
#### Features and benefits

- High temperature transparent material
- Ideal as a protective laminate or as a printed label
- The barrier label needs to overlap the covered label
- Survives 5 years external weathering in central European climate
- Provides additional protection against chemicals for the underlying label



Helatag protective laminates.

<b>MATERIAL</b>	Type 323, Polyvinylidene Fluoride (PVDF), transparent (CL)
<b>Operating Temperature</b>	-40 °C to +140 °C
<b>Curing Temperature</b>	from +10 °C
<b>Adhesive</b>	Acrylic
<b>Thickness of Foil</b>	25 µm
<b>Chem. Material Properties</b>	Excellent resistance against water, UV radiation, weather influence and solvents based on petroleum.
<b>Recommended Ribbon Type</b>	TT822OUT
<b>Thermal Transfer Printer</b>	TT430, TT4030



TYPE	Width (W)	Height (H)	Width of Liner (WL)	Labels per Row	Pack Cont.	Colour	Article-No.
TAG0638TL2-323-CL	43.2	11.4	94.9	2 pcs.	5,000 pcs.	Transparent (CL)	596-38321
TAG1351TL1-323-CL	55.9	17.8	62.0	1 pc.	2,000 pcs.	Transparent (CL)	596-51321
TAG2551TL1-323-CL	55.9	30.5	62.0	1 pc.	1,000 pcs.	Transparent (CL)	596-52321
TAG3863TL1-323-CL	68.6	43.2	75.0	1 pc.	1,000 pcs.	Transparent (CL)	596-63321

All dimensions in mm. Subject to technical changes.

Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.



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



## Labelling software

### TagPrint Pro 3.0

TagPrint Pro 3.0 is the easy-to-use label/marker design and printing software in the HellermannTyton printing. Compatible with Windows® 7, Vista and XP as well as future operating systems such as Windows® 8, TagPrint Pro 3.0 delivers an individualised, task-based experience that enables a user to easily develop print templates including bar codes, text and graphics to meet numerous applications. TagPrint Pro 3.0 streamlines labeling production by offering a user full control over the importing or entering of data, advanced security features, the option to group label designs under a single file name or job number, and the ability to batch print to either one or more printers at the same time.

#### Features and benefits

- Easy and intuitive label/marker template design
- WYSIWYG
- Print to multiple printers at one time
- Save jobs in a queue and print all at one time with "Print later" function
- Connect or import directly from other databases including Excel, Access, text files
- Text, graphics and barcode functionalities
- Full text editing functions
- Inverse, flip, and mirror image options for graphic images
- Print log available

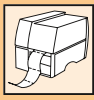


*The easy to use software speeds up production of markers, labels and identification tags.*

<b>System Requirements</b>	TagPrint Pro Standalone/TagPrint Pro Client PC running Microsoft Windows XP SP3, Vista SP1 or later, Windows 7, 8, 10 .NET Framework 4 512 MB RAM (XP SP3) 1.0 GB RAM (Vista/Windows 7, 8, 10) 500 MB available hard disk space.
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TYPE	Article-No.
<b>TagPrint Pro 3.0 EMEA</b>	556-00051

Subject to technical changes.



## Thermal transfer printer

### TT430

The TT430 thermal transfer printer is perfect for printing on HellermannTyton materials such as self-adhesive labels, shrinkable tubing and identification tags. Thanks to its low weight and compact construction, the TT430 integrates seamlessly into any workstation. It is easy to use due to its intuitive touch display and clear status messages which can be shown in multiple languages. The optional cutter and perforator make this printer ideal for a wide range of applications. 300 dpi resolution ensures that barcodes, warning symbols, logos and text are as sharp as they can be.

#### Features and benefits

- Medium volume single sided printing
- Print on HellermannTyton cable markers and labels
- Uses standard ribbons
- Barcodes: standard and 2D
- Print speed up to 125 mm/s (30mm/s recommended for Ladder Style products and tubing)
- Adjustable label sensor
- Multiple language selection
- Windows drivers: 32/64 bit for Windows XP, Windows Vista, Windows 7, 8, 10



One Step to the Web!



TT430 thermal transfer printer.

<b>Print Method</b>	Thermal Transfer
<b>Print Head Type</b>	300 dpi, flat type
<b>Print Speed</b>	up to 125 mm/s
<b>Max. Print Width</b>	106 mm
<b>Label Height Max (metric)</b>	1,000 mm
<b>Interfaces</b>	USB 2.0, Ethernet 10/100 Base T
<b>Supported Barcodes, Printer</b>	Standard and 2D
<b>Printer Memory</b>	64 MB RAM
<b>Dimensions W x H x D</b>	253 mm x 189 mm x 322 mm
<b>Weight</b>	4 kg



TYPE	Article-No.
TT430	556-00450

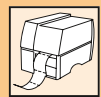
Subject to technical changes.

TYPE	Description	Article-No.
S430 Cutter	Cutter for TT430	556-00452
P430 Perforator	Perforator for TT430	556-00456
TT External Reel Holder	External Reel Holder	556-00451
TT430 300dpi Printhead	Printhead for TT430	556-00453
TT430 Print Roller	Print Roller for TT430	556-00454

Subject to technical changes.



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



## Thermal transfer printer

### TT4030

HellermannTyton's premium printer TT4030 is specifically designed for medium and heavy duty industrial applications. The 300 dpi print head fulfils all standard requirements for printing bar codes, warning signs, logos and written information. Optional premium quality accessories such as a perforator and cutter are designed to work seamlessly with the printer and will suit the most demanding needs.

Printing high definition graphics such as 2d barcodes, standard bar codes, numbers and text on adhesive labels, thermo plastics such as heat shrink and cable markers (Tiptags) is easily done.

A colour LCD Touchscreen with modern user interface helps intuitive operation.

Creation of professional looking industrial identification is simplified by the use of HellermannTyton's label creation software TagPrint Pro 3.0.

Whether in stand-alone mode, as a PC application or in a network - the robust TT4030 printers can meet every requirement.

### Features and benefits

- High volume single sided printing
- Print on HellermannTyton heatshrink tubing, cable markers and labels
- Uses standard 300 m ribbons
- Barcodes: standard and 2D
- Print speed up to 300 mm/s (30 mm/s recommended for ladder style products and tubing)
- Multiple language selection
- Windows drivers: 32 / 64 bit for Windows XP, Windows Vista, Windows 7, 8, 10



TT4030 thermal transfer printer for high volumes.

<b>Print Method</b>	Thermal transfer
<b>Print Head Type</b>	300 dpi, flat type
<b>Print Speed</b>	up to 300mm/s
<b>Max. Print Width</b>	105.70 mm
<b>Label Height Max (metric)</b>	2,000 mm
<b>Interfaces</b>	RS232 C, USB 2.0, Ethernet 10/100 Base T
<b>Supported Barcodes, Printer</b>	Standard, 2D
<b>Printer Memory</b>	256 MB RAM
<b>Dimensions W x H x D</b>	252 mm x 288 mm x 460 mm
<b>Weight</b>	10 kg



TYPE	Article-No.
TT4030	556-04037

Subject to technical changes.

TYPE	Description	Article-No.
<b>P4030 Perforator</b>	Perforator for TT4030	556-04051
<b>Printer Roller for TT4030</b>	Printer Roller for TT4030	556-04053
<b>Printhead for TT4030</b>	Printhead for TT4030	556-04052
<b>S4030 Cutter</b>	S4030 Cutter for TT4030	556-04050
<b>TT External Reel Holder</b>	External Reel Holder	556-00451

Subject to technical changes.



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



## Thermal transfer printer

### TrakMark DS, Double Sided

The TrakMark DS is a high-performance printer for double-sided printing. This printer is perfect for double-sided printing on HellermannTyton shrinkable tubing. With two print heads mounted one on top of the other, the TrakMark DS prints onto both sides of the material at the same time. High reliability and multiple peripherals enable applications and solutions tailored to specific customer requirements. It is easy to use thanks to its display and clear status messages which can be shown in multiple languages. 300 dpi resolution ensures that barcodes, warning symbols, logos and text are as sharp as they can be.

#### Features and benefits

- High volume double sided printing
- Prints perfectly on HellermannTyton heatshrink ladder style products
- Uses standard 300 m ribbons
- Barcodes: standard and 2D
- Print speed up to 125 mm/s (30 mm/s recommended for ladder style products and tubing)
- Multiple language selection
- Windows drivers: 32/64 bit for Windows XP, Windows Vista, Windows 7, 8, 10



One Step to the Web!

TYPE	Article-No.
TrakMark DS	556-05000

Subject to technical changes.

TYPE	Description	Article-No.
S4000 Cutter	S4000 Cutter for TT4000+ and TrakMark DS	556-04025
P4000 Perforator	Perforator for TT4000+ and TrakMark DS	556-04024
TT External Reel Holder	External Reel Holder	556-00451

Subject to technical changes.



TrakMark DS printer.

<b>Print Method</b>	Thermal Transfer
<b>Print Head Type</b>	300 dpi, flat type
<b>Print Speed</b>	30, 40, 50, 75, 100, 125 mm/s
<b>Max. Print Width</b>	105.6 mm
<b>Label Height Max (metric)</b>	2,000 mm
<b>Interfaces</b>	RS232 C, USB 2.0, Ethernet 10/100 Base T
<b>Supported Barcodes, Printer</b>	Standard, 2D
<b>Printer Memory</b>	64 MB RAM
<b>Dimensions W x H x D</b>	248 mm x 395 mm x 554 mm
<b>Weight</b>	21 kg



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

## Selection matrix: materials and ribbons

Use this selection matrix to find the right combination of material and ribbon to suit your application.

Material (Page)	TT ribbon	Resistance to							Market (suggested)						
		Smudgeproof	Scratchproof	Partly smudgeproof	Oils / benzenes	Alcoholic solvents	Etching	Approved	Aerospace	Automotive	Electronics	Machine Building	Military	Process Control	Rail
323 (477/528), 1209 (475)	TT822OUT	●	●	—	●	—	—	—	—	—	●	●	—	●	—
	TT932DOUT	●	—	—	—	—	—	—	—	—	●	●	—	●	—
823 (514)	TT822OUT	●	●	—	●	—	—	—	—	—	●	●	—	●	—
1206 (508)	TT822OUT	●	●	—	●	—	—	●	—	—	●	●	—	●	—
880 (499)	TT822OUT	●	●	—	●	—	—	—	—	—	—	●	—	●	—
892 (496)	TT822OUT	●	●	—	●	—	—	—	—	—	—	●	—	●	—
951 (524)	TT822OUT	●	●	—	●	—	—	●	—	●	●	●	—	—	—
1203 (522)	TT822OUT	●	●	—	●	—	—	●	—	—	●	●	—	●	—
1204 (507)	TT822OUT	●	●	—	●	—	—	●	—	●	●	●	—	●	—
1208 (523)	TT822OUT	●	●	—	●	—	—	—	—	—	●	—	—	—	—
1211 (499)	TT822OUT	●	●	—	●	—	—	—	—	—	—	●	—	●	—
1213 (513)	TT822OUT	●	●	—	●	—	—	—	—	—	—	●	—	●	—
1216 (500)	TT822OUT	●	●	—	●	—	—	—	—	—	●	—	—	—	—
1220 (505) 1221 (506)	TT122OUT	●	●	—	●	●	—	—	—	—	●	●	—	●	—
	TT822OUT	●	●	—	●	—	—	—	—	—	●	●	—	●	—
TCGT (448), TULT (450)	TT822OUT8	—	—	●	—	—	—	—	●	—	●	●	●	●	—
	TTDTHOUT	●	●	—	●	●	—	—	●	●	●	●	●	●	—
	TTRC+	●	●	—	●	●	●	—	●	—	—	●	●	●	—
	TTRW	—	—	●	—	—	—	—	●	—	●	●	●	●	—
TULT DS (452), TAGUL (470)	TTDTHOUT	●	●	—	●	●	—	—	●	●	●	●	●	●	—
TLFX (454), TLFX DS (456), TLFD DS (461), TAGLF (472), TIPTAG HF (467)	TTDTHOUT	●	●	—	●	●	—	—	—	—	—	●	—	—	●
THTT (463), THTT DS (465), TAGHT (474)	TTRHT	●	●	—	●	●	—	—	●	—	—	—	●	—	—
TDRT (458), TDRT DS (459), TAGDR (473)	TTDTHOUT	●	●	—	●	●	—	—	—	—	—	—	—	—	●
TAGPU (471)	TTRHT	●	●	—	●	●	—	—	—	—	●	●	—	●	—
TIPTAG PU (468)	TTRC+	●	●	—	●	●	●	—	—	—	●	●	—	●	—

- yes
- no



## Thermal transfer ribbons for

### Adhesive Labels

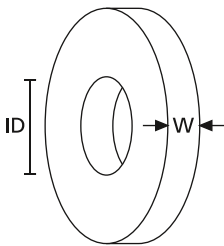
The thermal transfer print technology is based on heating up certain dots in the print head. This transfers the ink very precisely from the ribbon onto the surface of the printed material. All HellermannTyton ribbons consist of a special resin composition to maximise print performance. In combination with HellermannTyton printers the ribbons ensure the highest of print quality on all HellermannTyton thermal printable identification materials.

### Features and benefits

- Thermal transfer ribbons for highest quality and performance of printed labels
- Ribbons are specifically designed to maximise print performance for the recommended material



Ribbons for printing on Adhesive Labels.



**ID:** The standard inside core diameter is 25.4 mm.

TYPE	Recommended Material	Colour	Width (W)	Reel Length	Article-No.
TT822OUT 60MM	323/823/880/892/951/1203/1204/1206/1208/1210/1211/1213/1216/1220/1221	Black (BK)	60.0	300 m	556-00111
TT822OUT 110MM	323/823/880/892/951/1203/1204/1206/1208/1210/1211/1213/1216/1220/1221	Black (BK)	110.0	300 m	556-00101
TT932DOUT 85MM	323/1209	Black (BK)	85.0	300 m	556-00117
TT932DOUT 110MM	323/1209	Black (BK)	110.0	300 m	556-00118
TT122OUT 60mm	1220/1221	Black (BK)	60.0	300 m	556-00060
TT122OUT 110mm	1220/1221	Black (BK)	110.0	300 m	556-00061
TTRR 110	Labels/1220/1221	Red (RD)	110.0	300 m	556-00208

All dimensions in mm. Subject to technical changes.



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





## Thermal printer ribbons for

### Heatshrink and Tiptags

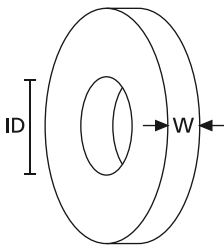
The thermal transfer print technology is based on heating up certain dots in the print head. This transfers the ink very precisely from the ribbon onto the surface of the printed material. All HellermannTyton ribbons consist of a special resin composition to maximise print performance. In combination with HellermannTyton printers the ribbons ensure the highest of print quality on all HellermannTyton thermal printable identification materials.

### Features and benefits

- Thermal transfer ribbons for high quality print results on heatshrink tubing and Tiptag identification tags
- Ribbons are specifically designed to maximize print performance for the recommended material



Ribbons for printing on Tubing and TipTags.



**ID: The standard inside core diameter is 25.4 mm.**

TYPE	Recommended Material	Colour	Width (W)	Reel Length	Article-No.
<b>TT822OUT8 110MM</b>	TCGT/TULT	Silver (SR)	110.0	300 m	556-00161
<b>TTRW 30MM</b>	TCGT/TULT(DS)	White (WH)	30.0	300 m	556-00125
<b>TTRW 60MM</b>	TCGT/TULT(DS)	White (WH)	60.0	300 m	556-00137
<b>TTDTHOUT 40MM</b>	TCGT/TULT(DS)/TLFX(DS)/TDRT(DS)/TLFD(DS)/TIPTAG	Black (BK)	40.0	300 m	556-00139
<b>TTDTHOUT 60MM</b>	TCGT/TULT(DS)/TLFX(DS)/TDRT(DS)/TLFD(DS)/TIPTAG	Black (BK)	60.0	300 m	556-00140
<b>TTDTHOUT 100MM</b>	TCGT/TULT(DS)/TLFX(DS)/TDRT(DS)/TLFD(DS)/TIPTAG	Black (BK)	100.0	300 m	556-00141
<b>TTRHTBK 70MM</b>	THTT/THTT DS/TAGHT	Black (BK)	70.0	300 m	556-00204
<b>TTRHTBK 100mm</b>	THTT/THTT DS/TAGHT	Black (BK)	100.0	300 m	556-00210
<b>TTRHTWH 70mm</b>	THTT/THTT DS/TAGHT	White (WH)	70.0	300 m	556-00209
<b>TTRHTWH 100mm</b>	THTT/THTT DS/TAGHT	White (WH)	100.0	300 m	556-00211
<b>TTRC+ 30MM</b>	TIPTAG PU/TCGT/TULT	Black (BK)	30.0	300 m	556-00114
<b>TTRC+ 60MM</b>	TIPTAG PU/TCGT/TULT	Black (BK)	60.0	300 m	556-00115
<b>TTRC+ 100MM</b>	TIPTAG PU/TCGT/TULT	Black (BK)	100.0	300 m	556-00103

All dimensions in mm. Subject to technical changes.

