

HellermannTyton

Product Catalogue

Fixing your challenges is our passion – welcome to a world of smart cable management solutions

At HellermannTyton, we rethink what's possible in cable management – and make it real with precision, sustainability and a good dose of passion.

This catalogue goes beyond trusted standard products. It's an open invitation to collaborate. Together, we can shape components that fit your needs exactly – right down to the smallest detail.

Every new development here starts with listening. From early ideas to full-scale production, we work side-by-side with design engineers and procurement teams to create smart product solutions that perform optimally in the real world.

With our new Source label, we're making another confident step towards more sustainable products – with smarter materials, reusable designs and recyclable options that reduce emissions and conserve resources to help you meet your environmental goals.

Wherever you are, our global reach and local know-how mean you get support that's fast, relevant and personal. **Stronger together – at HellermannTyton, we don't just manufacture and deliver parts, we enable you to build better, more efficient, more sustainable systems.**

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Where HellermannTyton fits in

Billions of kilometres of cables, wires, pipes and hoses connect and power the modern world. Wherever they are installed, HellermannTyton products are there to support, guide and protect them – reliably and precisely.

We're a global manufacturer and supplier of high-quality products that **fasten, route, protect, connect and identify** all the infrastructure carrying electrical power, data, signals and fluids. People use our solutions all around the globe.

With 19 advanced production facilities, development centres at 13 sites, and more than 7,000 dedicated people on the ground in 40 countries, we combine international strength with local responsiveness. Whether you need off-the-shelf parts or fully customised components, we deliver to the highest standards – efficiently and cost-effectively.

Since 1935, we've been shaping the electrotechnical sector. Our **smart cable management** innovations, made from high-performance plastics, continue to drive progress in the vehicles, machines, systems and buildings that support everyday life.

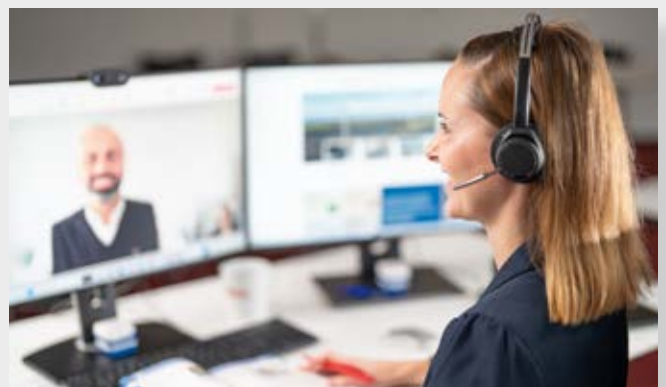


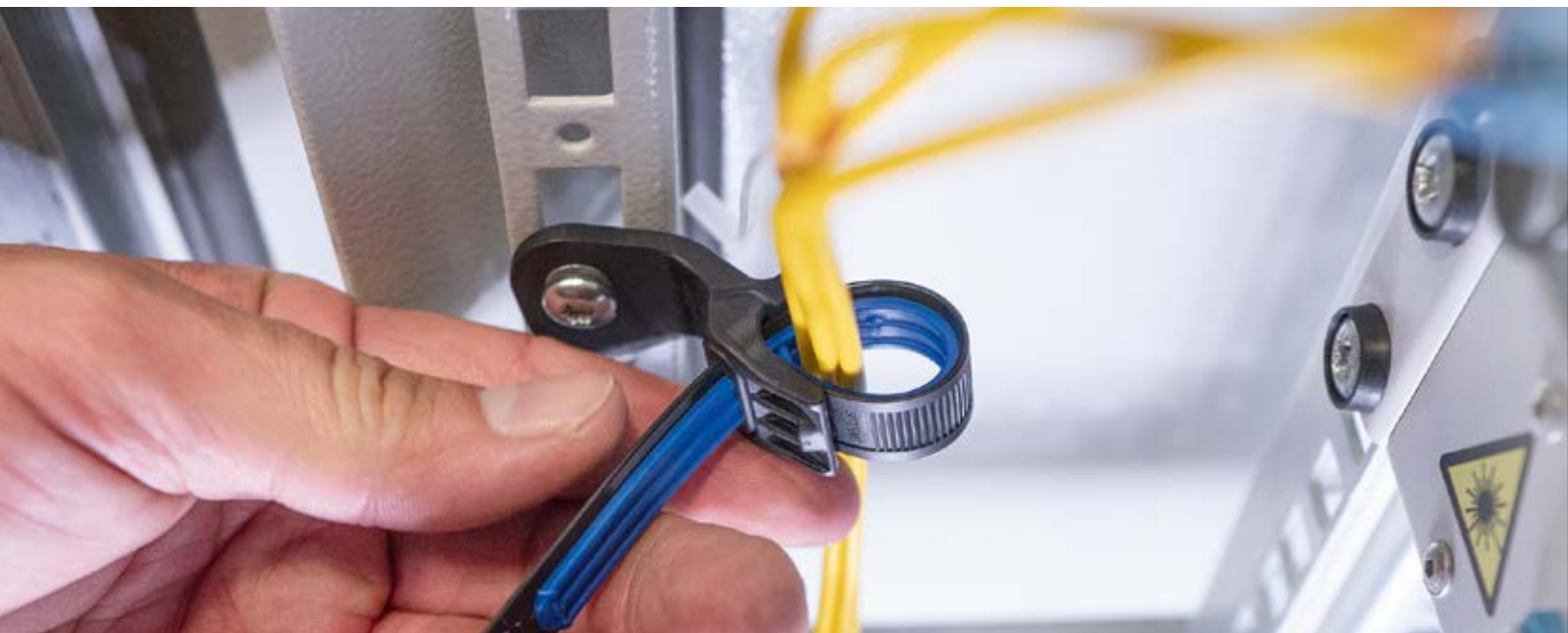
How we help you get ahead

At HellermannTyton, we work as one – from design through to delivery. This collaborative approach means you can count on **consistent quality, dependable availability and sharp focus on cost efficiency.**

Every new product we create is built on three core principles: **suitability, scalability and sustainability.** That means real benefits for you – from quicker installation and smoother workflows to long-lasting reliability and tighter cost control.

What truly sets us apart is our people. They're experienced, practical and genuinely care about finding the right solution for your challenge. Whether you need advice, a second opinion from someone who'll listen, **our local experts are there for you** – ready to recommend the right solution and support you at every step.





Designed to make the difference

You won't always see HellermannTyton products – but you'll notice the difference they make. Behind panels and under surfaces, they keep machines running, vehicles moving, and infrastructure reliable.

Backed by decades of hands-on experience, our engineering experts solve complex fastening and cable management challenges with **smart, space-saving and lightweight yet robust solutions** – built to meet real-world demands.



MADE FOR REAL[🌐]

With HellermannTyton, you're not just buying parts – you're securing the **performance, reliability, and peace of mind** our brand stands for. Whether off-the-shelf, like the products in this catalogue, or made to measure, our Made for Real promise is simple: **we strive to make the difference that matters most – for you.**



Inventiveness is in our DNA

We don't just make cable management parts – **we rethink what's possible**. Many of our most inventive products began as custom solutions that turned technical potential into practical reality. Today, they're proven standards used worldwide.

We bring ideas to life by working closely with customers and partners – challenging limits, exploring every detail and using the right materials to deliver dependable performance.

From first sketch to final product, HellermannTyton is your partner in developing application-specific components that set global benchmarks. Whether it's a modular clamp, a versatile clip or a fully automated tool, **we deliver the results that others say can't be done**.



Frame Clamp



Ratchet P-Clamp



Autotool ATS flex

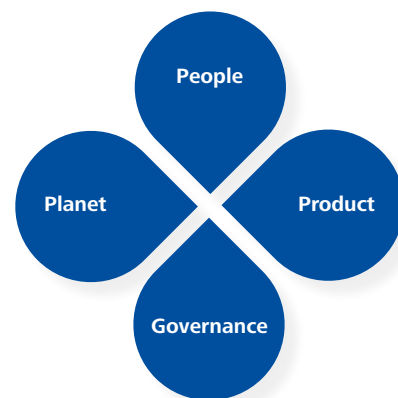


Our sustainability strategy

HellermannTyton is committed to reducing the resources we consume and minimising the environmental impact of everything we do.

Our path to carbon neutrality is guided by a company-wide sustainability strategy, **built around four key pillars: People, Planet, Product and Governance**. These principles help us act with purpose – across teams, operations and supply chains.

We actively encourage our people to drive positive change, supporting sustainability in the workplace, in our communities and across wider industry.



Let's make a greener future, together. One of our main goals is to advance sustainability through product innovation – reducing emissions by working closely with our customers, material suppliers and sales partners.



Discuss your needs with us

We're here to advise on the most suitable HellermannTyton products for your application – including those with the lowest environmental impact.

www.HellermannTyton.co.in/contact



Your sustainable product choice

Introducing **Source** – HellermannTyton’s growing range of products offering sustainable choice through the materials used or design features that promote **reusability, waste reduction or recyclability**.



reSource®

ReSource highlights HellermannTyton products that are made from recycled waste or from virgin materials with relatively lower carbon emissions.



earthSource®

EarthSource denotes HellermannTyton products made from polymers derived from abundant or renewable plant-based sources.



oceanSource®

OceanSource showcases HellermannTyton parts made out of plastic material recovered from marine environments or even aquatic plants.



bydesign

Sustainable by design focuses on product solutions that reduce waste, improve longevity or support subsequent reuse and recyclability.



Look out for this icon in the catalogue

Our Source icon identifies products that can make a sustainable difference for you.



Helping industry to progress

Every industry has its own combination of cable management challenges and standards to meet – from secure fastening under vibration, to weight-saving design or streamlined processing.

At HellermannTyton, **we understand the complexities and thrive on solving them.** Our deep industry know-how means we can deliver smart, targeted solutions where they're needed most – from one-off proof of concepts to full-scale series production, even under strict time and quality constraints.

Quality you can trust

You can rely on us to meet all relevant industry standards – and even go beyond them where experience tells us it adds real value.





Key market challenges we serve



Aerospace

High-performance thermoplastic parts designed for reliability under extreme temperatures.



Automotive

Lightweight parts to secure, guide, protect and identify harnesses, hoses, pipes, sensors and connectors.



Rail

Innovative products that speed up installation and meet the toughest fire safety standards.



Renewable energy

Efficient fastening components engineered from weather and UV resistant materials.



Appliances

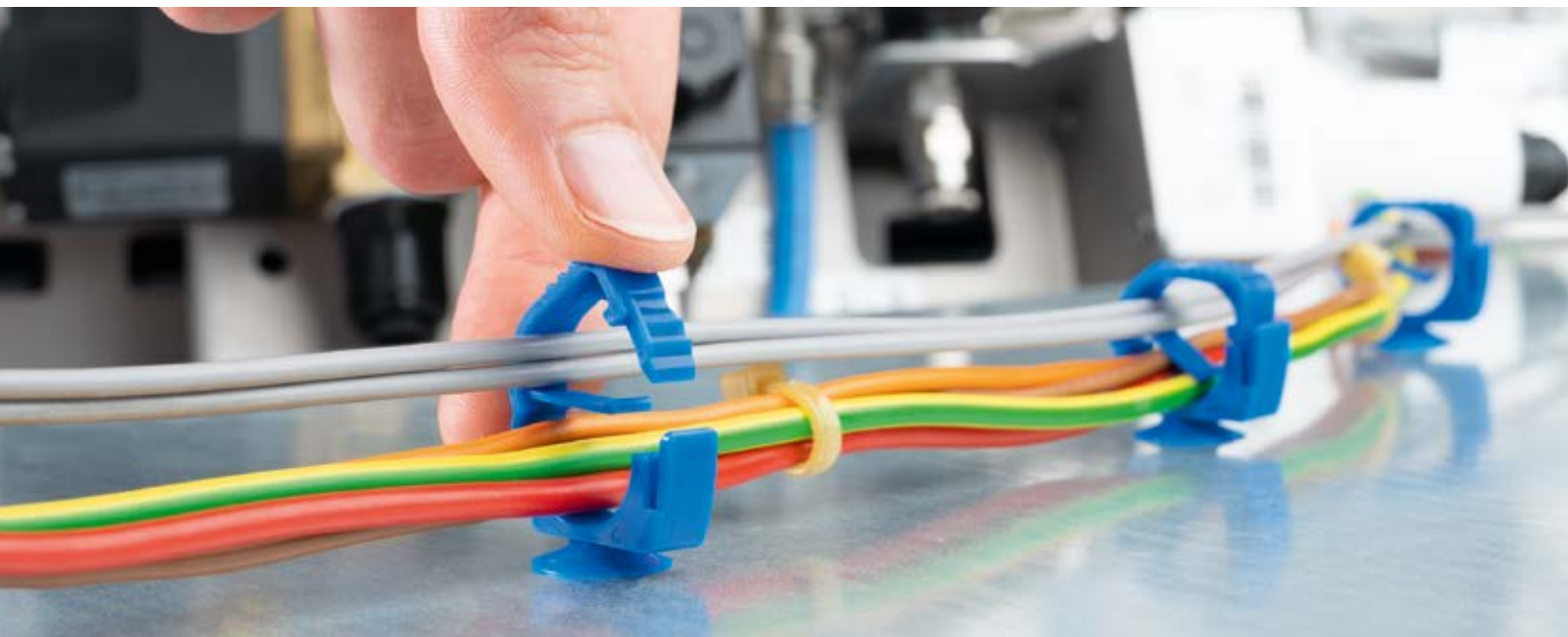
Flexible product ranges designed for smart assembly and easy maintenance across appliances.



Defence

Rugged products that shield, secure and withstand vibration, torsion and movement.

For more industry-specific product information, visit: www.HellermannTyton.co.in/markets



Smart cable management

Our standard product portfolio is anything but ordinary. Every part is engineered to deliver – **faster installation, longer service life, lower total cost of ownership**. They're not just parts – they're part of the solution to your challenges.

Cable Ties and Fixings



The S50ROS polypropylene cable tie has a lower equivalent CO₂ footprint – and protects bundles with an anti-slip design on the inside and serration on the outside.

Insulation



HIS heat shrink tubing in handy dispenser boxes – offering flexible, reliable insulation and abrasion protection in a wide range of sizes, colours and shrink ratios.

Cable Protection Systems



Twist-In-RR sleeves are flexible, lightweight and easy to retrofit – protecting cables from abrasion and the teeth of rodents in vulnerable areas.



At the right time, in the right place

With EDI-compliant systems and strong regional networks, we keep things moving – **from single boxes to large-scale shipments**, we process and deliver your orders quickly, reliably and with care.

Electrical Installation



The VarioPlate cable entry system saves space and time – with flexible inserts, strain relief and IP-rated sealing in one modular design for easy routing.

Identification Systems



TAGPU LOOP markers are easy to preprint and apply in one simple step – delivering fast, durable, UV stable cable labelling indoors and outside, without any cable ties.

Application Tooling



The CPK hybrid cable tie tool delivers full flexibility – running on mains power or on rechargeable battery for efficient automated cable tying across locations (page 310).



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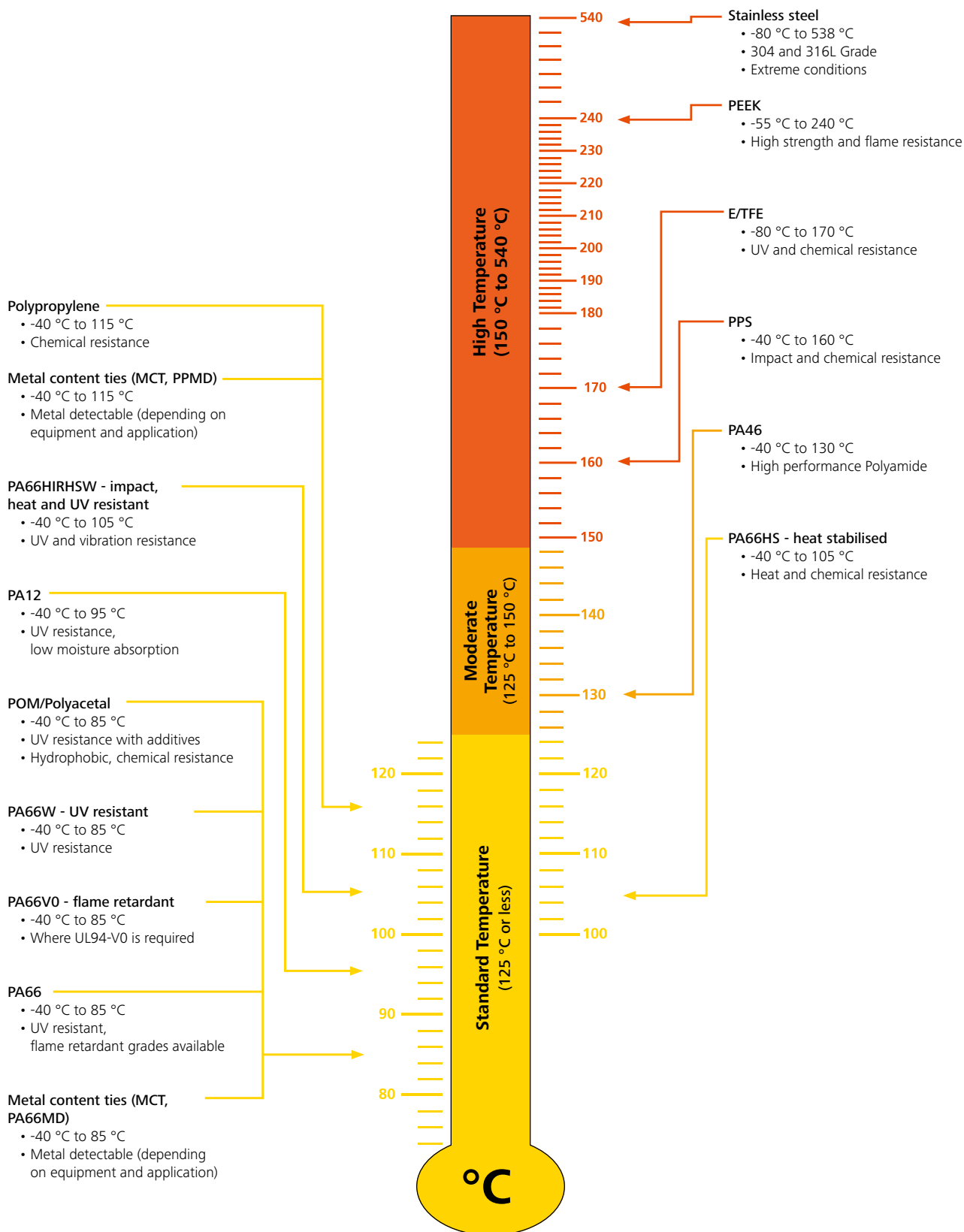


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Operating temperature ranges of cable tie materials

This Material Selection Guide illustrates the minimum and maximum operating temperatures for cable ties according to the material from which we manufacture them. It gives an overview of materials HellermannTyton uses to manufacture cable ties. Please contact our sales team to check availability of products in your preferred material.



Introduction to the main locking technologies used for cable ties

HellermannTyton offers a wide range of cable ties for use in different applications. By constantly refining our products and satisfying the ever-changing demands of the market, various locking technologies have been developed. Below you will find a brief overview of three most common locking technologies and their characteristics.

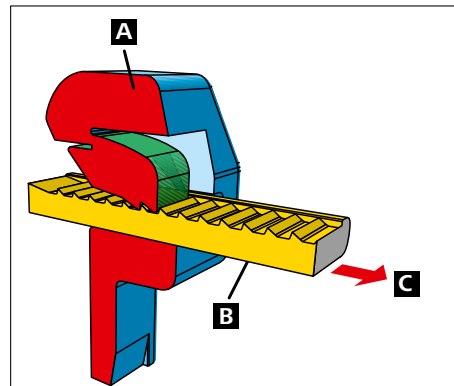
Cable ties with plastic pawls

This technology is used in 90 % of all polyamide (PA) cable ties applied by HellermannTyton. In order to cover a variety of applications, there are different variants of this system, for example: releasable versions, in-line versions, open head versions.

These are one-piece cable ties, the pawl is moulded as an integral part of the cable tie, thereby building in inherent strengths.

Locking technology

Positive locking is achieved by engaging the pawl with the strap serrations. This allows the cable tie to perform to the published minimum tensile strength, that is the loading that the cable tie can hold under application.



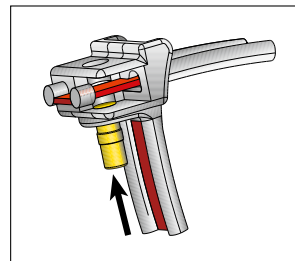
Locking technology of an outside serrated tie. A: Cable tie head B: Cable tie C: Direction of thread

KR series cable ties

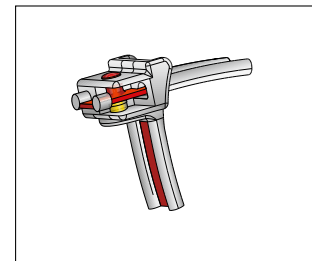
This cable tie is distinguished by its smooth strap and unique locking mechanism. With the KR series the chamfered head achieves an especially firm fit around the bundled material.

Locking technology

This locking technology takes advantage of the excellent deformation properties of polyamide (PA). Here, the glass fibre-reinforced locking pin (yellow) is forced into the strap by the use of an application tool - either the KR6/8 or KR8PNSE. The strap is deformed into the head of the tie by the application of the pin, thereby locking the cable tie in position and allowing the bundling of heavy loads.



The unlocked head (yellow) of a KR-tie.



The cable tie (red) is locked into place with the pin.

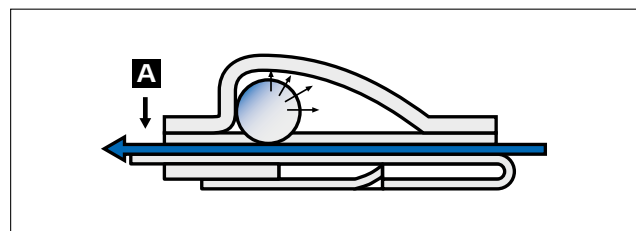
MBT series cable ties

Made of stainless steel grade 304 or 316L, the MBT range of cable ties has no serrations on the strap and is threaded parallel through the head, gliding under a metal ball-bearing locking mechanism. By using an appropriate application tool like our MK9SST the cable tie is easily and quickly tensioned, with the strap cut to a flush finish.

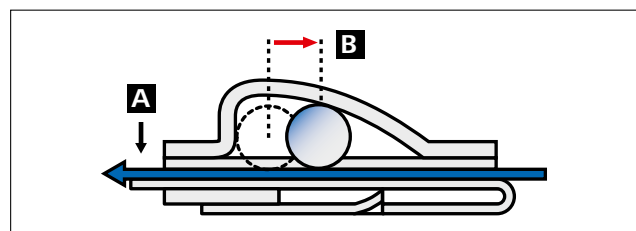
Locking technology

The strap is locked into the head via a ball bearing. The ball locks into the small end of the wedged shaped housing, forming a positive lock with strap.

For rigid objects such as metal pipes, we would recommend our protective channelling (LFPC) to be laid between the bundled object and tie strap. This not only provides protection against galvanic corrosion, but also ensures a better engagement with the bundle. The MBT locking technology keep the minimum tensile strength of up to 7,000 Newtons and standard strap lengths of up to 1.5 m.



1. Initial position, ball bearing moves freely. A: Cable tie (inserting)



2. Ball rebounds and wedges tie in place. A: Cable tie (tightening) B: Ball (wedged)

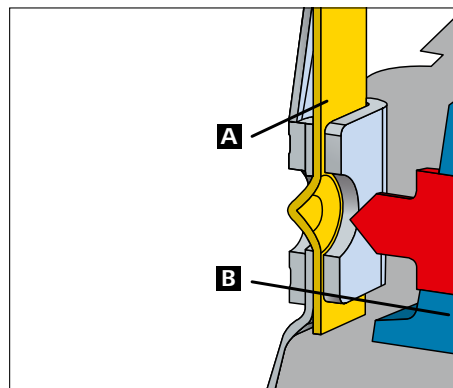
Introduction to the main locking technologies used for cable ties

MST series cable ties

MST cable ties are made of stainless steel 304. They offer similar features to MBT products but with a different head design and closure. Where space is tight the flat head allows for space savings. MST cable ties are not only weather-resistant but also highly resistant to heat, fire, and radiation. It can be used in challenging environments including indoor, outdoor and underground installations.

Locking technology

The punch-locking mechanism keeps the lock tight even in challenging areas with very high vibration such as on trains. Our MST application tools (MST6/MST9) have been specifically developed for tightening and cutting MST cable ties. This tool is mandatory to apply and lock these stainless steel cable ties properly.



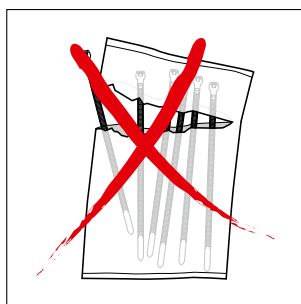
Punch-locking mechanism of the MST-Series. A: Cable tie
B: Application tool

Optimum storage conditions for cable ties made of Polyamide (PA)

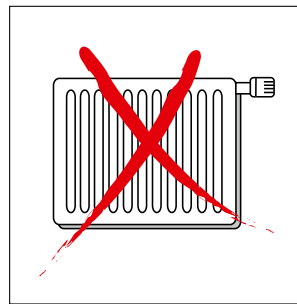
HellermannTyton cable ties, fastenings and fixings are manufactured from high-quality polyamide (PA). This industrial synthetic material is mainly processed using injection moulding, but can also be extruded. Polyamide is a hygroscopic material. This means that the material absorbs and loses moisture. For optimum handling of cable ties it is

important that the material is in a condition of equilibrium with a water content of approximately 2.5 %.

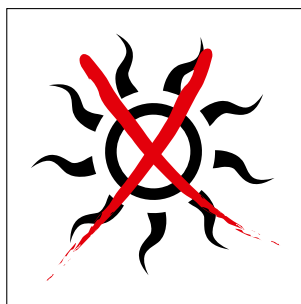
The packaging used by HellermannTyton ensures that the water content in the material remains constant. Therefore, it is important to store the products in their original packaging to preserve the quality of the ties.



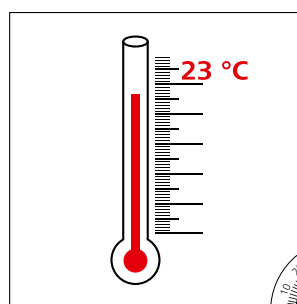
1. Once opened you should use the ties as quickly as possible.
2. Always store ties in the sealed plastic bag.



5. Store the product away from direct sources of heat.
6. Avoid contact with heat: for example, do not place on the radiators.

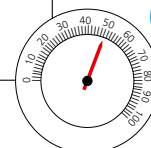


3. Do not expose the product to direct sunlight.
4. Do not store the product in sunlight; for example, on the windowsill.

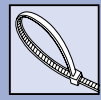


7. The ideal storage conditions are those of the central European standard climate:
23 °C

50%



50% relative humidity



Cable ties polyamide 6.6 standard

T-Series in PA66 natural and black

T-Series cable ties for bundling and securing of cables, pipes and hoses. These cable ties can be used for nearly all kind of applications.

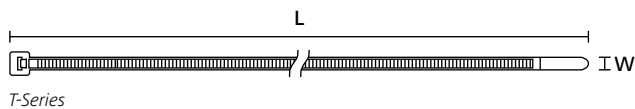
Features and benefits

- Available in a wide range of materials and sizes
- High tensile strength with very low insertion force
- Only high quality plastic is used meeting recycling targets
- Inside serrated cable ties for a strong hold onto bundles
- Ergonomic bent tail offers quick and simple installation
- Easy application either manually or with an application tool



Standard T-Series cable ties – for almost any type of application.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
T18S-PA66-NA	2.3	83.0	16.0	80	1000 pcs.	2,4-5;25	111-02809
T18R-PA66-NA	2.5	100.0	22.0	80	1000 pcs.	2,4-5;25	111-01929
T18R-PA66-BK	2.5	100.0	22.0	80	1000 pcs.	2,4-5;25	111-01980
T18I-PA66-NA	2.5	145.0	35.0	80	1000 pcs.	2,4-5;25	111-02320
T18L-PA66-BK	2.5	203.2	55.0	80	100 pcs.	2,4-5;25	111-02010
T30R-PA66-BK	3.5	150.0	35.0	135	100 pcs.	2,4-5;25	111-03210
T30R-PA66-NA	3.5	150.0	35.0	135	100 pcs.	2,4-5;25	111-03219
T30L-PA66-NA	3.5	198.0	50.0	135	100 pcs.	2,4-5;25	111-00946
T30L-PA66-BK	3.5	198.0	50.0	135	100 pcs.	2,4-5;25	111-00945
T30LL-PA66-NA	3.5	290.0	80.0	135	100 pcs.	2,4-5;25	111-03549
T30LL-PA66-BK	3.5	290.0	80.0	135	100 pcs.	2,4-5;25	111-00982
T40L-PA66-BK	4.0	370.0	105.0	180	100 pcs.	2,4-5;25	111-04301
T50R-PA66-NA	4.6	200.0	50.0	225	100 pcs.	2,4-7;9;25	111-48190
T50I-PA66-NA	4.6	305.0	80.0	225	100 pcs.	2,4-7;9;25	111-00951
T50I-PA66-BK	4.6	305.0	80.0	225	100 pcs.	2,4-7;9;25	111-00950
T50L-PA66-NA	4.6	390.0	110.0	225	100 pcs.	2,4-7;9;25	111-05619
T50L-PA66-BK	4.6	390.0	110.0	225	100 pcs.	2,4-7;9;25	111-00985
T120I-PA66-BK	7.6	300.0	80.0	535	100 pcs.	3;6-7;9-10;25	111-00958
T120I-PA66-NA	7.6	301.6	75.0	535	50 pcs.	3;6-7;9-10;25	111-00926
T150R-PA66-BK	7.6	365.0	100.0	670	100 pcs.	3;6-7;9-10;25	111-14810
T150R-PA66-NA	7.6	365.0	100.0	670	100 pcs.	3;6-7;9-10;25	111-14819
T120R-PA66-BK	7.6	381.0	100.0	535	50 pcs.	3;6-7;9-10;25	111-00823
T120XM-PA66-BK	7.6	600.0	175.0	535	50 pcs.	3;6-7;9-10;25	111-12701

Recommended Tools: 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes. Other combinations between cable tie and foot part available on request.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable Ties and Fixings

Cable ties, inside serrated

Cable ties polyamide 6.6 standard

T-Series in PA66 natural and black



T-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
T120L-PA66-NA	7.6	760.0	225.0	535	50 pcs.	3;6-7;9-10;25	111-12429

Recommended Tools: 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes. Other combinations between cable tie and foot part available on request.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

Cable ties polyamide 6.6 standard

T-Series in PA66 coloured

Coloured T-Series cable ties are ideally suited for marking purposes. They can be used to secure and/or identify different kinds of bundles at the same time.

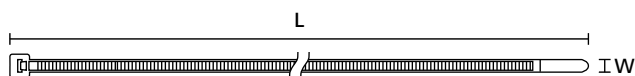
Features and benefits

- Available in a wide range of colours and sizes
- Strong cable tie to permanently mark or identify bundles
- Easy application either manually or with a processing tool
- Coloured T-Series cable ties provide an inside serration



T-Series cable ties – ideally suited for colour coding.

Material specifications: See Article-No. on our website.



T-Series

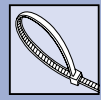
PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
T18R-PA66-OG	2.5	101.6	22.0	80	100 pcs.	2;4-5;25	111-02075
T30R-PA66-RD	3.5	152.0	36.0	135	100 pcs.	2;4-5;25	111-00697
T50R-PA66-YE	4.6	200.0	50.0	225	100 pcs.	2;4-7;9;25	111-04805
T50R-PA66-OG	4.6	200.0	50.0	225	100 pcs.	2;4-7;9;25	111-04803

Recommended Tools: 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable ties for outdoor use (UV-resistant)

T-Series in PA66W/UV black

These inside serrated cable ties are made of UV-resistant Polyamide 6.6 (PA66W) and thus suitable for outdoor applications. UV stabilised cable ties resist UV radiation for a considerably longer period compared to standard PA66 cable ties. They can easily be used for bundling and securing cables, pipes and hoses especially in outdoor areas.

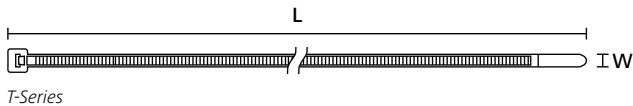
Features and benefits

- UV-resistant black cable tie available in a wide range of sizes
- Made from 100 % high quality plastic, allows for good recycling
- Inside serration for a strong hold onto bundles
- Easy application either manually or with a processing tool
- Simple to insert due to bent tail



UV-resistant T-Series cable ties (PA66W/UV).

Material specifications: See Article-No. on our website.



T-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
T18R-PA66W-BK	2.5	100.0	22.0	80	100 pcs.	2;4-5;25	111-01960
T18I-PA66W-BK	2.5	139.7	35.0	80	100 pcs.	2;4-5;25	111-01972
T18L-PA66W-BK	2.5	205.0	50.0	80	100 pcs.	2;4-5;25	111-02160
	2.5	205.0	50.0	80	100 pcs.	2;4-5;25	111-01973
T30R-PA66W-BK	3.5	150.0	35.0	135	100 pcs.	2;4-5;25	111-03260
	3.5	150.0	35.0	135	100 pcs.	2;4-5;25	111-01974
	3.5	150.0	35.0	135	100 pcs.	2;4-5;25	111-03113
T30L-PA66W-BK	3.5	198.0	50.0	135	100 pcs.	2;4-5;25	111-00947
T50R-PA66W-BK	4.6	200.0	50.0	225	100 pcs.	2;4-7;9;25	111-05031
	4.6	200.0	50.0	225	1000 pcs.	2;4-7;9;25	111-00984
T50I-PA66W-BK	4.6	300.0	85.0	225	100 pcs.	2;4-7;9;25	111-01975
	4.6	305.0	80.0	225	100 pcs.	2;4-7;9;25	111-00952
T50L-PA66W-BK	4.6	390.0	110.0	225	100 pcs.	2;4-7;9;25	111-05440
T120S-PA66W-BK	7.6	225.0	55.0	535	50 pcs.	3;6-7;9-10;25	111-12860
T120I-PA66W-BK	7.6	300.0	80.0	535	100 pcs.	3;6-7;9-10;25	111-12160
T150R(H)-PA66W-BK	7.6	365.0	100.0	670	100 pcs.	3;6-7;9-10;25	111-14860
T120L-PA66W-BK	7.6	760.0	225.0	535	50 pcs.	3;6-7;9-10;25	111-12430
T150L-PA66W-BK	8.9	820.0	245.0	780	25 pcs.	6-7;9-10	111-15460

Recommended Tools: 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

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

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EPD

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Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable ties for temperatures up to + 105°C (heat stabilised)

T-Series in PA66HS natural and black

These inside serrated cable ties are made from heat stabilised Polyamide 6.6 (PA66HS). They can be applied in environments with continuous temperatures up to +105 °C. T-Series cable ties can be easily installed by hand or using an application tool to ensure consistency of installation.

Features and benefits

- Heat stabilised cable ties (PA66HS) for temperatures up to +105 °C
- Available in a wide range of sizes to cover almost every application
- Inside serration provides a strong hold onto bundles
- Manual and/or pneumatic tools available for greater process reliability
- Commonly offered in natural and black, other colours available on request



Heat stabilised T-Series cable ties up to +105 °C.

Material specifications: See Article-No. on our website.



T-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
T18R-PA66HS-NA	2.5	100.0	22.0	80	100 pcs.	2;4-5;25	111-01959
T18R-PA66HS-BK	2.5	100.0	22.0	80	1000 pcs.	2;4-5;25	111-01940
T18I-PA66HS-BK	2.5	145.0	35.0	80	100 pcs.	2;4-5;25	111-02358
T18I-PA66HS-NA	2.5	145.0	35.0	80	1000 pcs.	2;4-5;25	111-02359
T18L-PA66HS-NA	2.5	205.0	50.0	80	100 pcs.	2;4-5;25	111-02159
T25LL-PA66HS-NA	2.8	330.0	95.0	110	100 pcs.	2;4-5;25	111-02602
T30R-PA66HS-NA	3.5	150.0	35.0	135	100 pcs.	2;4-5;25	111-03259
T30R-PA66HS-BK	3.5	150.0	35.0	135	100 pcs.	2;4-5;25	111-03250
T30L-PA66HS-NA	3.5	198.0	50.0	135	100 pcs.	2;4-5;25	111-03459
T40R-PA66HS-BK	4.0	175.0	40.0	180	100 pcs.	2;4-5;25	111-03970
T50R-PA66HS-BK	4.6	200.0	50.0	225	100 pcs.	2;4-7;9;25	111-02466
T50R-PA66HS-NA	4.6	200.0	50.0	225	100 pcs.	2;4-7;9;25	111-05034
	4.6	200.0	50.0	225	100 pcs.	2;4-7;9;25	111-05035
	4.6	202.0	50.0	225	100 pcs.	2;4-7;9;25	111-04855
T50I-PA66HS-BK	4.6	305.0	80.0	225	100 pcs.	2;4-7;9;25	111-05250
T50L-PA66HS-NA	4.6	390.0	110.0	225	100 pcs.	2;4-7;9;25	111-05655
T120I-PA66HS-NA	7.6	300.0	80.0	535	100 pcs.	3;6-7;9-10;25	111-00959
T150R(H)-PA66HS-NA	7.6	365.0	100.0	670	100 pcs.	3;6-7;9-10;25	111-15069
T150R(H)-PA66HS-BK	7.6	365.0	100.0	670	100 pcs.	3;6-7;9-10;25	111-15050
T120R-PA66HS-BK	7.6	387.0	105.0	535	500 pcs.	3;6-7;9-10;25	111-12058
T120M-PA66HS-BK	7.6	460.0	125.0	535	100 pcs.	3;6-7;9-10;25	111-00153
T120L-PA66HS-BK	7.6	760.0	225.0	535	50 pcs.	3;6-7;9-10;25	111-12440
T150L-PA66HSUV-BK	8.8	820.0	245.0	780	50 pcs.	6-7;9-10	111-01688

Recommended Tools: 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable ties for temperatures up to + 105°C (heat stabilised)

T-Series in PA66HS natural and black

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.		Pack Cont.	Tools	Article-No.
T150M-PA66HS-BK	8.9	530.0	150.0	780	25 pcs.	6-7;9-10	111-15609
T150XL-PA66HS-BK	8.9	1095.0	330.0	780	25 pcs.	6-7;9-10	111-15510

Recommended Tools: 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable Ties inside serrated

T-Series in PA66HIRHS

T-Series cable ties for bundling and securing of cables, pipes and hoses. These cable ties can be used for nearly all kind of applications.

Features and benefits

- Available in a wide range of materials and sizes
- High tensile strength with very low insertion force
- Only high quality plastic is used meeting recycling targets
- Inside serrated cable ties for a strong hold onto bundles
- Ergonomic bent tail offers quick and simple installation
- Easy application either manually or with an application tool



The Allrounder: T-Series cable ties can be used for almost any type of application.

Material specifications: See Article-No. on our website.

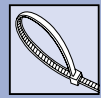


T-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.		Pack Cont.	Tools	Article-No.
T50R-PA66HIRHS-BK	4.6	200.0	50.0	225	100 pcs.	2;4-7;9;25	111-02469

Recommended Tools: 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

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 for outdoor use at higher temperatures

T-Series in PA66HSW

T-Series cable ties for bundling and securing of cables, pipes and hoses. These cable ties can be used for nearly all kind of applications.

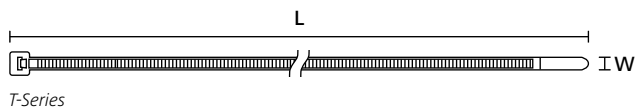
Features and benefits

- Available in a wide range of materials and sizes
- High tensile strength with very low insertion force
- Only high quality plastic is used meeting recycling targets
- Inside serrated cable ties for a strong hold onto bundles
- Ergonomic bent tail offers quick and simple installation
- Easy application either manually or with an application tool



Heat stabilised T-Series cable ties up to +105 °C.

Material specifications: See Article-No. on our website.



T-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
T18R-PA66HSW-BK	2.5	101.6	22.0	80	1000 pcs.	2;4-5;25	111-01199
T30R-PA66HSW-BK	3.5	150.0	35.0	135	100 pcs.	2;4-5;25	111-01211
T50R-PA66HSW-BK	4.6	202.0	50.0	225	100 pcs.	2;4-7;9;25	111-01278
T50I-PA66HSW-BK	4.6	305.0	80.0	225	100 pcs.	2;4-7;9;25	111-00954
T50L-PA66HSW-BK	4.6	390.0	110.0	225	100 pcs.	2;4-7;9;25	111-01226
T150R(H)-PA66HSW-BK	7.6	365.0	100.0	780	100 pcs.	3;6-7;9-10;25	111-15005

Recommended Tools: 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable ties for higher fire-protection

T-Series in PA66V0 white

T-Series cable ties for bundling and securing cables, pipes and hoses. These cable ties can be used for almost any type of application especially where safety regulations are high and the reduction of smoke and dangerous gases is required. PA66V0 products are most critically used within public sector areas – particularly in the rail, construction and defence industry.

Features and benefits

- White cable tie for higher fire-protection
- Conform to low smoke generation requirements (UL94 V0)
- Low evolution of toxic gases and corrosive acids in event of a fire
- PA66V0 cable ties are available in different sizes
- High safety rating due to low fire hazard



Flame retardant cable tie made from PA66V0 material.

Material specifications: See Article-No. on our website.



T-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
T18R-PA66V0-NA	2.5	100.0	22.0	80	1000 pcs.	2;4-5;25	111-00961
T30R-PA66V0-NA	3.5	150.0	35.0	135	100 pcs.	2;4-5;25	111-00980
T50R-PA66V0-WH	4.6	200.0	50.0	225	100 pcs.	2;4-7;9;25	111-95019
T50R-PA66V0-BK	4.6	200.0	50.0	225	100 pcs.	2;4-7;9;25	111-05037
T50L-PA66V0-WH	4.6	390.0	110.0	225	100 pcs.	2;4-7;9;25	111-00904

Recommended Tools: 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

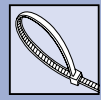
All dimensions in mm. Subject to technical changes. Minimum Order Quantity (MOQ) may differ from package content. Other packaging options may also be available.

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Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable ties for temperatures up to +150 °C (5000 h) in polyamide 4.6

T-Series in PA46 natural and grey

These inside serrated cable ties are made from Polyamide 4.6 (PA46). They can be applied in environments with temperatures up to +195 °C (for 500 hours) which makes them suitable for applications where a broader temperature range is required. Polyamide 4.6 is a well known material in the automotive, railway or white goods area. An application tool is recommended to ensure greater process reliability while installing cable ties.

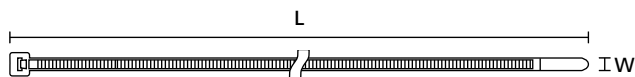
Features and benefits

- Cable tie for high temperature applications up to +150 °C (5000 h) and +195 °C (500 h)
- Available in different sizes to cover various bundle diameters
- Low smoke generation in the event of a fire
- PA46 is a moisture sensitive material
- Inside serrated cable tie offers strong hold around bundles
- Easy application either manually or with an application tool



T-Series cable ties – higher temperature resistance up to +150 °C for 5000 hours (PA46).

Material specifications: See Article-No. on our website.



T-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
T18R-PA46-NA	2.5	100.0	22.0	80	1000 pcs.	2;4-5;25	111-00960
T30R-PA46-NA	3.5	150.0	35.0	135	100 pcs.	2;4-5;25	114-03079
T30R-PA46-GY	3.5	150.0	35.0	135	100 pcs.	2;4-5;25	111-00968
T50R-PA46-GY	4.6	200.0	50.0	225	100 pcs.	2;4-7;9;25	111-05024
T50R-PA46-NA	4.6	202.0	50.0	225	100 pcs.	2;4-7;9;25	111-00525
T50R-PA46-GY	4.6	202.0	50.0	225	100 pcs.	2;4-7;9;25	111-00824
T50I-PA46-GY	4.6	300.0	85.0	225	100 pcs.	2;4-7;9;25	111-01472

Recommended Tools: 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable ties for higher chemical resistance and temperatures of -80° to +170 °C

T-Series in E/TFE (Tefzel®) blue

E/TFE or Tefzel® cable ties are used when higher chemical resistance and/or temperatures up to +170 °C are required. These ties are most likely chosen for challenging applications in industries like food and beverage, aerospace, automotive or railway.

Features and benefits

- Blue cable tie offering high chemical resistance
- Suitable for applications with temperatures of -80° to +170 °C
- Resistant to radioactivity and UV light
- E/TFE is a non hydroscopic material, no moisture absorption
- Complying with UL94 V0 requirements



T-Series E/TFE cable ties – for higher chemical resistance up to +170 °C.

Material specifications: See Article-No. on our website.



T-Series

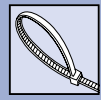
PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.		Pack Cont.	Tools	Article-No.
T18R-E/TFE-BU	2.5	100.0	22.0	80	100 pcs.	2;5	111-00659
T30R-E/TFE-BU	3.5	150.0	36.0	133	100 pcs.	2;4-5;25	111-00698
T50R-E/TFE-BU	4.7	202.0	50.0	222	100 pcs.	2;4-7;9;25	111-00732
T50L-E/TFE-BU	4.7	381.0	105.0	225	100 pcs.	2;4-7;9;25	111-00718

Recommended Tools: 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable ties in-between size to T-Series

LK-Series

For bundling and securing cables, pipes, hoses and other elements. These cable ties can be used for a countless number of applications. The LK-Series is similar to T-Series but offers in-between sizes to fit individual customer needs.

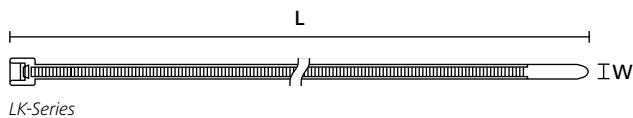
Features and benefits

- Inside serrated cable ties for a strong hold around bundles
- Various materials and sizes are available
- High tensile strength with very low insertion force
- Easy application either manually or with an application tool



LK-Series – in-between size to T-Series.

Material specifications: See Article-No. on our website.



LK-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
LK2A-PA66HIR-BK	4.6	270.0	73.0	225	500 pcs.	2;4-5;25	111-00118
LK5-PA66-BK	13.2	535.0	150.0	1115	50 pcs.	3;6-7;9-10;25	111-60510
LK5-PA66W-BK	13.2	535.0	150.0	1115	50 pcs.	3;6-7;9-10;25	111-60560

Recommended Tools: 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



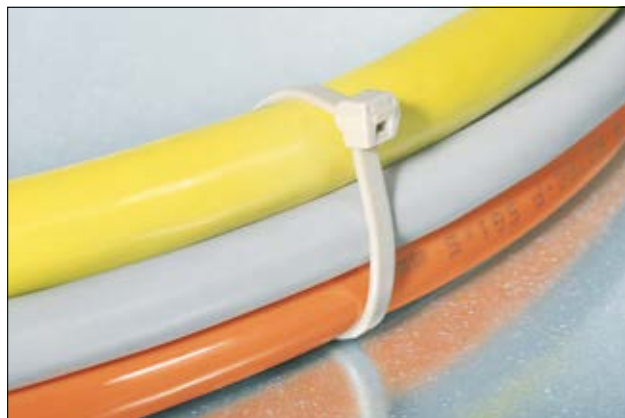
Cable ties for high temperature applications up to +240 °C

PEEK Ties, inside serrated

PEEK Ties have been designed for use in hazardous environments. Their suitability for high temperature applications makes them ideal for use in the drilling industry, railway, offshore or automotive industry. The excellent chemical and radium ray resistance is predestined for applications in medical engineering, chemical industry and power stations. Within the aerospace industry, PEEK ties are suitable due to their good ratio weight to tensile strength. Because of this combination of different properties, PEEK ties can replace metal solutions.

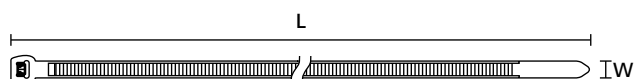
Features and benefits

- For high temperature applications from -55 °C up to +240 °C
- Close fit to the cable bundle due to the deepening head shape
- Easy insertion combined with high tensile strength
- Takes up less space due to curved head design
- Combines the performance of a metal tie with the ease of use of a polyamide cable tie
- Manual and/or pneumatic tools available for greater process reliability



The PEEK cable tie PT220 for high temperature applications.

Material specifications: See Article-No. on our website.



PEEK-Series

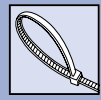
PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.		Pack Cont.	Tools	Article-No.
PT220-PEEK-BGE	4.7	220.0	8.0	56.0	380	100 pcs.	1-2;4-5;25	111-01235

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



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Cable ties for parallel routing

DH-Series

Double loop head ties are ideal for separation of two cable runs without the need for additional cable ties. Additionally these ties are widely used within the packaging industry. The first loop closes and secures the bag whilst the second loop can be made into a carrying handle (subject to weight).

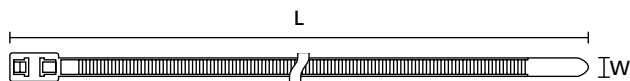
Features and benefits

- Possibility to separate bundles with only one cable tie
- Cable tie with two heads creating an inside and outside serrated loop
- Available in a wide range of materials
- Bundles can be of different diameter
- Maximum bundle diameter is a maximum combined bundle
- Easy application either manually or with a processing tool

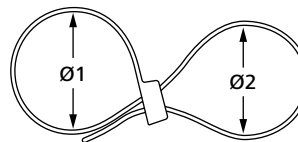


DH-Series cable ties for parallel routing.

Material specifications: See Article-No. on our website.



DH-Series



DH-Series maximum combined bundle diameter

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Min. Tensile Strength 2nd loop	Pack Cont.	Tools	Article-No.
T50RDH-PA66-BK	4.7	210.0	38.0	225	180 N	100 pcs.	2;4-7;9;25	117-05000
T50RDH-PA66HS-BK	4.7	210.0	38.0	225	180 N	100 pcs.	2;4-7;9;25	117-05050
T50IDH-PA66HS-BK	4.7	305.0	76.2	225	180 N	1000 pcs.	2;4-7;9;25	117-05350
T50LDH-PA66HS-BK	4.7	395.0	100.0	225	180 N	100 pcs.	2;4-7;9;25	117-00008
T50LDH-PA66-BK	4.7	395.0	101.6	225	180 N	100 pcs.	2;4-7;9;25	117-05400
T120RDH-PA66-BK	7.6	398.0	101.6	534	535 N	50 pcs.	3;6-7;9-10;25	117-05501

Recommended Tools: 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

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



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Cable Ties and Fixings

Cable ties, inside serrated

Cable ties for food industry, detectable

MCT-Series

The Metal Content Tie is a cable tie specifically designed for use in the food and pharmaceutical processing industries. A unique manufacturing process, involving the inclusion of a metallic pigment, enables even small 'cut-off' sections of the tie to be detected by standard metal-detecting equipment. Ideally suited for the installation of cabling in and around the manufacturing process.

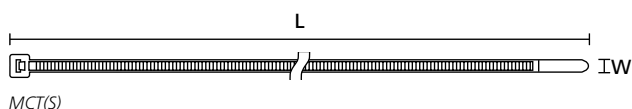
Features and benefits

- Total metal dispersion throughout the tie
- Can support quality assurance in the production of food stuffs, for example HACCP
- Blue colour for easy visual detection
- Greatly reduces risk of contamination
- Metal detectable (detection level depending on specific application and equipment)



Our detectable MCT(S) cable ties are used in the food and pharmaceutical industry.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
MCT18R-PA66MD-BU	2.5	100.0	22.0	80	100 pcs.	2;4-5;25	111-01225
MCT30R-PA66MD-BU	3.5	150.0	35.0	135	100 pcs.	2;4-5;25	111-00829
MCT50R-PA66MD-BU	4.6	203.2	50.0	225	100 pcs.	2;4-5;25	111-00830
MCT50L-PA66MD-BU	4.7	380.0	110.0	225	100 pcs.	2;4-5;25	111-00831

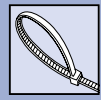
Recommended Tools: 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



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Cable ties for hose and convoluted tubing

WS-Series for heavy duty applications

The very flexible wide-strap cable tie is used in heavy-duty applications where limited room is offered for the application. It is therefore a valued product in all areas of mass transit, as well as the construction and automotive industries.

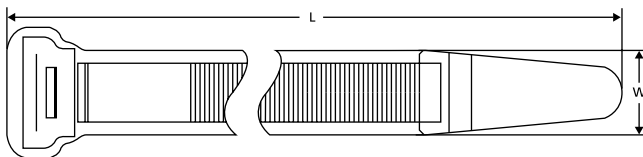
Features and benefits

- Wide strap is designed to minimize pinching of soft hoses and convoluted tubing
- Low profile head
- Clamping rails on the bottom of head to increase grip on round bundles
- Accommodates a large range of bundle diameters: 9.5mm - 104.7mm
- Flexible strap
- Bent tip for quick insertion into mounts



The wide strap cable tie accommodates a large range of bundle diameters: 9,5mm - 104mm.

Material specifications: See Article-No. on our website.



Wide Strap Heavy Duty Cable Ties

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
WSI-PA66HIRHSUV-BK	12.7	307.0	82.5	535	300 pcs.	6-7;9-10	111-12301

Recommended Tools: 7=EVO9i, 9=EVO9iHT, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 308.

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 inside serrated

AB-Series

AB-Series cable ties for bundling and securing of cables, pipes and hoses. These cable ties can be used for nearly all kind of applications.

Features and benefits

- Made of Polyamide 6.6 (PA66), heat and UV-resistance
- For High Temperature and indoor/outdoor use
- Available in a wide range of materials and sizes
- High tensile strength with very low insertion force
- Only high quality plastic is used meeting recycling targets
- Inside serrated cable ties for a strong hold onto bundles
- Ergonomic bent tail offers quick and simple installation
- Easy application either manually or with an application tool



Material specifications: See Article-No. on our website.

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.		Pack Cont.	Tools	Article-No.
AB100-PA66HSW-BGE	2.5	100.0	22.0	80	100 pcs.	2;4-5	111-00775
AB350-PA66HSW-BGE	7.6	382.0	100.0	535	50 pcs.	1;3;5;10	111-00780

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 308.

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 for high temperature applications up to +150 °C

Dynalok

Dynalock have been designed for the use in hazardous environment. Its suitability for high temperature applications makes it useful for the drilling industry, railway, offshore or automotive industry. The excellent chemical and radium ray resistance is predestined for applications in medical engineering, chemical industry and power stations.

Features and benefits

- For high temperature application from -40° C up to +150° C
- Close-fitting to the cable bundle due to the deepening head shape
- Easy insertion combined with high tensile strength
- Easy application either manually or with a processing tool



Material specifications: See Article-No. on our website.

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.		Pack Cont.	Tools	Article-No.
DL220-PA9THS-BK	4.7	220.0	50.0	350	100 pcs.	2;4-5;25	111-01716

Recommended Tools: 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

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 for thin-walled bundles

OS-Series

OS-Series cable ties are used in many areas where thin-walled or soft insulation wires and cable are being installed, for instance automotive and electrical industry.

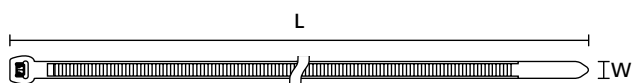
Features and benefits

- Outside serrated cable tie with smooth surface to the bundle
- Tie follows the contours of the cable bundle perfectly
- Takes up less space due to curved head design
- Easy insertion combined with high tensile strength
- PA46 material for higher temperatures up to +195 °C (500 h)
- PA66V0 cable ties fulfill Limited Fire Hazard requirements
- Easy application either manually or with a processing tool



Outside serrated OS-Series cable tie with smooth surface to the bundle.

Material specifications: See Article-No. on our website.



OS-Series



The curved head design of the OS-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
T18ROS-PA66HS-NA	2.5	100.0	20.0	80	200 pcs.	1-2;4-5;25	118-00034
T18ROS-PA66HS-BK	2.5	100.0	20.0	80	1000 pcs.	1-2;4-5;25	118-04703
T30ROS-PA66HS-BK	3.4	148.0	35.0	135	500 pcs.	1-2;4-5;25	118-00254
T30LOS-PA66HS-NA	3.4	200.0	50.0	135	100 pcs.	1-2;4-5;25	118-00044
T30LOS-PA66HS-BK	3.4	200.0	50.0	135	100 pcs.	1-2;4-5;25	118-04900
T50SOS-PA66HS-BK	4.6	150.0	35.0	225	500 pcs.	1-2;4-7;25	118-00099
	4.6	150.0	35.0	225	1000 pcs.	1-2;4-7;25	118-00119
T50ROS-PA66HS-BK	4.6	200.0	50.0	225	1000 pcs.	1-2;4-7;25	118-00093
T50ROS-PA66HS-NA	4.6	200.0	50.0	225	1000 pcs.	1-2;4-7;25	118-00097
T50MOS-PA66HS-BK	4.6	245.0	66.0	225	100 pcs.	1-2;4-5;25	118-00018
T50LOS-PA66HS-BK	4.6	384.0	110.0	225	100 pcs.	1-2;4-7;25	118-05900
T120ROS-PA66HS-BK	7.6	385.0	105.0	535	100 pcs.	1;3;6-7;9-10;25	118-00066
T120ROS-PA66HS-NA	7.6	385.0	105.0	535	100 pcs.	1;3;6-7;9-10;25	118-00067

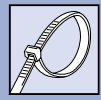
Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



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Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable ties for high temperature applications up to +240 °C

PEEK Ties, outside serrated

PEEK Ties have been designed for use in hazardous environments. Their suitability for high temperature applications makes them ideal for use in the drilling industry, railway, offshore or automotive industry. The excellent chemical and radium ray resistance is predestined for applications in medical engineering, chemical industry and power stations. Within the aerospace industry, PEEK ties are suitable due to their good ratio weight to tensile strength. Because of this combination of different properties, PEEK ties can replace metal solutions.

Features and benefits

- For high temperature applications from -55 °C up to +240 °C
- Outside serrated cable tie with smooth surface to the bundle
- Close fit to the cable bundle due to the deepening head shape
- Easy insertion combined with high tensile strength
- Takes up less space due to curved head design
- Combines the performance of a metal tie with the ease of use of a polyamide cable tie
- Manual and/or pneumatic tools available for greater process reliability

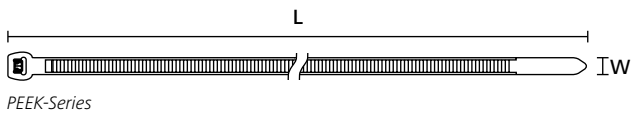


Outside serrated Cable Tie and Identification tag HFTP48 made from Peek.



A clearly better way of identifying cables and pipes with HFTP PEEK tags.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
PT2A-PEEK-BGE		3.4	145.0	4.0	35.0	230	100 pcs.	1-2;4-5;25	118-00032

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



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Cable ties with low profile head

PE-Series

These ties are particularly useful in areas with restricted space. The low profile design ensures that nothing snags on the heads. Coloured low profile cable ties are ideal for securing foam padding to playground equipment or as a simple means of identifying equipment.

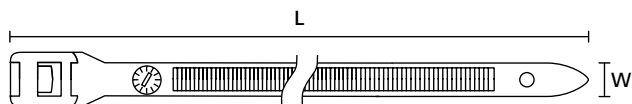
Features and benefits

- Outside serrated cable tie with a smooth surface to the bundle
- Coloured cable ties can be used for identification
- Broad contact area with the bundle minimises risk of damage
- Low profile head for ideal use in restricted spaces
- Parallel entry for optimal fit around circular bundles



Coloured PE400-Series are ideal to secure foam in playground area.

Material specifications: See Article-No. on our website.



PE-Series

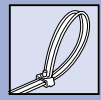
PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
PE530-PA66-BK	9.0	535.0	146.0	445	100 pcs.	6-7;9-10	112-53062

Recommended Tools: 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable tie locked by glass fibre pin

KR-Series, 1-Piece

This cable tie is distinguished by its smooth strap and unique locking mechanism. The chamfered head of the KR-Series allows for a firm fit around the bundled element. Due to its special design KR-Series cable ties can be used as a safety method to bundle any cable and to also secure bellows on steering racks, water hoses or vacuum lines. The endless strap version is fairly flexible and can be cut to any length required. Separate heads are available to fix the strap.

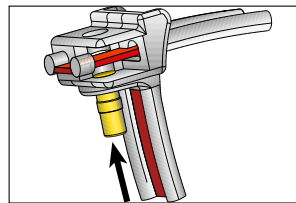
Features and benefits

- Cable tie without serration to avoid any damage to cables
- Strap is locked into place with a glass-fibre reinforced pin
- Very secure and vibration resistant fixing
- Available in various materials, colours and almost every length
- Cable ties from PA12 are highly resistant to chemicals, impact and UV light
- KR-ties up to 426 mm are made as one piece
- For assembly a special KR-tool is needed

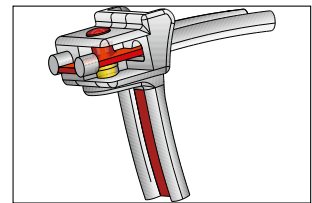
Specific part numbers according to EN45545 available on request.



KR-Series ties applied on a cable tray.

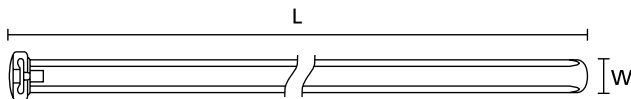


The unlocked head (yellow) of a KR-tie.



The cable tie (red) is locked into place with the pin.

Material specifications: See Article-No. on our website.



Cable tie KR-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
KR6/35-PA66UV-BK	6.1	360.0	93.0	490	50 pcs.	11-13	121-63560
KR8/33-PA66HS-BK	8.0	337.0	86.0	785	50 pcs.	11-13	121-73390
KR8/33-PA66HS-NA	8.0	337.0	86.0	785	50 pcs.	11-13	121-83355

Recommended Tools: 11=KR6/8, 12=EVO-KR, 13=KR8PNSE. For more information on toolings please refer to the Application Tooling chapter on page 310.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Endless cable ties with separate head and spacer

EL-TY-Series

These robust cable ties are particularly suitable for use with larger diameter cables, pipes and hoses. Designed originally for securing overhead catenary and cables, they are now used in many industries from the building sector, through to the chemical industry, to the installation of signs for traffic management. Separate spacers allow for a defined distance when bundling in parallel.

Features and benefits

- Made of very strong Polyacetal (POM)
- System consists of endless strap, spacers and heads
- Head includes stainless steel pawls for a proper fixation
- Very secure fixing and good resistance to ageing and UV light
- Suits any bundle diameter and reduces inventory

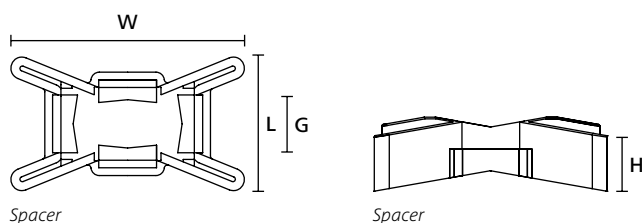


Continuous strap and separate heads allow for any bundle diameter, eliminating waste.



Spacer.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Width (W)	Length (L)	Height (H)		Content	Article-No.
EL-TY (TELS-SPK2)-PP-BK	53.3	30.5	17.0	1115	50 Spacer	111-32000

All dimensions in mm. Subject to technical changes.



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Cable ties inside serrated with tuckaway

RT250-Series up to 1115 N loop tensile strength

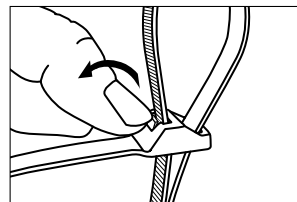
The RT250 is a releasable cable tie. Due to its minimum loop tensile strength of 1,115 N the cable tie is perfectly suited to fix larger and/or heavier bundles. RT250 can be opened and reused. UV-resistant cable ties manufactured from PA66W are recommended for outdoor applications. For shorter lengths REL250-Series can be offered.

Features and benefits

- Releasable and reusable cable tie
- Suitable for larger and/or heavier bundles
- Eyelet allows excess tail to be tucked neatly away
- Available in black and natural colour
- Extended trigger for simple and quick release of ties
- Protected trigger to avoid accidental release
- RT250 cable ties are inside serrated

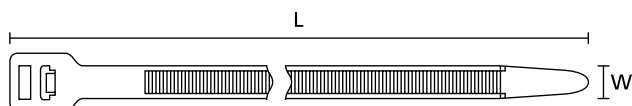


RT250 Cable Ties: Ideal for larger or heavier bundles these ties can be opened and reused.



The closure function of the reopenable cable tie from the RT250-series.

Material specifications: See Article-No. on our website.



RT250-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.	N	Pack Cont.	Article-No.
RT250XL-PA66-BK	12.5	1030.0	12.0	305.0	1115	25 pcs.	131-75510

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable ties inside serrated with kickdown lever

REL-Series

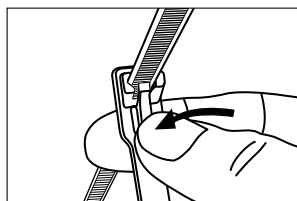
The REL-Series is ideally used in applications where changes are anticipated and a tie needs to be opened and closed repeatedly. The release mechanism of an REL cable tie allows simple and quick opening with only one hand. UV resistant cable ties manufactured from PA66W are recommended for outdoor applications.

Features and benefits

- Releasable and reusable cable tie for medium-weight loads
- Extremely easy-to-operate release mechanism
- Opens simply and quickly with only one hand
- Also available in PA66W for outdoor applications
- REL cable ties have their serration on the inside

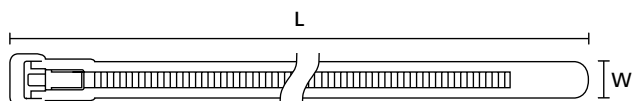


Releasable and reusable cable tie, REL-Series.



The closure function of the reopenable cable tie from the REL-series.

Material specifications: See Article-No. on our website.



REL-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.		Pack Cont.	Article-No.
REL250-PA66-NA	7.6	250.0	16.0	68.0	200	100 pcs.	131-22519
REL250-PA66W-BK	7.6	250.0	16.0	68.0	200	100 pcs.	131-22560

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Releaseable Cable Ties

RT Series With Extended Pawl

Used in a wide range of industries these releasable and reusable ties are ideal where temporary installation, or, the addition or removal of cables is required, e.g. Theatres, outdoor events or prototype harnessing work.

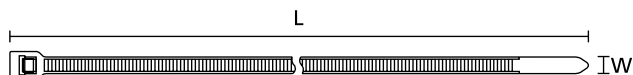
Features and benefits

- Extended trigger for simple and quick release of ties
- Multiple grades of PA 6.6 for use indoors, outdoors or at high temperatures



Releasable cable tie features a head design with extended pawl for quick release of bundles.

Material specifications: See Article-No. on our website.



RT,-RELK-, RLT-Series

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.		Pack Cont.	Article-No.
RT40R-PA66-NA	4.0	215.9	1.5	51.0	180	100 pcs.	115-06219

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable ties releasable for heavier bundles

SR255-Series

SR255 Series heavy-duty cable ties offer a release feature in the head allowing for easy installation with the use of a cable tie tool. The head design guarantees high tensile strength even after repeated use, as well as a low insertion force.

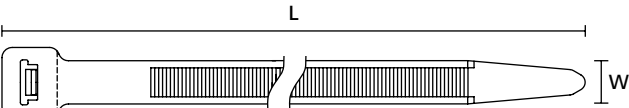
Features and benefits

- Releasable and reusable cable tie
- Suitable for larger and heavier bundles
- Extended trigger for simple and quick release of ties
- Protected trigger to avoid accidental release



Heavy duty cable tie features a release in the head for easier bundle maintenance.

Material specifications: See Article-No. on our website.



SR225

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.		Pack Cont.	Article-No.
SR255X-PA66HIRHSUV-BK	12.6	370.0	13.0	100.0	1115	500 pcs.	115-42100

All dimensions in mm. Subject to technical changes.



Reusable tie

RF Series

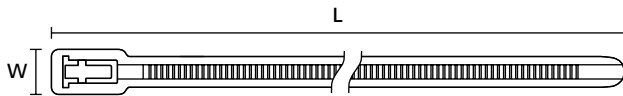
Can be used for temporal bandling, cable identification, and as packing material.

Features and benefits

- Variety of colors are prepared for identification purposes



Material specifications: See Article-No. on our website.



PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.		Pack Cont.	Article-No.
RF100-PA66-BK	7.4	100.0	2.5	18.0	222	100 pcs.	115-00044

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Hook and loop ties

TEXTIE-Series

The TEXTIE-Series offers a soft bundling method and is ideal for use on telephone cables, optical fibre and network cables. These cable ties can be reopened and reused up to 400 times. A perfect solution for temporary installations and cable management for stage equipment, at outdoor events or for prototype harnessing. Also suitable for use in private or office applications. TEXTIE cable ties are available in various colours and can be used to colour-code cables and/or wires.

Features and benefits

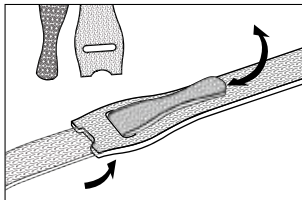
- Quick and simple to use without tools
- Reusable up to 400 times
- Various colours for easy identification
- For indoor and outdoor use
- Can be attached to the bundle permanently
- Resistant to ageing, no corrosion



Due to the functional cable tie design the TEXTIE is fixed on the cable and cannot get lost.

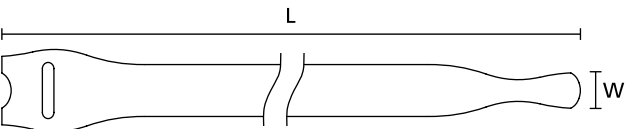


The TEXTIE-Series is available in different colours and lengths.

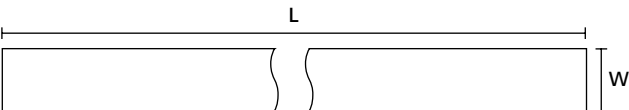


The closure function of the reopenable cable tie from the Textie-series.

Material specifications: See Article-No. on our website.



TEXTIE -Series S, M and L



TEXTIE-Series 5 and 25 m

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	Material Loop	Material Hook	Pack Cont.	Article-No.
TEXTIE M-PA66/PP-BK	12.5	200.0	60.0	Polyamide 6.6 (PA66)	Polypropylene (PP)	10 pcs.	130-00013

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Lacing tape made of glass fibre

Lacing tape LTHT4C2NA

Features and benefits

- High tensile strength
- Synthetic rubber surface finishing provides very good knotting characteristics



Lacing tape LTHT4C2NA.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Width (W) min.	Width (W) max.	Length (L)	Material	Pack Cont.	Article-No.
LTHT4C2NA-GF-NA	2.41	3.27	250.0 m	Glass-fibre (GF)	250 m	174-00254

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable ties with ball-lock

MBT-Series, stainless steel 304

Metal ties are ideal for all applications that require high strength, reliability and fire resistance. The MBT range of stainless steel cable ties can be used in chemical industries and on oil platforms as well as in mass transit, shipbuilding and mining industries. MBT ties are also suitable for machine building, construction and in the outside area of radio technology. Additionally MBT ties are ideal for securing lighting in theatres and exhibition halls.

Features and benefits

- Cable ties MBT, made from stainless steel 304
- Non-releasable locking feature
- Corrosion resistant
- Weather resistant
- Outstanding chemical resistance
- High temperature resistant
- Non-burning

Material specifications: See Article-No. on our website.

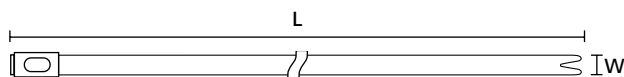
For hard, smooth surface applications, we recommend the use of our LFPC protective channels.



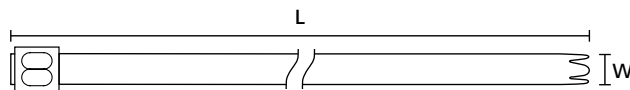
Stainless steel cable ties, uncoated, MBT_SS, MBT_HS.



Stainless Steel Cable Ties, uncoated, MBT_XHS.



MBT-Series 4.6 mm and 7.9 mm width



MBT-Series 12.3 mm width

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	Pack Cont.	Tools	Article-No.
MBT125AL-SS304-ML	4.6	125.0	25.0	100 pcs.	15-18	111-20810
MBT200AL-SS304-ML	4.6	200.0	50.0	100 pcs.	15-18	111-20830

Recommended Tools: 15=MK9SST, 16=MK9PSST, 17=HDT16, 18=KST-STG200. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

MBT-Series, stainless steel 316L

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø min.	Bundle Ø max.		Pack Cont.	Tools	Article-No.
MBT680BL-SS316-ML	4.6	680.0	-	200.0	-	100 pcs.	15-18	111-20600
MBT33H-SS316L-ML	7.9	838.0	12.0	254.0	2000	50 pcs.	15-18	111-94339

Recommended Tools: 15=MK9SST, 16=MK9PSST, 17=HDT16, 18=KST-STG200. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable ties with ball-lock and coating

MBT-FC-Series, stainless steel 316L

The MBT range of stainless steel cable ties can be used in the most arduous of conditions or where the additional security, strength and fire resistance of a metal fixing is required. Used in all industries from mass transit, ship building, oil rigs, mining and chemical industry, theatres and exhibition halls. In the event of a fire, cables will remain securely held in place and will not fall to block emergency exits. Fully coated ties can also be used to avoid any reflection. An important consideration for instance in the defence industry.

Features and benefits

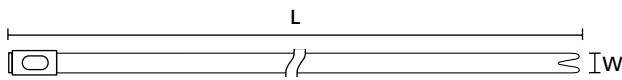
- Fully coated MBT, made from type 316L stainless steel with polyester coating
- Non-releasable locking feature
- Coated cable tie with smooth edges
- Comfortable handling and installation
- Eliminates contact corrosion between dissimilar materials during application



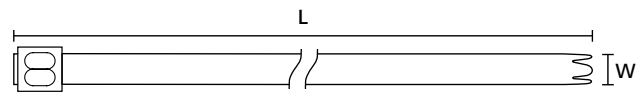
Stainless steel cable ties, coated, MBT_SFC, MBT_HFC.

For hard, smooth surface applications, we recommend the use of our LFPC protective channels.

Material specifications: See Article-No. on our website.



MBT-Series 4.6 mm and 7.9 mm width



MBT-Series 12.3 mm width

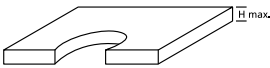
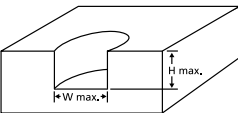
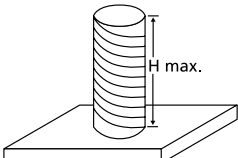
PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	Pack Cont.	Tools	Article-No.
MBT100BCL-SS316/SP-BK	4.6	100.0	25.0	100 pcs.	15-18	111-20000
MBT125BCL-SS316/SP-BK	4.6	125.0	25.0	100 pcs.	15-18	111-20210
MBT150BCL-SS316/SP-BK	4.6	150.0	35.0	100 pcs.	15-18	111-20220
MBT200BCL-SS316/SP-BK	4.6	200.0	50.0	100 pcs.	15-18	111-20230
MBT260BCL-SS316/SP-BK	4.6	200.0	62.0	100 pcs.	15-18	111-20240
MBT300BCL-SS316/SP-BK	4.6	300.0	83.0	100 pcs.	15-18	111-20250
MBT360BCL-SS316/SP-BK	4.6	360.0	100.0	100 pcs.	15-18	111-20260

Recommended Tools: 15=MK9SST, 16=MK9PSST, 17=HDT16, 18=KST-STG200. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Selection guide for fixing ties

Application	Arrowhead	Fir Tree Mount	Rivet Wall Plug	Screw Mount	EdgeClip	Weld Stud Mount
	●	●		●		
		●	●	●		
					●	
						●



Arrowhead

This fixing tie is based on an arrowhead offering high extraction forces. The arrowhead is securely in place when a click can be heard and felt by the user.



Arrowhead with disc

The disc minimises the ingress of dust, dirt and water. Furthermore a safe fixation inside the drill hole is assured that withstands pressure from various directions.



Arrowhead with supporting wings

Arrowhead fixings with supporting wings offer good and stable fixation in drilled holes. The supporting wings generate additional pressure to assure a firm and secure fixing while taking up any variation in panel thickness. These ties are also suitable in high vibration applications.



Arrowhead without supporting wings

The arrowhead design ensures good fixation and takes up minimal space.



Fir Tree Mount

Fir Tree Mounts can be pushed into pre-punched holes easily in panels or threaded, blind holes based on the low insertion forces. The design is ideally suited for a wide range of sheet thicknesses. The disc on top of the fir tree covers the hole and minimises the ingress of dust, dirt and water.



Weld Stud Mount

Many of the HellermannTyton weld stud mounts can easily be attached by hand ("soft push"). The design offers very low insertion forces that require no tools. The mounts can be removed by twisting to the left.



Weld Stud Fixings with lateral adjustment

The special oval shape of these mounts provides a 5 - 6 mm lateral adjustment to cater for any misalignment of the stud or incorrect positioning of ties on the cables. The bundle can therefore be moved when mounted.



EdgeClip

The EdgeClips are specifically designed to bundle and guide cable and wires on edges. Cost intensive drill holes for fixing are no longer required. EdgeClips are easily mounted by hand, the integrated metal clamp, securely keeping the clips on the edge.



EdgeClip twistable

Ideally suited for fixations where bundles need to be flexibly guided. These EdgeClips are available with facilities for 90° or 360° rotation.



Cable and Hose Attachment

Excellent solution for subsequent attachment of pipes and wires to installed tubes.



Heavy Duty Application

These sturdy fixing ties can withstand vibrations. They are easy to apply and give a secure alignment to the bundle. There will be high tightening torque through metal bushing.



Two Piece Fixing Ties with Clip Coupler

The Coupler is an article to connect two cable ties for parallel bundling of tubes, harnesses or cables. Its design enables the cable ties to rotate up to 90° and allows flexible installations.



1-piece fixing ties with arrowhead, with disc in the strap

for round holes

These fixing ties are ideal for use in many different industries, including automotive, aerospace, rail and panel building.

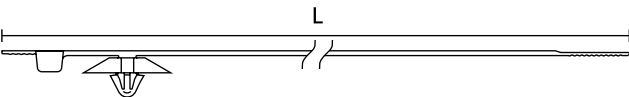
Features and benefits

- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressures from various directions and minimises access of dust and dirt
- Cable tie head always situated in defined position
- Bundle runs directly across fixing point
- Simple assembly due to tab at the end of the head

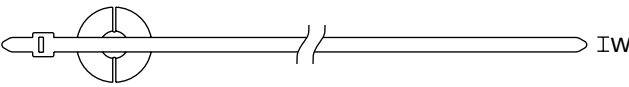


The 'tab' on the head of the tie makes it easy to locate and lift the head for assembly.

Material specifications: See Article-No. on our website.



T80RSFT

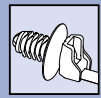


T80RSFT with flexible disc.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Disc Ø	Bundle Ø max.	N	Tools	Article-No.
T80RSFT-PA66HS-BK		5.7 - 6.3	1.0 - 3.5	4.6	190.0	24.4	45.0	355	1-2;4-7;25	150-15493

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



1-piece fixing ties with arrowhead, with disc

for round holes

With a diverse range of fixing possibilities these ties are ideal for use in many different industries, including automotive, aerospace, white goods manufacture and panel building. This fastening solution is used to secure cable harnesses. We offer a variety of panel thicknesses and hole sizes to suit all kinds of application.

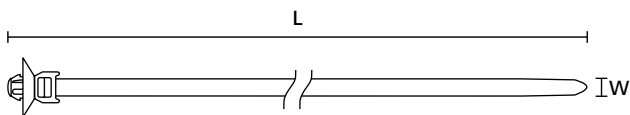
Features and benefits

- Easy to install without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressures from various directions and minimises ingress of dust and dirt
- Cable tie head always situated in a defined position
- KSFT-types with specially rounded arrowhead minimise the assembly height



The disc at the head of the T50S0SSFT6.5E protects the bore against dirt and splashes.

Material specifications: See Article-No. on our website.



T50S0SKSFT6.5S2-E

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
HB010-25120-PA66/6HIRHS-GY		-	-	-	-	-	-	-	126-00712
T50S0SSFT6.5E-PA66HS-BK		6.3 - 6.7	1.9 - 2.5	4.6	158.8	30.0	225	1-2;4-7;25	126-03102
T50S0SKSFT6.5E-PA66HS-BK		6.3 - 6.7	0.7 - 1.3	4.6	156.0	35.0	180	1-2;4-7;25	126-00081
OS180AH7S-LH-E-PA66HS-BK		6.8 - 7.2	0.6 - 3.2	5.3	178.4	30.0	180	1;3;6-7;9-10;25	126-00310
T50S0SKSFT5.4E-PA66HS-BK		5.2 - 5.6	0.7 - 1.3	4.6	156.0	35.0	180	1-2;4-7;25	126-00075
T50SST5-PA66HS-BK		6.1 - 6.5	0.70 - 1.50	4.6	170.0	31.0	225	1-2;4-7;25	126-00332
T50SST5-PA66-NA		6.1 - 6.5	0.7 - 1.5	4.6	170.0	31.0	225	1-2;4-7;25	126-02300
T50S0SAH7S-E-PA66HS-BK		6.8 - 7.2	-	-	-	-	-	1-2;4-7;25	126-00503

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-piece fixing ties with arrowhead, with disc

for round holes

Primarily designed for fixing cable harnesses in the automotive industry, their simplicity and ease of use has resulted in these parts being used in other industries, for example aviation, switch gear and white goods manufacturing.

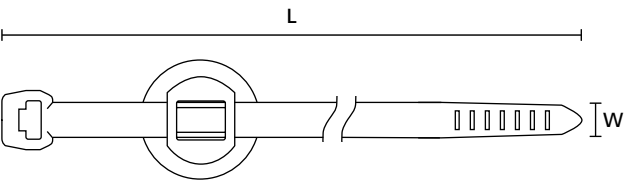
Features and benefits

- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt

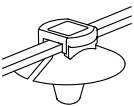


Being a two-piece assembly allows the tie head to be located in the most convenient position.

Material specifications: See Article-No. on our website.



T50ROSSFT6.5

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Disc Ø	Bundle Ø max.		Tools	Article-No.
T50RSFT6.5-PA66HS-BK		6.3 - 6.7	0.7 - 2.0	4.6	200.0	22.4	45.0	225	1-2;4-7;25	156-01697

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



1-piece fixing ties with arrowhead, with disc

for round holes, sealed

The parts are mainly used in the automotive industry. This fastening solution is used to secure cable harnesses e.g. in car doors. We offer a variety of panel thicknesses and hole sizes to suit all kinds of application. The seal protects the interior and surrounding cables among other things from splash water.

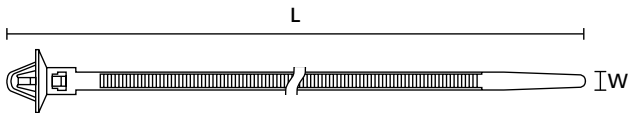
Features and benefits

- One-piece fixing ties with cellular rubber disc
- Especially suitable for door and tailgate harnesses used for car body applications
- Made from PA66 heat-stabilised material
- Cellular rubber disc minimises ingress of dust, dirt and splash water



The additional seal protects against the ingress of moisture.

Material specifications: See Article-No. on our website.



One piece fixing tie with arrowhead and disc, standard design

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50SOSKSFT5.4E-MD-PA66HS-BK		5.4 - 5.6	0.7 - 1.3	4.6	156.0	35.0	180	2;4-7;25	126-00180
T50SOSSFT6.5E-MD-PA66HS-GY		6.3 - 6.7	0.60 - 1.80	4.6	160.0	35.0	225	1-2;4-7;25	126-00156
T50SOSSFT6.5E-MD-PA66HS-BK		6.3 - 6.7	0.60 - 1.80	4.6	160.0	35.0	225	1-2;4-7;25	126-00215
T50SOSSFT6.5E-MDL-PA66HS-GN		6.3 - 6.7	0.6 - 1.8	4.6	158.8	30.0	225	1-2;4-7;25	126-03100
T50SOSSFT7-E-MD-PA66HS-BK		6.8 - 7.2	0.7 - 1.8	4.7	165.0	30.0	225	1-2;4-7;25	126-00204

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-piece fixing ties with arrowhead, with disc

for round holes, sealed

The parts are mainly used in the automotive industry. This fastening solution is used to secure cable harnesses e.g. in car doors. We offer a variety of panel thicknesses and hole sizes to suit all kinds of application. The seal protects the interior and surrounding cables among other things from splash water.

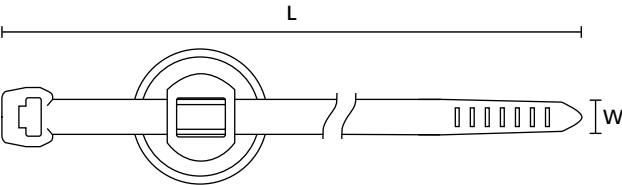
Features and benefits

- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressure from various directions
- Seal protects against splash water
- Versions "SRAH" are coming with a seal made from thermoplastic elastomer (TPE)



The additional seal protects against the ingress of moisture.

Material specifications: See Article-No. on our website.

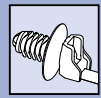


T50ROSSFT6.5-16-2MOD-MD

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50ROSSFT6.5-16-2MOD-MD-PA66HS/PA66HIRHS-BK/GN		6.3 - 6.7	0.7 - 1.8	4.6	200.0	45.0	225	1-2;4-7;25	150-93129

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



1-piece fixing ties with arrowhead, with disc

for oval holes

With a diverse range of fixing possibilities are ideal for use in many different industries, including automotive, aerospace and panel building.

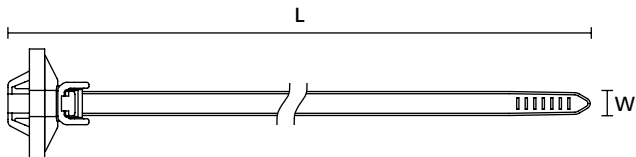
Features and benefits

- Easy to install without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressures from various directions and minimises access of dust and dirt
- Cable tie head always situated in a defined position
- Versions for oval holes feature anti-twist protection



1-piece fixing ties with arrowhead, with disc for oval holes.

Material specifications: See Article-No. on our website.



Reference drawing for dimensions only.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Disc Ø	Bundle Ø max.	N	Article-No.
HB010-01090-PA66/6HIRHS-GY		-	-	-	-	-	-	-	126-00766
OS130-SPM712-PA66HSW-BK		7.0 x 12.0	0.55 - 1.0	5.0	130.0	16.0 x 21.0	20.0	150	126-00252
OS170-PM712-PA66HSUV-BK		7.0 x 12.0	0.60 - 1.60	5.0	170.0	16.0 x 21.0	30.0	150	126-00131
T50SOSKSFT62x122PT0.7-1.3 90°-PA66HS-BK		6.2 x 12.2	0.7 - 1.3	4.6	158.0	16.0 x 21.0	35.0	225	126-00143
T60SOSSFT712S-E1-PA66HS-BK		7.0 x 12.0	0.6 - 3.2	5.5	158.0	16.0 x 22.0	30.0	300	126-00281
T60SOSSFT712S-E-PA66HS-BK		7.0 x 12.0	0.6 - 3.2	5.5	158.0	16 X 22	30.0	300	126-00207

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



1-piece fixing ties with arrowhead, with disc

for oval holes, sealed

The parts are mainly used in the automotive industry, e.g. for door harnesses.

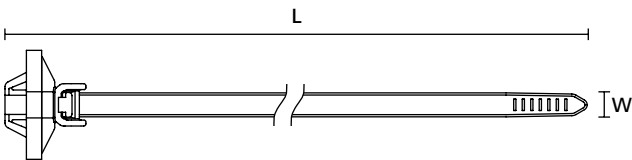
Features and benefits

- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts the tie for pressures from various directions
- Cable tie head always situated in defined position
- Cellular rubber seal minimises access of dust and dirt
- SFT versions for oval holes feature anti-twist protection



Fixing bracket for an oval hole with a seal for protection against e.g. dust and splash water.

Material specifications: See Article-No. on our website.

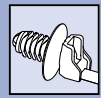


Reference drawing for dimensions only.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Disc Ø	Bundle Ø max.	N	Tools	Article-No.
OS200DB-PM712V-PP-BK		7.0 x 12.0	0.5 - 2.5	5.6	200.0	16.0 x 21.0	40.0	150	-	126-00464
T60SOSSFT62x122-E-MD-PA66HS-BK		6.2 x 12.2	0.6 - 2.0	5.5	157.5	16.0 x 22.0	30.0	300	3;6-7;9-10;25	126-00080
T60SOSSFT70x120-E-MD-PA66HS-BK		7.0 x 12.0	0.6 - 2.0	5.5	157.7	16.0 x 22.0	30.0	300	3;6-7;9-10;25	126-00079
T60XSOSFT7x12-E-MD-PA66HS-BK		7.0 x 12.0	0.6 - 2.0	-	-	-	25.0	-	-	126-00287
OS150-PM712-WPJ-PA66HS-NA		7.0 x 12.0	0.60 - 2.00	5.0	150.0	17.0 x 22.0	22.0	180	1;3;6-7;9-10;25	126-00165

Recommended Tools: 1=MK10-SB, 3=MK21, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



1-piece fixing ties with arrowhead, with wings

for round holes

For bundling and fixing of cable harnesses, pipes and hoses in many different industries, including automotive, aerospace, white goods manufacturing and panel building.

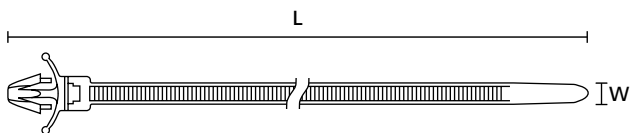
Features and benefits

- Easy to assemble without the need for a tool
- Cable tie head always situated in defined position
- Arrowhead simply locks into place
- Supporting legs provide a secure and firm fixing in areas where space is limited



A wide range of arrowhead fixing ties which are suitable for different panel thicknesses and hole diameters.

Material specifications: See Article-No. on our website.



T50SSL5

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50SSFM-PA66-NA		6.0 - 6.6	0.7 - 3.0	4.6	160.0	35.0	225	1-2;4-7;25	126-00069
T50RSFM-PA66HS-BK		6.0 - 6.6	0.7 - 3.0	4.6	205.0	45.0	225	1-2;4-7;25	126-00123
T50SSL5-PA66HS-BK		6.1 - 6.5	0.5 - 2.7	4.6	135.0	27.0	225	1-2;4-7;25	126-02204
T50SSFM-PA66HS-BK		6.0 - 6.6	0.7 - 3.0	4.6	160.0	35.0	225	1-2;4-7;25	126-00125
T50SSF-PA66V0-WH		6.0 - 7.5	0.7 - 2.6	4.8	130.0	26.0	223	1-2;4-5;25	126-00361
T50SAH-PA66HS-NA		6.0 - 6.6	0.7 - 3.0	4.6	160.0	25.0	225	1-2;4-5;25	155-41102
T18RWPM-PA66-BK		4.8 - 5.6	1.5 - 3.2	2.5	113.0	22.0	80	1-2;4-5;25	126-00077
T18RWPM-PA66-NA		4.8 - 5.6	1.5 - 3.2	2.5	113.0	22.0	80	1-2;4-5;25	126-00078
T50XWPM7.0-PA66HS-BK		6.8 - 7.2	0.70 - 3.00	4.6	140.0	27.0	225	1-2;4-5;25	126-00168
T50RWPM7.0-PA66HS-BK		6.8 - 7.2	0.7 - 3.0	4.6	200.0	45.0	225	1-2;4-5;25	126-00169
OS150-WPM712-PA610-BK		7.0 x 12.0	1.2 - 3.5	6.0	150.0	26.0	150	1;3;6-7;9-10;25	126-00273

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

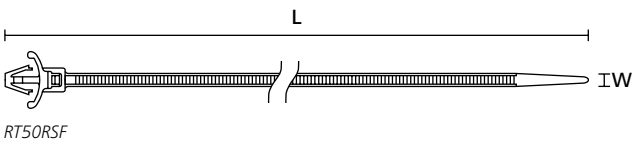
All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



for round holes, releasable



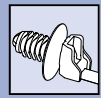
PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
RT50RSF-PA66-BK		7.8 - 8.2	0.8 - 2.5	4.6	215.0	50.0	225	2;4-5;25	115-07010
RT50SFK-PA66-BK		6.4 - 7.0	0.8 - 3.0	5.0	225.0	50.0	225	3;6-7;9-10;25	115-06960
LRT18RWPM4.8-PA66-NA		4.7 - 4.9	0.4 - 2.0	2.5	110.0	20.0	100	1-2;4-5;25	126-00195
RT18RSF-PA66-NA		3.8 - 4.2	0.6 - 2.30	3.0	132.0	27.0	80	1-2;4-5;25	115-01900
RT30SSF5-PA66-NA		4.7 - 5.0	0.5 - 2.3	3.3	130.0	27.0	196	1-2;4-5;25	115-00067
RT50RSF-PA66W-BK		6.3 - 7.5	0.80 - 2.60	4.8	200.0	48.0	225	1-2;4-5;25	115-00076

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 310.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



1-piece fixing ties with arrowhead, with wings in the strap

for round holes

This range of fixing ties is ideal for use in many different industries, including automotive, aerospace and panel building. The T80RSF6.5FW features a detent that fits securely into the profile of the tubing which prevents from lateral movement and slipping.

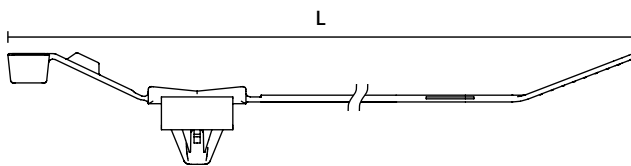
Features and benefits

- Easy to assemble without the need for a tool
- Arrowhead simply locks into place
- Supporting legs provide a secure and firm fixing when space is limited
- Bundle runs central across fixing point
- Cable tie head always situated in defined position



Designed to secure cables with parallel bundling the T80RSF6.5F offers a simple and secure fixing.

Material specifications: See Article-No. on our website.



T80RSF6.5FW

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T80RSF6.5F-PA66HS-BK		6.3 - 6.5	0.6 - 3.0	4.7	209.0	50.0	355	1-2;4-7;25	126-02600

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

1-Piece Fixing Ties with Arrowhead, with Wings, for Squared Holes

PART DESCRIPTION	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
OS100-SPM46S-PA66HSW-BK	4.0 x 6.0	1.0 - 2.0	3.5	100.0	15.0	100	1-2;4-5;25	126-00372

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



1-piece fixing ties with arrowhead

without wings and disc, for round holes

The arrowhead design is usefull in areas with limited space.

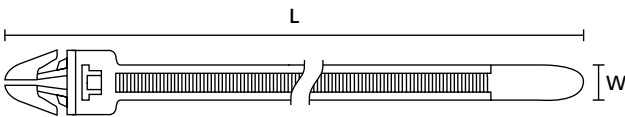
Features and benefits

- Easy to assemble without the need for a tool
- Fixing tie with arrowhead without wings
- Arrowhead simply locks into place
- Cable tie head always situated in defined position



The arrowhead design allows these fixing ties to be used in areas with limited space.

Material specifications: See Article-No. on our website.



T30RSF

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.		Tools	Article-No.
T30RSF(U)-PA66HS-BK		4.7 - 5.6	0.75 - 2.1	3.6	158.0	32.0	136	1-2;4-5;25	111-85610
T30RSF(U)-PA66-NA		4.7 - 5.6	0.75 - 2.1	3.6	160.0	32.0	136	1-2;4-5;25	111-85603
T50RSF(U)-PA66-NA		6.4 - 7.1	1.0 - 3.56	4.7	210.8	44.5	225	1-2;4-5;25	126-01011

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



2-piece fixing ties with arrowhead, with disc

for round holes, for parallel routing

Primarily designed for fixing cable harnesses in the automotive industry their simplicity, and ease of use, has seen these parts used in everything from aircraft, to switch-gear, to washing machines.

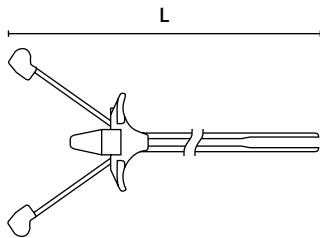
Features and benefits

- Pre-assembled 2-piece fixing tie with arrowhead foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Arrowhead simply locks into place

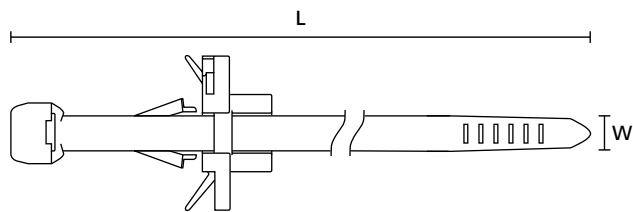


T50SOSDSFT6.5 for parallel routing.

Material specifications: See Article-No. on our website.



T50SOSDSFT6.5



T50SOSDSFT6.5

PART DESCRIPTION	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50SOSDSFT6.5-PA66HS/PA66HIRHS-BK	6.3 - 6.7	0.7 - 1.5	4.6	150.0	15.0	225	1-2;4-7;25	156-00133

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



1-piece fixing ties with fir tree, with disc, for round holes

Fir tree parts FT5

Primarily designed for fixing cable harnesses in the automotive industry, their simplicity and ease of use has resulted in these parts being used in other industries, for example aviation, switch gear manufacturer, white goods manufacturer.

Features and benefits

- Cable tie head always situated in defined position
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises ingress of dust and dirt
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Parts with an anti-slip engraving, such as the T30SOS-AS-FT5-E, to prevent the harness from slipping sideways



Fir tree foot parts can be used for a variety of panel thicknesses.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Disc Ø	Bundle Ø max.	N	Tools	Article-No.
T18RDP5-PA66-BK		4.9 - 5.1	3.0 - 4.0	2.5	110.0	13.0	20.0	80	2;4-5;25	150-55610
OS160FT5-PA66HSUV-BK		4.5 - 5.0	1.6 - 3.2	4.0	163.0	13.0	30.0	100	1-2;4-5;25	126-00057

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.
All dimensions in mm. Subject to technical changes.

Fir tree parts FT6

PART DESCRIPTION	Drawing	Hole Ø (FH)	Length (L)	Panel Thickness	Width (W)	Disc Ø	Bundle Ø max.	N	Tools	Article-No.
T50SOSFT6E-PA66HIRHS-BK		6.5 - 7.0	160.0	0.75 - 3.0	4.7	16.0	32.0	150	1-2;4-7;25	155-05800
T50RTM25-PA66HS-BK		6.2 - 7.0	204.7	1.32 - 7.0	4.6	12.6	50.0	225	1-2;4-7;25	126-03501
T50SOSFT6D10E-PA46-GY		5.8 - 6.2	163.0	0.8 - 5.5	4.6	9.8	32.0	200	1-2;4-5;25	157-00028
T50SOSFT6D10E-PA66HS-BK		5.8 - 6.2	163.0	0.8 - 5.5	4.6	9.8	32.0	225	1-2;4-5;25	157-00045
T50SOSFT6E2-PA66HS-BK		6.3 - 7.0	161.0	0.6 - 4.2	4.6	16.0	35.0	180	1-2;4-7;25	157-00136

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.
All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



1-piece fixing ties with fir tree, with disc, for round holes

Fir tree parts FT6

PART DESCRIPTION	Drawing	Hole Ø (FH)	Length (L)	Panel Thickness	Width (W)	Disc Ø	Bundle Ø max.	N	Tools	Article-No.
T50SOSFT6.5LG-E4-PA66HIRHS-NA		6.1 - 6.9	167.9	0.6 - 8.25	4.6	16.0	35.0	225	1-2;4-7;25	157-00355
T50SOSFT6LG-E-PA66HS-BK		6.3 - 7.0	165.0	0.7 - 7.0	4.6	16.0	35.0	180	1-2;4-7;25	157-00127
T50SOSFT6.5LG-E4-PA66HIRHSUV-BK		6.35 (hexagonal) 6.5	167.9	0.6 - 8.25	4.6	16.0	35.0	225	1-2;4-7;25	157-00296
OS160FT6-PA66HS-BK		6.3 - 6.7	170.0	0.7 - 5.0	5.3	16.0	30.0	200	1;3;6-7;9-10;25	157-00096
OS160FT6HEX-PA66HS-BK		6.35	170.0	0.7 - 5.0	5.3	16.0	30.0	200	1;3;6-7;9-10;25	157-00081
T50SOSFT6E3-PA66HIRHS-BK		6.1 - 6.9	161.0	0.7 - 3.5	4.7	16.0	35.0	150	1-2;4-7;25	157-00241
T50SOSFT6E1-PA66HS-BK		6.3 - 7.0	161.4	0.7 - 3	4.7	16	35.0	150	1-2;4-5;25	157-00126
T50SOSFT6LG-E2-PA66HIRHSUV-BK		6.1 - 6.9 6.1 - 6.6 (hexagonal)	167.0	0.6 - 8.25	4.6	16.0	35.0	180	1-2;4-7;25	157-00452
T50SOSFT6LG-E4-PA66HS-BK		6.3 - 7.0	165.0	0.8 - 7.0	4.9	22.0	31.0	200	1;3;6-7;9-10;25	157-00237
T50RTM25E-PA66HIRHS-GY		6.25 - 7.0	203.2	2.3 - 13.9	4.7	12.6	50.8	222	1-2;4-7;25	126-03504
T50R6.6TM250-PA66HIRHSUV-BK		M6	202.0	2.3 - 13.9	4.6	12.6	50.0	225	1-2;4-5;25	157-00277
T50SDP6-PA66HIRHS-BK		6.3 - 7.1	170.0	0.8 - 7.0	5.1	22.0	31.0	225	1;3;6-7;9-10;25	157-01100

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Fir tree parts FT7

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Disc Ø	Bundle Ø max.	N	Tools	Article-No.
FT220DP7-PA66-BK		6.8 - 7.2	0.8 - 5.0	4.7	232.0	16.0	40.0	225	2;4-5;25	150-01700
OS170-FT7-PA66-BK		6.8 - 7.2	0.6 - 4.5	5.3	170.0	16.0	30.0	147	3;6-7;9-10;25	157-00017
OS180FT7LH-PA66-BK		6.5 - 7.0 6.35 (hexagonal)	0.6 - 4.5	5.3	180.0	16.0	30.0	200	3;6-7;9-10;25	157-00070

Recommended Tools: 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

Fir tree parts FT8

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Disc Ø	Bundle Ø max.	N	Tools	Article-No.
T50SOSFT8E-PA46-GY		8.0 - 8.5	0.6 - 6.0	4.6	163.0	16.0	35.0	225	1-2;4-7;25	157-00115
T50SOSFT8E-PA66HS-BK		8.0 - 8.5	0.6 - 6.0	4.6	163.0	16.0	35.0	225	1-2;4-7;25	157-00072

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

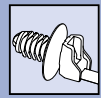
All dimensions in mm. Subject to technical changes.

Fir tree parts FT12

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Disc Ø	Bundle Ø max.	N	Tools	Article-No.
T60SOSFT12-E-PA66HS-BK		12.0 - 12.5 M14 x 1.5	1.0 - 6.0	5.5	161.5	20.0	30.0	300	1;3;6-7;9-10;25	157-00533

Recommended Tools: 1=MK10-SB, 3=MK21, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



1-piece fixing ties with fir tree, with disc

for oval holes

Primarily designed for fixing cable harnesses in the automotive industry their simplicity, and ease of use, has seen these parts used in everything from aircraft, to switch-gear, to washing machines.

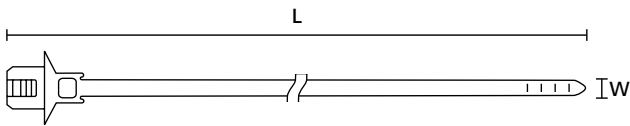
Features and benefits

- Cable tie head always situated in defined position
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Versions for oval holes feature anti-twist protection



This 1-piece fixing tie with fir tree design for oval holes features anti-twist protection.

Material specifications: See Article-No. on our website.



1-piece fixing tie with fir tree, with disc, for oval holes

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
OS180FT62122A-PA66HS-BK		6.2 x 12.2	0.7 - 3.0	5.1	180.0	33.0	225	1;3;6-7;9-10;25	157-00104
OS180FT65113-PA66HS-BK		6.5 x 13.0	0.7 - 5.2	5.1	180.0	33.0	225	1;3;6-7;9-10;25	157-00087
T50ROSFTOVALR-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.0	5.1	218.4	50.0	222	1;3;6-7;9-10;25	157-00232
T50ROSFTSOVAL-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 3.0	4.7	215.9	50.0	225	1-2;4-7;25	157-00268
T50SOS2DOP62X122-E-PA46-GY		6.2 x 12.2	0.6 - 6.0	4.6	164.0	35.0	200	1-2;4-5;25	157-00069
T50SOS2DOP62X122-E-PA66HS-BK		6.2 x 12.2	0.6 - 6.0	4.6	164.0	35.0	225	1-2;4-5;25	157-00014
T50SOS3DOP65X130-E-PA66HS-BK		6.5 x 13.0	0.7 - 5.0	4.6	165.0	35.0	180	1-2;4-7;25	126-00200
T50SOS2DOP7X12-E-PA66HS-BK		7.0 x 12.0	0.6 - 6.0	4.6	164.0	35.0	225	1-2;4-5;25	157-01105
T50ROSFTOVALU-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	5.1	219.0	50.0	225	1;3;6-7;9-10;25	157-00142

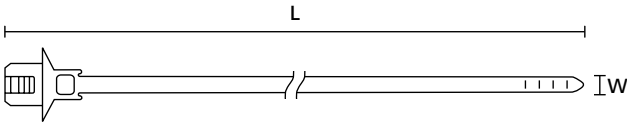
Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



1-piece fixing ties with fir tree, with disc

for oval holes



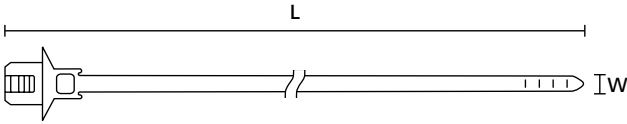
1-piece fixing tie with fir tree, with disc, for oval holes

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50SOS-AS-DFTOVAL-E-PA66HIRHS-BK		6.5 x 12.5	0.6 - 6.75	4.6	166.4	35.0	180	1-2;4-5;25	157-00414
T50SOSFT7X12-PA66HIRHS-GY		7.0 x 12.0	0.8 - 14.5	4.8	157.0	50.0	222	-	133-02810

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

for oval holes



1-piece fixing tie with fir tree, with disc, for oval holes

PART DESCRIPTION	Drawing	Article-No.
OS180FT6513-PA66HS-BK		920-30026

All dimensions in mm. Subject to technical changes.



1-piece fixing ties with fir tree, with disc

for round holes, releasable

This fir tree design is ideal for use in thick panels and threaded, blind holes. The additional disc avoids the intrusion of dust and dirt.

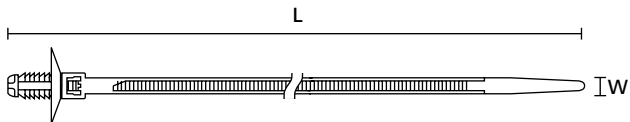
Features and benefits

- Cable tie head always situated in defined position
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt
- Suitable for use within threaded holes
- Reusable - Less waste and less pollution of the environment



REL30SDP6.

Material specifications: See Article-No. on our website.



Reference for dimensions only.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Disc Ø	Bundle Ø max.	N	Tools	Article-No.
REL30SDP6-PA66-BK		6.3 - 7.1	3.0 - 7.0	5.0	170.0	22.0	31.0	135	3;6-7;9-10;25	150-55500

Recommended Tools: 3=MK21, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



1-piece fixing ties with fir tree, with disc, with stand-off, for round holes

With offset 12.5 and 25.0 mm

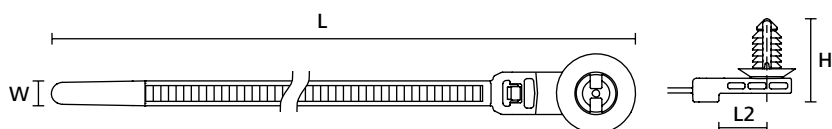
Features and benefits

- Bundling and fixing solution
- Ideal combination of materials and design
- Different positions of the fixing anchor are available to fit installation space

Material specifications: See Article-No. on our website.



Designed for optimal spacing: the integrated stand-off in this 1-piece fixing tie ensures secure cable routing while preventing contact with surfaces, ideal for high-performance applications.



PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Length (L2)	Bundle Ø max.	N	Article-No.
T50ROSFT6S25SO-PA66HIRHSUV-BK		6.1 - 6.9	0.6 - 3.75	5.1	242.2	25.0	50.0	225	157-00197
T50ROSFT612.5SO-PA66HIRHS-BK		6.1 - 6.9	0.6 - 6.0	5.1	234.2	12.5	50.0	220	157-04099
T50ROSFT612.5SO-PA66HIRHSUV-BK		6.1 - 6.9	0.6 - 6.0	5.1	234.2	12.5	50.0	220	157-00216
T50ROSFT612.5SO-PA46-BN		6.1 - 6.9	0.6 - 6.0	5.1	234.2	12.5	50.0	225	157-02517
T50ROSFT625SO-PA66HIRHSUV-BK		6.1 - 6.9	0.6 - 8.25	5.1	247.2	25.0	50.0	222	157-00195
T50ROSFT5SO25A-PA66HIRHS-GY		4.8 - 5.2	0.6 - 5.1	5.1	230.0	25.0	50.0	225	157-00167
T50ROSFT6SO12.5A-PA66HIRHSUV-BK		6.1 - 7.0 6.35	0.6 - 6.65	4.7	215.5	12.5	50.0	225	157-00331
T50ROSFT6SO12.5A-PA66HIRHS-GY		6.1 - 7.0 6.35	0.6 - 6.65	5.1	215.9	12.5	50.0	225	157-00130
T50ROSFT6SO25A-PA66HIRHSUV-BK		6.1 - 7.0 6.35	0.6 - 6.65	5.1	230.0	25.0	50.0	222	157-00150
T50ROSFT6SO25A-PA66HIRHS-GY		6.1 - 7.0 6.35	0.6 - 6.65	5.1	230.0	25.0	50.0	225	157-00119
T50ROSFTM6SO12.5A-PA66HIRHS-GY		M6	0.6 - 5.5	4.7	215.5	12.5	50.0	222	157-00118
T50ROSFTM6SO25B-PA66HIRHSUV-BK		M6	0.6 - 5.5	4.6	230.0	25.0	50.0	222	157-00172
T50ROSFT6SO12.5R-PA66HIRHSUV-BK		6.1 - 7.0 6.35	0.6 - 8.25	5.1	223.3	12.5	50.0	225	157-00165
T50ROSFT8SO12.5R-PA66HIRHSUV-BK		7.6 - 8.4	0.6 - 8.75	5.1	223.5	12.5	50.0	225	157-00215

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



1-piece fixing ties with fir tree, with disc, with stand-off, for oval holes

with offset 12.5 and 25.0 mm

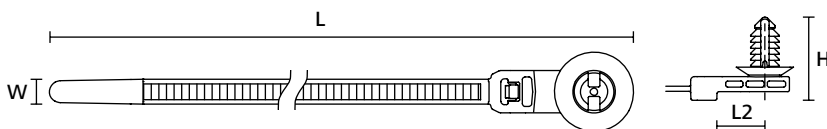
Features and benefits

- Bundling and fixing solution
- Ideal combination of materials and design
- Different positions of the fixing anchor are available to fit installation space
- 1-Piece Fixing Tie with defined offset 12.5 and 25.0 mm

Material specifications: See Article-No. on our website.



One piece fixing tie T50ROSFTOVALIL25A with stand-off for oval holes.



PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Length (L2)	Bundle Ø max.	N	Article-No.
T50ROSFTOVAL25SO-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	5.1	243.8	25.0	50.0	222	157-00219
T50ROSFTOVAL25A-PA66HIRHS-GY		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	4.7	229.3	25.0	50.0	222	157-00205
T50ROSFTOVAL25A-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	4.7	229.3	25.0	50.0	225	157-00222
T50ROSFTOVAL12.5A-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	-	-	-	50.0	225	157-04155
T50ROSFTOVAL12.5SO-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	5.1	231.3	12.5	50.0	222	157-00218
T50ROSFTOVAL25R-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	5.1	237.4	25.0	50.0	222	157-00221

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-piece fixing ties with fir tree, with disc, for round holes

Fir tree parts FT4

Primarily designed for fixing cable harnesses in the automotive industry their simplicity and ease of use has seen these parts used in everything from aircraft, to switch-gear, to washing machines.

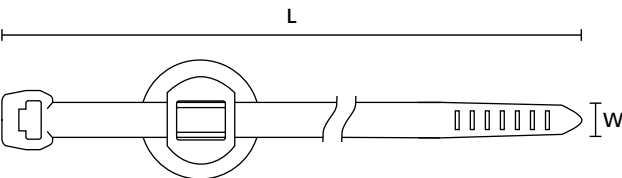
Features and benefits

- Pre-assembled 2-piece fixing tie with fir tree foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises ingress of dust and dirt
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes



Disc feature prevents rattling in high-vibration applications and protects against debris ingress.

Material specifications: See Article-No. on our website.



T50ROSSFT6.5

PART DESCRIPTION	Hole Ø (FH)	Width (W)	Length (L)	Bundle Ø max.		Article-No.
T30RFT4-PA66HS/PA66HSUV-BK	3.3 - 4.0	3.5	150.0	35.0	135	920-30071

All dimensions in mm. Subject to technical changes.

Fir tree parts FT5

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.		Tools	Article-No.
T30RFT5-PA46-NA/GY		4.5 - 5.0	0.7 - 3.0	3.5	150.0	34.0	135	1-2;4-5;25	150-55948

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

Fir tree parts FT5

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.		Article-No.
T30RFT5-PA46-GY/NA		4.5 - 5.0	0.7 - 3.0	3.5	150.0	34.0	135	920-30054
T30RFT5-PA66HS/PA66HIRHS-BK		4.5 - 5.0	0.7 - 3.0	3.5	150.0	34.0	135	920-30018

All dimensions in mm. Subject to technical changes.



Fir tree parts FT5

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Article-No.
IN5FT50-PA66HS-BK		4.5 - 5.0	0.7 - 3.0	4.6	202.0	45.0	225	920-30006

All dimensions in mm. Subject to technical changes.

Fir tree parts FT5

PART DESCRIPTION	Width (W)	Length (L)	Article-No.
REZ200FT5-PA66/PA66HIRHS-BK	4.7	200.0	920-30028

All dimensions in mm. Subject to technical changes.

Fir tree parts FT6

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T30RFT6LG-PA66HS/PA66HIRHS-BK		6.5 - 7.0	0.75 - 6.0	3.5	150.0	30.0	135	1-2;4-5;25	150-31090
T50RFT6LG-PA46-GY		6.5 - 7.0	0.75 - 6.0	4.6	200.0	45.0	222	1-2;4-7;25	150-31098
T50ROSFT6LG-PA66HS-BK		6.5 - 7.0	0.75 - 6.0	4.6	200.0	45.0	225	1-2;4-7;25	156-00371
T50RFT6LG-PA66HS/PA66HIRHS-BK		6.5 - 7.0	0.75 - 6.0	4.6	202.0	45.0	225	1-2;4-7;25	150-31091
T30RFT6SD-PA66HS/PA66HIRHS-BK		6.4 - 7.1	0.75 - 3.0	3.5	150.0	35.0	135	1-2;4-5;25	150-52690
T50RFT6-PA46-GY		6.4 - 7.1	0.75 - 3.0	4.6	202.0	45.0	225	1-2;4-7;25	156-00466
T50RFT6-PA66HS/PA66HIRHS-BK		6.4 - 7.1	0.75 - 3.0	4.6	202.0	45.0	225	1-2;4-7;25	157-00633
T50RDHFT6-PA66HS/PA66HIRHS-BK		6.4 - 7.1	0.75 - 3.0	4.7	210.0	19.0	180	1-2;4-7;25	150-77936
T30RFT6-PA46-GY		6.4 - 7.1	0.75 - 3.00	3.5	150.0	34.0	135	1-2;4-5;25	156-02905
T30RFT6-PA66HS/PA66HIRHS-BK		6.4 - 7.1	0.75 - 3.00	3.5	150.0	34.0	135	1-2;4-5;25	156-02827
T50RSOC15FT6LG-PA46-GY		6.4 - 7.1	0.8 - 6.0	4.6	202.0	50.0	225	1-2;4-5;25	156-00657
DT50RDHFT6XLG-PA66HS/PA66HIRHS-BK		6.3 - 6.7	1.2 - 8.5	4.6	200.0	45.0	225	1-2;4-5	156-02972

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

Fir tree parts FT6



2-piece fixing ties with fir tree, with disc, for round holes

Fir tree parts FT6

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Article-No.
IN5FT60-PA66HS/PA66HIRHS-BK		6.4 - 7.1	0.75 - 3.0	4.6	202.0	45.0	225	920-30007

All dimensions in mm. Subject to technical changes.

Fir tree parts FT6

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Article-No.
T50ROSFT6LG-PA66HS/PA66HIRHS-BK		6.4 - 7.1	0.75 - 6.0	4.6	200.0	45.0	225	920-30058

All dimensions in mm. Subject to technical changes.

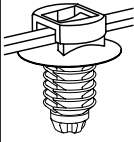
Fir tree parts FT6

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Article-No.
T30RFT6LG-PA66HS/PA66HIRHS-BK		6.4 - 7.1	0.75 - 6.00	3.6	148.0	30.0	135	920-30010

All dimensions in mm. Subject to technical changes.



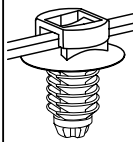
Fir tree parts FT7

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50RFT7-PA66HS-BK		6.5 - 7.0	0.8 - 7.0	4.6	202.0	45.0	225	1-2;4-7;25	156-02828

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

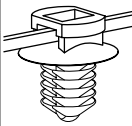
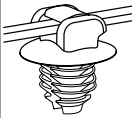
All dimensions in mm. Subject to technical changes.

Fir tree parts FT7

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Article-No.
T50ROSFT7-PA66HS-BK		6.5 - 7.0	0.8 - 7.0	4.6	200.0	45.0	225	920-30012

All dimensions in mm. Subject to technical changes.

Fir tree parts FT8

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T30RFT8-PA66HS-BK		7.7 - 8.0	0.80 - 6.00	3.6	150.0	31.0	135	1-2;4-5;25	156-03701
T50LFT8-PA66HS-BK		7.7 - 8.0	0.80 - 6.00	4.7	380.0	105.0	225	1-2;4-7;25	156-03703
T40RFT8GSD-PA66HS/PA66HIRHS-BK		8.0 - 8.5	1.5 - 4.0	4.0	180.0	40.0	180	1-2;4-5;25	156-00104
T50RFT8GSD-PA46-GY		8.0 - 8.5	1.5 - 4.0	4.6	202.0	45.0	225	1-2;4-7;25	156-00235
T50RFT8GSD-PA66HS/PA66HIRHS-BK		8.0 - 8.5	1.5 - 4.0	4.6	202.0	45.0	225	1-2;4-7;25	133-00034

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Cable Ties and Fixings

Fixing products for holes

Fir tree parts FT8

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Article-No.
T50ROSFT8-PA66HS-BK		7.7 - 8.0	0.8 - 6.0	4.6	200.0	35.0	225	920-30033

All dimensions in mm. Subject to technical changes.

Fir tree parts FT9

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T150RFT9-PA66HS/PA66HIRHS-BK		9.0 - 10.6	5.0 - 11	7.6	365.0	100.0	670	1;3;6-7;9-10;25	156-00845
T50RFT9LP-PA66HS/PA66HIRHS-BK		8.8 - 9.2	0.80 - 9.00	4.6	200.0	45.0	225	1-2;4-5;25	156-01201
WSSFT9A-PA66HIRHSUV-BK		8.7 - 9.2	1.0 - 6.5	12.7	228.0	57.0	535	3;5-7;9-10	156-00068
T150RFT9B-PA66HS/PA66HIRHS-BK		8.8 - 9.2	-	-	-	-	-	1;3;6-7;9-10;25	156-02813

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

Fir tree parts FT10

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50RFT10-PA66HS-BK		9.7 - 10.0	0.80 - 5.0	4.6	200.0	45.0	225	1-2;4-7;25	156-02817

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-piece fixing ties with fir tree, with disc, for round holes

Unassembled Parts

Primarily designed for fixing cable harnesses in the automotive industry their simplicity, and ease of use, has seen these parts used in everything from aircraft, to switch-gear, to washing machines.

Features and benefits

- Pre-assembled 2-piece fixing tie with fir tree foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises ingress of dust and dirt
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes



These fir tree fixings can also be used in threaded, blind holes.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Disc Ø	Bundle Ø max.	N	Tools	Article-No.
T50RFT9SET-PA66HS/PA66HIRHS-BK		-	-	-	-	-	-	-	2-7	156-00159
T50RFT6LG-PA66HS/PA6HIRHS-BK		-	-	-	-	-	-	-	-	150-00613
T50RFT6LG1SDSET-PA66HS/PA66HIRHS-BK		6.5 - 7.0	-	-	202.0	16.0	45.0	225	1-2;4-7;25	156-00186
T50ROSFT13SET-PA66HS/PA66HIRHS-BK		13.0	0.7 - 10.0	4.6	200.0	-	50.0	225	1-2;4-7;25	156-01471
T30RATSFT5LGSET-PA66HS/PA66HIRHS-BK		4.5 - 5.0	0.7 - 8.0	-	-	-	35.0	-	2;4-5	156-00336

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-piece fixing ties with fir tree, with disc

for oval holes

Primarily designed for fixing cable harnesses in the automotive industry their simplicity, and ease of use, has seen these parts used in everything from aircraft, to switch-gear, to washing machines.

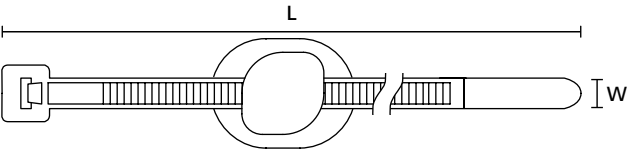
Features and benefits

- Pre-assembled 2-piece fixing tie with fir tree foot part
- Cable tie head can be moved after bundling
- Easy to assemble without the need for a tool
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- DOP versions for oval holes feature anti-twist protection



Two piece fixing tie T50ROSFTOVAL-B with fir tree for oval holes.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50RFTOVAL-A-PA66HS/PA66HIRHS-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.60 - 5.00	4.6	200.0	50.0	225	1-2;4-5;25	156-01464
T50RFTOVAL-A-PA46-GY		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 5.0	4.6	200.0	50.0	225	1-2;4-5;25	156-01465
T50ROSFTOVAL-B-PA66HS/PA66HIRHS-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.60 - 6.00	4.6	200.0	50.0	225	1-2;4-5;25	156-01519

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7I, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



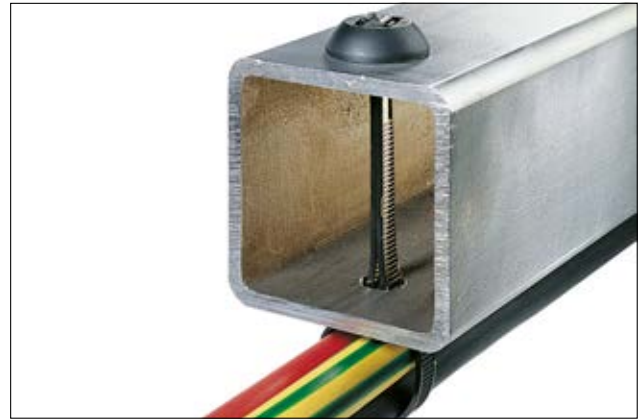
Cable ties for single hole application

Chassis ties

Using a single hole these 'chassis ties' are widely used in the automotive, truck and heavy equipment markets. Ideal for applications which have access to both sides of the hole - example truck frame rails.

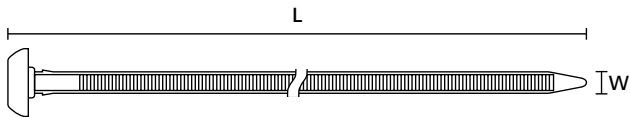
Features and benefits

- Both sides serrated cable tie
- BHT-Series with round head for larger bearing area
- BHT375 for centred position
- CT- and LHT-Series with small squared head for restricted space areas
- Tensioning with application tool



BHT375 - used for mounting cables via a single hole.

Material specifications: See Article-No. on our website.



BHT375

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Pack Cont.	Tools	Article-No.
BHT375M-PA66HS-BK		7.6	375.0	100.0	700	250 pcs.	3;6-7;9-10;25	150-47595

Recommended Tools: 3=MK21, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.
All dimensions in mm. Subject to technical changes.



Arrowhead cradle

SF/TM-Series

Offering simple and easy methods of securing cables or pipes, these fixing accessories have many applications within a wide range of industries.

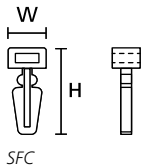
Features and benefits

- Arrowhead fixing for use in pre-drilled or punched holes
- Ideal for applications with limited space and restricted access
- Parts with disc protect against dirt and dust



TM1SF for secure fixing of cables into pre-drilled or pre-punched holes.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Strap Width max. (G)	Article-No.
SFC3-F-PA66UV-BK		6.4	2.0 - 3.3	22.0	16.8	6.5	151-00340

Recommended Tools: 7=EVO9i, 9=EVO9iHT, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 310.
All dimensions in mm. Subject to technical changes.

EN 45545-2

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Fixing elements with fir tree, for distance routing

Saddle mount

These heavy duty fixing offers excellent performance for ship building and the truck and construction vehicle industries.

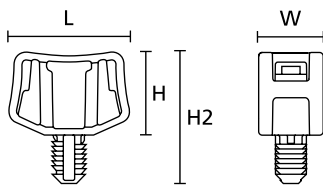
Features and benefits

- For parallel routing of four bundles
- Secure alignment to the bundle due to H-design
- For cable ties up to 13.0 mm wide
- Pre-fixing of tie with integrated nose



The mount can secure up to four separate bundles, providing parallel spacing between the frame rail and adjacent bundles.

Material specifications: See Article-No. on our website.



Fir Tree Saddle Mounts

PART DESCRIPTION	Hole Ø (FH)	Panel Thickness	Strap Width max. (G)	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Height (H2)	Pack Cont.	Article-No.
S3STM50-PA66HIRHS-BK	12.7 - 13.7	1.9 - 13.0	13.0	127.0	22.0	50.0	35.0	55.0	100 pcs.	151-29500

All dimensions in mm. Subject to technical changes.



Fixing elements for BHT-ties for distance routing

MSBT120

These heavy duty fixing offers excellent performance for ship building and the truck and construction vehicle industries.

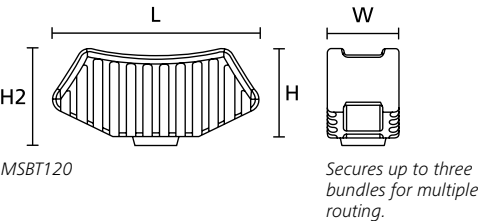
Features and benefits

- For parallel routing of three bundles
- Retainer is fixed in the hole with BHT-tie
- Socket centres retainer in the hole and can protect tie from sharp edges



Saddle Mount MSBT120.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Drawing	Width (W)	Length (L)	Height (H)	Height (H2)	Hole Ø (FH)	Panel Thickness	Pack Cont.	Article-No.
MSBT120-PA66HIRHS-BK		16.5	48.3	20.6	22.2	11.2 - 20.8	4.1 - 19.1	500 pcs.	151-29301

All dimensions in mm. Subject to technical changes.



Automatic bundling

Fir tree clips for automatic cable tying systems

Features and benefits

- Clips to fix cables and harnesses in the automotive and white goods industries
- Optimized for use automatic cable tying systems
- Easy to apply
- The fixing elements can be tied automatically with Autotool System



Fixing elements for automatic bundling.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Article-No.
ATSFT5LG-PA66HIRHS-BK		4.5 - 5.0	0.7 - 8.0	102-67050

All dimensions in mm. Subject to technical changes.

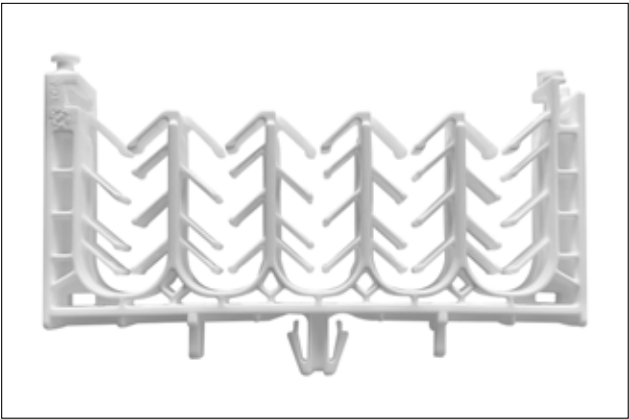


LadderClamp

for installation on cable ladders

Features and benefits

- Time saving
- Quick installation
- Ergonomic installation saves the installers shoulders
- No waste
- Fix the cables in place
- Reusable
- No tool needed
- Fits to cable ladders of brand MP-bolagen and Wibe
- Ladder clamp made of polypropylene (PP) offers a lower CO₂ footprint compared to PA66 making it a more sustainable choice without compromising on performance



Material specifications: See Article-No. on our website.

PART DESCRIPTION	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
LC5-8-10SFT8.5-PP-WH	15.0	95.0	85.0	50 pcs.	151-04121

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Rivet mount

TY5-Series

The TY Fixings are ideal for use where a high pull out force is required (eg. in the aircraft industry). The two piece 'wedge' ensures that once installed the mounts will not come away from the panel. Particularly designed for areas with restricted access.

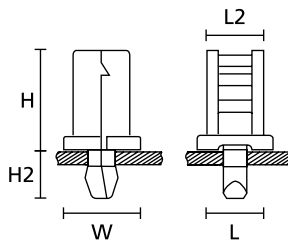
Features and benefits

- Quick installation
- Two-piece wedge
- Easy insertion
- Firmly fixes wide variety of cable ties



Rivet Mount TY5 is usable with a wide variety of our cable ties.

Material specifications: See Article-No. on our website.



TY5K1 Rivet Mount

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Length (L2)	Height (H)	Height (H2)	Strap Width max. (G)	Hole Ø (FH)	Panel Thickness	Article-No.
TY5K3-PA66HS-NA		22.0	18.0	14.0	10.0	12.5	9.3	5.9 - 6.4	2.0 - 8.0	152-11309

All dimensions in mm. Subject to technical changes.



Mounting for wiring ducts

TDY Series

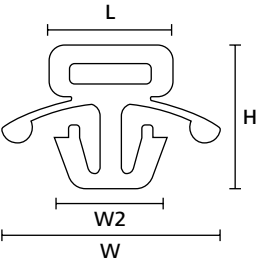
To prevent noise generation, it is a cable fixing accessory used to wire the signal line outside of the duct.

Features and benefits

- Secures direct wiring to the outside of the wiring duct in combination with tie.



Material specifications: See Article-No. on our website.



PART DESCRIPTION	Width (W)	Width (W2)	Length (L)	Height (H)	Wall (WT2)	Strap Thickness max.	Article-No.
TDY1-PA66HS-NA	19.7	10.7	12.0	13.8	2.0	1.8	151-00576

All dimensions in mm. Subject to technical changes.



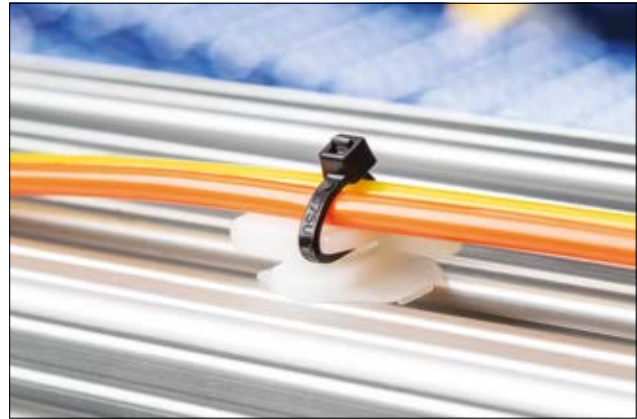
Fixing mount for aluminum frame

AFLM series

Our aluminium frame mounts are specially designed for aluminium construction profiles. Their installation and handling is very simple. At every favoured place on the profile just with a quarter turn the mount is firmly fixed. Also it can be easily loosened and repositioned at any time. The mounts are custom developed for several aluminium construction profiles.

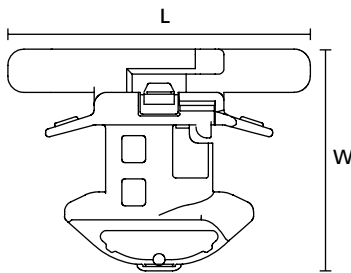
Features and benefits

- AFLM can be easily attached to aluminum frames, which are indispensable for equipment units used at production sites.
- AFLM offers exceptional versatility as it can fit into frames from the major aluminum frame manufacturers.
- Can be attached to an aluminum frame in just one second. Simply rotate to lock in place.



Easy to install, remove and reposition with just a quarter-turn – no tools necessary.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
AFLM40-PA66-NA	21.0	28.0	20.5	100 pcs.	151-01066

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Blind plugs

with fir tree for oval holes

Our Plugs were developed especially for the automotive industry. Application in trunks, doors, wheel housing and dash panels. Whenever needed to secure a hole against dirt or dust. Sometimes even used for optical reasons.

Features and benefits

- Easy assembly without the need of a tool
- Disc covers the hole and minimises ingress of dust, dirt and water
- TRIM PLUG 5: with additional retainer to fix panel or cover



Disc surrounding push pin minimizes the ingress of dust, dirt and water.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Pack Cont.	Article-No.
PLUGFTOVALXL-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 8.0	3000 pcs.	133-02029

All dimensions in mm. Subject to technical changes.



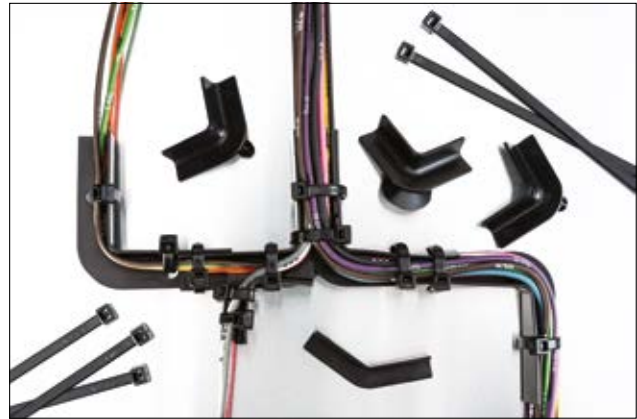
Mini cable channel family

Modular and interchangeable cable routing system

HellermannTyton Mini Channels provide protection and configurable routing in a cost-effective wire management solution. The variety of sizes and configurations enables engineers and installers to create optimum routing scenarios. Mini channels replace engineered channels that are costly to design and develop.

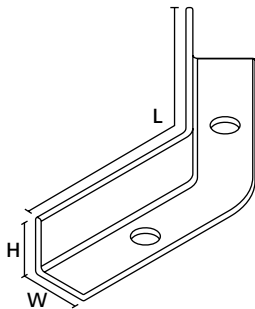
Features and benefits

- Angled channel allows specific guidance around corners or obstructions
- U-Shape channel provides three sides of protection for wire or bundle
- Protects against abrasion and other environmental factors
- Types made from PPT20 material convince with a high operating temperature



Mini channel provides safe routing of wires around corners or obstructions

Material specifications: See Article-No. on our website.



45MINICHNL2

PART DESCRIPTION	Drawing	Hole Ø (FH)	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
45MINICHNL-PPTD20-BK		6.1 - 6.9	10.0	52.0	10.0	4000 pcs.	133-01480
90MINICHNL-PPTD20-BK		-	10.0	38.5	10.0	3500 pcs.	133-01479

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Bundling clips with arrowhead for round holes

Bundling clips with arrowhead for round holes, distance routing

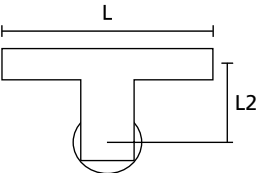
Originally designed for the automotive industry, these clips offer simple and easy methods of securing cables, hoses or pipes. These parts are used in the automotive industry for assembly of cable harnesses.

Features and benefits

- Easy to install without the need for a tool
- Arrowhead simply locks into place
- Disc adjusts tie for pressure from various directions and minimises access of dust and dirt
- Versions for oval holes feature anti-twist protection



StandOff Clips allow cable looms to be routed at a set distance from the punched holes.



Stand Off Clip SOC

More details: Click on article number in table.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Length (L2)	Pack Cont.	Article-No.
CH20D7-PA66HIRHS-BK		6.4 - 7.0 6.8 (hexagonal)	0.8 - 1.6	50.0	20.0	7000 pcs.	151-00968
STAND OFF CLIP-PA66HIRHS-BK		6.5 - 6.8	0.4 - 1.6	40.0	31.0	500 pcs.	150-45397

All dimensions in mm. Subject to technical changes.



Bundling clips with arrowhead for oval holes

Bundling clips with arrowhead for oval holes

Originally designed for the automotive industry, these clips offer simple and easy methods of securing cables, hoses or pipes. This parts are used in the automotive industry for assembly of cable harnesses.

Features and benefits

- Especially for banding of cables and cable harnesses
- Fastened onto bundling bar with cable ties or adhesive tape
- Various base geometries for wide variety of metal gauges and bore diameters

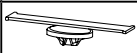


Bundling clip for oval holes with a stepped foot design for different panel thicknesses.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Pack Cont.	Article-No.
BCHSFT712-PA66HIRHS-BK		7.0 x 12.0	0.7 - 3.2	40.0	500 pcs.	151-01037

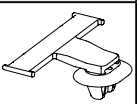
All dimensions in mm. Subject to technical changes.

Bundling clips with arrowhead for oval holes, sealed

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Pack Cont.	Article-No.
BC70SFT712-MD-PA66HIRHS-BK		7.0 x 12.0	0.7 - 1.8	70.0	1000 pcs.	151-01094

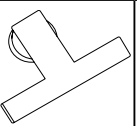
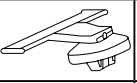
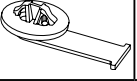
All dimensions in mm. Subject to technical changes.

Bundling clips with arrowhead for oval holes, distance routing

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Pack Cont.	Article-No.
SOC20SFT712-S-PA66HIRHS-BK		7.0 x 12.0	2.2 - 3.0	500 pcs.	151-01852

All dimensions in mm. Subject to technical changes.

Bundling clips with arrowhead for oval holes, distance routing, sealed

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Length (L2)	Pack Cont.	Article-No.
CH20D7MD-PA66-BK		7.0	0.80 - 1.60	20.0	-	500 pcs.	151-00969
SOC20SFT712-MD-PA66HIRHS/EPDM-BK		7.0 x 12.0	0.6 - 2.0	50.0	20.0	500 pcs.	151-01255
BCHSFT712-MD-PA66HIRHS-BK		7.0 x 12.0	0.7 - 1.8	42.0	-	500 pcs.	151-01301

All dimensions in mm. Subject to technical changes.



Bundling clips with fir tree

for round holes

Widespread used in cable harness production; a quick and easy means of fixing cables and wires securely in various parts of cars.

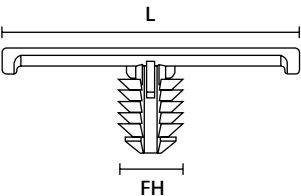
Features and benefits

- Easy to install without the need for a tool
- One fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Holding tabs prevent the tie slipping sideways
- ATS fixing elements can be tied automatically with the ATS3080 tool



Bundling Clips with fir tree for a variety of applications with a wide range of panel thicknesses and drilled holes.

Material specifications: See Article-No. on our website.



TC4FT6LG

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Pack Cont.	Article-No.
TC5FT6S-PA66HIRHS-BK		6.4 - 7.1	0.75 - 1.5	37.0	1000 pcs.	150-95500
TC4FT6LG-PA66HIRHS-BK		6.3 - 7.0	0.6 - 5.1	37.0	10000 pcs.	151-00215
TC4FT6LG-PA66HIRHS-NA		6.3 - 7.0	0.6 - 5.1	37.0	10000 pcs.	151-00467
TC30FT6LG-PA66-BK		6.3 - 7.0	0.7 - 5.1	36.0	1000 pcs.	151-00884
BCFT6XL56-PA66HIRHS-BK		6.3 - 7.0	0.7 - 9.0	56.0	5000 pcs.	151-00662
BCOWFT6M-PA66HIRHS-BK		6.5 - 7.0	0.6 - 3.5	27.3	20000 pcs.	151-02226
TC2FT6LG-PA66HIRHS-BK		6.3 - 7.0	0.6 - 5.1	55.0	14000 pcs.	155-30802

All dimensions in mm. Subject to technical changes.



Bundling clips with fir tree

for oval holes

Originally designed for the automotive industry, these clips offer simple and easy methods of securing cables, hoses or pipes. These parts are used in the automotive industry for assembly of cable harnesses.

Features and benefits

- Especially for banding of cables and cable harnesses
- Fastened onto bundling bar with cable ties or adhesive tape
- Various base geometries for wide variety of metal gauges and bore diameters



Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Pack Cont.	Article-No.
TC50FT62122-PA66-BK		6.2 - 12.2	0.7 - 3	50.0	1000 pcs.	151-00883
TCOP70x120-PA66HIRHS-BK		7.0 x 12.0	0.60 - 6.0	55.0	5000 pcs.	151-00029
WICKELCLIP-VDS-PA66HIRHS-BK		6.3 x 9.0 6.3 x 10.0	0.6 - 2.5	40.0	1000 pcs.	155-16301
BCFTOVAL2-PA66HIRHS-NA		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.0	38.7	10000 pcs.	151-01240
BCFTOVAL-PA66HIRHS-NA		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.0	58.0	8000 pcs.	151-01239
TCOP62X122-PA66HIRHS-BK		6.2 x 12.2	0.6 - 6.0	55.0	8000 pcs.	151-01282

All dimensions in mm. Subject to technical changes.

for oval holes, sealed

PART DESCRIPTION	Drawing	Pack Cont.	Article-No.
SOC11FTOVAL1MD-PA66HIRHS/EPDM-BK/NA		3000 pcs.	151-03860

All dimensions in mm. Subject to technical changes.



Bundling clips with fir tree for round holes

for distance routing

Originally designed for the automotive industry, these clips offer simple and easy methods of securing cables, hoses or pipes.

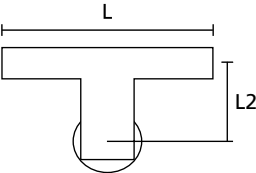
Features and benefits

- Easy to install without the need for a tool
- One fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Disc covers the hole to prevent dirt and dust gaining access
- Bundle runs in a set distance to the hole



COW Clip used as tape-on clip.

Material specifications: See Article-No. on our website.



Stand Off Clip SOC

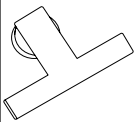
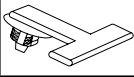
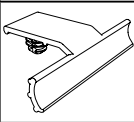
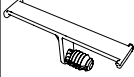
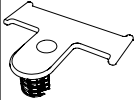
PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Length (L2)	Pack Cont.	Article-No.
COW20DP7-PA66-BN		6.3 - 7.0	0.80 - 4.50	42.0	20.0	500 pcs.	151-01095
COW20DP7-PA66HS-BN		6.3 - 7.0	0.80 - 4.50	42.0	20.0	500 pcs.	151-01097
COW20DP7-PA66HS-BK		6.3 - 7.0	0.80 - 4.50	42.0	20.0	500 pcs.	151-01098
COW30DP7-PA66HS-BK		6.1 - 6.6 (hexagonal) 6.3 - 7.0	0.8 - 4.5	43.2	30.48	500 pcs.	151-00080
COW30DP7-PA66-BK		6.3 - 7.0 6.1 - 6.6 (hexagonal)	0.8 - 4.5	-	-	500 pcs.	151-01398
SOC4MFT6-PA66HIRHS-BK		6.5 - 7.0	0.7 - 5.1	55.0	20.32	500 pcs.	155-30902
SOC5FT6LG-PA66HIRHS-BK		6.1 - 6.6 (hexagonal) 6.5 - 7.0	0.7 - 5.1	55.0	21.0	500 pcs.	151-00074
SOC3FT6LG-PA66HIRHS-BK		6.4 - 7.1	0.75 - 6.0	12.0	30.0	500 pcs.	155-19001
BC13FT6.35-PA66HIRHS-BK		6.35	1.1 - 5.0	40.0	22.0	500 pcs.	151-01335

All dimensions in mm. Subject to technical changes.



Bundling clips with fir tree for round holes

for distance routing

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Length (L2)	Pack Cont.	Article-No.
CH20D7MD-PA66-BK		7.0	0.80 - 1.60	20.0	-	500 pcs.	151-00969
CH20FT6-PA66HIRHS-BK		6.5 - 7.0	0.8 - 2.5	50.0	20.0	1000 pcs.	151-00830
SOC14FT6-PA66HIRHS-NA		6.1 - 6.9	0.6 - 6.0	45.0	-	2000 pcs.	133-01497
SOC10405-PA66HIRHS-BK		6.3 - 6.7	0.7 - 3.5	55.0	20.0	500 pcs.	151-01840
SOC8FT6-PA66HIRHS-NA		6.2 - 6.8	0.7 - 5.75	55.9	42.5	2000 pcs.	151-00650
SOC9FT6XLG-PA66HIRHS-NA		6.1 - 6.9	0.5 - 5.84	35.5	15.75	5000 pcs.	151-01154

All dimensions in mm. Subject to technical changes.



Bundling clips with fir tree for oval holes

for distance routing

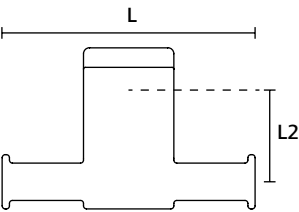
Originally designed for the automotive industry, these clips offer simple and easy methods of securing cables, hoses or pipes.

Features and benefits

- Easy to install without the need for a tool
- One fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Disc covers the hole to prevent dust and dirt gaining access
- Bundle runs in a set distance to the hole



Material specifications: See Article-No. on our website.



PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Length (L2)	Pack Cont.	Article-No.
SOC11FTOVAL-PA66HIRHS-NA		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	50.0	20.0	3000 pcs.	151-00932
SOC11FTOVAL-PA66HIRHS-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	50.0	20.0	3000 pcs.	151-01269
SOC12FTOVAL-PA66HIRHS-NA		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	50.0	32.0	1500 pcs.	151-01238
SOC12FTOVAL-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	50.0	32.0	1500 pcs.	151-01117
SOC25FT63x100-PA66HIRHS-BK		6.3 x 10.0	0.6 - 2.5	42.0	18.0	500	133-02635
BC70LFT712-PA66HIRHS-BK		7.0 x 12.0	0.9 - 5.5	81.3	40.0	200 pcs.	151-01217

All dimensions in mm. Subject to technical changes.



Bundling clips for weld studs, lateral adjustment

for distance routing

The BC series is proving very popular in the automotive industry as a means of installing cable sets easily in various areas of the vehicle. Due to the flat and lightweight design they are a solution provider at limited space areas.

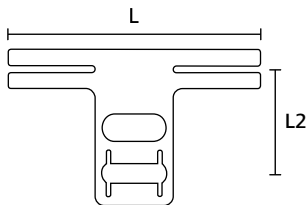
Features and benefits

- Very flat bundling clip for 5.0 mm weld stud
- Horizontal length tolerance compensation
- Suitable for cables of reduced weight and diameter

Material specifications: See Article-No. on our website.



The slim line BC series is particularly compact and flexible.



PART DESCRIPTION	Drawing	Stud Ø	Length (L)	Length (L2)	Pack Cont.	Article-No.
BC2212-PA66HIRHS-BK		5.0	55.0	22.0	1000 pcs.	151-00017

All dimensions in mm. Subject to technical changes.

Bundling clips for round holes with fir tree, lateral adjustment

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Pack Cont.	Article-No.
CHA2-PA66-BK		6.5 - 7.0	0.8 - 2.0	6.0	54.0	500 pcs.	151-02901

All dimensions in mm. Subject to technical changes.



Bundling clips for connectors

for connectors

Originally designed for the automotive industry, these clips offer simple and easy methods of securing cables, hoses or pipes. These parts are used in the automotive industry for assembly of cable harnesses.

Features and benefits

- Bundles are guided above connector plug
- Secure fixing of connector
- Connector easily installed by simply pushing into place
- Connection can be released non-destructive

Material specifications: See Article-No. on our website.



Connector Clips designed for cables and cable sets used in the automotive industry.

PART DESCRIPTION	Drawing	Bundling Bar Length	Pack Cont.	Article-No.
SOC25S09CC11-POM-BK		50.0	5000 pcs.	151-02551

All dimensions in mm. Subject to technical changes.

Bundling clips

with harness clip

Originally designed for the automotive industry, these clips offer simple and easy methods of securing cables, hoses or pipes. These parts are used in the automotive industry for assembly of cable harnesses.

Features and benefits

- Especially for banding of cables and cable harnesses
- Fastened onto bundling bar with cable ties or adhesive tape
- Various base geometries for wide variety of metal gauges and bore diameters
- Suitable for post-installation of bundles
- Interchangeable in case of maintenance

Material specifications: See Article-No. on our website.



Bundling clip OCTC1 with harness clip.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Length (L)	Pack Cont.	Article-No.
Halter SFT6.5-PA66HIRHS-BK		6.3 - 6.7	0.6 - 1.5	60.0	1000 pcs.	133-00067

All dimensions in mm. Subject to technical changes.



Bundling clips

for edges

EdgeClips are used in the automotive industries and electrical industries and when it is impossible to drill holes or no other fixing points are available.

Features and benefits

- Easy assembly, just shuffle manually
- Designed for edges of 1 - 3 and 1.5 - 4 mm
- Integrated metal clamp holds clip firmly in place
- Clamp consists of double tempered steel spring
- ATS fixing elements can be tied automatically with tools ATS3080, AT2000 or AT2000CPK



Cables and leads can be fastened with a cable tie or adhesive tape to the bars of the mounting element.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Panel Thickness	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
EC14-PA66HIRHS-BK		1.0 - 3.0	10.0	40.0	12.4	500 pcs.	151-03404
EC15-PA66HIRHS-BK		1.0 - 3.0	10.0	40.0	12.5	500 pcs.	151-03401
EC16-PA66HIRHS-BK		1.0 - 3.0	10.0	40.0	13.0	500 pcs.	151-03402
EC17-PA66HIRHS-BK		1.0 - 3.0	10.0	46.5	13.0	500 pcs.	151-03403
ATSBCEC38-PA66HSW-BK		1.5 - 4.0	13.2	39.0	14.2	500 pcs.	102-68385

All dimensions in mm. Subject to technical changes.



2-piece fixing ties for parallel separation

T50RCoupler for max. bundle diameter 2 x 47.0 mm

The fixing ties with coupler is a fastening solution designed to ensure parallel routing of two bundles of tubes, cables, or harnesses. Thanks to its design, each tie can twistable up to 90°, offering great flexibility during installation. The coupler also serves as a spacer: it maintains a space between two harnesses to prevent the risk of friction, especially when cables cross each other. Widely used in the automotive industry, this solution is particularly suitable for securing fluid pipes (fuel, engine cooling...)

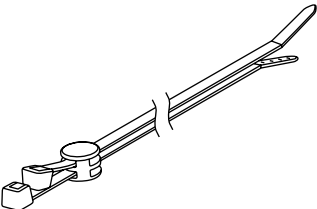
Features and benefits

- Pre-assembled 2-piece fixing tie with coupler
- Cable tie head can be moved after bundling
- Easy addition of cables after assembly
- For parallel routing of bundles that can be twisted 90° even after installation

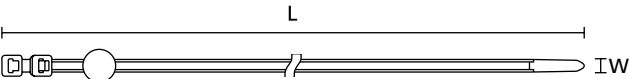


T50RCOUPLER for parallel routing.

Material specifications: See Article-No. on our website.



Two Cable Ties with Coupler



Cable Ties with Coupler



Coupler

PART DESCRIPTION	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50RCOUPLER-PA46-GY	4.6	202.0	47.0	225	1-2;4-7;25	156-00382

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.
All dimensions in mm. Subject to technical changes.



Cable tie mount for parallel routing, twistable 360°

DSWS-Series

These fixing element for parallel routing can be used where bundles need separation from each other combined with the necessary functionality to support moving harnesses.

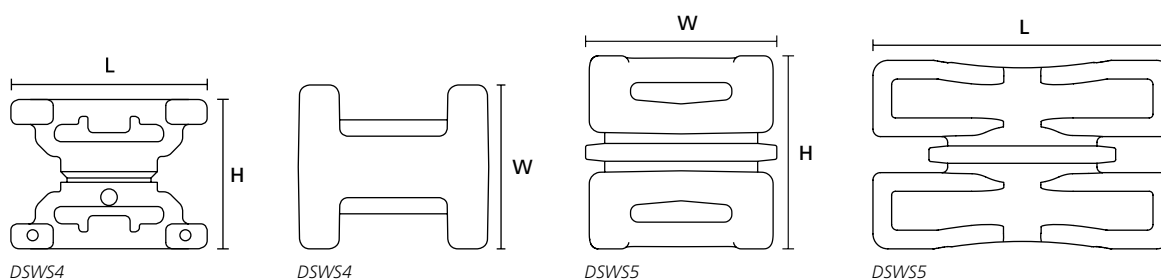
Features and benefits

- For parallel routing of bundles that can be twisted 360° even after setting
- Secure alignment to the bundle due to H-design
- Cable tie head can be moved after bundling
- For cable ties up to 12.7 mm wide
- For post-installation of bundles



The spacers can be easily rotated by hand, allowing the bundles to be crossed and rotated at any angle.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Drawing	Bundle Ø min.	Bundle Ø max.	Strap Width max. (G)	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
DSWS4-PA66HS/POM-BK		6.0	76.0	12.7	20.3	23.6	18.0	2200 pcs.	151-06500
DSWS5-PA66HS/PA46-BK		16.0	152.0	12.7	25.4	40.6	23.6	50 pcs.	151-06502

All dimensions in mm. Subject to technical changes.



Fixing base

LOK04

The LOK04 spacer is ideal whenever two or more cables are routed in parallel.

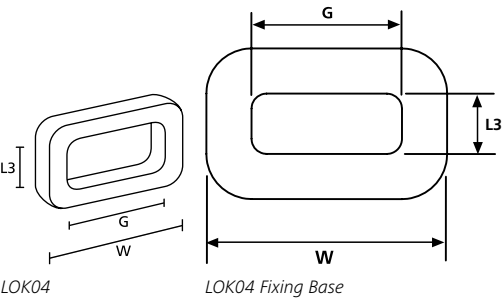
Features and benefits

- For routing bundles over a distance in parallel
- Can be used with cable ties up to 9 mm cable tie width



LOK04 ring for parallel routing.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Width (W)	Length (L3)	Strap Width max. (G)	Pack Cont.	Article-No.
LOK04-PA66-NA	16.0	4.0	9.0	100 pcs.	151-00678

All dimensions in mm. Subject to technical changes.



Spacer Shim

CE Series

The Spacer Shim is used to distance and secure cables, tubes, hoses and other products that require this purpose. It was specially developed to be used together with T120 and T250 series cable ties. With manual assembly, it does not require any type of special tool for its application.

Features and benefits

- Used to distance and secure wires, cables, tubes, hoses
- Used together with T120 and T250 series cable ties
- Easy to install
- No tool is needed



Material specifications: See Article-No. on our website.

PART DESCRIPTION	Width (W)	Length (L)	Height (H)	Bundle Ø max.	Strap Width max. (G)	Pack Cont.	Article-No.
CE30-PA46-WH	18.0	18.0	30.0	27.0	12.5	0.05 ml	151-01068

All dimensions in mm. Subject to technical changes.

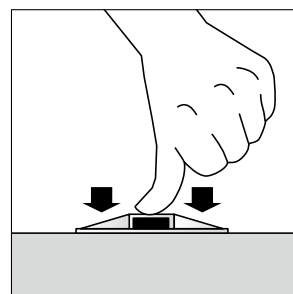
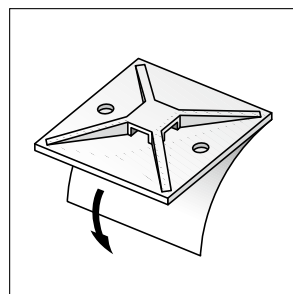
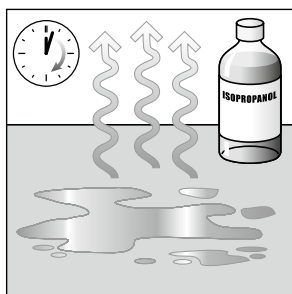


Information and installation instructions for self-adhesive mounting bases

HellermannTyton uses different types of adhesives for self-adhesive bases: acrylate and synthetic rubber. These differ in the operating temperature range and the 'pull off' force of the adhesive. Synthetic rubber has an excellent initial grip, allowing for almost immediate use.

Acrylate adhesive has less initial grip, so there might be a need to wait for a few hours before use (depending on the surface), but has a higher, "pull off" force than synthetic rubber. This enables a permanent fixing lasting months or even years.

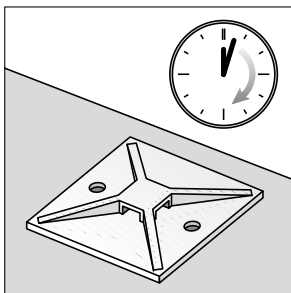
Instructions for use



1. The surface must be dry, free from dust, oil, oxides, parting agents and other impurities. The surface to be glued should be cleaned using a clean cloth and isopropanol/water (50/50). When using other appropriate cleaning agents, ensure that they do not attack the surface nor leave any residues. After cleaning allow the surface to air-dry completely.

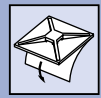
2. Peel off protective backing and ensure the adhesive area is not touched.

3. Press down firmly on the base with the thumbs for several seconds.



4. Depending on the type of adhesive, wait for several minutes (synthetic rubber) or hours (acrylate) so that the adhesive can bond completely with the surface.

We will be happy to send you on request an up-to-date technical datasheet for whichever adhesive you are using.



Cable tie mounts with high performance adhesive

FlexTack-Series FMB for round and angled surfaces

FlexTack cable tie mounts can be successfully applied to a variety of high- and low-energy surfaces such as glass, metals (including painted, varnished or powder-coated surfaces) as well as plastics. FlexTack provides a reliable fixing solution where it is impractical to use screws or bolts. The unique design in combination with the special acrylate adhesive makes professional cable management easy.

Features and benefits

- Flexible mount for round and angled surfaces
- FMB mounts with homogeneous system of acrylic adhesive
- Allows greater design freedom and offers uniform stress distribution along with weight reduction
- Innovative fixing solution for high and low energy surfaces
- Protection foil with finger lift for easy peel off
- FlexTack cable tie mounts are also suitable for high energy surfaces like metal or glass.



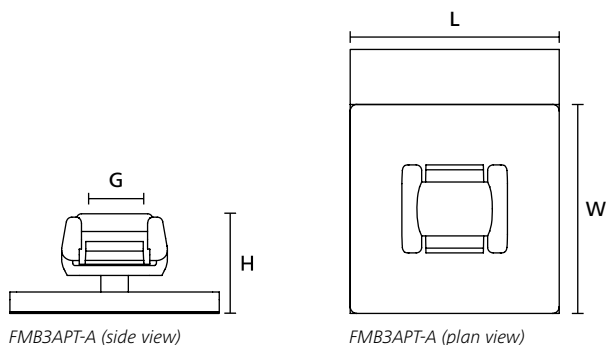
Flexible cable tie mount, FlexTack in use on a concave surface.

MATERIAL	Polyamide 6.6, heat stabilised (PA66HS)
Adhesive	Acrylate with base of acrylic foam
Operating Temperature	-40 °C to +90 °C
Flammability	UL 94 V2 (excluding adhesive)

HF ✓

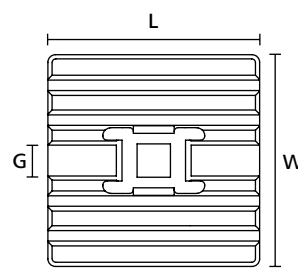
RoHS ✓

For more information on the types of adhesive please see page 108.



FMB3APT-A (side view)

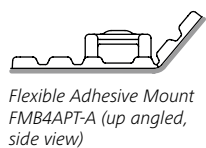
FMB3APT-A (plan view)



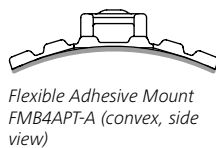
Flexible Adhesive Mount FMB4APT-A (plan view)



Flexible Adhesive Mount FMB4APT-A (side view)



Flexible Adhesive Mount FMB4APT-A (up angled, side view)



Flexible Adhesive Mount FMB4APT-A (convex, side view)

PART DESCRIPTION	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Pack Cont.	Article-No.
FMB4APT-A-PA66HS-BK	28.0	28.0	6.3	5.4	100 pcs.	151-02219

All dimensions in mm. Subject to technical changes.



Cable tie mounts with high performance adhesive

SolidTack-Series MB

SolidTack MB Series mounts have a square design and are fairly common in areas like electrical cabinet, railway, aerospace, automotive and agriculture machinery. The premium self-adhesive bonds well on high and low-energy surfaces like plastics, metal, varnish or paint and is suitable for a wide range of applications.

Features and benefits

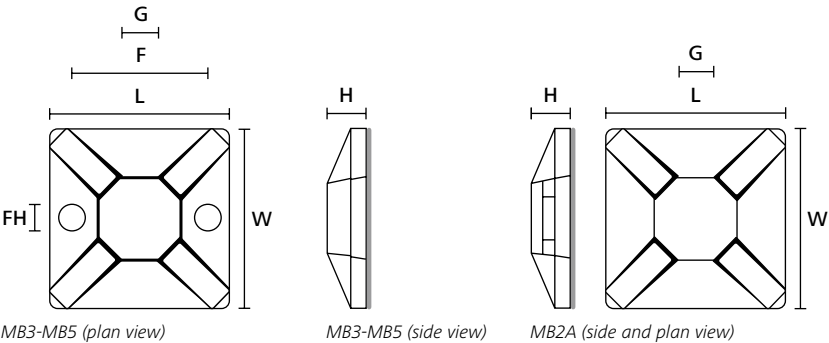
- MB mounts with homogeneous system of acrylic adhesive
- Very good initial adhesion, increases with time
- Innovative fixing solution for high and low energy surfaces
- Protection foil with finger lift for easy peel off

For more information on the types of adhesive please see page 108.



SolidTack MB Series mounts with square design - screwable, self-adhesive - suitable for a wide range of applications like fastening of cables in the automotive machinery.

MATERIAL	Polyamide 6.6 (PA66)
Adhesive	Acrylate with base of acrylic foam
Operating Temperature	-40 °C to +85 °C
Flammability	UL 94 V2 (excluding adhesive)



PART DESCRIPTION	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Pack Cont.	Article-No.
MB2APT-A-PA66-BK	13.0	13.0	4.1	2.7	100 pcs.	151-02243
MB3APT-A-PA66-BK	19.0	19.0	3.8	4.4	100 pcs.	151-02244
MB4APT-A-PA66-BK	28.0	28.0	4.7	5.6	100 pcs.	151-02245

All dimensions in mm. Subject to technical changes.



Cable tie mounts

MB-Series square design, self-adhesive

Where speed, simplicity and a firm fixing base are required these self adhesive clips are ideal. Particularly suitable for use in control cabinets, telecoms equipment or domestic appliances where the use of holes, screws, or nuts and bolts is impractical or undesirable.

Features and benefits

- Simple to instal
- Excellent security, particularly in areas of high vibration
- Maximum surface area with adhesive to achieve high pull-off force
- 4-way entry for cable tie for quicker and more flexible installation



MB-Series Mounts with square design.

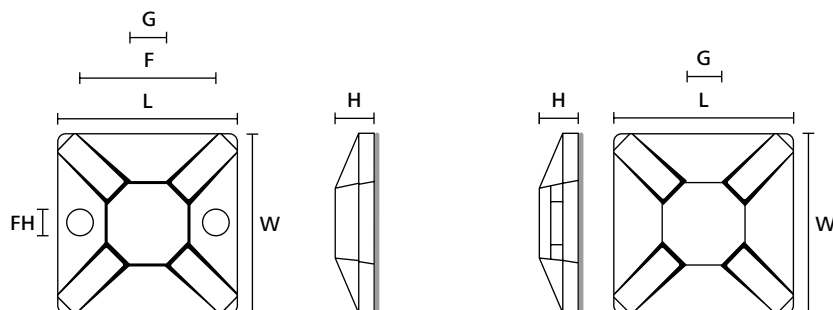
For more information on the types of adhesive please see page 108.

MATERIAL	Polyamide 6.6 (PA66)	
Adhesive	Synthetic rubber	Synthetic rubber with base of polyethylene foam
Flammability	UL 94 V2	UL 94 V2 (excluding adhesive)

RoHS ✓

HF ✓

RoHS ✓



MB3-MB5 (plan view)

MB3-MB5 (side view)

MB2A (side and plan view)

PART DESCRIPTION	Width (W)	Length (L)	Height (H)	Fixing Hole Centres (F)	Strap Width max. (G)	Pack Cont.	Operating Temperature	Article-No.
MB2A-PA66-WH	13.0	13.0	4.1	-	2.7	100 pcs.	-40 °C to +60 °C	151-01802
MB3A-PA66-BK	19.0	19.0	3.8	13.2	4.1	100 pcs.	-40 °C to +60 °C	151-28320
MB3A-PA66-WH	19.0	19.0	3.8	13.2	4.1	100 pcs.	-40 °C to +60 °C	151-28349
MB4A-PA66-BK	28.0	28.0	4.7	20.2	5.4	100 pcs.	-40 °C to +60 °C	151-28412
MB4A-PA66-WH	28.0	28.0	4.7	20.2	5.4	100 pcs.	-40 °C to +60 °C	151-28469
MB5A-PA66-NA	38.0	38.0	8.0	27.5	10.0	100 pcs.	-	151-00537

All dimensions in mm. Subject to technical changes.



Cable tie mounts

TY-Series rectangle design, self-adhesive

Where speed, simplicity, and a firm fixing base are required these self adhesive clips are ideal. Particularly suitable for use in control cabinets, telecoms equipment or domestic appliances where the use of holes, screws, or nuts and bolts is impractical or undesirable.

Features and benefits

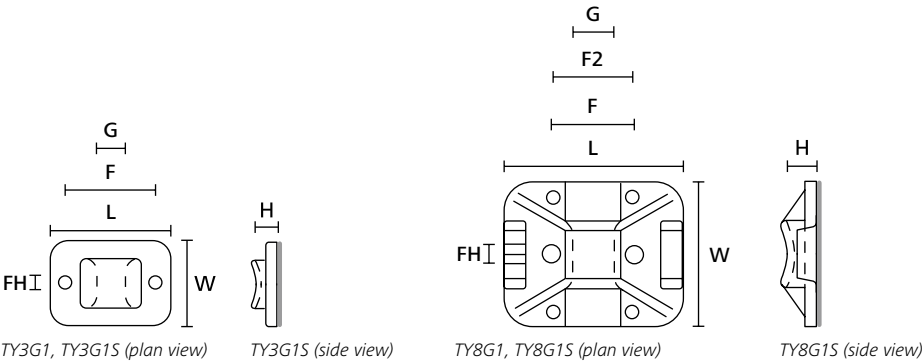
- 2-way mounting base for safe guiding of cables and conduits
- Suitable for applications with minimal space
- Mounted before cable installation



TY-Series selfadhesive mounts with rectangle design.

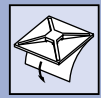
For more information on the types of adhesive please see page 108.

MATERIAL	Polyamide 6.6 (PA66)
Adhesive	Acrylate with base of polyurethane foam
Operating Temperature	-40 °C to +85 °C
Flammability	UL 94 V2 (excluding adhesive)



PART DESCRIPTION	Drawing	Width (W)	Length (L)	Height (H)	Fixing Hole Centres (F)	Strap Width max. (G)	Pack Cont.	Article-No.
TY3G1S-PA66-NA		14.0	20.0	3.7	15.0	4.0	100 pcs.	151-11319

All dimensions in mm. Subject to technical changes.



Mounts with cable clip, self-adhesive

RA-Series

These mounts are ideal for use in applications which are difficult to access or for areas where self adhesive is the only possible fixing method and fixing holes would be unacceptable. The self adhesive mounts can be used without cable ties. Offering process optimization in industries like automotive, bus and truck, construction vehicles or industrial building.

Features and benefits

- One-piece self adhesive mount for quick and easy installation
- Can be used without cable ties offering process optimization
- Designed to hold wires, cables or hoses
- Different sizes for various bundle diameters available
- Two types of adhesive can be offered

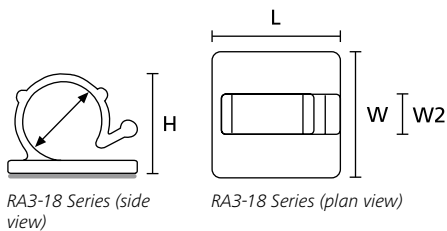
For more information on the types of adhesive please see page 108.



Self adhesive one piece fixing mounts RA6 (l) and RB5 (r).

MATERIAL	Polyamide 6.6 (PA66)	
Adhesive	Synthetic rubber with base of polyethylene foam	
Operating Temperature	-40 °C to +60 °C	-40 °C to +85 °C
Flammability	UL 94 V2 (excluding adhesive)	

RoHS ✓



PART DESCRIPTION	Width (W2)	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Operating Temperature	Pack Cont.	Article-No.
RA6-PA66-NA	5.0	6.0	19.0	19.0	9.0	-40 °C to +60 °C	100 pcs.	151-13019
	5.0	6.0	19.0	19.0	9.0	-40 °C to +85 °C	50 pcs.	151-13401
RA9-PA66-NA	7.5	9.0	19.0	19.0	12.5	-40 °C to +60 °C	100 pcs.	151-13020

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Mounts with cable clip, self-adhesive

RB-Series

RB-Series self adhesive mounts offer greater routing freedom and also reduce the risk of corrosion compared to screw fixing mounts. They are ideally suited for tool-free installation and can be re-opened and reused easily when cables need to be replaced. These mounts can be used without the need for additional cable ties. Offering process optimization in a variety of applications.

Features and benefits

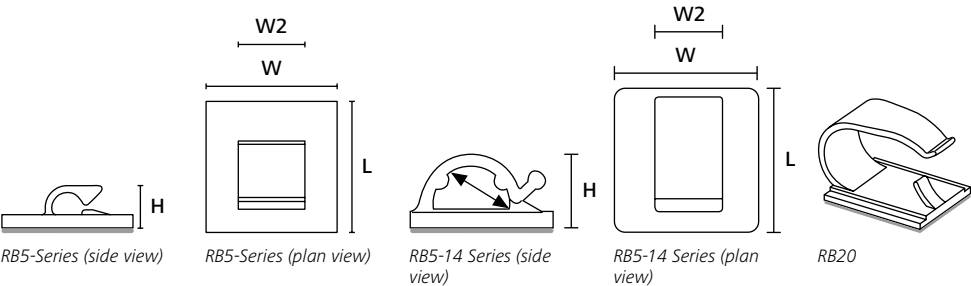
- Flat design to use in applications with limited space
- One-piece self adhesive mount for quick and easy installation
- Can be used without cable ties offering process optimization
- Different sizes for various bundle diameters available
- Cost effective with easy application on smooth, clean surfaces

For more information on the types of adhesive please see page 108.



Self adhesive one piece fixing mounts RB20 (l) and RB14 (r).

MATERIAL	Polyamide 6.6 (PA66)
Adhesive	Synthetic rubber with base of polyethylene foam
Flammability	UL 94 V2 (excluding adhesive)



PART DESCRIPTION	Width (W2)	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Operating Temperature	Pack Cont.	Article-No.
RB5-PA66-BK	9.7	5.0	19.0	19.0	6.0	-40 °C to +60 °C	50 pcs.	151-14000
RB8-PA66-NA	12.7	8.0	25.0	25.0	11.5	-40 °C to +85 °C	200 pcs.	151-13608

All dimensions in mm. Subject to technical changes.



Connector clips for oval holes

with arrowhead

The connector clip used here have been designed in the automotive industry

Features and benefits

- Connector easily installed by simply pushing into place
- Connection can be released non-destructive
- Easy assembly, just shuffle manually
- Oval connectors offer twist protection



Connector clip CCISFT6 with arrowhead fixing for oval holes.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Pack Cont.	Article-No.
CCSFT7x12-PA66HIRHS-BK		7.0 x 12.0	0.8 - 2.0	17.5	17.5	500 pcs.	151-00194
CCAMPSFT7.0x12.0-PA66HIRHS-BK		7.0 x 12.0	1.0 - 2.0	16.0	16.0	1000 pcs.	155-43802
CCIVSFT6.5x130-PA66HIRHSUV-BK		6.5 x 13.0	0.7 - 3.0	19.6	23.0	10000 pcs.	151-02076
STECKERHALTER-OVALFUSS-PA66HIRHS-BK		6.2 - 12.2	0.5 - 3.0	22.0	29.5	1000 pcs.	133-00004
CCAH7X12PT0.5-3.0-PP-BK		7.0 - 12.0	0.5 - 3.0	13.2	38.3	2400 Bag	133-03060

All dimensions in mm. Subject to technical changes.



Connector clips for oval holes

with arrowhead, sealed

HellermannTyton sealed clips and ties are constructed of engineered nylon with a dual TPE (thermo plastic elastomer) seal. The combination of dual seal and engineered arrowhead provide superior sealing performance for applications where protection from moisture and debris is essential.

Features and benefits

- Once installed, perpendicular arrowhead arms reduce movement and will not collapse when exposed to water or load.
- Integrated dual seal meets IP65 for protection against water, dust, chemicals, air and sound.
- Superior design and high-spec materials maintain routing position to deliver consistent performance in the most rugged applications.
- Low-profile design saves 5 mm of height when installed.
- Sealed arrowhead meets USCAR44 push in, pull off and sealing standards.



Once installed, perpendicular arrowhead arms reduce movement and will not collapse when exposed to water or load.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Height (H)	Pack Cont.	Type of connection	EWCAP standard	Article-No.
SAHOVAL1.4TCC7-PA66HIRHS/TPE-BK/GY		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0	1.2 - 1.8	22.8	27.3	17.6	4000 Carton	USCAR7	EWCAP-005-7	151-02996

All dimensions in mm. Subject to technical changes.



Connector clips for round holes

with fir tree

The connector clips used here have been designed for electronic cables and cable sets used in the automotive industry. These parts are related to a connector and then secured to a surface depending on the requirement.

Features and benefits

- Connector easily installed by simply pushing into place
- Connection can be released non-destructive
- One fir tree foot part can be used for a variety of panel thicknesses
- Disc covers the hole to prevent dust and dirt gaining access
- For twist protection: Variants with additional stick



Connector Clips are available for many different connector types and fixing varieties.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Height (H)	Pack Cont.	Type of connection	Article-No.
FT6LG-AMP-PA66HIRHS-BK		6.5 - 7.0	0.7 - 6.0	16.0	16.0	20.5	500 pcs.	AMP	155-03800
		6.5 - 7.0	0.7 - 6.0	-	-	-	1000 pcs.	-	151-01278
FT6LG.M.St.Aufn.II-PA66HIRHS-BK		6.5 - 7.0	0.75 - 5.0	16.0	27.0	17.3	500 pcs.	-	155-32602
FT6LG.YAZ.CONNECT-TS-PA66HIRHS-BK		6.4 - 7.1	0.7 - 5.1	16.0	27.0	15.3	500 pcs.	-	155-30702
CCFT6LG-PA66HIRHS-BK		6.0 - 6.7	0.70 - 4.00	-	-	17.0	-	-	151-03698
YCCFT6LGTS2-PA66HIRHS-BK		6.1 - 6.9	0.7 - 5.0	16.0	31.3	16.8	15000 pcs.	-	151-00965
CC11FTM6-PA46-BN		M6	1.3 - 4.5	15.8	24.9	20.7	5000	-	151-02458

All dimensions in mm. Subject to technical changes.



Connector clips, oval holes

with fir tree

The connector clips used here have been designed for electronic cables and cable sets used in the automotive industry. These parts are related to a connector and then secured to a surface depending on the requirement.

Features and benefits

- Connector easily installed by simply pushing into place
- Connection can be released non-destructive
- Easy assembly, just shuffle manually
- Oval connectors offer twist protection
- Available for a wide variety of panel thicknesses



For a secure fixation simply push the connector by hand on our Connector Clip YCCFT62x122.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Pack Cont.	Article-No.
JCCSFT6.5x13-PA66HIRHS-BK		6.5 x 13.0	0.7 - 3.0	-	-	500 pcs.	151-01248
YCCFT62x122-PA66HIRHS-BK		6.2 x 12.2	0.6 - 6.0	16.0	21.1	1000 pcs.	151-00180
CC12-PA66HIRHSUV-BK		8.0 x 15.0	0.6 - 6.5	18.3	25.5	4000 pcs.	151-01136
CCLOP62X122-PA66HIRHS-BK		6.2 x 12.2	15.0	19.7	31.2	5000 pcs.	151-00855
CCOVAL2-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.0	17.6	29.0	5000 pcs.	151-03492
CCOVAL-PA66HIRHS-BK		6.2 - 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.0	17.6	24.9	1000 pcs.	151-02533
CCOVAL23OS10-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	19.7	35.2	1500 pcs.	133-04724

All dimensions in mm. Subject to technical changes.

Connector Clips, oval hole, fir tree with seal

PART DESCRIPTION	Article-No.
CCOVAL2-E-MD-PA66-BK	151-03455

All dimensions in mm. Subject to technical changes.



Connector clips for edges

1 - 3 mm, 1.5 - 4 mm and 3 - 6 mm

EdgeClips are used in the automotive industries and electrical industries and when it is impossible to drill holes or no other fixing points are available.

Features and benefits

- Connectors are mounted simply by pushing them into retainer
- Connector can be removed without damage
- Fastened to an edge, the EdgeClip ensures snug fit almost all types of connector

Material specifications: See Article-No. on our website.



EdgeClip EC6mod.

PART DESCRIPTION	Drawing	Panel Thickness	Pack Cont.	Type of connection	Article-No.
EC33-PA66HIRHS-BK		1.0 - 3.0	500 pcs.	AMP	151-00192
EC6mod-PA66HIRHS-BK		1.0 - 3.0	1000 pcs.	-	151-00464
CCEC6-PA66HIRHS-BK		1.0 - 3.0	1000 pcs.	-	150-92600
CCEC3.0SV-PA66HIRHS-BK		1.0 - 3.0	500 pcs.	-	151-01058
CCEC3TR-PA66HIRHS-BK		1.0 - 3.0	7000 pcs.	-	151-01142
EC8-PA66HIRHS-BK		1.0 - 3.0	500 pcs.	-	133-03177

All dimensions in mm. Subject to technical changes.



Connector accessory

Fixing slider for 3.0 mm panel thickness

Fixing slider A, 3.0 mm

The slider is used to keep the plugs firmly and vibration-proof in place, even when movement acts on it.

Features and benefits

- Color coding for panel thickness: red (2.5 mm), yellow (3.0 mm), grey (1.5 mm and 3.5mm), natural (1.0 mm and 1.5 mm)
- Panel thickness is marked on the slider
- Permanent fixation of the connectors in the mounting hole by using the slider
- These parts are also available in V0 material (flame retardent) e.g. for public transport
- Fixing slider fit for the Aptiv connector XS and SP series



Fixing Slider "Group A" for 3.0 mm panel thickness.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Width (W)	Length (L)	Height (H)	Panel Thickness	Pack Cont.	Article-No.
FSE3.0-PBTGF30FR-YE	36.2	56.5	12.7	3.0	1200 pcs.	151-02413

All dimensions in mm. Subject to technical changes.

Connector accessory

Backshells, straight

Backshell A, straight, NW 8.5

The backshells or covers protecting the individual cables and wires from splashing water and dirt.

Features and benefits

- Strain relief for corrugated tubes
- Four shrouded locks
- Strapping points fully integrated with cover for maximum retention of harness
- Nominal diameter printed in backshell
- Insertion support and pre-catch function audible by clicking simplify the closing, laying of the cables and saves time
- Corrugated tube is completely enclosed by backshell, so that tube is not bruised in case of using an additional cable tie and cannot slip out of place especially during movement and vibration
- Available in V0-material (flame retardent) especially for vehicles used for transportation of passengers



Backshell "Group A" NW8.5 180°.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Nominal Ø	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
BSE180NW17-PA66HS-BK	17.0	53.3	39.1	27.2	900 pcs.	151-02398

All dimensions in mm. Subject to technical changes.



1-piece fixing ties for weld studs

For cable routing above the stud

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

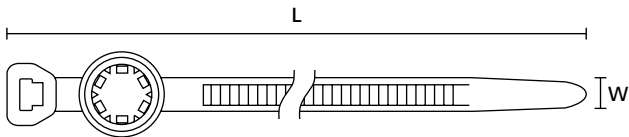
Features and benefits

- Cable tie head always situated in defined position
- Easy to assemble without the need for a tool
- Bundle runs directly above weld stud with defined stand-off from the panel



The T50SSBS50T-E / T50SSBS60T-E allows very precise routing of cable bundles.

Material specifications: See Article-No. on our website.



T50SSBS60T-E

PART DESCRIPTION	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50SSBS50T-E-PA66HS-BK		5.0	4.6	160.0	35.0	200	1-2;4-7;25	157-00207
T50SSBS60T-E-PA66HS-BK		6.0	4.6	160.0	35.0	200	1-2;4-7;25	157-00083

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



1-piece fixing ties for weld studs

For cable routing alongside the stud

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

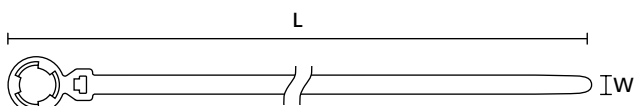
Features and benefits

- Cable tie head always situated in defined position
- Easy to install without the need for a tool
- Bundles are routed very close to stud



T50SOSSBD-M8/10.

Material specifications: See Article-No. on our website.



T50SOSSBD-M8/M10

PART DESCRIPTION	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50SOSSBU-M6-PA66HSUV-GY		M6	5.7	175.0	30.0	150	1;3;6-7;9-10;25	157-00065
T50SOSSBD-M6-PA66HSUV-BK		M6	5.7	175.0	30.0	150	1;3;6-7;9-10;25	157-00038
T50SOSSBD-M8-PA66HSW-BK		M8	5.7	175.0	30.0	150	1;3;6-7;9-10;25	157-00039
T50SOSSBD-M10-PA66HSW-BK		M10	5.7	175.0	30.0	150	1;3;6-7;9-10;25	157-00040
T50SOSSBS5E-PA66HS-BK		5.0	4.7	160.0	35.0	225	1-2;4-7;25	157-00210
T50SOSSBS5E-2-PA66HS-BK		5.0	4.7	161.0	35.0	225	1-2;4-5;25	157-00252
T50SOSSBS6E-2-PA66HS-BK		M6	4.7	161.0	35.0	225	1-2;4-5;25	157-00530
SBT120-M6-PA66HSUV-BK		M6	13.0	300.0	60.0	533	6-7;9-10	157-00022
SBT120-M8-PA66HSUV-BK		M8	13.0	300.0	60.0	533	6-7;9-10	157-00023
SBT50-M8-PA66HSUV-BK		M8	6.0	180.0	35.0	222	1;3;6-7;9-10;25	157-00027
T50ROSLPM6MSO25-PA66HIRHSUV-BK		5.0, 6.0	14.2	223.5	50.0	225	1-2;4-5;25	157-00335
T50ROSM6MSO25-PA66HIRHSUV-BK		M5, T5, M6, T6	4.7	224.0	50.0	222	-	157-00325
T50ROSSB5-6U-PA66HIRHSUV-BK		5.0, 6.0	5.1	218.4	50.0	225	1;3;6-7;9-10;25	157-00233

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



1-piece fixing ties for weld studs, lateral adjustment

T50SOSWSP5E-2 for 5 mm studs, retainer height 3.5 mm

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

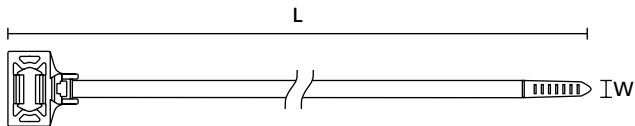
Features and benefits

- Cable tie head always situated in defined position
- Easy to install without the need for a tool
- Provides 5 – 6 mm lateral adjustment
- Very low profile, stackable design
- For parallel routing of several bundles



T50SOSWSP5E-2, parallel installation using two fixing ties.

Material specifications: See Article-No. on our website.



T50SOSWSP5E-2

PART DESCRIPTION	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50SOSWSP5E-2-PA66HS-BK		5.0, 6.0	4.6	162.6	35.0	225	1-2;4-5;25	133-01553

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Cable Ties and Fixings

Fixing products for weld studs

1-piece fixing ties for weld studs

for lateral adjustment

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

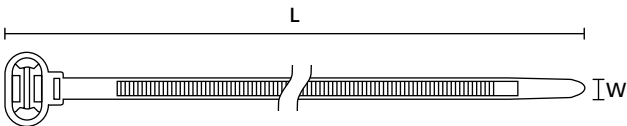
Features and benefits

- Cable tie head always situated in defined position
- Easy to install without the need for a tool
- Provides a 5 – 6 mm lateral adjustment, also subsequently possible



The fixing tie T50SOSSB5-High-E-C-CC for fixation on weld or ISO bolts.

Material specifications: See Article-No. on our website.



T50SOSSB5-High-E-C-CC

PART DESCRIPTION	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50SOSSB6HE-PA66HS-BK		6.0	4.7	160.0	35.0	170	1-2;4-7;25	155-46302
T50SOSSB5-High-E-C-CC-PA66HS-BK		5.0, M6	5.0	167.0	35.0	225	1;3;6-7;9-10;25	157-00037
HT160SB5HE-PA66HS-BK		M5	5.0	167.0	35.0	200	1;3;6-7;9-10;25	157-00089
T60ROSSB6HEC-PA66HS-BK		6.0	5.5	227.4	55.0	300	1;3;6-7;9-10;25	157-00101

Recommended Tools: 1=MK10-SB, 2=MK20, 3=MK21, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.
All dimensions in mm. Subject to technical changes.



1-piece fixing ties for weld studs

LFC-Series for routing close to the stud

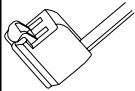
Features and benefits

- 1-piece fixing tie for 5 mm studs
- Cable tie head always situated in defined position
- Easy to install without the need for a tool
- Bundle runs very close next to stud
- Closed stud retainer protects the bundle against damage
- Contact surface allows secure bundling with tensioning tool



LFC165-2 for bundle diameters up to 35.0 mm.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
LFC165-2-PA66HS-BK		5.0	4.7	165.0	35.0	150	2;4-5;25	157-00047

Recommended Tools: 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



1-piece fixing ties for weld studs, for heavy duty applications

for parallel routing

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

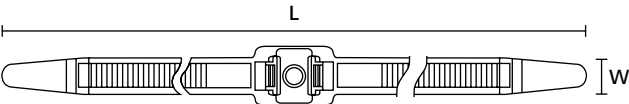
Features and benefits

- Parallel separation between hoses, wires, cables and tubing
- Abrasion protection
- Optional mounting hole for securing bundles along the Chassis of trucks, trailers and heavy duty equipment



DCT products are made for parallel routing of harnesses with stud fixing.

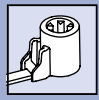
Material specifications: See Article-No. on our website.



Dual Clamp Ties (DCT)

PART DESCRIPTION	Stud Ø	Width (W)	Length (L)	Bundle Ø max.		Tools	Article-No.
DCT11-PA66HIRHSUV-BK	M6	12.7	487.7	58.0	667	6-7;9-10	115-31100
DCT9-PA66HIRHSUV-BK	M6	12.8	331.0	33.0	667	6-7;9-10	115-00034

Recommended Tools: 7=EVO9i, 9=EVO9iHT, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 308.
All dimensions in mm. Subject to technical changes.



1-piece fixing ties for weld studs

T120RSM

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured (T120RSM is for 1/4" bolts).

Features and benefits

- One-piece fixing ties
- High specification materials
- Superior design
- Suitable for complex applications



Heavy duty T-Series cable ties feature inside serrations to provide a positive hold on wire and cable bundles.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T120RSM-PA66HIRHSUV-BK		6.3	7.6	405.0	101.0	535	1;3;6-7;9-10;25	157-01300

Recommended Tools: 1=MK10-SB, 3=MK21, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-piece fixing ties for weld studs

for parallel routing

Widely used for securing cables pipes and hoses in the automotive and truck building industries, the mounting base is simply pushed onto a 5 mm diameter stud or bolt.

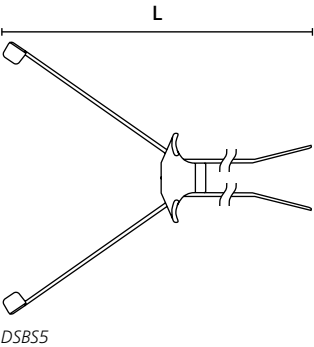
Features and benefits

- Pre-assembled 2-piece fixing tie with stud retainer
- For parallel routing of cables, hoses or harnesses
- Cable tie head can be moved after bundling
- Easy to install without the need for a tool
- For 5 mm studs or 5 mm ISO threaded studs
- Made from PP/PA66HIRHS: combines sustainability benefits of PP (lightweight, chemically resistant) with the robustness and heat stability of PA66HIRHS – perfect for demanding automotive environments



Parallel fixation of two cables and keeps the bundles close to the cables.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50RDSBS5-6-PA66HS/PA66HIRHS-BK		M5, M6	4.6	200.0	45.0	225	1-2;4-5;25	156-01650
T50RODSBS5-PA66HS/PA66HIRHS-BK		5.0	4.6	200.0	45.0	222	1-2;4-5;25	150-56199
T50SDSBS5-PA66HS/PA66HIRHS-BK		5.0	4.6	150.0	35.0	225	1-2;4-5;25	150-56193

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.
All dimensions in mm. Subject to technical changes.



2-piece fixing ties for weld studs

for parallel routing

Unique, two-piece design allows routing to be above, parallel or perpendicular to stud. This also enables up to three separate bundles to be fastened to the same stud. With their low insertion force and high extraction performance, HellermannTyton mounting ties offer the ideal combination of high-grade materials and superior design to suit the mounting and bundling needs of complex applications. Available in standard and high-heat material options.

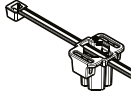
Features and benefits

- Versatile design allows cable routing above, perpendicular or parallel to stud.
- Can mount up to three bundles simultaneously, making efficient use of a single mounting point.
- Four-pawl, three-tooth design delivers outstanding stud retention to keep bundles secure.



Versatile two-piece design allows cable routing above, perpendicular or parallel to stud.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Width (W)	Length (L)	Bundle Ø max.	N	Article-No.
T50R05BS5-6U-SET-PA66HS/PA66HIRHSUV-BK		M5 x 0.8 M6 x 1 T5	4.6	202.0	50.0	222	156-01547

All dimensions in mm. Subject to technical changes.



2-piece fixing ties

for weld studs

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where 5mm weld studs or 5mm ISO bolts are used and cables need to be bundled and secured

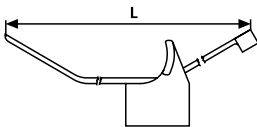
Features and benefits

- Pre-assembled 2-piece fixing tie with stud retainer
- Cable tie head can be moved after bundling
- Easy to install without the need for a tool
- SB5-types for 5mm studs or 5mm ISO threaded studs
- Types with discs can retain insulation materials while fixing a cable bundle
- GBS8C for 8 mm retainer enables parallel routing



2-piece fixing tie T50ROSKL

Material specifications: See Article-No. on our website.

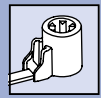


T50RSBS5

PART DESCRIPTION	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T30RSBS5-PA66HS-BK		5.0	3.5	150.0	35.0	135	1-2;4-5;25	156-03702
T50RSBS5-PA66HS-BK		5.0	4.6	200.0	45.0	225	1-2;4-7;25	150-21291
T50ROSSBS5-PA66HS-BK		M5	4.6	200.0	45.0	225	1-2;4-5;25	150-21299

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-piece fixing ties for weld studs

with disc (for isolation material)

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where weld studs or ISO bolts are used and cables need to be bundled and secured.

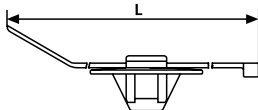
Features and benefits

- Pre-assembled with cable tie and weld stud mounting base
- Quick and easy installation
- Head rotates into perfect position for installation
- 'Soft-push' design for tool-free installation
- Mushroom-shaped SBH handles insulation or a sound-deadening blanket



Two Piece Fixing Tie T50RSBH5SD for weld studs.

Material specifications: See Article-No. on our website.



T50RSBH5

PART DESCRIPTION	Drawing	Stud Ø	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50SOSSBH5E-PA66HS-BK		5.0	4.6	166.4	35.0	225	1-2;4-7;25	155-05701
T50ROSSBH5SD-PA66HS-BK		5.0	4.6	200.0	45.0	225	1-2;4-5;25	156-05905
T50RSBH5SD-14-PA66HS-BK		5.0	4.6	200.0	45.0	225	1-2;4-5;25	156-01422
T50RSBH5-10-PA66HS/PA66HIRHS-BK		5.0	4.6	202.0	45.0	225	1-2;4-7;25	156-00536

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Fixing elements for weld studs

SB-Series

Many industries (but specifically the automotive market) are using weld studs as the standard method of attaching components. Simply hammered onto the stud these parts provide ideal fixing bases for attaching cables, pipes or hose.

The use of weld studs avoids the problems with holes (ingress of moisture, corrosion etc).

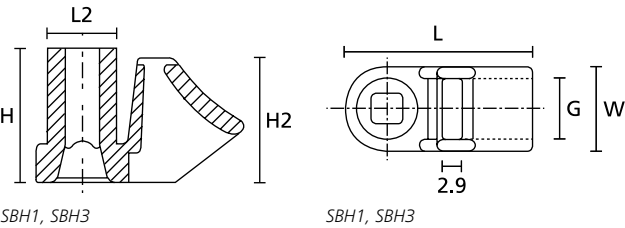
Features and benefits

- Simple and quick method of fixing
- SBH1 and SBH3 allow cables to run across the panel



SBH2 allow cables to run at 90° to the panel.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Drawing	Stud Ø	Width (W)	Length (L)	Length (L2)	Height (H)	Height (H2)	Strap Width max. (G)	Article-No.
SBH1-PA66-BK		5.0	12.5	26.8	9.0	13.9	15.9	8.5	151-02260
SBH3-PA66-BK		5.0	12.5	26.8	9.0	18.0	15.9	8.5	151-02279

Recommended Tools: 7=EVO9i, 9=EVO9iHT, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Fixing elements for weld studs

for tubes and harnesses with automatic locking feature

Offering a simple and secure method of attaching pipes or hoses to panels. Originally designed for the automotive industry they are finding a wide variety of applications in all industries using sheet metal panels with studs or weld studs. The use of weld studs avoid the problems with 'holes' (ingress of moisture, corrosion etc.).

Features and benefits

- missing Text!



Material specifications: See Article-No. on our website.

PART DESCRIPTION	Stud Ø	Height (H)	Width (W)	Length (L)	Pack Cont.	Article-No.
DCTC16SBS6-PA66HIRHS/TPE-BK/GN	M6	45.8	14.0	66.7	1000 pcs.	151-04189

All dimensions in mm. Subject to technical changes.

for tubes and harnesses with automatic locking feature

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Stud Ø	Height (H)	Width (W)	Length (L)	Pack Cont.	Article-No.
DCTC20SBS6-PA66HIRHS/TPE-BK/GN	M6	22.9	15.0	146.5	1000 pcs.	151-04190

All dimensions in mm. Subject to technical changes.



Fixing elements for weld studs

ATSSB5-6

Primarily designed for use in the automotive industry, these parts can be used in a wide variety of applications where 5mm weld studs or 5mm ISO bolts are used and cables need to be bundled and secured.

Features and benefits

- Quick and easy installation
- SBS ideal for installation prior to attaching cable (i.e. no lateral tolerances required)



Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Stud Ø	Article-No.
ATS SB5-6-PA66HIRHS-BK		5.0, 6.0	102-69061

All dimensions in mm. Subject to technical changes.



1-piece fixing ties with mounting head for screws

M-Series

This range of one piece cable ties have a built in mounting hole and once fastened around the cables the bundle can be simply secured to the panel with a screw or bolt. The tie is fitted to the panel first and then the cables can be added.

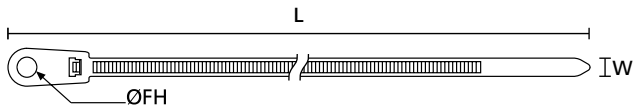
Features and benefits

- One-piece bundling and fixing tie
- Quick and easy installation



The mounting head ties can be easily screwed onto a panel.

Material specifications: See Article-No. on our website.



T(MR Series with Mounting Head for Screw fixing

PART DESCRIPTION	Drawing	Hole Ø (FH)	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T18MR-PA66-NA		3.1	2.5	110.0	20.0	80	2;4-5;25	113-01819
T18MR-PA66HS-NA		3.1	2.5	111.0	20.0	80	2;4-5;25	113-00042
T30MR-PA66HSUV-BK		4.1	3.5	157.0	32.0	135	1-2;4-5;25	113-00046
T30MR-PA66-BK		4.3	3.5	160.0	32.0	135	1-2;4-5;25	113-03010
T50MR-PA66-BK		5.4	4.7	215.0	45.0	225	1-2;4-7;25	113-00053

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



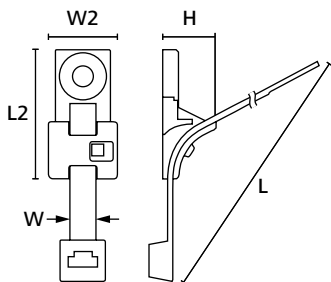
2-piece fixing ties for heavy duty applications, for screws

HDM-Series

Used mainly in the transport sector, HDM mounts can find various applications depending on their environment. In the automotive sector, these mounts are mainly used to hold engine harnesses. Thanks to their high resistance to heat and movement, harnesses will be maintained securely. They are also found in the railway sector to maintain corrugated tubing and train harnesses. They can also be used in the military and naval sectors to route electrical cables in vehicles. Thanks to its many properties, HDM mounts can be used in many environments.

Features and benefits

- Pre-assembled 2-piece fixing tie
- Cable tie head can be moved after bundling
- Secure alignment to the bundle due to H-design
- A suitable alternative for metal clamps
- Withstands vibrations and displacement forces
- High tightening torque through metal bushing



HDM with cable tie (L = length of the tie "flat")



These HDM (Heavy duty mount) are suitable for assembling on screws.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Width (W)	Width (W2)	Length (L)	Length (L2)	Height (H)	Mounting Screw Type	Bundle Ø max.	Tools	Article-No.
T120RHDM6-PA66HIRHS-BK	7.6	20.0	390.0	37.5	16.0	M6 Screw	105.0	1;3;6-7;9-10;25	156-00406

Recommended Tools: 7=EVO9i, 9=EVO9iHT. For more information on toolings please refer to the Application Tooling chapter on page 308.
All dimensions in mm. Subject to technical changes.

HDM-Series for M8 screws

PART DESCRIPTION	Width (W)	Width (W2)	Length (L)	Length (L2)	Height (H)	Bundle Ø max.	Article-No.
T120RHDM8-PA46-GY	7.6	20.0	390.0	37.5	16.0	105.0	920-30035

All dimensions in mm. Subject to technical changes.

CPCSeries for M6 screws

PART DESCRIPTION	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Bundle Ø max.	Article-No.
T50RCPCM6-PA66HS/PA66HIRHS-BK	4.6	202.0	16.0	6.2	50.0	920-30036

All dimensions in mm. Subject to technical changes.



CPCSeries for M6 screws

PART DESCRIPTION	Width (W)	Width (W2)	Length (L)	Length (L2)	Height (H)	Bundle Ø max.	Article-No.
T120RCPCM6-PA66HS/PA66HIRHS-BK	7.6	20.0	387.0	37.5	16.0	105.0	920-30063

All dimensions in mm. Subject to technical changes.



Screwed Ratchet Clamp

for multiple parallel cable routing

The Screwed Ratchet Clamp can be used wherever cables are to be laid in parallel. The clamp can be mounted both horizontally and vertically. In the second assembly step the cables can be inserted. The component can be used to fix various cables or cable combinations as it can be filled in a range from 25 to 150 mm.

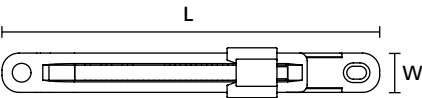
Features and benefits

- Cables and tubes can be bundled in parallel
- Can be opened and closed with one hand and without tools due to lever on the sliding element
- Re-openable, thus cables can be exchanged and added when required
- Can be screwed vertically or horizontally depending on the equipment
- After being screwed the locking cover/ lever is pushed onto the cable
- Allows a flexible accommodation of the cables with regards to the number of cables to be routed

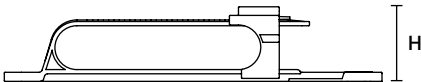


Screwed Ratchet Clamp SRC150M8 for parallel bundling of cables and tubes.

Material specifications: See Article-No. on our website.



SRC150M8 (top view)



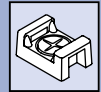
SRC150M8 (side view)

PART DESCRIPTION	Width (W)	Length (L)	Height (H)	Bundle Ø max.	Mounting Screw Type	Pack Cont.	Article-No.
SRC110M6-PA666GF15/PA666GF30-BK	32.4	165.0	29.4	19.0	M6 Screw	25 pcs.	156-03187
SRC150M8-PA6GF30-BK	33.0	250.0	49.4	29.0	M8 Screw	150	156-02742

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Screw fixing mounts

Cable tie mounts with curved design

Designed specifically for holding heavier cable bundles these mounting bases can be used in many industries from agriculture to truck manufacturing. They offer a very secure fixing and can be used with a wide variety of heavy duty cable ties up to 8.3 mm width.

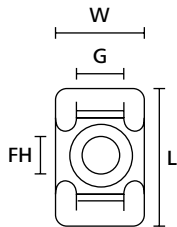
Features and benefits

- Curved design for additional cable support
- Simple to install with a screw or bolt
- Excellent security, particularly in areas of high vibration
- Mounts are available in various sizes and materials

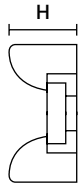


Cable Tie Mounts KR6G5, KR8G5 and CTM.

Material specifications: See Article-No. on our website.



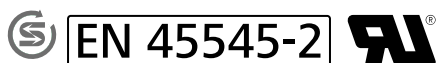
KR6G5, KR8G5 and CTM (plan view)



KR6G5, KR8G5 and CTM (side view)

PART DESCRIPTION	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Pack Cont.	Article-No.
CTM0-PA66-BK	9.4	14.7	6.9	3.8	5.0	100 pcs.	151-30300
CTM0-PA66-WH	9.4	14.7	6.9	3.8	5.0	100 pcs.	151-30303
CTM1-PA66-BK	9.4	14.7	6.9	4.8	5.0	100 pcs.	151-30400
CTM1-PA66-WH	9.4	14.7	6.9	4.8	5.0	100 pcs.	151-30404
KR6G5-E/TFE-BU	11.8	17.8	8.8	4.5	6.4	100 pcs.	151-00653
KR6G5-PA66-BK	12.0	18.0	9.0	4.5	6.0	100 pcs.	151-24600
KR6G5-PA66-NA	12.0	18.0	9.0	4.5	6.0	100 pcs.	151-24619
KR6G5-PA66W-BK	12.0	18.0	9.0	4.5	6.0	100 pcs.	151-24660
KR6G5-PP-BK	12.0	18.0	9.0	4.5	6.0	100 pcs.	151-03286
KR8G5-E/TFE-BU	14.3	24.8	12.1	6.5	8.3	100 pcs.	151-00654
KR8G5-PA66W-BK	14.3	24.8	12.1	6.5	8.3	100 pcs.	151-00554
KR8G5-PA66-NA	14.5	25.0	12.0	6.5	8.0	100 pcs.	151-24819
KR8G5-PA66HS-BK	14.5	25.0	12.0	6.5	8.0	100 pcs.	151-24850
CTM2-PA66-BK	15.5	21.8	9.4	4.6	7.9	100 pcs.	151-30500
CTM2-PA66-WH	15.5	21.8	9.4	4.6	7.9	100 pcs.	151-30504
CTM3-PA66-BK	15.5	21.8	9.4	5.1	7.9	100 pcs.	151-30600
CTM3-PA66-WH	15.5	21.8	9.4	5.1	7.9	100 pcs.	151-30605
CTM4-PA66-BK	15.8	21.8	9.4	6.4	7.9	100 pcs.	151-30700
CTM4-PA66-WH	15.8	21.8	9.4	6.4	7.9	100 pcs.	151-30703

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Screw fixing mounts

CTAM-Series for applications where space is limited

The CTAM series offers a range of mounting solutions that combine ease of installation with durability. Designed for a wide range of applications, these mounts are particularly valued in telecommunications equipment, switchgear and control cabinets. Thanks to their robust design, they are also a proven choice in the aerospace and railroad industries.

MCCTAM mounts (MC = Metal Content) are specially designed for use in hygiene-sensitive areas such as the food industry. Due to the integrated metal content, they can be detected by standard metal detection systems, which reduces the risk of contamination. They hold the MCT series cable ties securely in place, even in high vibration environments such as food processing machines and automated packaging lines.

All products in this range are screw-fastened, ensuring a stable and durable fastening even under dynamic loads.

Features and benefits

- Suitable for applications with minimal space
- Mounted before cable installation and in line with cable
- 4-way entry design for use in line or at 90° angle to cable run
- Available in different sizes and materials

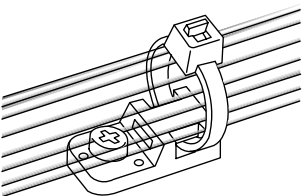


CTAM mounts for applications with limited space.

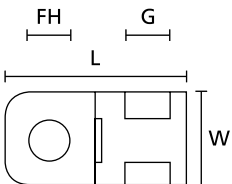


Detectable fixing solution containing of MCCTAM1 mount and MCTS cable tie.

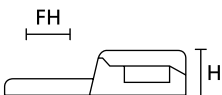
Material specifications: See Article-No. on our website.



CTAM-Series in application



CTAM-Series (plan view)



CTAM-Series (side view)

PART DESCRIPTION	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Pack Cont.	Article-No.
CTAM1-PA66-WH	10.2	20.4	5.1	4.3	5.0	100 pcs.	151-31103
CTAM2-PA66-WH	10.2	20.4	5.1	5.2	5.0	100 pcs.	151-31203
CTAM1-PA66-NA	10.2	20.5	5.1	4.3	5.0	100 pcs.	151-00539
CTAM1-PEEK-BGE	10.2	20.5	5.5	4.3	5.0	100 pcs.	151-00757
CTAM2-PEEK-BGE	10.2	20.5	5.5	5.1	5.0	100 pcs.	151-00758

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Screw fixing mounts

LKC-, NY- and LOK-series with overlapping curved design

Designed specifically for holding heavier cable bundles, these mounting bases can be used in many industries from agriculture to truck manufacturing. They offer a very secure fixing and can be used with a wide variety of heavy duty cable ties up to 13 mm width.

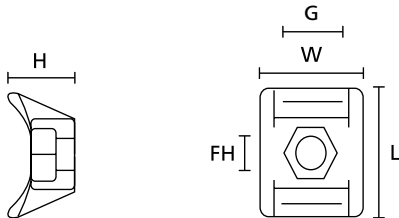
Features and benefits

- Curved design for additional cable support
- Simple to install with a screw or bolt
- Excellent security, particularly in areas of high vibration



LOK02 fixing base application.

Material specifications: See Article-No. on our website.



NY3256 (side view)

NY3256 (plan view)

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Pack Cont.	Article-No.
LKCSF1-PA66-BK		19.0	40.0	16.8	6.0	13.0	100 pcs.	151-27202
LKC-PA66-NA		17.0	25.0	13.5	5.5	8.0	100 pcs.	151-27019

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Screw fixing mounts

LKM / CL / FH with curved design for sideways fixing

In areas with limited space these mounting bases allow the cable to be offset from the fixing hole, and can be installed in the equipment prior to the cable installation. A major cost saving can be made using these products as they will allow the use of many different sizes of standard cable ties without the need to stock a wide range of specific fixing ties.

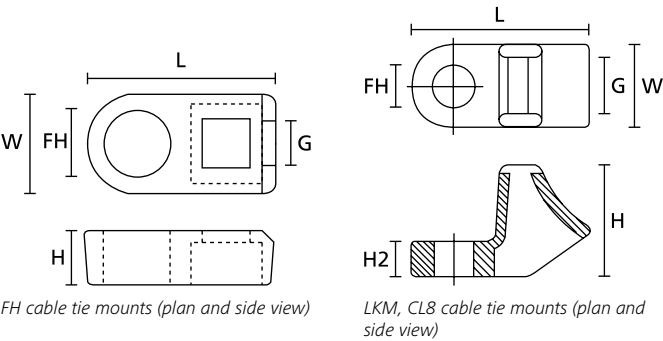
Features and benefits

- Small overall size for areas with limited mounting space
- Screwable mounts for fixing cable sideways
- Ideal for securing large, heavier bundles
- Suitable for cable ties up to 8 mm width



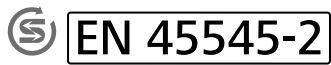
LKM, CL8 and FH cable tie mounts for applications with limited space.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Width (W)	Length (L)	Height (H)	Height (H2)	Hole Ø (FH)	Strap Width max. (G)	Pack Cont.	Article-No.
CL8-PA66-NA	12.5	27.3	16.0	5.0	6.5	8.0	100 pcs.	151-02258

Recommended Tools: 7=EVO9i, 9=EVO9iHT, 10=MK9P. For more information on toolings please refer to the Application Tooling chapter on page 310.
All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Clamps with elastical loop

Cradle clamp

Simple and versatile method of bundling cables. These clamps consist of two parts. The clamping base for mounting onto a panel and the elastical loop.

Features and benefits

- 2-piece fixing system consisting of a clamping base (C-part) and a reusable retaining ring (R-part)
- Allows cables to be added or removed after installation without tools
- Elastic loop enables quick and secure cable fastening by simply stretching over the clamp
- Suitable for dynamic environments where rework or maintenance is required
- Reopenable and reusable design supports sustainable cable management solutions
- Space-saving and simple method for routing and bundling cables on control panels

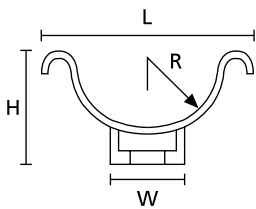


Cradle clamp - 2-piece fixing part consisting of clamp and retaining ring. The simple and versatile method of bundling cables.

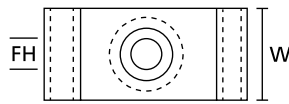


2-Piece fixing cradle clamp.

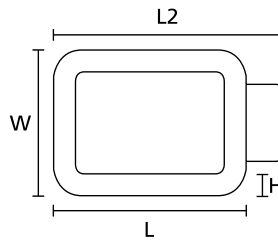
Material specifications: See Article-No. on our website.



Cradle clamp (front view)



Cradle clamp (plan view)



Retaining ring R1 - 3

PART DESCRIPTION	Length (L2)	Height (H)	Radius (R)	Width (W)	Hole Ø (FH)	Length (L)	Pack Cont.	Article-No.
C1-PA6HIR-BK	-	14.0	6.3	12.7	4.8	22.0	100 pcs.	201-10010
C2-PA6HIR-BK	-	18.0	11.0	12.7	4.8	35.0	100 pcs.	201-10020
C3-PA6HIR-BK	-	25.0	17.5	12.7	4.8	48.0	100 pcs.	201-10030
R2-PVC-BK	29.0	3.2	-	23.8	-	22.0	500 pcs.	201-20020
R3-PVC-BK	39.0	3.2	-	23.8	-	33.0	500 pcs.	201-20030
R1-PVC-BK	22.0	3.2	-	23.8	-	16.0	500 pcs.	201-20010

All dimensions in mm. Subject to technical changes.



Harness clip for heavy duty applications, for screws or threaded bolts

Standard torque mounts

These heavy duty mounts (HDM) have been primarily designed for use in the automotive and truck industry. Nowadays they can be found in a variety of applications requiring heavy duty mounting in areas like the railway, defence and/or agriculture industry.

Features and benefits

- Design offers secure alignment to the bundle
- Possible replacement of cushion clamps and/or metal clamps
- Eliminates the needs for multiple sized fix diameter clamps
- For heavy duty cable ties up to 12.7 mm width
- High tightening torque
- Easy maintenance of bundle by simply changing the cable tie



Heavy Duty Mounts HDM-Series, patent number US5820083.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Pack Cont.	Article-No.
HDM25-PA66HIRHSUV-BK		19.3	36.3	16.7	6.2	12.7	500 pcs.	151-00438

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

Medium torque mounts

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Pack Cont.	Article-No.
HDM321-PA66HIRHSUV-BK		24.0	46.0	20.7	8.31	12.7	500 pcs.	151-07100
HDM401-PA66HIRHSUV-BK		24.0	46.0	20.7	10.29	12.7	500 pcs.	151-07300

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

High torque mounts

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Pack Cont.	Article-No.
HDM320-PA66HIRHSUV-BK		25.0	47.0	20.7	8.31	12.7	500 pcs.	151-02094
HDM400-PA66HIRHSUV-BK		25.0	47.0	20.7	10.29	12.7	500 pcs.	151-01224
HDM375BDM4W-R-PA66HIRHSUV-BK		34.1	89.0	25.2	10.29	12.7	100 pcs.	151-02104

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Two way saddle mount for heavy duty applications, for parallel separation

for screws or studs

Heavy duty saddle mounts can be installed between two bundles to separate them and prevent chafing and wear. Fastened to a frame rail or mounting bracket, the special profile on the saddle mount provides a tight circumferential loop on large and small bundles. The saddle mount is an ideal assistant in many applications within the railway, truck and agricultural vehicle construction as well as in the ship building industry.

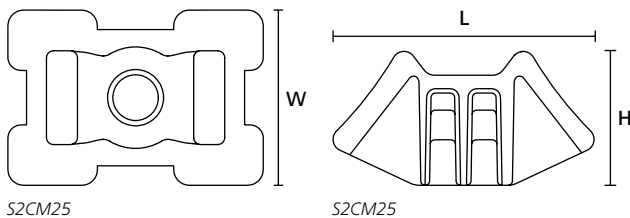
Features and benefits

- For parallel routing of different bundles to avoid wear and chafing
- Offers secure alignment to the bundle
- Can be used in combination with heavy duty cable ties
- Easy maintenance of bundle by simply changing the cable tie
- S2HM25 can be used with hex head screws 6.35



This saddle mount is installed between two bundles to separate them and prevent chafing and wear.

Material specifications: See Article-No. on our website.



S2CM25

S2CM25

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Pack Cont.	Article-No.
S2CM25-PA66HIRHS-GY		30.0	45.0	23.0	6.0 6.35	13.5	500 pcs.	151-29400
S2HM25-PA66HIRHSUV-BK		30.0	45.0	23.0	6.0 6.35	13.5	500 pcs.	151-29403

All dimensions in mm. Subject to technical changes.



Two way mount for heavy duty applications

for parallel separation

Low Profile Mounts secure bundles close to mounting surfaces, making them ideal for applications where bundle mounting space is limited. These are secured with a screw, and have a counter bore for easy access with a socket which can be torqued up to 100 in/lbs.

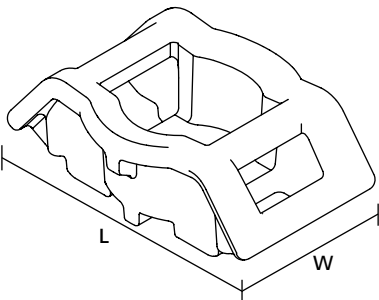
Features and benefits

- Separates bundles to help prevent chafing and wear
- Single bundles can be mounted on top of the mount,
- or two bundles can be separated using the two side saddles; giving the mount versatility
- Low profile design allows mount to be placed in areas where space is limited



Low profile design allows mount to be placed in areas where space is limited.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Drawing	Width (W)	Length (L)	Hole Ø (FH)	Strap Width max. (G)	Pack Cont.	Article-No.
LPM25-PA66HIRHSUV-BK		24.9	45.1	6.7	13.5	500 pcs.	151-01122

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Harness clip for heavy duty applications, for screws or threaded bolts for edges

SA-Series

This axial oval mount stands off bundles from frame rails and cross members to prevent them from rubbing and chafing. They can be perfectly used in combination with heavy duty cable ties up to 12.7 mm width – ideal to securely fix cables and wires in the railway and shipbuilding industry as well as in truck and agricultural vehicle construction.

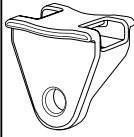
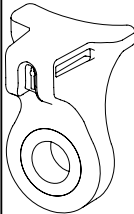
Features and benefits

- Guides bundles securely above sharp edges
- For threaded bolts or screws
- Can be used in combination with heavy duty cable ties
- For cable ties up to 12.7 mm width



Axial oval mounts stand off bundles from frame rails and cross members to prevent them from rubbing and chafing.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Height (H)	Hole Ø (FH)	Strap Width max. (G)	Pack Cont.	Article-No.
SAM83-PA66HIRHS-GY		26.0	34.0	35.0	8.0	12.7	500 pcs.	151-29600
SAM320B-R-PA66HIRHSUV-BK		25.0	29.9	44.9	8.31	12.7	500 pcs.	151-02099

All dimensions in mm. Subject to technical changes.



Heavy duty mounts for 3-way routing

for screws or studs

These 3-way routing saddle mounts are designed to secure up to three bundles for multiple routing and reduce chaving or wear to those bundles. Applicable for various applications within the OEM, mass transit, defence or heavy truck and automotive markets.

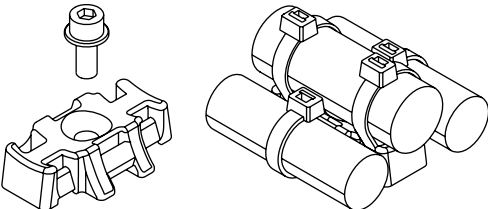
Features and benefits

- For parallel routing of bundles
- Secure alignment to the bundle due to H-design
- Easy maintenance of bundle by simply changing cable tie
- Cable tie head can be moved after bundling



S3SB15CBM8 and S3CBM8.

Material specifications: See Article-No. on our website.

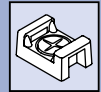


Suitable for external cylindrical hexagonal bolts M8

Example of a possible 3-way transfer

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Height (H)	Strap Width max. (G)	Hole Ø (FH)	Pack Cont.	Article-No.
S3CBM8-PA6GF30-BK		46.0	70.0	18.6	9.0	8.0	500 pcs.	151-01040

All dimensions in mm. Subject to technical changes.



Ratchet P-Clamp

The Ratchet P-Clamp family offers versatility when managing wires, cables and hoses. The robust design and durable materials make it ideal for heavy duty applications, both in- and outdoors. The one-piece adjustable clamp can be closed by hand to the desired diameter. The release feature provides easy and nondestructive removal of cables simply by using a flat-head screwdriver. This nondestructive release allows the clamp to be reused without removing or replacing any bolts or screws. The Ratchet P-Clamp is offered in four sizes and multiple mounting configurations.

Features and benefits

- One-piece ratchet closure design allows for easy installation during pre- or final assembly
- Multiple configurations handle a wide range of diameters and applications, reducing part inventory
- Clamp interior is designed to guide and center bundle to reduce pinching
- Easy release feature allows for quick adjustments and maintenance
- Impact modified, heat and UV stabilized PA66 provides long-term durability, in- and outdoors
- Steel mounting plate tolerates high torque mounting and is treated to resist chemicals and salt spray

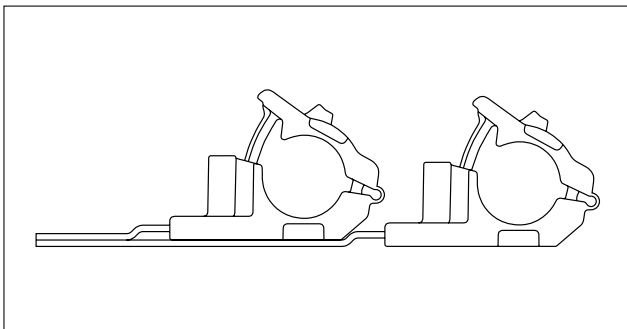


Ratchet P-Clamp - A more versatile way to mount and clamp cables.

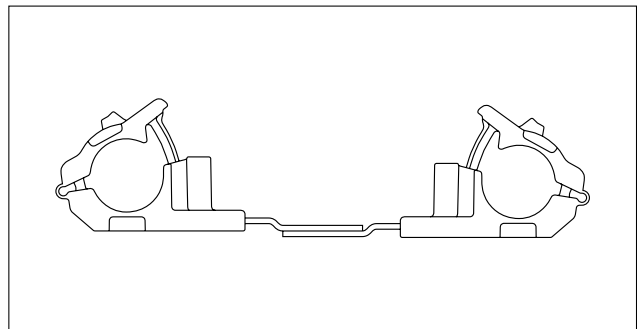
Multiple configurations

The wiring schemes in heavy duty applications become more complex day after day. Using a single mounting point, you can combine Ratchet P-Clamps to match the number, position and diameters of the wires or bundles inherent to today's wire management challenges. You will see

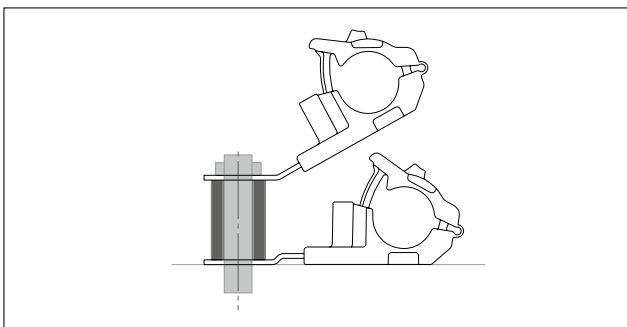
below just a few of the nearly endless number of configurations you can arrange by mixing Ratchet P-Clamps of varying sizes and different mounting plates.



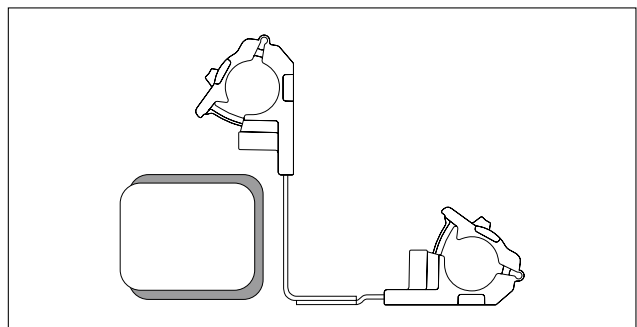
You can piggy-back Ratchet P-Clamps by using different length mounting plates to secure parallel cable configurations.



Ratchet P-Clamp mounting plates are shaped to allow face-to-face positioning. By using different length mounting plates, you can vary the distance between bundles and take advantage of the optimal routing path.



Add a spacer between Ratchet P-Clamps to speed installation and maintenance of stacked wire bundles.



90° angle mounting plates enable you to work around obstacles and protect wire from contacting moving parts.



For bundle diameters from 6.2 mm to 13.7 mm, A-Series

PART DESCRIPTION	Drawing	Width (W)	Length (L2)	Bundle Ø min.	Bundle Ø max.	Hole Ø (FH)	Fixing Hole Centres (F)	Variant	Article-No.
RCA180SM10-PA66HIRHSUV/ST/ZN-BK		34.9	83.1	6.2	13.7	10.29	50.5	Short	151-01417

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

For bundle diameters from 12.7 mm to 19.5 mm, B-Series

PART DESCRIPTION	Drawing	Width (W)	Length (L2)	Bundle Ø min.	Bundle Ø max.	Hole Ø (FH)	Fixing Hole Centres (F)	Variant	Article-No.
RCB90SM12-PA66HIRHSUV/ST/ZN-BK		34.9	68.8	12.7	19.5	12.95	26.7	Short	151-01459

All dimensions in mm. Subject to technical changes.



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For bundle diameters from 19.4 mm to 36.0 mm, C-Series

PART DESCRIPTION	Drawing	Width (W)	Length (L2)	Bundle Ø min.	Bundle Ø max.	Hole Ø (FH)	Fixing Hole Centres (F)	Variant	Article-No.
RCC15SM12-PA66HIRHSUV/ST/ZN-BK		34.9	103.5	19.4	36.0	12.95	62.3	Short	151-01485
RCC180LM12-PA66HIRHSUV/ST/ZN-BK		34.9	154.0	19.4	36.0	12.95	113.3	Long	151-01482
RCC180MM12-PA66HIRHSUV/ST/ZN-BK		34.9	125.0	19.4	36.0	12.95	84.3	Medium	151-01479
RCC180SM8-PA66HIRHSUV/ST/ZN-BK		34.9	103.0	19.4	36.0	8.31	62.3	Short	151-01474
RCC180SM12-PA66HIRHSUV/ST/ZN-BK		34.9	103.0	19.4	36.0	12.95	62.3	Short	151-01476
RCC30LM12-PA66HIRHSUV/ST/ZN-BK		34.9	114.9	19.4	36.0	12.95	75.2	Long	151-01491
RCC30SM12-PA66HIRHSUV/ST/ZN-BK		34.9	90.2	19.4	36.0	12.95	50.5	Short	151-01488
RCC90LM12-PA66HIRHSUV/ST/ZN-BK		34.9	129.2	19.4	36.0	12.95	39.9	Long	151-01497
RCC90SM12-PA66HIRHSUV/ST/ZN-BK		34.9	101.2	19.4	36.0	12.95	39.9	Short	151-01494

All dimensions in mm. Subject to technical changes.



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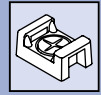
For bundle diameters from 36.0 mm to 51.0 mm, D-Series

PART DESCRIPTION	Drawing	Width (W)	Length (L2)	Bundle Ø min.	Bundle Ø max.	Hole Ø (FH)	Fixing Hole Centres (F)	Variant	Article-No.
RCD15SM8-PA66HIRHSUV/ST/ZN-BK		34.9	115.9	36.0	51.0	8.31	69.1	Short	151-01509
RCD180LM8-PA66HIRHSUV/ST/ZN-BK		34.9	166.5	36.0	51.0	8.31	121.0	Long	151-01506
RCD180MM8-PA66HIRHSUV/ST/ZN-BK		34.9	137.5	36.0	51.0	8.31	92.0	Medium	151-01503
RCD180SM8-PA66HIRHSUV/ST/ZN-BK		34.9	115.5	36.0	51.0	8.31	70.0	Short	151-03044
RCD30LM8-PA66HIRHSUV/ST/ZN-BK		34.9	127.0	36.0	51.0	8.31	80.5	Long	151-01515
RCD30SM8-PA66HIRHSUV/ST/ZN-BK		34.9	102.4	36.0	51.0	8.31	55.9	Short	151-01512
RCD90LM8-PA66HIRHSUV/ST/ZN-BK		34.9	116.7	36.0	51.0	8.31	42.4	Long	151-01521
RCD90LM10-PA66HIRHSUV/ST/ZN-BK		34.9	116.7	36.0	51.0	10.29	42.4	Long	151-01522
RCD90SM8-PA66HIRHSUV/ST/ZN-BK		34.9	88.7	36.0	51.0	8.31	42.4	Short	151-01518

All dimensions in mm. Subject to technical changes.



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Heavy duty cable clamps

screwable, Inline Ratchet Clamps

The Inline Ratchet Clamp family is a perfect fit when facing space constraints or where offset mounting options are not ideal. Easily twists onto existing threaded rods, eliminating the need for additional hardware. The robust design and durable materials make it ideal for heavy duty applications, both in- and outdoors. The one-piece adjustable clamp can be closed by hand to the desired diameter. The release feature provides easy and nondestructive removal of cables simply by using a flat-head screwdriver. This allows the clamp to be reused without removing or replacing any bolts or screws.

Features and benefits

- Building on the Ratchet P-Clamp family, the Center Mount Ratchet Clamp (CMRC) family offers fast and versatile installation of lines, hoses and cables
- Designed for applications where space is limited or when a staggered mounting option is not ideal
- Depending on the variant, the CMRC can be screwed on with an M6/M8/M10 screw or attached to an M8 threaded bolt
- The variants for bolt attachment enable time-saving installation with a reliable hold

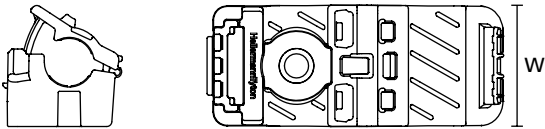


The Inline Ratchet Clamp family is a perfect fit when facing space constraints.



Inline Center Mount series, CMRCBLM6.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Hole Ø (FH)	Width (W)	Bundle Ø min.	Length (L)	Bundle Ø max.	Height (H)		Pack Cont.	Article-No.
CMRCBHM6-PA66HIRHSUV-BK	7.0	35.1	12.7	86.1	19.6	30.4	889	150 pcs.	151-03538

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Aluminium P-Clamps

Alu-P-Clamp with / without chloroprene insert

Manufactured from a high quality aluminium, these metal P-Clamps provide flexibility whilst providing a permanent fixing in the most arduous of environments. The addition of a chloroprene insert provides the cable or pipe bundle with a high degree of protection against vibration, reducing noise and also providing electrical isolation. They are commonly used in caravan construction, the defence and railway industry as well as in the renewable energy sector.

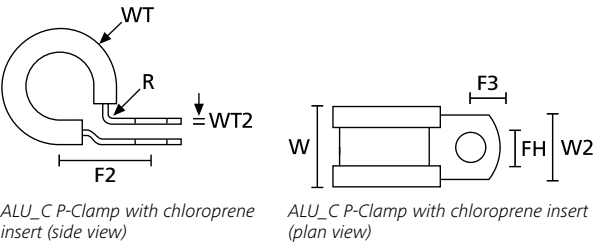
Features and benefits

- Simple and secure pipe or cable fixation
- Can be combined with chloroprene rubber for vibration resistance
- Ideal for use in high temperature applications
- Suitable for applications needing strength of metal components



P-Clamps manufactured in polyamide, aluminium or aluminium with a chloroprene insert.

Material specifications: See Article-No. on our website.

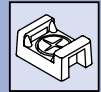


PART DESCRIPTION	Width (W)	Width (W2)	Wall (WT)	Wall (WT2)	Hole Ø (FH)	Fixing Hole Centres (F2)	Fixing Hole Centres (F3)	Bundle Ø max.	Radius (R)	Article-No.
ALU10C-CR/AL-BK	16.3	12.7	3.70	0.8	5.2	16.6	5.5	12.7	1.6	211-15100
ALU7C-AL/CR-BK	16.3	12.7	3.70	0.8	5.2	14.2	5.5	8.0	1.6	211-15070
ALU9C-AL/CR-BK	16.3	12.7	3.70	0.8	5.2	15.8	5.5	11.1	1.6	211-15090
ALU12C-AL/CR-BK	16.3	12.7	4.50	1.3	5.2	19.9	5.5	15.9	2.8	211-15120
ALU13C-AL/CR-BK	16.3	12.7	4.50	1.3	5.2	20.7	5.5	17.5	2.8	211-15130
ALU14C-AL/CR-BK	16.3	12.7	4.50	1.3	5.2	21.5	5.5	19.1	2.8	211-15140
ALU16C-AL/CR-BK	16.3	12.7	4.50	1.3	5.2	23.1	5.5	22.2	2.8	211-15160
ALU15C-AL/CR-BK	16.3	12.7	4.50	1.3	5.2	22.3	5.5	20.6	2.8	211-15150
ALU20C-AL/CR-BK	16.3	12.7	4.50	1.6	5.2	27.0	5.5	28.6	3.2	211-15200

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Plastic P-Clamps

HP-Series

For permanent or semi-permanent cable fixings this range of plastic P-Clamps can be used in many industries. Their light weight makes them particularly suitable for use in areas such as aircraft and aerospace where minimising weight, but retaining a strong fixing, is vitally important.

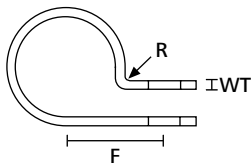
Features and benefits

- Manufactured from Polyamide
- Good temperature resistance and high strength
- Wide range of sizes for every application
- Can be used without cable ties



P-Clamps H1P - H18P in different dimensions.

Material specifications: See Article-No. on our website.



P-Clamp H1P - H18P (side view)



P-Clamp H1P - H18P (plan view)

PART DESCRIPTION	Width (W)	Wall (WT)	Hole Ø (FH)	Fixing Hole Centres (F)	Radius (R)	Bundle Ø max.	Pack Cont.	Article-No.
H1P-PA66-NA	10.0	0.80	4.2	8.5	0.5	3.2	1000 pcs.	211-60019
H1P-PA66HS-BK	10.0	0.80	4.2	8.5	0.5	3.2	100 pcs.	211-60000
H2P-PA66-NA	10.0	1.00	4.2	9.5	1.0	5.0	1000 pcs.	211-60029
H2P-PA66HS-BK	10.0	1.00	4.2	9.5	1.0	5.0	100 pcs.	211-60001
H3P-PA66-NA	10.0	1.00	4.2	10.0	1.0	6.5	1000 pcs.	211-60039
H3P-PA66HS-BK	10.0	1.00	4.2	10.0	1.0	6.5	100 pcs.	211-60002
H4P-PA66-NA	10.0	1.20	4.2	10.0	1.0	8.0	1000 pcs.	211-60049
H4P-PA66HS-BK	10.0	1.20	4.2	10.0	1.0	8.0	100 pcs.	211-60003
H5P-PA66-NA	10.0	1.20	4.2	11.0	1.0	9.5	1000 pcs.	211-60059
H5P-PA66HS-BK	10.0	1.20	4.2	11.0	1.0	9.5	100 pcs.	211-60004
H6P-PA66-NA	10.0	1.20	4.2	13.0	1.0	11.0	1000 pcs.	211-60069
H6P-PA66HS-BK	10.0	1.20	4.2	13.0	1.0	11.0	100 pcs.	211-60005
H7P-PA66HS-BK	10.0	1.20	4.2	14.0	1.5	12.5	100 pcs.	211-60006
H8P-PA66-NA	10.0	1.50	4.2	15.0	1.5	14.0	1000 pcs.	211-60089
H8P-PA66HS-BK	10.0	1.50	4.2	15.0	1.5	14.0	100 pcs.	211-60007
H9P-PA66-NA	10.0	1.50	4.2	16.0	1.5	16.0	1000 pcs.	211-60099
H9P-PA66HS-BK	10.0	1.50	4.2	16.0	1.5	16.0	100 pcs.	211-60008
H10P-PA66HS-BK	10.0	1.50	4.2	17.0	1.5	17.5	100 pcs.	211-60009
H11P-PA66-NA	10.0	1.50	4.2	18.0	2.0	19.0	1000 pcs.	211-60119
H12P-PA66-NA	10.0	1.50	4.2	19.0	2.0	20.5	1000 pcs.	211-60129
H13P-PA66-NA	12.0	1.50	5.2	20.5	2.0	22.0	500 pcs.	211-60139
H14P-PA66-NA	12.0	1.50	5.2	21.5	2.0	24.0	500 pcs.	211-60149

All dimensions in mm. Subject to technical changes.



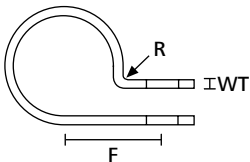
EN 45545-2

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

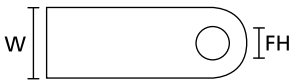


Plastic P-Clamps

HP-Series



P-Clamp H1P - H18P (side view)



P-Clamp H1P - H18P (plan view)

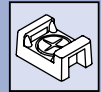
PART DESCRIPTION	Width (W)	Wall (WT)	Hole Ø (FH)	Fixing Hole Centres (F)	Radius (R)	Bundle Ø max.	Pack Cont.	Article-No.
H15P-PA66-NA	12.0	1.50	5.2	23.0	2.5	25.5	500 pcs.	211-60159
H16P-PA66-NA	12.0	1.50	5.2	24.0	2.5	28.5	500 pcs.	211-60169
H18P-PA66-NA	12.0	1.50	5.2	27.5	2.5	35.0	250 pcs.	211-60189
NX14-PA66-BK	16.0	1.50	4.3	-	-	25.4	100 pcs.	221-10140

All dimensions in mm. Subject to technical changes.



EN 45545-2

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



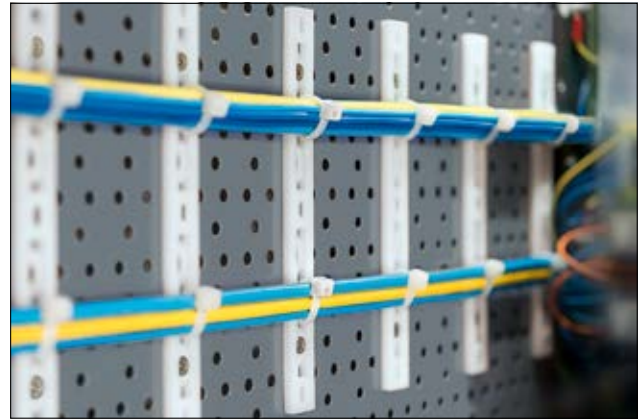
Mounting plates for screw fixing

MP-Series for parallel bundling

Many applications require each cable run to be firmly held in place but to be held separately from adjacent cable runs (example - control cabinets, machinery and military systems). The MP series of mounts can achieve this.

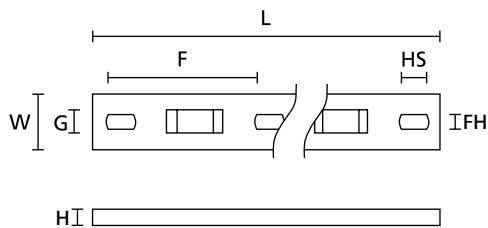
Features and benefits

- Allow multiple cables to run in parallel
- Simple to fix with two screws
- Cables are fixed by using a cable tie through any combination of the available slots

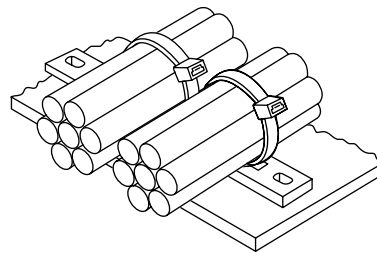


Screwable mounting plate MSMP

Material specifications: See Article-No. on our website.



Mounting plates MP and MSMP (plan and side view)



Mounting plates in application

PART DESCRIPTION	Width (W)	Length (L)	Height (H)	Fixing Hole Centres (F)	Hole Ø (FH)	Strap Width max. (G)	No. of bundles	Pack Cont.	Article-No.
MP2M3-PA66-NA	12.7	76.2	3.2	31.8	3.7	5.2	2	100 pcs.	151-24219
MP3M3-PA66-NA	12.7	108.0	3.2	31.8	3.7	5.2	3	100 pcs.	151-24319
MP4M3-PA66-NA	12.7	139.8	3.2	31.8	3.7	5.2	4	100 pcs.	151-24419
MSMP6/6-PA66-NA	15.7	243.0	5.3	38.0	3.8	7.6	6	100 pcs.	151-25619
MSMP5/10-PA66-NA	15.8	204.5	5.3	38.0	5.1	7.6	5	100 pcs.	151-25519
MSMP4-PA66-NA	15.9	167.0	5.2	19.0	5.1	8.2	4	500 pcs.	150-83499

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Cable Cleat Stainless Steel

Cable Cleat Trefoil

Cable cleats are designed to secure and support electrical cables within cable management systems, especially in environments exposed to high fault currents. Their primary role is to maintain cable alignment and containment under both normal operating conditions and during short-circuit events, where electromechanical forces can be extremely severe. Short circuits are unpredictable and potentially destructive when they occur, they pose serious risk to cables, infrastructure and personnel. That's why proper selection and installation of cable cleats is essential to ensure system integrity, protect equipment and people, comply with industry standards such as IEC61914, safeguarding your operations with confidence and reliability.

Features and benefits

- Complies with IEC61914-2021 industry standards
- Marine grade SS316L
- Supplied with Hardware SS316L M8, M10 or M12 bolt and nylon lock nut
- Easy to install
- Ensures system integrity
- Protects people and equipment
- Retains cable under electromechanical forces caused by short circuit events
- 180kA peek at 300mm spacing
- 125kA peek at 600mm spacing
- Very heavy impact resistance
- Lateral load test average 25kg
- Axial load test pass
- Needle Flame test 30 seconds
- Resistance to UV light test 1000 hours

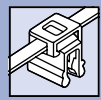


Cable cleats, trefoil

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Width (W)	Height (H)	Cable Ø min	Mounting Screw Type	Cable Ø max	Pack Cont.	Article-No.
CCT023-SS316L/PO-ML	50.0	79.0	18	M10 Screw	23	1 pc.	151-05001

All dimensions in mm. Subject to technical changes.



1-piece fixing ties for edges

EdgeClip series

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail. Once the cable tie is fastened around the cables the EdgeClip is presented ready for attaching to the panel. Widely used within the automotive and panel building industries these cable ties and EdgeClips save time and money.

The silver-grey clamp, the heart of our EdgeClips, consists of doubletempered spring steel in accordance with DIN EN 10132-4 C75S. The spring steel gives the clamp both the necessary rigidity to provide high pull-off forces and also sufficient flexibility for various possible applications.

The double coating is applied initially with a zinc plate system followed by inorganic surface sealing. Naturally, no chromium (VI) is used in this process. The clamp therefore complies with the current EU Directive 200/53/EC on end of life vehicles and the prohibition on heavy metals. The refined spring-steel clamp also fulfils the requirements for resistance to salt spray stipulated in DIN EN ISO 9227 NSS (min. 840 h without corrosion of base metal) and DIN EN ISO 6270-Z-CH (min. 720 h without corrosion of base material).

This solution has therefore been approved by many OEMs for exposed installation locations, e.g. in engine compartments and the running-gear area.

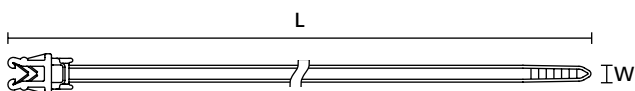


1-Piece Fixing Tie T50SOSEC12 can be pushed easily on edges.

Material specifications: See Article-No. on our website.

Features and benefits

- Easy assembly, just clip on per hand
- For edges of 1 - 3 mm, 1.5 - 4 mm, 3 - 6 mm, 4 - 6 mm or 6 - 8 mm
- Integrated metal clamp holds clip firmly in place
- Clamp consists of double tempered steel spring
- Ideal for applications where holes or adhesives are not suitable



T50SOSEC12E

PART DESCRIPTION	Drawing	Panel Thickness	Width (W)	Length (L)	Length (L2)	Bundle Ø max.	N	Tools	Article-No.
T50SOSEC12E-PA66HS-BK		1.0 - 3.0	4.6	160.0	15.0	35.0	180	1-2;4-7;25	148-00200
T50SOSEC13E-PA66HS-BK		1.0 - 3.0	4.6	160.0	15.0	35.0	180	1-2;4-7;25	126-00000
T50SOSEC34E-PA66HS-BK		1.0 - 3.0	4.6	155.0	15.0	35.0	180	1-2;4-7;25	126-00426

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-piece fixing ties for edges

EdgeClip-Series, 0.5 - 2.5 mm, top fixing

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where adhesives will fail due to temperature problems. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry. These EdgeClips are specially designed for applications where space is limited such as in mirrors and headlights.

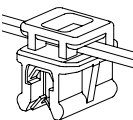
Features and benefits

- For flat edges
- For thin edges 0.5 - 2.5 mm
- Small housing for limited space
- Pre-assembled 2-piece fixing tie with EdgeClip
- Cable tie head can be moved after bundling



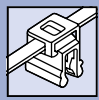
T30ROSEC0,5-2,5SPV for application on thin edges.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.		Tools	Article-No.
T30ROSEC0.5-2.5TPVA-PA66HS/PA66HIRHS-BK		3.4	145.0	30.0	133	1-2;4-5;25	156-01542

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-piece fixing ties for edges

EdgeClip-Series, 1.0 - 3.0 mm, top fixing

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry.

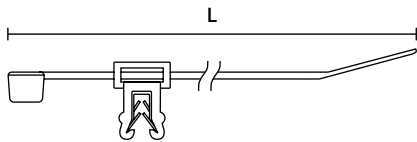
Features and benefits

- Pre-assembled 2-piece fixing tie with EdgeClip
- Cable tie head can be moved after bundling
- EC9, EC10, EC21 and EC22 are for minimum bundle diameters of 1 mm
- For edges of 1 - 3 mm



Edge Clip 10 (EC10) fitted onto a plastic panel to hold a Ø 6 mm harness.

Material specifications: See Article-No. on our website.



Fixing Tie with Edge Clip

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50ROSEC4A-PA46-GY		4.6	200.0	45.0	225	1-2;4-7;25	156-03049
T50ROSEC4A-PA66HS/PA66HIRHS-BK		4.6	200.0	45.0	225	1-2;4-7;25	156-02821
T50ROSEC4B-PA46-GY		4.6	200.0	45.0	225	1-2;4-7;25	156-00782
T50ROSEC4B-PA66HS/PA66HIRHS-BK		4.6	200.0	45.0	225	1-2;4-7;25	156-02823
T50ROSEC10-PA66HS/PA66HIRHS-BK		4.6	200.0	45.0	225	1-2;4-7;25	156-05904

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

EdgeClip-Series, 1.0 - 3.0 mm, top fixing

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Article-No.
T50ROSEC9-PA66HS/PA66HIRHS-BK-PA66HS/PA66HIRHS-BK		4.6	200.0	45.0	225	920-30023

All dimensions in mm. Subject to technical changes.



EdgeClip-Series, 1.0 - 3.0 mm, side fixing

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50SOSEC5A-PA66HS/PA66HIRHS-BK		4.6	150.0	31.0	225	1-2;4-7;25	150-40593
T50REC5A-PA66HS/PA66HIRHS-BK		4.6	202.0	45.0	225	1-2;4-7;25	156-01037
T50SOSEC21-PA66HS/PA66HIRHS-BK		4.6	150.0	35.0	225	1-2;4-7;25	156-00017
T50ROSEC22-PA66HS/PA66HIRHS-BK		4.6	200.0	45.0	225	1-2;4-7;25	156-00011

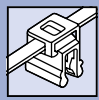
Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 310.

All dimensions in mm. Subject to technical changes.

EdgeClip-Series, 1.0 - 3.0 mm, side fixing

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Article-No.
T50ROSEC5A-PA66HS/PA66HIRHS-BK		4.6	200.0	45.0	225	920-30009
T50ROSEC5B-PA66HS/PA66HIRHS-BK		4.6	200.0	45.0	225	920-30011
T50ROSEC21-PA66HS/PA66HIRHS-BK		4.6	200.0	45.0	225	920-30013

All dimensions in mm. Subject to technical changes.



2-Piece Fixing Ties with EdgeClip

EdgeClip 1-3 mm

Many applications require cables to be run parallel to each other but separated to avoid abrasion. These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail.

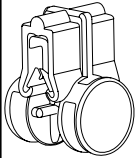
Features and benefits

- For parallel routing of cables, hoses or harnesses
- Easy assembly, just clip on per hand
- For edges of 1-3 mm
- Integrated metal clamp holds clip firmly in place
- Clamp consists of double tempered steel spring
- Ideal for applications where holes or adhesives are not suitable



T50ROSCBT02SET for parallel bundling.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.		Tools	Article-No.
T50ROSCBT02SET-PA66HS/PA66W-BK		1.0	4.6	200.0	45.0	225	1-2;4-7;25	156-00805

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



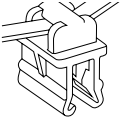
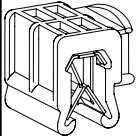
2-piece fixing ties for edges

EdgeClip-Series, unassembled



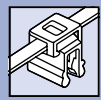
Edge Clip 10 (EC10) fitted onto a plastic panel to hold a Ø 6 mm harness.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.		Tools	Article-No.
T18REC10SDSET-PA66HS/PA66HIRHS-BK		2.5	100.0	20.0	80	1-2;4-5;25	156-00962
T30RATSEC37SET-PA66HS/PA66HIRHS-BK		3.6	150.0	32.0	135	-	156-00112

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-piece fixing ties for edges

EdgeClip-Series, 3.0 - 6.0 mm, top fixing

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where due to temperature problems adhesives will fail. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry.

Features and benefits

- Pre-assembled 2-piece fixing tie with EdgeClip
- Cable tie head can be moved after bundling
- For minimum bundle diameters of 1 mm
- For edges of 3 – 6 mm



Fixing Tie with EdgeClip for thick edges.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50ROSEC19-PA46-GY		4.6	200.0	45.0	225	1-2;4-7;25	156-02799
T50ROSEC19-PA66HS/PA6HIRHS-BK		4.6	200.0	45.0	225	1-2;4-7;25	156-02819
T50ROSEC20-PA46-GY		4.6	200.0	45.0	225	1-2;4-7;25	156-02748
T50ROSEC20-PA66HS/PA6HIRHS-BK		4.6	200.0	45.0	225	1-2;4-7;25	156-02814

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

EdgeClip-Series, 3.0 - 6.0 mm, top fixing

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Article-No.
T50SOSEC20-PA66HS/PA66HIRHS-BK		4.6	150.0	35.0	225	920-30042

All dimensions in mm. Subject to technical changes.

EdgeClip series, 3.0 - 6.0 mm, side fixing

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50ROSEC23-PA66HS/PA66HIRHS-BK		4.6	200.0	45.0	225	1-2;4-7;25	156-03705

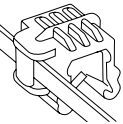
Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



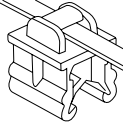
2-piece fixing ties for edges

EdgeClip series, 3.0 - 6.0 mm, side fixing

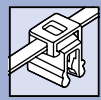
PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.		Tools	Article-No.
T50ROSEC24-PA66HS/PA66HIRHS-BK		4.6	200.0	45.0	225	1-2;4-7;25	156-00007

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.
All dimensions in mm. Subject to technical changes.

EdgeClip-Series, 6.0 - 8.0 mm, top fixing

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.		Article-No.
T50ROSEC6-8-PA66HS/PA66HIRHS-BK		4.6	200.0	45.0	225	156-02700

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut
All dimensions in mm. Subject to technical changes.



2-piece fixing ties for edges

EdgeClip-Series, twistable

These cable ties and EdgeClip assemblies are ideal for use where holes are not acceptable or where adhesives will fail due to temperature problems. These assemblies are widely used for fixing and bundling cables, pipes and hoses within the automotive industry, harness making, panel building and electrical industry.

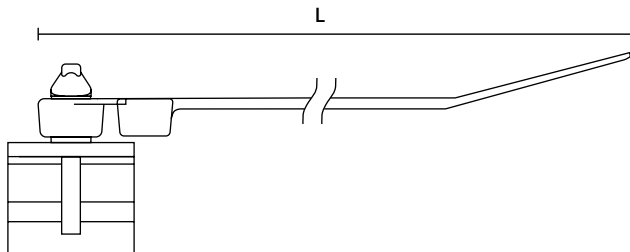
Features and benefits

- Pre-assembled 2-piece fixing tie with EdgeClip
- Easy to assemble by hand
- Cable tie head can be moved after bundling
- For edges of 1 – 2.5 mm or 1 – 3 mm
- Can be rotated to the desired position

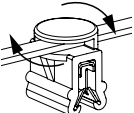


EdgeClip CBTO50R, rotatable 90°.

Material specifications: See Article-No. on our website.



CBT30MR

PART DESCRIPTION	Drawing	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
CBTO50R-PA66HS/PA66HIRHS-BK		1.0 - 3.0	4.6	202.0	47.0	225	2;4-5;25	156-01601

Recommended Tools: 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-piece fixing ties for edges

for drill holes

Due to the tie's reduced installation height it is ideal for use wherever space is at a premium.

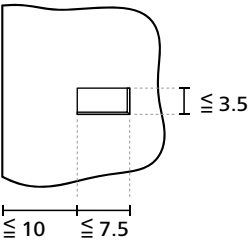
Features and benefits

- Pre-assembled 2-piece fixing tie with EdgeClip
- Easy to assemble by hand
- Cable tie head can be moved after bundling
- For edges of 1.0 - 3.0 mm
- Secure fixing of the EdgeClip into drill hole
- Ideal for use wherever space is at its premium



The holding tab increases the tensile strength additionaly.

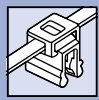
Material specifications: See Article-No. on our website.



Position of the plate cut-out for the holding tab.

PART DESCRIPTION	Drawing	Panel Thickness	Width (W)	Length (L)	Bundle Ø max.		Tools	Article-No.
T50ROSEC2.5A-PA66HS/PA66HIRHS-BK		1.0 - 3.0	4.6	200.0	50.0	225	1-2;4-7;25	156-00676

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.
All dimensions in mm. Subject to technical changes.



Fixing elements for tubes and harnesses, for edges

EdgeClip-Series

EdgeClips are used in the automotive industry and electrical industries and when it is impossible to drill holes or no other fixing points are available.

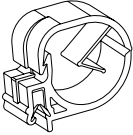
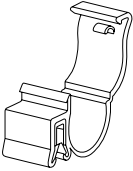
Features and benefits

- Releasable fixing elements with EdgeClip
- Low-vibration routing of bigger bundle diameters
- Clips to be pushed onto an edge
- To be closed single handed, a snap can be felt
- Bundles can be released at any time
- EC27: fixing element enables usage of smaller bundle diameter
- EC41: for parallel guidance of two bundles



EdgeClip cable and tube clips are suitable for the low-vibration routing of cables and tubes with larger bundle diameters.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Panel Thickness	Attach to Ø	Pack Cont.	Article-No.
EC27-PA66HIRHS-BK		1.0 - 3.0	15.0 - 22.0	500 pcs.	151-00161
EC39-PA6HIRHS-BK		1.0 - 3.0	-	250 pcs.	151-03611

All dimensions in mm. Subject to technical changes.



Automatic bundling

EdgeClip-Series for automatic cable tying systems

Clips to fix cables and harnesses in the automotive and white goods industry.

Features and benefits

- Optimized for use automatic cable tying systems
- Easy to apply
- The fixing elements can be tied automatically with Autotool System ATS



Automized clip application.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Panel Thickness	Width (W)	Length (L)	Height (H)	Article-No.
ATSEC38-PA66HIRHS-BK		1.5 - 4.0	16.4	15.0	14.5	102-68380
ATSEC37-PA66HIRHS-BK		1.5 - 4.0	16.4	15.0	14.7	102-68370
ATSEC35-PA66HIRHS-BK		1.5 - 4.0	10.0	15.0	18.9	102-68350
ATSEC36-PA66HIRHS-BK		1.5 - 4.0	10.1	15.0	19.0	102-68360

All dimensions in mm. Subject to technical changes.



2-piece fixing ties

with pipe clip

Mainly used in the automotive industry, offer solutions for bundling two harnesses.

Features and benefits

- For post-installation of additional cables for pre-assembled cable looms
- Variety of twist angles and even different loop directions provide flexibility for cable routing
- For OC1 and 2A additional cable tie dimensions are available
- CBTO-series for cable ties up to 5 mm



Pipe Clip CBTO, twistable 90°.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.	Attach to Ø	Tools	Article-No.
T30ROC1A-PA66HS/PA66HIRHS-BK		3.6	150.0	31.0	4.0 - 10.0	1-2;4-5;25	156-00689
T50ROC1A-PA66HS/PA66HIRHS-BK		4.6	202.0	45.0	4.0 - 10.0	1-2;4-7;25	156-00767
T30ROC5J-PA66HSUV-BK		3.5	152.0	30.0	11.0	1-2;4-5;25	156-00520
T50RORC15x15-PA66HS/PA66HIRHS-BK		4.6	200.0	50.0	15.0 x 15.0	1-2;4-5;25	156-01549
T50RLOC5-9-SET-PA66HS/PA66HIRHSUV-BK		12.0	23.7	9.0	-	-	156-01289
T50RLOC10-14-PA66HS/PA66HIRHSUV-BK		12.0	43.7	14.0	10.0 - 14.0	-	156-01093
T50RLOC15-19-SET-PA66HS/PA66HIRHSUV-BK		-	31.6	19.0	-	-	156-01292
T50ROCSG1A-PA66/PA66HIRHS-BK		4.6	202.0	45.0	4.0 - 10.0	1-2;4-5;25	156-01212
T50ROC10-17A-PA66HS/PA66HIRHS-BK		-	200.0	50.0	10.0 - 17.0	1-2;4-5;25	156-02903
T50ROSCTCL14A-PA66HS/PA66HIRHS-BK		4.6	200.0	45.0	18.7	-	156-03353

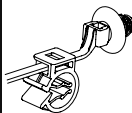
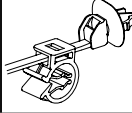
Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-piece fixing ties

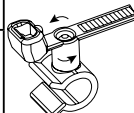
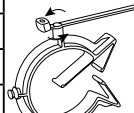
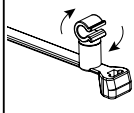
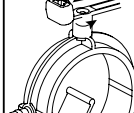
with pipe clip

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Bundle Ø max.	Attach to Ø	Tools	Article-No.
T50SOSFT7EOC1A-PA66HS/PA66HIRHS-BK		-	-	30.0	-	-	156-01273
T60SOSSFT7125-E1OC1A-PA66HS/PA66HIRHS-BK		-	-	30.0	-	-	156-01684

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

twistable 360°

PART DESCRIPTION	Drawing	Attach to Ø	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50SVC6.5-PA46-GY		6.5 - 8.0	4.7	155.0	35.0	225	1-2;4-7;25	156-00937
T50SVC6.5-PA66HS/PA66HIRHS-BK		6.5 - 8.0	4.7	155.0	35.0	222	1-2;4-7;25	156-00155
T50SVCOC10-14-PA46-GY		10.0 - 14.0	4.7	155.0	35.0	222	1-2;4-7;25	156-01045
T50SMVCOC10-14-PA46-GY		10.0 - 14.0	4.7	210.0	50.0	222	1-2;4-7;25	156-02610
T50SMVCOC10-14-PA66HS/PA66HIRHS-BK		10.0 - 14.0	4.7	210.0	50.0	222	1-2;4-7;25	156-02003
T50SVCOC15-18-PA66HS/PA66HIRHS-BK		15.0 - 18.0	4.7	155.0	35.0	222	1-2;4-7;25	156-02002
T50SMVCOC15-18-PA66HS/PA66HIRHS-BK		15.0 - 18.0	4.7	210.0	50.0	222	1-2;4-7;25	156-00129
T50SVCOC19-24.5-PA66HS/PA66HIRHS-BK		19.0 - 24.5	4.7	155.0	35.0	222	1-2;4-7;25	156-02005
T50SMVCOC19-24.5-PA46-GY		19.0 - 24.5	4.7	210.0	50.0	222	1-2;4-7;25	156-00577
T50SMVCOC19-24.5-PA66HS/PA66HIRHS-BK		19.0 - 24.5	4.7	210.0	50.0	222	1-2;4-7;25	156-00130
T50SVCOC25-31-PA66HS/PA66HIRHS-BK		25.0 - 31.0	4.7	155.0	35.0	222	1-2;4-7;25	156-01230
T50SMVCOC28-PA66HS/PA66HIRHS-BK		28.0	4.7	210.0	50.0	222	1-2;4-7;25	156-01268
T50SVCOC31-39-PA66HS/PA66HIRHS-BK		31 - 39	4.7	155.0	35.0	222	1-2;4-7;25	156-02000
T50SMVCOC31-39-PA66HS/PA66HIRHS-BK		31.0 - 39.0	4.7	210.0	50.0	222	1-2;4-7;25	156-01321
T50SMVCOC39-45-PA66HS/PA66HIRHS-BK		39.0 - 45.0	4.7	210.0	50.0	222	1-2;4-7;25	156-00131
T50SVC3.5-PA66HS/PA66HIRHS-BK		3.45 - 3.55	4.7	155.0	35.0	222	1-2;4-7;25	156-01350
T50SVCOC19.0-24.5 ST-PA66HS/PA66HIRHS-BK		-	-	-	-	-	-	156-02402

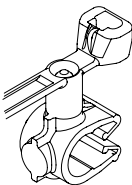
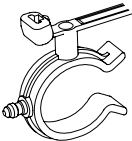
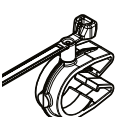
Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-piece fixing ties with pipe clip

twistable 360°

PART DESCRIPTION	Drawing	Attach to Ø	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T50SVCMOC9M-PA66HIRHSUV-BK		-	-	17.2	10.0	225	-	156-02243
T50SVCOC9-11A-PA66HS/PA66HIRHS-BK		9 - 11	4.7	155.0	35.0	222	1-2;4-7;25	156-01419
T50SMVCMOC19M-PA66HIRHSUV-BK		-	-	32.7	21.8	225	-	156-04243

Recommended Tools: 1=MK10-SB, 2=MK20, 4=MK3PNSP2, 5=EVO7i, MK7P, 7=EVO9i, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

2-piece fixing ties with automatic harness clip, connectable and twistable 360°

IAHC-Series

Offering a simple and secure method of attaching cables together. Originally designed for the automotive industry, these products are used in a wide range of applications.

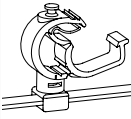
Features and benefits

- Push and click closure
- 360 degrees rotatable
- Coupling elements of the IAHC variants allow parts to interconnect



T120R cable tie assembled with an IAHC.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Attach to Ø	Width (W)	Length (L)	Bundle Ø max.	N	Tools	Article-No.
T120RIAHC3TCR-PA66HIRHS-BK		19.0 - 28.0	7.6	390.0	108.0	530	1;3;6-7;9-10;25	156-03382

Recommended Tools: 1=MK10-SB, 3=MK21, 7=EVO9i, 9=EVO9iHT, 10=MK9P, 25=EVOcut. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Fixing elements for tubes and harnesses with automatic locking feature

with arrowhead, for round holes

Offering a simple and secure method of attaching cables to panels. Originally designed for the automotive industry, these products are used in a wide range of applications with sheet metal panels across various industries.

Features and benefits

- Push and click closure for fixing of wires
- Clip is clicked into a specific hole
- AHC()SS und AHC()SB can be pushed onto a 5.0 mm stud

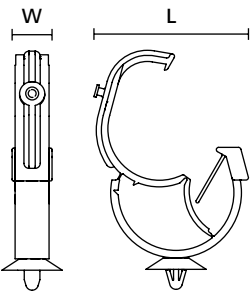
Material specifications: See Article-No. on our website.



Automatic Harness Clip closed.



Automatic Harness Clip open.



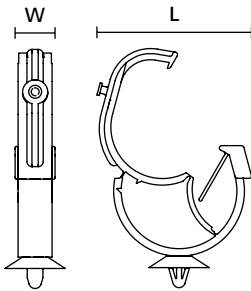
AHC-Series

PART DESCRIPTION	Drawing	Panel Thickness	Disc Ø	Width (W)	Bundle Ø max.	Length (L)	Pack Cont.	Article-No.
IAHC3AH-PA66HIRHS-BK		0.5 - 2.7	24.0	13.5	28.0	40.0	500 pcs.	151-00378
AHC4AH-PA66HIRHS-BK		0.8 - 2.7	24.0	15.9	41.5	60.5	400 pcs.	151-00374

All dimensions in mm. Subject to technical changes.



with fir tree for round holes



AHC-Series

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Bundle Ø max.	Disc Ø	Width (W)	Length (L)	Pack Cont.	Article-No.
AHC25FT6LG-PA66HIRHS-BK		6.4 - 7.0	0.7 - 4.0	22.0	20.0	10.0	34.5	3000 pcs.	151-02746
AHC223FT6LG-PA66HIRHS-BK		6.4 - 7.0	0.7 - 4.0	23.0	20.0	10.0	35.0	300 pcs.	151-03450
AHC336FT6LG-PA66HIRHS-BK		6.4 - 7.0	0.7 - 4.0	37.5	22.0	14.0	50.0	700 pcs.	151-01376

All dimensions in mm. Subject to technical changes.



Fixing elements for tubes and harnesses with automatic locking feature, connectable

IAHC-Series, connectable

Offering a simple and secure method of attaching cables to panels. Originally designed for the automotive industry, these products are used in a wide range of applications with sheet metal panels across various industries.

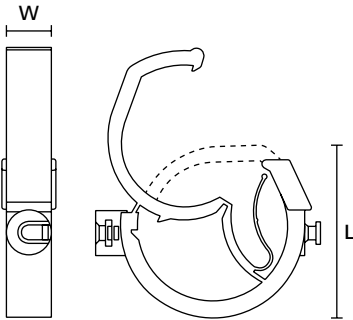
Features and benefits

- Push and click closure
- Coupling elements of the IAHC variants allow parts to connect
- IAHC()T can only be connected with another IAHC element
- Vibration resistant, rattlefree and secure hold of bundle
- In case of maintenance easy replacement of bundle possible
- 360 degree rotatable for guiding bundles in different directions



IAHC()AH in combination with an IAHC()T.

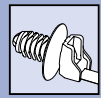
Material specifications: See Article-No. on our website.



IAHC()T

PART DESCRIPTION	Drawing	Bundle Ø max.	Pack Cont.	Article-No.
IAHC3TIAHC3T-PA66HIRHS-BK		28.0	700 pcs.	156-03385

All dimensions in mm. Subject to technical changes.



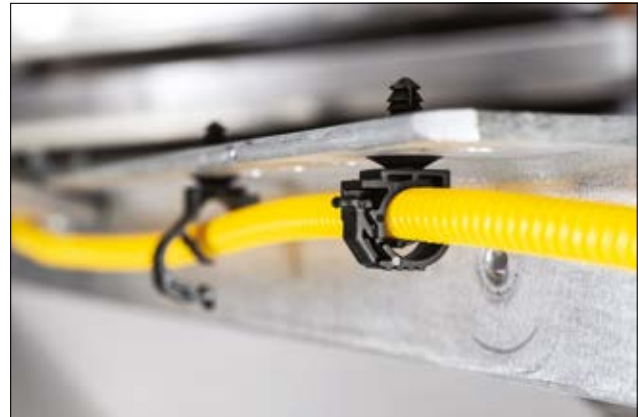
Fixing elements for tubes and pipes

with fir tree for round holes and cover, LOC-Series

These clips offer fast and easy bundling of convoluted tubes and pipes, especially for the automotive industry.

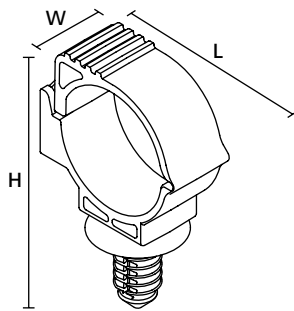
Features and benefits

- For fixing and bundling convoluted tubes and pipes
- Vibration resistant, rattle-free and secure hold of bundle
- In case of maintenance easy replacement of bundle possible



The locking clamps of the LOC-Series offer fast and easy bundling of convoluted tubes and pipes.

Material specifications: See Article-No. on our website.



Reference drawing for dimensions only

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
LOC10-14FT6LG-PA66HIRHSUV-BK		6.1 - 6.6 (hexagonal) 6.1 - 7.0	0.6 - 8.25	14.0	12.0	34.9	57.8	2000 pcs.	151-01166
LOC15-19FT6LG-PA66HIRHSUV-BK		6.1 - 6.6 (hexagonal) 6.1 - 7.0	0.6 - 8.25	19.0	12.0	31.6	47.5	2000 pcs.	151-01022

All dimensions in mm. Subject to technical changes.



Fixing elements for tubes and pipes

with fir tree for oval holes and cover, LOC-Series

These clips offer fast and easy bundling of convoluted tubes and pipes, especially for the automotive industry.

Features and benefits

- For fixing and bundling convoluted tubes and pipes
- Vibration resistant, rattle-free and secure hold of bundle
- In case of maintenance easy replacement of bundle possible



Open Pipe Clip LOC15-19FTOVAL.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
LOC40-45FTOval-PA66HIRHS-BK		-	-	-	-	-	-	400 pcs.	151-02803
LOC15-19FTOVAL-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	19.0	12.0	31.6	49.5	1000 pcs.	151-01049
LOC5-9FTOVAL-PA66HIRHSUV-BK		6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.75	9.0	12.0	25.5	34.2	1700 pcs.	151-01306

All dimensions in mm. Subject to technical changes.



Fixing elements for tubes and hanneses

with fir tree

This Fixing Element is pressed into a hole by hand and locked into place with a hearable click. Cable bundles can be applicated afterwards.

Features and benefits

- Easy to install without the need for a tool
- Types with disc cover the hole and protect against dirt and dust ingress
- Rattlefree and secure hold of bundles due to retaining collar
- Suitable for post-installation of bundles
- Easy replacement of bundles in case of maintenance



The HC48FT6 is designed for Bundle diameter 4.3 - 5.2 mm.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Attach to Ø	Pack Cont.	Article-No.
HC512FT7J-PA66HSUV-BK		7.0	4.5 - 4.5	12.0	100 pcs.	151-00852

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Fixing elements for corrugated tubing, with arrowhead

for round and oval holes

These clamps are used in the automotive industry, in the production of cable harnesses and in the electrical industry. Their quick and easy mounting is the reason for their universal success wherever corrugated tubing and pipes have to be fixed quickly and securely.

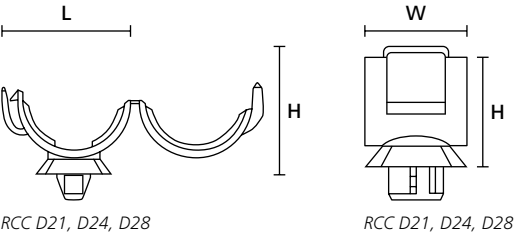
Features and benefits

- Clamps for corrugated tubing for a variety of nominal diameters
- Arrowhead simply locks into place
- Tube is guided accurately by clicking
- Axial slipping is prevented by the inside profile of the clamp



Simple and secure installation of pipes or hoses to panels.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Width (W)	Length (L)	Height (H)	Nominal Ø	Pack Cont.	Article-No.
TCTC16SFT10x10-PA6-OG		10.0 x 10.0 (square)	1.0 - 1.8	15.0	68.3	33.6	16.0	100 pcs.	151-03182

All dimensions in mm. Subject to technical changes.



Fixing elements for corrugated tubing, with fir tree

for round and oval holes

These clamps are used for example in the automotive industry, harness making, electrical industry and wherever corrugated tubing has to be quickly and firmly fixed.

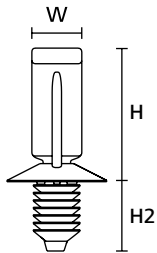
Features and benefits

- Clamps for a variety of nominal diameters
- Fir tree foot part can be used for a variety of panel thicknesses
- Suitable for use within threaded holes
- Tube is guided accurately by clicking
- Axial slipping is prevented by the inside profile of the clamp



CNCTC8FT6.5LG Clamps.

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Drawing	Hole Ø (FH)	Panel Thickness	Nominal Ø	Width (W)	Height (H)	Height (H2)	Pack Cont.	Article-No.
CTCL8.5FT6LG-PA66HIRHS-BK		6.3 - 6.7	0.75 - 3.0	8.5	10.0	28.4	9.4	1000 pcs.	151-02469

All dimensions in mm. Subject to technical changes.



Fixing elements for tubes and harnesses

rotatable

Rotatable dual routing clips keep two routings secured and separated. A swivel coupler allows them to rotate independently of each other.

Features and benefits

- Patented retention design features inverted retaining legs, narrow opening and circular retainer to prevent inadvertent disengagement.
- Controlled flex and angled entry promote easy installation.
- Independent rotation allows for adjustable routing orientation.



A rotatable dual routing clip that keeps two routings secured and separated.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Length (L)	Height (H)	Pack Cont.	Article-No.
MOC26FMOC26M-PA66HIRHSUV-BK		73.4	41.0	1000 pcs.	156-02369
MOC8FMOC19M-PA66HIRHSUV-BK		45.6	32.8	2000	156-02321

All dimensions in mm. Subject to technical changes.

Fixing elements for tubes and harnesses

rotatable

The MOC to LOC is a rotatable dual routing clip and clamp combination that keeps two routings secured and separated. A swivel coupler allows them to rotate independently of each other.

Features and benefits

- Patented retention design of clip features inverted retaining legs, narrow opening and circular retainer to prevent inadvertent disengagement.
- Clip and clamp both offer easy bundle installation.
- Independent rotation allows for adjustable routing orientation.
- Locking clamp dynamically fits a range of bundle sizes.



Independent rotation allows for adjustable routing orientation.

PART DESCRIPTION	Drawing	Length (L)	Height (H)	Pack Cont.	Article-No.
MOC10FLOC5-9-PA66HIRHSUV-BK		41.3	23.6	2000	156-01837

All dimensions in mm. Subject to technical changes.



Fixing elements for tubes and harnesses

multiparallel routing, fir tree, round hole

Designed for the fast and easy parallel routing of two tubes or pipes. Both can be installed by hand. The fixing element inside assures a firm grip even with smaller diameters.

Features and benefits

- For parallel routing of tubes and pipes
- Easy to install
- Post installation of tubes and pipes possible
- Defined offset between the bundles



Material specifications: See Article-No. on our website.

PART DESCRIPTION	Hole Ø (FH)	Panel Thickness	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
DUALFT6DOCK-PA66HIRHSUV-BK	6.5	0.6 - 6.0	15.5	16.7	51.8	34.6	2000 pcs.	151-01310

All dimensions in mm. Subject to technical changes.

Fixing elements for tubes and harnesses

multiparallel routing, fir tree, oval hole

The clips are used to guide HV cables, harnesses and tubes. The products are designed to offer high stability within the application. The ratchet closure makes it possible to guide different cable diameters in parallel.

Features and benefits

- 2-way clip for bundling and securing cables, for oval holes
- For parallel / multiple routing
- can be used without cable ties due to clip function
- Ratchet function allows for different cable diameters
- Clip can be opened for maintenance purposes without damaging the clip



Fixing element for parallel routing of two harnesses or tubes (12.2 - 18.0mm).

PART DESCRIPTION	Hole Ø (FH)	Panel Thickness	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
DHC12.2-18.2FTOVAL-PA66HIRHS-BK	6.2 x 12.2 6.5 x 12.5 6.5 x 12.2	0.6 - 5.0	12.2	18.2	20.0	93.0	46.0	250 pcs.	151-02965

All dimensions in mm. Subject to technical changes.



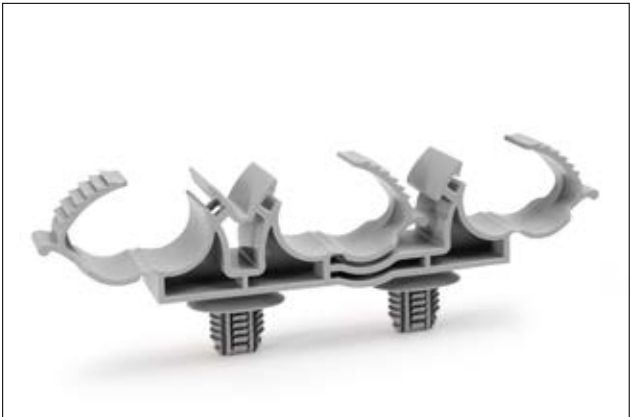
Fixing elements for tubes and harnesses

multiparallel routing, fir tree, oval hole

The clips are used to guide HV cables, harnesses and tubes. The products are designed to offer high stability within the application. The ratchet closure makes it possible to guide different cable diameters in parallel.

Features and benefits

- 3-way clip for bundling and securing cables, for oval holes
- For parallel / multiple routing
- can be used without cable ties due to clip function
- Ratchet function allows for different cable diameters
- Clip can be opened for maintenance purposes without damaging the clip



Fixing element for parallel routing of three harnesses or tubes (12.2 - 18.2 mm).

PART DESCRIPTION	Hole Ø (FH)	Panel Thickness	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
THC12.2-18.2FTOVAL-PA66HIRHS-BK	6.2 x 12.2 6.5 x 12.5 6.5 x 12.2	0.6 - 5.0	12.2	18.2	20.0	139.0	46.0	200	151-02967

All dimensions in mm. Subject to technical changes.

Fixing elements for convoluted tubes

multiparallel routing, fir tree, oval hole

These clips offer fast and easy bundling of convoluted tubes and pipes, especially for the automotive industry.

Features and benefits

- For fixing and bundling convoluted tubes and pipes
- Suitable for nearly every application

Material specifications: See Article-No. on our website.



PART DESCRIPTION	Hole Ø (FH)	Panel Thickness	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
PC3OVAL-PA66HIRHS-BK	6.2 x 12.2 6.5 x 12.5 6.5 x 13.0 7.0 x 12.0	0.6 - 6.5	22.0	17.6	91.5	69.6	1000 pcs.	151-02123

All dimensions in mm. Subject to technical changes.



Fixing elements for tubes and harnesses

for multiparallel routing

These clips are designed for the installation of high voltage cables in the automotive sector or electric vehicles in general, but can be used for any application requiring parallel wiring.

The sturdy clip fixes and guides cables and corrugated conduits in a stable and optimal way, keeping the wiring parallel even in the presence of strong vibrations. The HV-Clips are available as CLP, CMP and CHP parts. The "L" stands for lower performance (EPDM), the "M" for medium performance (heat resistant + AEM) and the "H" for high performance (PA46 + AEM). The HV clips can also be produced with other material combinations or are already available.



Double and triple high voltage clips.

Features and benefits

- Easy installation thanks to the special closure
- PA6HS for temperatures up to 90°C,
- PA46 for temperature up to 150°C
- For fixing on 5.0 mm studs with anti-rotation pin
- For 2 or 3 cables for parallel routing
- The Twist-Lock closing system (20.0 - 24.0 mm) acts with the same force on both compartments
- It increases the reopening force by decreasing the closing force significantly
- Soft AEM inserts protect the wiring from crushing, abrasion and chemicals
- Rotatable fastener = 20.0 -24.0 mm bundle diameter
- Hinge lock = 14.0 -17.0 mm bundle diameter
- NR = no rubber



Double clip in PA6HS with anti-rotation pin recommended for corrugated tubing.

Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Stud Ø	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
CHP2W20-24NA-PA46-OG		-	-	20.0	24.0	-	-	-	150 pcs.	151-03414
CMP2W20-24NA-PA6HS-BK		-	-	-	-	-	-	-	100 pcs.	151-03465
CLP2W19.5NR-PA6HS-BK		-	5.0, M5	19.5	19.5	20.4	75.1	31.7	100 pcs.	151-03629
CHP2W19.5NR-PA46-OG		-	5.0, M5	19.5	19.5	20.4	75.1	31.7	250 pcs.	151-03666
CHP2W14-17-PA46/AEM-OG		-	M5	14.0	17.0	20.0	75.1	31.7	250 pcs.	151-03331
CMP2W14-17-PA6HS/AEM-BK		-	M5	14.0	17.0	20.4	75.1	31.7	250 pcs.	151-03463
CLP2W14-17-PA66HS/EPDM-BK		-	M5	14.0	17.0	-	-	-	250 pcs.	151-03352
CHP3W14-17-PA46/AEM-OG		6.3 - 6.7	M5	14.0	17.0	20.5	108.9	33.9	125 pcs.	151-03353

All dimensions in mm. Subject to technical changes.



Fixing elements for tubes and harnesses

for multiparallel routing

Features and benefits

- TPE layer protects cables and prevents rotation and axial slide, for a positive hold without crushing bundles.
- Clamps are stackable to minimize space.
- Anti-rotation feature prevents clamps from rotating while bolting down.
- Releasable latch allows access to routings for serviceability.



Material specifications: See Article-No. on our website.

PART DESCRIPTION	Drawing	Hole Ø (FH)	Stud Ø	Bundle Ø min.	Bundle Ø max.	Width (W)	Length (L)	Height (H)	Pack Cont.	Article-No.
HDC19x2-PA66GF15/TPE-BK		M8	-	18.5	19.5	26.0	82.3	36.0	400 pcs.	151-03790
HDC17x2-PA66GF15/TPE-BK		M8	M8	16.5	17.5	26.0	82.3	36.0	400 pcs.	151-03789
HDC17x3-PA66GF15/TPE-BK		M8	-	16.5	17.5	26.0	126.3	36.0	350 pcs.	151-03791
HDC19x3-PA66GF15/TPE-BK		M8	-	18.5	19.5	26.0	126.3	36.0	350 pcs.	151-03792

All dimensions in mm. Subject to technical changes.

Fixing elements for tubes and harnesses

multi parallel routing

Features and benefits

- Separates and secures bundles avoiding abrasion.
- Designed to handle both convoluted tubing and bundles not covered in convoluted tubing.
- Available in a variety of sizes and colors to be easily identified.



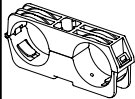
Each mount has two pawls for easy pre-installation on a threaded fastener prior to securing with a mechanical fastener.

PART DESCRIPTION	Drawing	Width (W)	Length (L)	Height (H)	Bundle Ø max.	Hole Ø (FH)	Article-No.
HC3A-PA66HIRGF13-BK		27.9	107.9	34.9	24.3	8.12	133-00998

All dimensions in mm. Subject to technical changes.



Locking clamp with M8 stud mount, multi parallel routing

PART DESCRIPTION	Drawing	Pack Cont.	Article-No.
DLC26M8-PA66HIRHSUV-BK		1000 pcs.	151-03590

All dimensions in mm. Subject to technical changes.



Fixing elements for tubes and harnesses

multiparallel routing, weld studs

Offering a simple and secure method of attaching pipes or hoses to panels. Originally designed for the automotive industry they are finding a wide variety of applications in all industries using sheet metal panels with studs or weld studs. The use of weld studs avoid the problems with 'holes' (ingress of moisture, corrosion etc.).

Features and benefits

- Multi-option dual-clamp stud mount secures two bundles running alongside a bolt or stud.
- The 360-degree locking enclosure and cable tie dynamically fit a range of bundle sizes.
- Clamp can be opened for bundle maintenance.
- Independent rotation allows for adjustable routing orientation.
- High-performance stud mount design allows for easy installation and delivers outstanding stud retention to keep bundles secure.



Material specifications: See Article-No. on our website.

PART DESCRIPTION	Bundle Ø max.	Hole Ø (FH)	Stud Ø	Height (H)	Length (L)	Pack Cont.	Article-No.
SMF2LOC10-14X2-PA66HIRHSUV-BK	15.0	5.0 6.0	5.0, 6.0	34.9	107.3	1000 pcs.	156-02843

All dimensions in mm. Subject to technical changes.



Snapper hose clips for tubes and harnesses

SNP-Series

Our SNP range can be used as an alternative to metal hose clamps. Snapper can be used in markets as diverse as automotive, agriculture, white goods, venting systems, pumps and hydraulic systems to medical engineering.

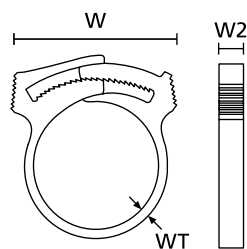
Features and benefits

- Releasable and reusable plastic hose clamps
- Self-locking
- Releasable by giving a lateral movement to the 'head'
- Installation by hand possible
- Installation with processing tool for a secure tensioning
- For higher operating temperatures: Glass Filled PA66

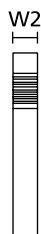


SNP - Snapper Hose Clips range.

Material specifications: See Article-No. on our website.



SNP - Snapper Hose Clip (front view)



SNP Clip (side view)

PART DESCRIPTION	Bundle Ø min.	Bundle Ø max.	Width (W) min.	Width (W) max.	Width (W2)	Wall (WT)	Article-No.
SNP8(E)-POM-NA	13.7	15.3	19.00	24.00	6.0	1.80	191-10089
SNP10-POM-WH	14.5	16.6	16.81	25.63	6.0	1.70	190-00046
SNP16-POM-WH	19.1	21.7	19.48	30.12	5.8	1.70	190-00079

All dimensions in mm. Subject to technical changes.





2.1 Heat Shrink Tubing

Thin wall

HFT-A, 2:1, flexible and coloured, self extinguishing	192
TF21, 2:1, flexible and coloured	195
TF24, 2:1, flexible and transparent; VG	196
TF31, 3:1, flexible and coloured	197
TF34, 3:1, flexible and transparent, VG	198
TFN21, 2:1, flexible and coloured	199
TFN24, 2:1, flexible and transparent, self-extinguishing	200
TFN31, 3:1, flexible, coloured or transparent	201

Thin wall with adhesive liner

EPS-300, 3:1, on reel	203
EPS-400, 4:1, on reel	204
TA37, 3:1, Halogen free and flame retardant	205

Medium wall

SE28, 2:1, Elastomer	206
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Medium wall with adhesive liner

MA47, 4:1, 1 m lengths	207
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2.2 Heat Shrink Moulded Shapes

Bulbous Boots and Transitions

	Helashrink 100 Series	208
	Helashrink 100 Series, with rib, MIL	209
	Helashrink 150 Series, with rib, VG	210
	Helashrink 170 Series, with rib, VG	212
	Helashrink 200 Series, in line, low voltage	213
	Helashrink 200 Series, VG	214
	Helashrink 300 Series, in line, low voltage	215
	Helashrink 300 Series, VG	216
	Helashrink 400 Series, in line, low voltage	217
	Helashrink 600 Series, in line, low voltage	218
	Helashrink 1100 Series, with rib, VG	219
	Helashrink 1100 Series, with rib, MIL	221
	Helashrink 1200 Series, VG	222
	Helashrink 1300 Series, 30° & 45° angle, VG	223

Low Profile Boots and Transitions

	Helashrink 412H Series, side breakout	224
	Helashrink 492H Series, 1 to 2 cables	225

Adhesives for Heat Shrinkable Moulded Shapes

Hot Melt Tape	HMT200A	226
Two-Component Adhesive	V9500	227



2.3 Insulating Tubing

Chloroprene tubing and grommets

Helsyn H	229
Helsyn TH - thin wall	230

Installation aid for tubing and grommets

Hellerine	231
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Heat shrinkable tubing 2:1 - flexible and coloured

HFT-A - self extinguishing

This high performance thin wall tubing is used extensively for electrical and mechanical protection. It is also well proven for sleeve marking to identify wiring circuits.

Features and benefits

- Flexible heat shrink tubing
- Fast shrinking, easy handling, good mechanical strength
- Wide range of colours
- Internal diameters up to 102 mm (4 inches)
- UL-224 ,CSA listed and VG approved

Standard sizes available in colours black, red, blue, yellow, white and green-yellow.



HFT-A conforms to major standards (VG) used in all Defence industries.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	2:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+135 °C
Longitudinal Change After Shrinkage	-5% max.
Dielectric Strength	21 kV/mm
Flammability	UL 224 VW-1
Self extinguishing	Yes

RoHS



Heat Shrink Tubing 2:1



PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Designation as per VG-Norm	Article-No.
HFT-A-1.2/0.6-PO-X-BK	1.2	0.6	0.40	400 m	VG 95343 T05 A 001 A	305-01200
HFT-A-1.2/0.6-PO-X-RD	1.2	0.6	0.40	400 m	VG 95343 T05 A 001 C	305-01202
HFT-A-1.2/0.6-PO-X-YE	1.2	0.6	0.40	400 m	VG 95343 T05 A 001 E	305-01204
HFT-A-1.2/0.6-PO-X-BU	1.2	0.6	0.40	400 m	VG 95343 T05 A 001 G	305-01206
HFT-A-1.2/0.6-PO-X-WH	1.2	0.6	0.40	400 m	VG 95343 T05 A 001 L	305-01209
HFT-A-1.6/0.8-PO-X-BK	1.6	0.8	0.40	400 m	VG 95343 T05 A 002 A	305-01600
HFT-A-1.6/0.8-PO-X-RD	1.6	0.8	0.40	400 m	VG 95343 T05 A 002 C	305-01602
HFT-A-1.6/0.8-PO-X-YE	1.6	0.8	0.40	400 m	VG 95343 T05 A 002 E	305-01604
HFT-A-1.6/0.8-PO-X-BU	1.6	0.8	0.40	400 m	VG 95343 T05 A 002 G	305-01606
HFT-A-1.6/0.8-PO-X-WH	1.6	0.8	0.40	400 m	VG 95343 T05 A 002 L	305-01609
HFT-A-2.4/1.2-PO-X-RD	2.4	1.2	0.50	100 m	VG 95343 T05 A 003 C	305-02402
HFT-A-2.4/1.2-PO-X-YE	2.4	1.2	0.50	100 m	VG 95343 T05 A 003 E	305-02404
HFT-A-2.4/1.2-PO-X-BU	2.4	1.2	0.50	100 m	VG 95343 T05 A 003 G	305-02406
HFT-A-2.4/1.2-PO-X-WH	2.4	1.2	0.50	100 m	VG 95343 T05 A 003 L	305-02409

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Heat shrinkable tubing 2:1 - flexible and coloured

HFT-A - self extinguishing

PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Designation as per VG-Norm	Article-No.
HFT-A-2.4/1.2-PO-X-BK	2.4	1.2	0.50	400 m	VG 95343 T05 A 003 A	305-02400
HFT-A-3.2/1.6-PO-X-RD	3.2	1.6	0.50	100 m	VG 95343 T05 A 004 C	305-03202
HFT-A-3.2/1.6-PO-X-YE	3.2	1.6	0.50	100 m	VG 95343 T05 A 004 E	305-03204
HFT-A-3.2/1.6-PO-X-BU	3.2	1.6	0.50	100 m	VG 95343 T05 A 004 G	305-03206
HFT-A-3.2/1.6-PO-X-WH	3.2	1.6	0.50	100 m	VG 95343 T05 A 004 L	305-03209
HFT-A-3.2/1.6-PO-X-GNYYE	3.2	1.6	0.50	100 m	VG 95343 T05 A 004 N	305-03245
HFT-A-3.2/1.6-PO-X-BK	3.2	1.6	0.50	400 m	VG 95343 T05 A 004 A	305-03200
HFT-A-4.8/2.4-PO-X-RD	4.8	2.4	0.50	75 m	VG 95343 T05 A 005 C	305-04802
HFT-A-4.8/2.4-PO-X-YE	4.8	2.4	0.50	75 m	VG 95343 T05 A 005 E	305-04804
HFT-A-4.8/2.4-PO-X-BU	4.8	2.4	0.50	75 m	VG 95343 T05 A 005 G	305-04806
HFT-A-4.8/2.4-PO-X-WH	4.8	2.4	0.50	75 m	VG 95343 T05 A 005 L	305-04809
HFT-A-4.8/2.4-PO-X-GNYYE	4.8	2.4	0.50	75 m	VG 95343 T05 A 005 N	305-04845
HFT-A-4.8/2.4-PO-X-BK	4.8	2.4	0.50	300 m	VG 95343 T05 A 005 A	305-04800
HFT-A-6.4/3.2-PO-X-RD	6.4	3.2	0.60	75 m	VG 95343 T05 A 006 C	305-06402
HFT-A-6.4/3.2-PO-X-YE	6.4	3.2	0.60	75 m	VG 95343 T05 A 006 E	305-06404
HFT-A-6.4/3.2-PO-X-BU	6.4	3.2	0.60	75 m	VG 95343 T05 A 006 G	305-06406
HFT-A-6.4/3.2-PO-X-WH	6.4	3.2	0.60	75 m	VG 95343 T05 A 006 L	305-06409
HFT-A-6.4/3.2-PO-X-GNYYE	6.4	3.2	0.60	75 m	VG 95343 T05 A 006 N	305-06445
HFT-A-6.4/3.2-PO-X-BK	6.4	3.2	0.60	300 m	VG 95343 T05 A 006 A	305-06400
HFT-A-9.5/4.8-PO-X-RD	9.5	4.8	0.60	50 m	VG 95343 T05 A 007 C	305-09502
HFT-A-9.5/4.8-PO-X-YE	9.5	4.8	0.60	50 m	VG 95343 T05 A 007 E	305-09504
HFT-A-9.5/4.8-PO-X-BU	9.5	4.8	0.60	50 m	VG 95343 T05 A 007 G	305-09506
HFT-A-9.5/4.8-PO-X-WH	9.5	4.8	0.60	50 m	VG 95343 T05 A 007 L	305-09509
HFT-A-9.5/4.8-PO-X-GNYYE	9.5	4.8	0.60	50 m	VG 95343 T05 A 007 N	305-09545
HFT-A-9.5/4.8-PO-X-BK	9.5	4.8	0.60	150 m	VG 95343 T05 A 007 A	305-09500
HFT-A-12.7/6.4-PO-X-RD	12.7	6.4	0.60	50 m	VG 95343 T05 A 008 C	305-12702
HFT-A-12.7/6.4-PO-X-YE	12.7	6.4	0.60	50 m	VG 95343 T05 A 008 E	305-12704
HFT-A-12.7/6.4-PO-X-BU	12.7	6.4	0.60	50 m	VG 95343 T05 A 008 G	305-12706
HFT-A-12.7/6.4-PO-X-WH	12.7	6.4	0.60	50 m	VG 95343 T05 A 008 L	305-12709
HFT-A-12.7/6.4-PO-X-GNYYE	12.7	6.4	0.60	50 m	VG 95343 T05 A 008 N	305-12745
HFT-A-12.7/6.4-PO-X-BK	12.7	6.4	0.60	100 m	VG 95343 T05 A 008 A	305-12700
HFT-A-19.0/9.5-PO-X-RD	19.0	9.5	0.80	25 m	VG 95343 T05 A 009 C	305-19002
HFT-A-19.0/9.5-PO-X-YE	19.0	9.5	0.80	25 m	VG 95343 T05 A 009 E	305-19004
HFT-A-19.0/9.5-PO-X-BU	19.0	9.5	0.80	25 m	VG 95343 T05 A 009 G	305-19006
HFT-A-19.0/9.5-PO-X-WH	19.0	9.5	0.80	25 m	VG 95343 T05 A 009 L	305-19009
HFT-A-19.0/9.5-PO-X-GNYYE	19.0	9.5	0.80	25 m	VG 95343 T05 A 009 N	305-19045
HFT-A-19.0/9.5-PO-X-BK	19.0	9.5	0.80	50 m	VG 95343 T05 A 009 A	305-19000
HFT-A-25.4/12.7-PO-X-RD	25.4	12.7	0.90	25 m	VG 95343 T05 A 010 C	305-25402
HFT-A-25.4/12.7-PO-X-YE	25.4	12.7	0.90	25 m	VG 95343 T05 A 010 E	305-25404
HFT-A-25.4/12.7-PO-X-BU	25.4	12.7	0.90	25 m	VG 95343 T05 A 010 G	305-25406
HFT-A-25.4/12.7-PO-X-WH	25.4	12.7	0.90	25 m	VG 95343 T05 A 010 L	305-25409
HFT-A-25.4/12.7-PO-X-GNYYE	25.4	12.7	0.90	25 m	VG 95343 T05 A 010 N	305-25445

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Heat shrinkable tubing 2:1 - flexible and coloured

HFT-A - self extinguishing



Heat Shrink Tubing 2:1

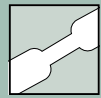


PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Designation as per VG-Norm	Article-No.
HFT-A-25.4/12.7-PO-X-BK	25.4	12.7	0.90	50 m	VG 95343 T05 A 010 A	305-25400
HFT-A-38.0/19.0-PO-X-BK	38.0	19.0	1.00	50 m	VG 95343 T05 A 011 A	305-38100
HFT-A-38.0/19.0-PO-X-RD	38.0	19.0	1.00	50 m	VG 95343 T05 A 011 C	305-38102
HFT-A-38.0/19.0-PO-X-YE	38.0	19.0	1.00	50 m	VG 95343 T05 A 011 E	305-38104
HFT-A-38.0/19.0-PO-X-BU	38.0	19.0	1.00	50 m	VG 95343 T05 A 011 G	305-38106
HFT-A-38.0/19.0-PO-X-WH	38.0	19.0	1.00	50 m	VG 95343 T05 A 011 L	305-38109
HFT-A-38.0/19.0-PO-X-GNYYE	38.0	19.0	1.00	50 m	VG 95343 T05 A 011 N	305-38145
HFT-A-50.8/25.4-PO-X-BK	51.0	25.4	1.10	35 m	VG 95343 T05 A 012 A	305-50800
HFT-A-50.8/25.4-PO-X-RD	51.0	25.4	1.10	35 m	VG 95343 T05 A 012 C	305-50802
HFT-A-50.8/25.4-PO-X-YE	51.0	25.4	1.10	35 m	VG 95343 T05 A 012 E	305-50804
HFT-A-50.8/25.4-PO-X-BU	51.0	25.4	1.10	35 m	VG 95343 T05 A 012 G	305-50806
HFT-A-50.8/25.4-PO-X-WH	51.0	25.4	1.10	35 m	VG 95343 T05 A 012 L	305-50809
HFT-A-76.0/38.0-PO-X-BK	76.0	38.0	1.30	25 m	VG 95343 T05 A 013 A	305-76200
HFT-A-76.0/38.0-PO-X-RD	76.0	38.0	1.30	25 m	VG 95343 T05 A 013 C	305-76202
HFT-A-76.0/38.0-PO-X-YE	76.0	38.0	1.30	25 m	VG 95343 T05 A 013 E	305-76204
HFT-A-76.0/38.0-PO-X-BU	76.0	38.0	1.30	25 m	VG 95343 T05 A 013 G	305-76206
HFT-A-101.6/50.8-PO-X-BK	102.0	51.0	1.40	25 m	VG 95343 T05 A 014 A	305-91600
HFT-A-101.6/50.8-PO-X-RD	102.0	51.0	1.40	25 m	VG 95343 T05 A 014 C	305-91602
HFT-A-101.6/50.8-PO-X-YE	102.0	51.0	1.40	25 m	VG 95343 T05 A 014 E	305-91604
HFT-A-101.6/50.8-PO-X-BU	102.0	51.0	1.40	25 m	VG 95343 T05 A 014 G	305-91606
HFT-A-101.6/50.8-PO-X-WH	102.0	51.0	1.40	25 m	VG 95343 T05 A 014 L	305-91609

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Heat shrinkable tubing 2:1 - flexible and coloured

TF21

Due to its versatility TF21 is suitable for a wide range of applications like electrical insulations, mechanical protection and marking.

Features and benefits

- Thin wall, flexible polyolefin tubing
- Fast shrinking and low shrink temperature
- Meets and exceeds a range of industrial standards
- Big variety of different colours and sizes
- Flame retardant and UL224 VW1 listed

More colours on request.

Cut lengths available on request. Please contact us!



TF21 - available in a wide range of colours and sizes.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	2:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+105 °C
Longitudinal Change After Shrinkage	+/-5%
Dielectric Strength	30 kV/mm
Flammability	UL 224 VW-1
Self extinguishing	Yes

RoHS ✓



Heat Shrink Tubing 2:1



PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Article-No.
TF21-3.2/1.6-PO-X-YE	3.2	1.6	0.51	100 m	309-20324
TF21-3.2/1.6-PO-X-WH	3.2	1.6	0.51	100 m	309-20329
TF21-3.2/1.6-PO-X-BK	3.2	1.6	0.51	300 m	309-10320
TF21-4.8/2.4-PO-X-GNYE	4.8	2.4	0.51	60 m	309-50487
TF21-12.7/6.4-PO-X-RD	12.7	6.4	0.64	50 m	309-21272
TF21-19.1/9.5-PO-X-YE	19.1	9.5	0.76	50 m	309-11904
TF21-25.4/12.7-PO-X-GNYE	25.4	12.7	0.89	50 m	309-12547

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Heat shrinkable tubing 2:1 - flexible and transparent

TF24

Protects wire and cable markers subject to abuse, while permitting inspectability of each item covered. Protects electronic components while permitting their identification and inspection.

Features and benefits

- Transparent, flexible polyolefin tubing
- Protects identification marking perfect
- Halogen free
- Good mechanical and chemical resistance
- VG and additional industrial approvals

Cut lengths available on request. Please contact us!



TF24 transparent tubing with 2:1 shrink ratio.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	2:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+110 °C
Longitudinal Change After Shrinkage	+/-5% max.
Dielectric Strength	30 kV/mm



Heat Shrink Tubing 2:1

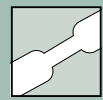


PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Reel Length	Designation as per VG-Norm	Article-No.
TF24-12.7/6.4-PO-X-CL	12.7	6.4	0.64	50.0 m	50 m	VG 95343 T05 B 008 M	309-41273
TF24-19.1/9.5-PO-X-CL	19.1	9.5	0.76	50.0 m	50 m	VG 95343 T05 B 009 M	309-31903
TF24-25.4/12.7-PO-X-CL	25.4	12.7	0.89	50.0 m	50 m	VG 95343 T05 B 010 M	309-32543
TF24-38.1/19.1-PO-X-CL	38.1	19.1	1.02	60.0 m	60 m	VG 95343 T05 B 011 M	309-33813

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



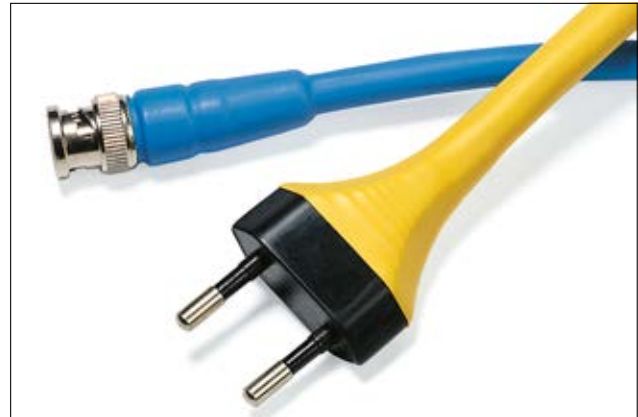
Heat shrinkable tubing 3:1 - flexible and coloured

TF31

If higher fire protection is a requirement TF31 heat shrinkable tubing is a good choice. It is used for protection, insulation and identification wires, cables and light duty harnesses.

Features and benefits

- Thin wall, very flexible polyolefin tubing
- A small range of sizes cover a wide range of diameters allowing reduced inventory
- Fast shrinking and low shrink temperature
- Flame-retardant, UL224 VW1 listed



TF31 with 3:1 shrink ratio allowing for a wider range of application.

Cut lengths available on request. Please contact us!

More colours on request.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+105 °C
Longitudinal Change After Shrinkage	+5%/-15%
Dielectric Strength	30 kV/mm
Flammability	UL 224 VW-1
Self extinguishing	Yes

RoHS ✓



Heat Shrink Tubing 3:1



PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Article-No.
TF31-3/1-PO-X-WH	3.0	1.0	0.60	30 m	333-30309
TF31-9/3-PO-X-RD	9.0	3.0	0.80	30 m	333-30902
TF31-9/3-PO-X-BU	9.0	3.0	0.80	30 m	333-30906
TF31-9/3-PO-X-BK	9.0	3.0	0.80	150 m	333-20900
TF31-12/4-PO-X-BK	12.0	4.0	0.85	100 m	333-21200
TF31-18/6-PO-X-YE	18.0	6.0	1.00	30 m	333-31804
TF31-24/8-PO-X-RD	24.0	8.0	1.20	30 m	333-32402
TF31-40/13-PO-X-WH	40.0	13.0	1.25	30 m	333-34009

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Heat shrinkable tubing 3:1 - flexible and transparent

TF34

Protects wire and cable markers subject to abuse, while permitting inspectability of each item covered. Protects electronic components while permitting their identification and inspection.

Features and benefits

- Transparent, flexible polyolefin tubing
- Protects identification marking perfectly
- A small range of sizes required to cover a wide range of diameters allowing reduced inventory
- Halogen free



TF34 transparent tubing with 3:1 shrink ratio allowing for a wider range of application.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+110 °C
Longitudinal Change After Shrinkage	-5% max.
Dielectric Strength	46 kV/mm



Heat Shrink Tubing 3:1



PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Reel Length	Article-No.
TF34-6/2-PO-X-CL	6.0	2.0	0.70	30 m	333-30603
TF34-24/8-PO-X-CL	24.0	8.0	1.20	30 m	333-32403

All dimensions in mm. Subject to technical changes.

Heat shrinkable tubing 2:1 - flexible and coloured

TFN21

TFN21 is suitable for a wide range of applications like electrical insulations, mechanical protection and cable bundling.

Features and benefits

- High shrink ratio (2:1)
- Few sizes cover a wide range of diameters allowing reduced inventory
- Thin wall, flexible polyolefin tubing
- Fast shrinking and low shrink temperature
- Flame-retardant, UL224 VW1 listed (except transparent)



TFN21 - available in a wide range of colours and sizes.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	2:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+70 °C
Longitudinal Change After Shrinkage	+/-5%
Dielectric Strength	20 kV/mm
Flammability	UL 224 VW-1

RoHS



Heat Shrink Tubing 2:1

PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Article-No.
TFN21 1.2/0.6-PO-X-BK	1.2	0.6	0.40	300 m	309-60190
TFN21 3.2/1.6-PO-X-YE	3.2	1.6	0.48	300 m	309-60124
TFN21 4.8/2.4-PO-X-BK	4.8	2.4	0.48	300 m	309-60131
TFN21 6.4/3.2-PO-X-BK	6.4	3.2	0.56	300 m	309-60141
TFN21 12.7/6.4-PO-X-BK	12.7	6.4	0.62	100 m	309-60161
TFN21 19.1/9.5-PO-X-BK	19.1	9.5	0.68	60 m	309-60171
TFN21 38.1/19.1-PO-X-BK	38.1	19.1	1.00	30 m	309-60200
TFN21 50.8/25.4-PO-X-BK	50.8	25.4	1.10	30 m	309-60210

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Heatshrink Tube

TFN24

They allow the visualization of the covered place, besides ensuring perfect isolation and protection. Ideal for electro-electronic applications, for insulation of wires, cables, connectors and electronic components.

Features and benefits

- Allows viewing of the covered location
- Ensures perfect insulation and protection
- Ideal for electrical and electronic applications



TF34 transparent tubing with 3:1 shrink ratio allowing for a wider range of application.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	2:1
Operating Temperature	-55 °C to +125 °C
Min. Shrink Temperature	+100 °C
Longitudinal Change After Shrinkage	+/-5%
Dielectric Strength	20 kV/mm
Flammability	UL 224 VW-1
Self extinguishing	Yes

RoHS ✓



Heat Shrink Tubing 2:1



PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Article-No.
TFN24-38.1/19.1-PO-X-CL	-	-	-	15 m	309-60096
TFN24 - 6.4/3.2-PO-X-CL	6.4	3.2	0.30	300 m	309-60050
TFN24 - 9.5/4.8-PO-X-CL	9.5	4.8	0.30	150 m	309-60060
TFN24 - 38.1/19.1-PO-X-CL	38.1	19.1	-	30 m	309-60095

All dimensions in mm. Subject to technical changes.

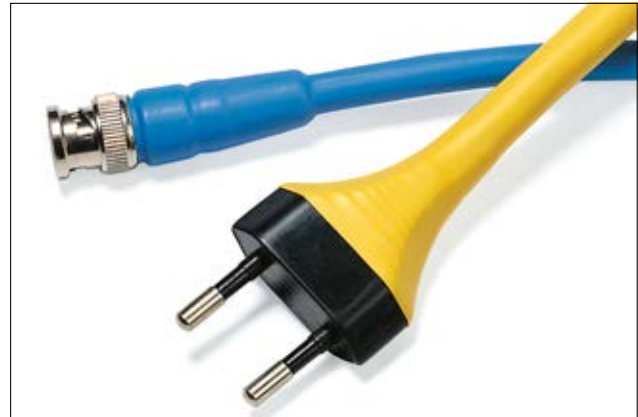
Heat shrinkable tubing 3:1 - flexible and coloured

TFN31

If higher fire protection is a requirement heat shrinkable tubing TFN31 is a good choice. It is used for protection, insulation and identification wires, cables and light duty harnesses.

Features and benefits

- High shrink ratio (3:1)
- Few sizes cover a wide range of diameters allowing reduced inventory
- Thin wall, flexible polyolefin tubing
- Fast shrinking and low shrink temperature
- Flame-retardant, UL224 VW1 listed



Heatshrinkable Tubing TFN21 and TFN31.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+70 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	20 kV/mm
Flammability	UL 224 VW-1

RoHS



PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Article-No.
TFN31-3/1-PO-X-RD	3.0	1.0	0.55	300 m	333-42090
TFN31-3/1-PO-X-YE	3.0	1.0	0.55	300 m	333-42091
TFN31 6/2-PO-X-BK	6.4	2.0	0.65	30 m	333-42003
TFN31-6/2-PO-X-RD	6.4	2.0	0.65	300 m	333-42094
TFN31-6/2-PO-X-YE	6.4	2.0	0.65	300 m	333-42095
TFN31 9/3-PO-X-CL	9.0	3.0	0.75	30 m	333-42013
TFN31 9/3-PO-X-BK	9.0	3.0	0.75	150 m	333-41001
TFN31-9/3-PO-X-RD	9.0	3.0	0.75	150 m	333-42096
TFN31-9/3-PO-X-YE	9.0	3.0	0.75	150 m	333-42097
TFN31 12/4-PO-X-BK	12.0	4.0	0.80	30 m	333-42005
TFN31 12/4-PO-X-CL	12.0	4.0	0.80	30 m	333-42014
TFN31 12/4-PO-X-YE	12.0	4.0	0.80	30 m	333-42032
TFN31-12/4-PO-X-RD	12.0	4.0	0.80	100 m	333-42085
TFN31-12/4-PO-X-YE	12.0	4.0	0.80	100 m	333-42086
TFN31-18/6-PO-X-YE	18.0	6.0	0.90	60 m	333-42087
TFN31-24/8-PO-X-RD	24.0	8.0	1.20	60 m	333-42088

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Heat shrinkable tubing 3:1 - flexible and coloured

TFN31

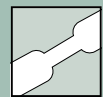


PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Article-No.
TFN31-24/8-PO-X-YE	24.0	8.0	1.20	60 m	333-42089
TFN31-39/13-PO-X-RD	39.0	13.0	1.25	30 m	333-42092
TFN31-39/13-PO-X-YE	39.0	13.0	1.25	30 m	333-42093

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Heat shrinkable tubing adhesive lined

EPS-300 - 3:1 shrink ratio

Heatshrinkable tubing EPS seals and protects a wide variety of electrical applications like back end connector sealing, connector-to-cable transitions and splices.

Features and benefits

- Flexible, thin wall polyolefin heat shrink tubing
- With coextruded hot melt adhesive inner wall
- Protects against moisture
- Provides an environmental sealing of complex parts

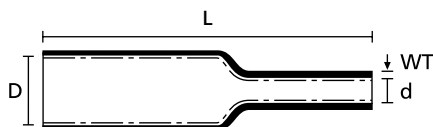
Cut lengths available on request. Please contact us!



EPS300 and EPS400 offer high shrink ratios and protection against humidity.

MATERIAL	Polyolefin, cross-linked (PO-X)
Operating Temperature	-55 °C to +125 °C
Min. Shrink Temperature	+120 °C
Longitudinal Change After Shrinkage	-5% max.
Softening Point Adhesive	+90 °C
Dielectric Strength	45 kV/mm
Self extinguishing	Yes

RoHS ✓



Heat Shrink Tubing 3:1 with adhesive

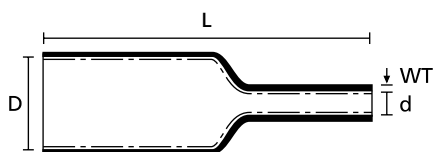


PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Reel Length	Shrink Ratio	Article-No.
EPS-300-3/1-PO-X-BK	3.0	1.0	1.00	400.0 m	400 m	3:1	340-03010
EPS-300-6/2-PO-X-BK	6.0	2.0	1.00	300.0 m	300 m	3:1	340-06020
EPS-300-9/3-PO-X-BK	9.0	3.0	1.40	150.0 m	150 m	3:1	340-09030
EPS-300-12/4-PO-X-BK	12.0	4.0	1.80	100.0 m	100 m	3:1	340-12040
EPS-300-19/6-PO-X-BK	19.0	6.0	2.20	50.0 m	50 m	3:1	340-19060
EPS-300-24/8-PO-X-BK	24.0	8.0	2.50	25.0 m	25 m	3:1	340-24080
EPS-300-40/13-PO-X-BK	40.0	13.0	2.50	25.0 m	25 m	3:1	340-40130

All dimensions in mm. Subject to technical changes.



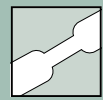
EPS-400 - 4:1 shrink ratio



Heat Shrink Tubing 4:1 with adhesive

PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Reel Length	Shrink Ratio	Article-No.
EPS-400-4/1-PO-X-BK	4.0	1.0	1.00	300.0 m	300 m	4:1	341-04010
EPS-400-8/2-PO-X-BK	8.0	2.0	1.00	150.0 m	150 m	4:1	341-08020
EPS-400-12/3-PO-X-BK	12.0	3.0	1.40	100.0 m	100 m	4:1	341-12030
EPS-400-16/4-PO-X-BK	16.0	4.0	1.80	100.0 m	100 m	4:1	341-16040
EPS-400-24/6-PO-X-BK	24.0	6.0	2.20	50.0 m	50 m	4:1	341-24060
EPS-400-32/8-PO-X-BK	32.0	8.0	2.50	25.0 m	25 m	4:1	341-32080

All dimensions in mm. Subject to technical changes.



Heat shrinkable tubing 3:1 - Flame retardant

TA37 – thin wall adhesive lined

TA37 shrink tubing has a low smoke index and excellent flame retardant properties to meet strict fire security standards in electrical insulation.

Features and benefits

- Thin wall adhesive lined heat shrink tubing
- Halogen free
- Flame retardant
- Combination of these three (halogen free, adhesive lined and flame retardant) product properties is unique
- Low smoke generation
- Low generation of toxic gases and corrosive acid



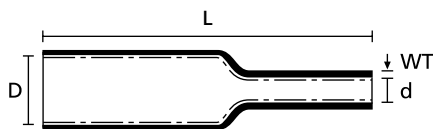
TA37 - Halogenfree and self-extinguishing 3:1 Thin Dual Wall Heat Shrink Tubing.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	3:1
Operating Temperature	-40 °C to +105 °C
Min. Shrink Temperature	+120 °C
Softening Point Adhesive	+85 °C
Longitudinal Change After Shrinkage	+3%/-15%
Dielectric Strength	19.7 kV/mm
Self extinguishing	Yes

HF ✓

LFH ✓

RoHS ✓



Heat Shrink Tubing 3:1 with adhesive



PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Article-No.
TA37 12-4-PO-X-BK-PO-X-BK	12.7	4.0	1.40	1.2 m	315-13004
TA37 19-6-PO-X-BK-PO-X-BK	19.1	6.0	2.20	1.2 m	315-13005
TA37 24-8-PO-X-BK-PO-X-BK	24.0	8.0	2.50	1.2 m	315-13006
TA37 40-13-PO-X-BK-PO-X-BK	40.0	13.0	2.50	1.2 m	315-13007
TA37 50-19-PO-X-BK-PO-X-BK	50.0	19.0	4.00	1.2 m	315-13008
TA37 75-25-PO-X-BK-PO-X-BK	75.0	25.0	3.00	1.2 m	315-13009

All dimensions in mm. Subject to technical changes.

EN 45545-2

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Heat shrinkable tubing 2:1 - Elastomer

SE28

SE28 is used for long-term protection of cables and wire harnesses in military equipment, motor sports and aviation.

Features and benefits

- Flexible, high performance elastomeric heat shrink tubing
- Used in aerospace, defence, railway and automotive applications
- Resistant to diesel fuel, aviation and hydraulic fluids
- Provides a reliable protection against abrasion and mechanical damage
- Very suitable for protecting cables and wire harnesses
- For high temperature applications up to 150 °C



SE28 - Diesel resistant 2:1 high performance elastomer heat shrink tubing.

MATERIAL	Elastomer, cross-linked (POA)
Shrink Ratio	2:1
Operating Temperature	-75 °C to +150 °C
Min. Shrink Temperature	+170 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	20 kV/mm
Flammability	VG 95343-5
Self extinguishing	Yes

RoHS



Heat Shrink Tubing 2:1

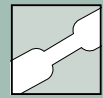
PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Reel Length	Designation as per VG-Norm	Tools	Article-No.
SE28 3.2/1.6-POA-BK	3.2	1.6	0.75	150.0 m	150 m	VG 95343 T05 D 001 A	32	342-20000
SE28 4.8/2.4-POA-BK	4.8	2.4	0.85	60.0 m	60 m	VG 95343 T05 D 002 A	32	342-20010
SE28 6.4/3.2-POA-BK	6.4	3.2	0.90	60.0 m	60 m	VG 95343 T05 D 003 A	32	342-20020
SE28 9.5/4.8-POA-BK	9.5	4.8	1.00	60.0 m	60 m	VG 95343 T05 D 004 A	32	342-20030
SE28 12.7/6.4-POA-BK	12.7	6.4	1.20	60.0 m	60 m	VG 95343 T05 D 005 A	32	342-20040
SE28 19.0/9.5-POA-BK	19.0	9.5	1.45	30.0 m	30 m	VG 95343 T05 D 006 A	32	342-20050
SE28 25.4/12.7-POA-BK	25.4	12.7	1.80	30.0 m	30 m	VG 95343 T05 D 007 A	32	342-20060
SE28 38.0/19.0-POA-BK	38.0	19.0	2.40	30.0 m	30 m	VG 95343 T05 D 008 A	32	342-20070
SE28 51.0/25.4-POA-BK	51.0	25.4	2.80	30.0 m	30 m	VG 95343 T05 D 009 A	32	342-20080
SE28 76.0/38.0-POA-BK	76.0	38.0	3.20	15.0 m	15 m	VG 95343 T05 D 010 A	32	342-20090
SE28 101.2/51.0-POA-BK	102.0	51.0	3.60	10.0 m	10 m	VG 95343 T05 D 011 A	32	342-20100

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Heat shrinkable tubing up to 4:1 - 1 m lengths

MA47 - medium wall adhesive lined

Insulation and protection of low voltage cable joints and terminations above and below ground.

Features and benefits

- Medium wall tubing with robust insulation characteristics
- Shrink tubing for above and underground cable applications
- Protects cable joints and terminations in low voltage applications
- Internally coated with a thermoplastic adhesive
- Protects against humidity and other environmental impacts

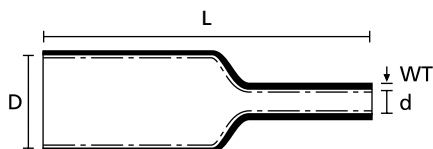


MA47 for above and below ground.

MATERIAL	Polyolefin, cross-linked (PO-X)
Shrink Ratio	up to 4:1
Operating Temperature	-55 °C to +110 °C
Min. Shrink Temperature	+120 °C
Softening Point Adhesive	+85 °C
Longitudinal Change After Shrinkage	-10% max.
Dielectric Strength	15 kV/mm
Insulation Class	A (VDE 0530)

HF ✓

RoHS ✓



Heat Shrink Tubing 4:1 with adhesive



PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Length (L)	Tools	Article-No.
MA47-8/2-PO-X-BK	8.0	2.0	1.80	1.0 m	32	323-20080
MA47-12/3-PO-X-BK	12.0	3.0	1.80	1.0 m	32	323-20120
MA47-19/6-PO-X-BK	22.0	6.0	2.40	1.0 m	32	323-20190
MA47-30/8-PO-X-BK	33.0	8.0	2.60	1.0 m	32	323-20300
MA47-40/12-PO-X-BK	40.0	12.0	2.60	1.0 m	32	323-20400
MA47-50/16-PO-X-BK	55.0	16.0	2.70	1.0 m	32	323-20500
MA47-63/19-PO-X-BK	65.0	19.0	2.90	1.0 m	32	323-20630
MA47-75/22-PO-X-BK	75.0	22.0	3.00	1.0 m	32	323-20750
MA47-95/30-PO-X-BK	95.0	25.0	3.60	1.0 m	32	323-20950
MA47-115/34-PO-X-BK	115.0	34.0	3.50	1.0 m	32	323-21150
MA47-140/42-PO-X-BK	140.0	42.0	3.30	1.0 m	32	323-21400

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Bottle Shapes

Helashrink 100 Series

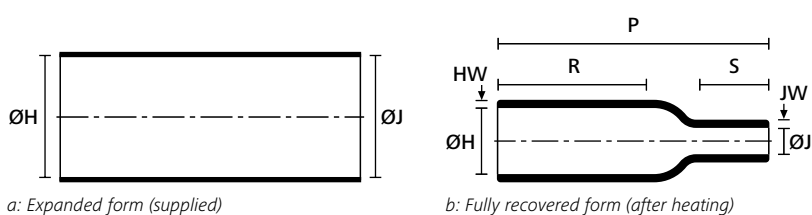
Heat Shrinkable moulded shapes for use in Electrical and Electronic Cable Harness Applications.

Features and benefits

- Strain relief for connector cable
- Easy re-entry for repair when combined with hot melt adhesive



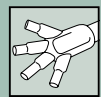
100 series supplied / fully recovered.



PART DESCRIPTION	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	HW ± 20 %	JW ± 30 %	S nom.	Tools	Article-No.
104-1-B7W8-PO-X-BK	16.5	7.9	16.5	3.8	25.4	1.3	1.3	6.9	32	401-04004
105-1-B7W8-PO-X-BK	23.4	10.4	23.4	5.6	38.1	1.5	1.5	10.2	32	401-05003
106-1-B7W8-PO-X-BK	31.0	14.2	31.0	6.6	55.4	1.8	1.8	16.5	32	401-06102

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Bottle Shapes, MIL style

Helashrink 100 Series, with rib

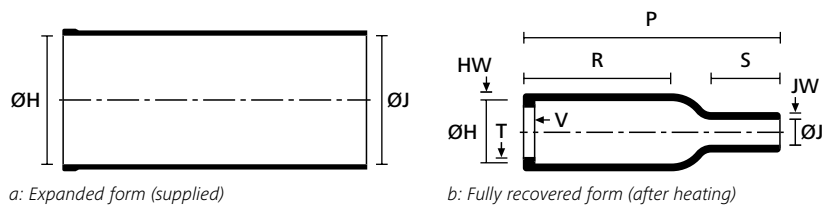
Heat Shrinkable moulded shapes for use in Electrical and Electronic Cable Harness Applications.

Features and benefits

- With circular grooved adaptor for strain relief
- Combine with complementary adhesives for environmental sealing
- Suitable for small cable diameters



100 series supplied / fully recovered.



PART DESCRIPTION	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	V ± 10 %	T ± 20 %	S nom.	Tools	Article-No.
104-4-GW24-PO-X-BK	16.5	7.9	16.5	3.8	25.4	-	1.3	1.3	-	1.0	6.9	32	401-04026
104-4-GW8-PO-X-BK	16.5	7.9	16.5	3.8	25.4	-	1.3	1.3	-	1.0	6.9	32	401-04063
104-4-HW8-PO-X-BK	16.5	7.9	16.5	3.8	25.4	-	1.3	1.3	-	1.0	6.9	32	401-04028
	16.5	7.9	16.5	3.8	25.4	-	1.3	1.3	-	1.0	6.9	32	401-04070
105-4-H-PO-X-BK	23.4	10.4	23.4	5.6	38.1	-	1.5	1.5	-	1.0	10.2	32	401-05039
105-4-HW8-PO-X-BK	23.4	10.4	23.4	5.6	38.1	-	1.5	1.5	-	1.0	10.2	32	401-05114
105-4-B7-PO-X-BK	23.4	10.4	23.4	5.6	38.1	-	1.5	1.5	-	1.0	10.2	32	401-05026
105-4-GW8-PO-X-BK	23.4	10.4	23.4	5.6	38.1	-	1.5	1.5	-	1.0	10.2	32	401-05038
106-4-G-PO-X-BK	31.0	14.2	31.0	6.6	55.4	22.9	1.8	1.8	3.0	1.0	10.2	32	401-06036
106-4-B7-PO-X-BK	31.0	14.2	31.0	6.6	55.4	-	1.8	1.8	-	1.0	16.5	32	401-06028
106-4-B7W8-PO-X-BK	31.0	14.2	31.0	6.6	55.4	-	1.8	1.8	-	1.0	16.5	32	401-06035
106-4-GW24-PO-X-BK	31.0	14.2	31.0	6.6	55.4	-	1.8	1.8	-	1.0	16.5	32	401-06038
106-4-GW8-PO-X-BK	31.0	14.2	31.0	6.6	55.4	-	1.8	1.8	-	1.0	16.5	32	401-06039
106-4-HW8-PO-X-BK	31.0	14.2	31.0	6.6	55.4	-	1.8	1.8	-	1.0	16.5	32	401-06110
101-4-B7-PO-X-BK	31.0	17.8	31.0	7.1	67.0	-	2.0	2.0	-	1.0	17.8	32	401-01030
102-4-G-PO-X-BK	36.1	22.4	36.1	8.4	73.7	43.2	1.8	1.8	3.0	1.0	21.0	32	401-02031
102-4-B7-PO-X-BK	36.1	22.4	36.1	8.4	73.7	-	1.8	1.8	-	1.0	21.0	32	401-02024
102-4-B7WM250-PO-X-BK	36.1	22.4	36.1	8.4	73.7	-	1.8	1.8	-	1.0	21.0	32	401-02029
103-4-B7-PO-X-BK	42.7	28.2	42.7	9.9	99.1	-	2.0	2.0	-	1.7	24.0	32	401-03032
107-4-B7-PO-X-BK	51.9	35.1	51.9	15.8	124.5	-	3.1	3.1	-	1.7	40.6	32	401-07025

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Bottle Shapes, VG style

Helashrink 150 Series, with rib

Heat Shrinkable moulded shapes for use in Electrical and Electronic Cable Harness Applications.

Features and benefits

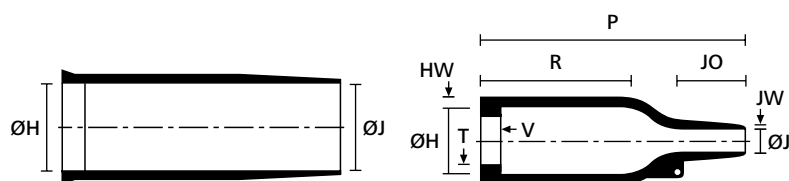
- Use in conjunction with circular grooved adaptors
- Strengthened strain relief by usage of an additional inner lip
- Excellent protection against environment impacts
- Eliminates moisture ingress to harness



150 Series boot recovered onto a connectors.



150 Series supplied.



a: Expanded form (supplied)

b: Fully recovered form (after heating)

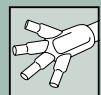
PART DESCRIPTION	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10%	JO ± 10%	HW ± 20%	JW ± 20%	V ± 10%	V max.	T ± 20%	Designation as per VG-Norm	Tools	Article-No.
152-42-GW24-PO-X-BK	24.0	10.5	24.0	6.0	38.0	21.0	20.0	1.6	0.5	3.0	3.3	1.0	VG 95343 T18 B 001 A	32	401-52884
152-42-GW8-PO-X-BK	24.0	10.5	24.0	6.0	38.0	21.0	-	1.6	0.5	3.0	3.3	1.0	-	32	401-52020
152-42-G-PO-X-BK	24.0	10.5	24.0	6.0	38.0	21.0	-	1.6	0.5	3.0	3.3	1.0	-	32	401-52043
152-42-B7-PO-X-BK	24.0	10.5	24.0	6.0	38.0	21.0	-	1.6	0.5	3.0	3.3	1.0	-	32	401-52008
152-42-HW8-PO-X-BK	24.0	10.5	24.0	6.0	38.0	21.0	-	1.6	0.5	3.0	3.3	1.0	-	32	401-52022
153-42-G-PO-X-BK	25.0	14.0	9.0	3.5	55.0	28.0	16.0	1.8	0.5	3.0	3.3	1.0	VG 95343 T06 B 002 A	32	401-53880
154-42-H-PO-X-BK	30.0	14.0	30.0	6.0	55.0	32.0	13.0	1.8	1.0	3.0	3.3	1.0	-	32	401-54017
154-42-B7-PO-X-BK	30.0	14.0	30.0	6.0	55.0	32.0	13.0	1.8	1.0	3.0	3.3	1.0	-	32	401-54820
154-42-GW8-PO-X-BK	30.0	14.0	30.0	6.0	55.0	32.0	13.0	1.8	1.0	3.0	3.3	1.0	-	32	401-54016
154-42-G-PO-X-BK	30.0	14.0	30.0	6.0	55.0	32.0	13.0	1.8	1.0	3.0	3.3	1.0	-	32	401-54045
154-42-GW24-PO-X-BK	30.0	14.0	30.0	6.0	55.0	32.0	13.0	1.8	1.0	3.0	3.3	1.0	-	32	401-54047
	30.0	14.0	30.0	6.0	55.0	32.0	13.0	1.8	1.0	3.0	3.3	1.0	VG 95343 T18 B 003 A	32	401-54884

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Bottle Shapes, VG style

Helashrink 150 Series, with rib

PART DESCRIPTION	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	JO ± 10 %	HW ± 20 %	JW ± 20 %	V ± 10 %	V max.	T ± 20 %	Designation as per VG-Norm	Tools	Article-No.
154-42-GWM250-PO-X-BK	30.0	14.0	30.0	6.0	55.0	32.0	13.0	1.8	1.0	3.0	3.3	1.0	-	32	401-54885
155-42-HW17-PO-X-BK	31.0	10.5	24.0	6.0	67.0	35.0	18.0	1.8	1.0	-	3.3	1.0	-	32	401-55030
155-42-B7W8-PO-X-BK	31.0	10.5	24.0	6.0	67.0	35.0	18.0	1.8	1.0	-	3.3	1.0	-	32	401-55009
155-42-GW8-PO-X-BK	31.0	10.5	31.0	7.0	67.0	35.0	18.0	1.8	1.0	3.0	3.3	1.0	-	32	401-55017
155-42-G-PO-X-BK	31.0	10.5	31.0	7.0	67.0	35.0	18.0	1.8	1.0	3.0	3.3	1.0	-	32	401-55043
155-42-GW24-PO-X-BK	31.0	10.5	31.0	7.0	67.0	35.0	18.0	1.8	1.0	3.0	3.3	1.0	-	32	401-55045
155-42-GWM250-PO-X-BK	31.0	10.5	31.0	7.0	67.0	35.0	18.0	1.8	1.0	3.0	3.3	1.0	-	32	401-55886
155-42-G-PO-X-BK	31.0	18.0	31.0	7.0	67.0	35.0	18.0	1.8	1.0	3.0	3.3	1.0	VG 95343 T06 B 004 A	32	401-55880
155-42-B7-PO-X-BK	31.0	18.0	31.0	7.0	67.0	35.0	18.0	1.8	1.0	3.0	3.3	1.0	-	32	401-55820
156-42-GW24-PO-X-BK	36.0	22.5	36.0	8.5	80.0	42.0	20.0	2.0	1.0	3.0	3.3	1.0	-	32	401-56019
156-42-G-PO-X-BK	36.0	22.5	36.0	8.5	80.0	42.0	20.0	2.0	1.0	3.0	3.3	1.0	VG 95343 T06 B 005 A	32	401-56880
156-42-GWM250-PO-X-BK	36.0	22.5	36.0	8.5	80.0	42.0	20.0	2.0	1.0	3.0	3.3	1.0	-	32	401-56885
156-42-HW8-PO-X-BK	36.0	22.5	36.0	8.5	80.0	42.0	20.0	2.0	1.0	3.0	3.3	1.0	-	32	401-56023
157-43-B7-PO-X-BK	43.0	28.0	43.0	10.0	99.0	61.0	20.0	2.2	1.0	3.0	3.3	1.7	-	32	401-57022
157-43-HW8-PO-X-BK	43.0	28.0	43.0	10.0	99.0	61.0	-	2.2	1.0	3.0	3.3	1.7	-	32	401-57034
157-43-GW24-PO-X-BK	43.0	28.0	43.0	10.0	99.0	61.0	-	2.2	1.0	3.0	3.3	1.7	-	32	401-57030
157-43-GW8-PO-X-BK	43.0	28.0	43.0	10.0	99.0	61.0	-	2.2	1.0	3.0	3.3	1.7	-	32	401-57031
157-43-G-PO-X-BK	43.0	28.0	43.0	10.0	99.0	61.0	-	2.2	1.0	3.0	3.3	1.7	-	32	401-57059
158-43-H-PO-X-BK	60.0	35.0	60.0	16.0	130.0	-	-	3.2	1.0	-	3.3	1.7	-	32	401-58021
158-43-HW17-PO-X-BK	60.0	35.0	60.0	16.0	130.0	-	-	3.2	1.0	-	3.3	1.7	-	32	401-58022
159-43-B7-PO-X-BK	66.0	45.0	-	17.0	171.0	-	-	3.8	-	3.0	-	2.0	-	32	401-59006

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Bottle Shapes, VG style

Helashrink 170 Series, with rib

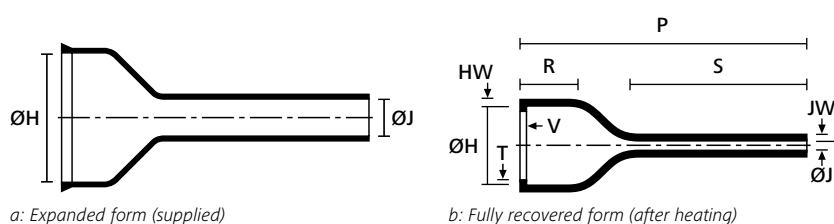
Heat Shrinkable moulded shapes for use in Electrical and Electronic Cable Harness Applications.

Features and benefits

- Cable strain relief for partially loaded connectors
- Small cable diameters
- Use with our W24 adhesive for excellent chemical resistance



177-1-G supplied / fully recovered.



PART DESCRIPTION	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10%	T ± 20%	HW ± 20%	JW nom.	V max.	S nom.	Tools	Article-No.
177-1-G-PO-X-BK	26.1	19.1	7.6	2.6	74.2	12.2	1.0	1.8	1.1	3.3	45.0	32	401-77023

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-Way Outlet Shapes, Breakout Boots

Helashrink 200 Series, in line, low voltage

Cable breakouts are manufactured from a tough cross-linked flame retarded polyolefin. This allows the breakouts to be used for both interior and exterior applications. They offer excellent electrical and mechanical protection.

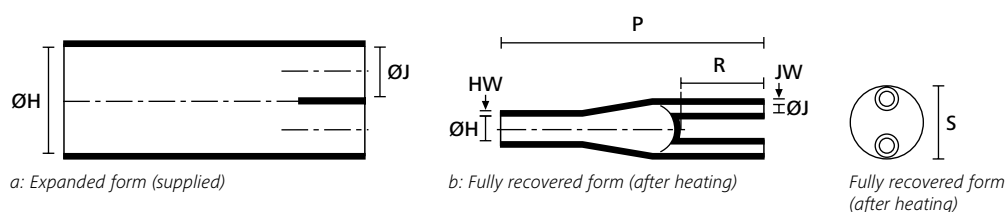
Cable breakouts are supplied with an adhesive inner coating for reliable environmental sealing, and are available for 2, 3, 4, 5 and 6 core cables.

Features and benefits

- Easy, time-saving insulation of cable branch point where it splits into single wires
- Adhesive is applied to relieve mechanical tension in cable harnesses



223-2 supplied / fully recovered.



PART DESCRIPTION	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10%	HW ± 20%	JW ± 20%	S nom.	Tools	Article-No.
223-2-B8HTW-PO-X-BK	33.0	9.4	17.5	4.1	94.0	30.0	1.5	1.2	20.0	32	402-23041
223-2-B8W-PO-X-BK	33.0	9.4	17.5	4.1	94.0	30.0	1.5	1.2	20.0	32	402-23058

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



2-Way Outlet Shapes, VG style

Helashrink 200 Series

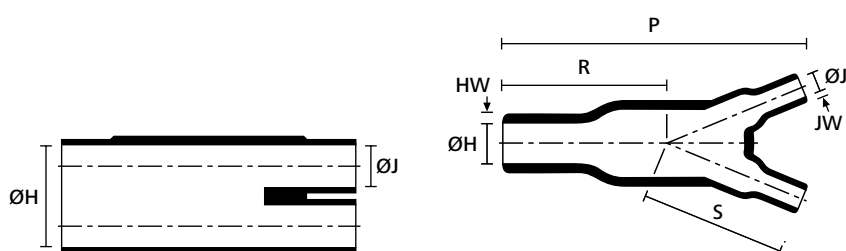
Heat Shrinkable moulded shapes for use in Electrical and Electronic Cable Harness Applications.

Features and benefits

- Mechanical tension relief in cable harnesses



203-1 supplied / fully recovered.



a: Expanded form (supplied)

b: Fully recovered form (after heating)

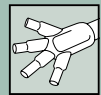
PART DESCRIPTION	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10%	HW ± 20%	JW ± 30%	JW nom.	Tools	S nom.	Designation as per VG-Norm	Article-No.
206-1-B7WM250-PO-X-BK	13.0	6.0	7.0	3.0	41.0	19.0	1.5	1.0	1.0	32	19.0	-	402-06005
206-1-GW8-PO-X-BK	13.0	6.0	7.0	3.0	41.0	19.0	1.5	1.0	1.0	32	19.0	-	402-06010
206-1-G-PO-X-BK	13.0	6.0	7.0	3.0	41.0	19.0	1.5	1.0	1.0	32	19.0	-	402-06036
206-1-GWM250-PO-X-BK	13.0	6.0	7.0	3.0	41.0	19.0	1.5	1.0	1.0	32	19.0	-	402-06185
206-1-H-PO-X-BK	13.0	6.0	7.0	3.0	41.0	19.0	1.5	1.0	1.0	32	19.0	-	402-06011
203-1-G-PO-X-BK	27.0	12.0	13.0	6.0	80.0	38.0	2.5	-	1.5	32	43.0	VG 95343 T08 C 002 A	402-03180
203-1-H-PO-X-BK	27.0	12.0	13.0	6.0	80.0	43.0	2.5	-	1.5	32	43.0	-	402-03015
203-1-B7WM250-PO-X-BK	27.0	12.0	13.0	6.0	80.0	43.0	-	-	1.5	32	43.0	-	402-03008
203-1-GW8-PO-X-BK	27.0	12.0	13.0	6.0	80.0	43.0	-	-	1.5	32	43.0	-	402-03012
203-1-G-PO-X-BK	27.0	12.0	13.0	6.0	80.0	43.0	-	-	1.5	32	43.0	-	402-03035
204-1-B7WM250-PO-X-BK	39.0	18.0	27.0	12.0	131.0	66.0	-	-	2.0	32	81.0	-	402-04003

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



3-Way Outlet Shapes, Breakout Boots

Helashrink 300 Series, in line, low voltage

Cable breakouts are manufactured from a tough cross-linked polyolefin containing a flame retardant. This allows the breakouts to be used for both interior and exterior applications. They offer excellent electrical and mechanical protection.

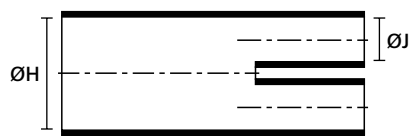
Cable breakouts are supplied with an adhesive inner coating for reliable environmental sealing, and are available for 2, 3, 4, 5 and 6 core cables.

Features and benefits

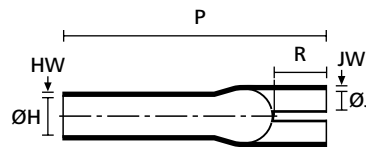
- Easy, time-saving insulation of cable branch point where it splits into single wires
- Adhesive is applied to relieve mechanical tension in cable harnesses



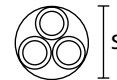
300 Series supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)



Fully recovered form (after heating)

PART DESCRIPTION	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	Tools	Article-No.
354-1-B8W-PO-X-BK	45.0	10.0	16.0	4.0	100.0	25.0	3.0	2.0	32	403-54004

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



3-Way Outlet Shapes, VG style

Helashrink 300 Series

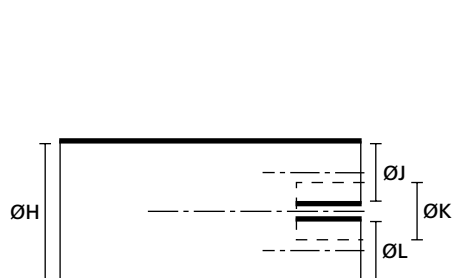
Heat Shrinkable moulded shapes for use in Electrical and Electronic Cable Harness Applications.

Features and benefits

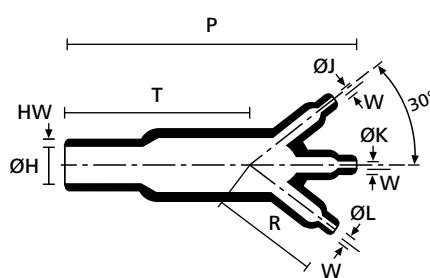
- Cable strain relief and mechanical protection at harness transition points
- All outlets clearly marked to aid orientation during installation



304-1-G supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

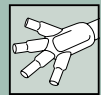
PART DESCRIPTION	ØH min. a	ØH max. b	ØJ/K/L min. a	ØJ/K/L max. b	P ± 10%	R ± 10%	HW ± 20%	HW ± 30%	W ± 20%	T ± 10%	Designation as per VG-Norm	Tools	Article-No.
306-1-G-PO-X-BK	13.0	6.5	6.5	3.5	46.0	21.0	-	1.5	1.0	20.3	VG 95343 T08 D 001 A	32	403-06180
306-1-B7WM250-PO-X-BK	13.0	6.5	6.5	3.5	46.0	25.0	1.5	1.5	1.0	21.0	-	32	403-06005
306-1-GW8-PO-X-BK	13.0	6.5	6.5	3.5	46.0	25.0	1.5	1.5	1.0	21.0	-	32	403-06009
304-1-B7WM250-PO-X-BK	27.0	13.5	13	7.0	93.0	50.0	2.5	-	1.5	43.0	-	32	403-04006
304-1-GW8-PO-X-BK	27.0	13.5	13	7.0	93.0	50.0	2.5	-	1.5	43.0	-	32	403-04011

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



4-Way Outlet Shapes, Breakout Boots

Helashrink 400 Series, in line, low voltage

Cable breakouts are manufactured from a tough cross-linked flame retarded polyolefin. This allows the breakouts to be used for both interior and exterior applications. The adhesive liner offers excellent electrical and mechanical protection and are available for 2, 3, 4, 5 and 6 core cables.

Features and benefits

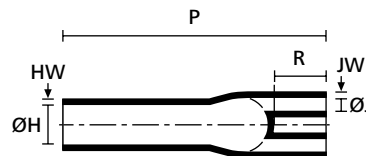
- Easy, time-saving insulation of cable branch point where it splits into single wires
- Made of tough, cross-linked, Polyolefin
- Adhesive is applied to relieve mechanical tension in cable harnesses



400 series supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)



Fully recovered form (after heating)

PART DESCRIPTION	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10%	HW ± 20%	JW ± 20%	S nom.	Tools	Article-No.
408-2-B8W2-PO-X-BK	35.0	12.0	15.0	3.0	95.0	24.0	2.5	2.0	22.0	32	404-08022
408-2-B8HTW2-PO-X-BK	35.0	12.0	15.0	3.0	95.0	24.0	2.5	2.0	22.0	32	404-08042
408-2-HW21-PO-X-BK	35.0	12.0	15.0	3.0	95.0	24.0	2.5	2.0	22.0	32	404-08074

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



6-Way Outlet Shapes, Breakout Boots

Helashrink 600 Series, in line, low voltage

Cable breakouts are manufactured from a tough cross-linked polyolefin containing a flame retardant. This allows the breakout to be used for both interior and exterior applications. they offer excellent electrical and mechanical protection.

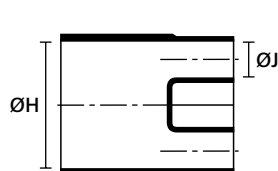
Cable breakouts are supplied with an adhesive inner coating for reliable environmental sealing, and are available for 2,3,4,5 and 6 conductor cables.

Features and benefits

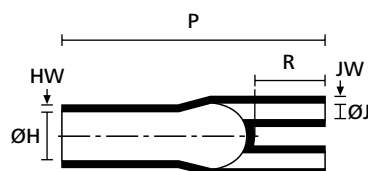
- Cable breakout boots for insulating and sealing cable crotch or conduit system
- Excellent resistance to abrasion and weathering



600 Series supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

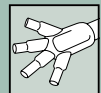


Fully recovered form (after heating)

PART DESCRIPTION	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	S nom.	Tools	Article-No.
609-2-HW1-PO-X-BK	40.0	16.0	12.0	4.0	75.0	20.0	2.5	1.5	25.0	32	406-06034

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Right-Angle Shapes, VG style

Helashrink 1100 Series, with rib

Heat Shrinkable moulded shapes for use in Electrical and Electronic Cable Harness Applications.

Features and benefits

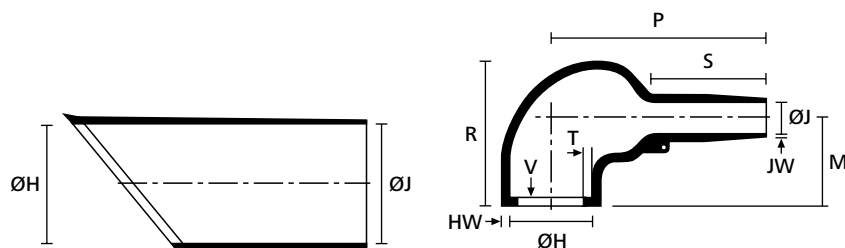
- Used in conjunction with a circular grooved adaptor
- Provides strain relief and an environmental seal



1152-4-G recovered onto a connector.



1155-4 supplied.



a: Expanded form (supplied)

b: Fully recovered form (after heating)

PART	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 20 %	V ± 10 %	V max.	T ± 20 %	M nom.	Tools	S nom.	Designation as per VG-Norm	Article-No.
1152-4-B7W8- PO-X-BK	24.0	10.5	24.0	6.0	-	25.0	1.3	-	-	3.3	1.0	19	32	10.0	-	411-52003
1152-4-G-PO- X-BK	24.0	10.5	24.0	6.0	-	25.0	1.3	0.5	3.0	3.3	1.0	19	32	10.0	-	411-52022
1152-4-HW17- PO-X-BK	24.0	10.5	24.0	6.0	-	25.0	1.3	-	-	-	1.0	19	32	10.0	-	411-52034
1154-4-B7-PO- X-BK	30.0	14.5	30.0	6.0	32.0	27.0	1.5	0.8	3.0	3.3	1.0	19	32	12.0	-	411-54001
1154-4-G-PO- X-BK	30.0	14.5	30.0	6.0	32.0	27.0	1.5	0.8	3.0	3.3	1.0	19	32	12.0	-	411-54025
1154-4-GW24- PO-X-BK	30.0	14.5	30.0	6.0	32.0	27.0	1.5	0.8	3.0	3.3	1.0	19	32	12.0	-	411-54026
1154-4-G-PO- X-BK	30.0	14.5	30.0	6.0	41.0	27.0	1.5	1.5	-	3.3	1.0	19.0	32	12.0	VG 95343 T06 E 002 A	411-54480
1154-4-B7W8- PO-X-BK	30.0	14.5	30.0	6.0	-	27.0	1.5	-	-	3.3	-	19	32	12.0	-	411-54004

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

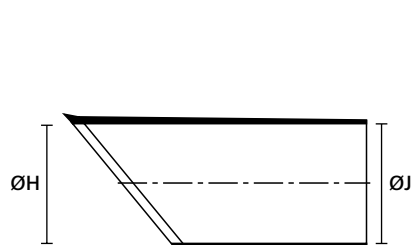


Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

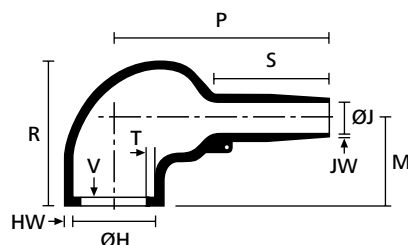


Right-Angle Shapes, VG style

Helashrink 1100 Series, with rib



a: Expanded form (supplied)



b: Fully recovered form (after heating)

PART	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10 %	R ± 10 %	HW ± 20 %	JW ± 20 %	V ± 10 %	V max.	T ± 20 %	M nom.	Tools	S nom.	Designation as per VG-Norm	Article-No.
1154-4-HW17- PO-X-BK	30.0	14.5	30.0	6.0	-	27.0	1.5	-	-	1.0	-	19	32	12.0	-	411-54042
1155-4-GW8- PO-X-BK	31.0	18.0	31.0	7.0	40.0	31.0	1.8	1.0	3.0	3.3	1.0	21	32	15.0	-	411-55013
1155-4-G-PO- X-BK	31.0	18.0	31.0	7.0	51.0	31.0	1.8	1.0	-	3.3	1.0	21.0	32	15.0	VG 95343 T06 E 003 A	411-55480
	31.0	18.0	31.0	7.0	-	31.0	1.8	-	-	3.3	1.0	21	32	15.0	-	411-55016
1156-4-GW8- PO-X-BK	36.0	22.5	36.0	8.5	46.0	38.0	1.8	1.0	3.0	3.3	1.0	26	32	15.0	-	411-56011
1156-4-G-PO- X-BK	36.0	22.5	36.0	8.5	59.0	38.0	1.8	1.0	-	3.3	1.0	26.0	32	15.0	VG 95343 T06 E 004 A	411-56480
	36.0	22.5	36.0	8.5	-	38.0	1.8	-	-	3.3	1.0	26	32	15.0	-	411-56015
1157-4-G-PO- X-BK	43.0	28.5	43.0	10.0	55.0	45.0	2.0	1.0	3.0	3.3	1.7	30	32	16.0	-	411-57020
1157-4-B7-PO- X-BK	43.0	28.5	43.0	10.0	-	45.0	2.0	-	-	3.3	1.7	30	32	16.0	-	411-57001
1157-4-B7W8- PO-X-BK	43.0	28.5	43.0	10.0	-	45.0	2.0	-	-	3.3	1.7	30	32	16.0	-	411-57003

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Right-Angle Shapes, MIL style

Helashrink 1100 Series, with rib

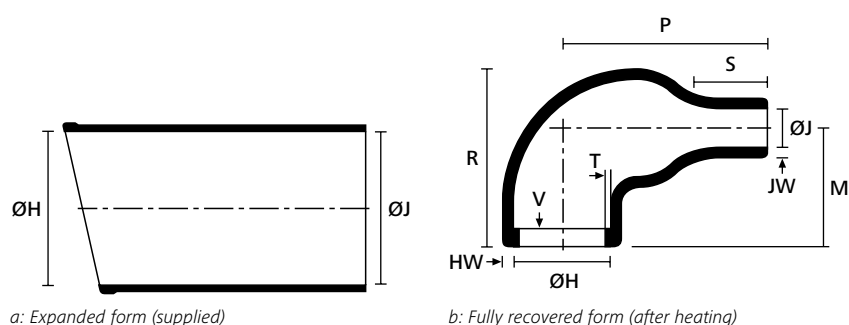
Heat Shrinkable moulded shapes for use in Electrical and Electronic Cable Harness Applications.

Features and benefits

- Used in conjunction with a circular grooved adaptor for strain relief



1108-4 supplied / fully recovered.



a: Expanded form (supplied)

b: Fully recovered form (after heating)

PART DESCRIPTION	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	P ± 10%	R ± 10 %	HW ± 20 %	JW ± 30 %	V max.	T ± 20 %	M nom.	S nom.	Tools	Article-No.
1108-4-HW8-PO-X-BK	16.5	7.9	16.5	2.5	18.3	20.1	1.0	1.6	3.3	1.0	15.2	5.1	32	411-08049
	16.5	7.9	16.5	2.5	18.3	20.1	1.0	1.6	3.3	1.0	15.2	5.1	32	411-08051
1108-4-GW8-PO-X-BK	16.5	7.9	16.5	3.8	20.1	20.1	1.0	1.6	3.3	1.0	15.2	5.1	32	411-08043
1106-4-HW8-PO-X-BK	23.3	10.4	23.3	5.6	20.3	22.9	1.3	1.3	3.3	1.0	15.2	5.8	32	411-06068
1107-4-HW8-PO-X-BK	28.4	14.2	28.4	6.3	29.8	28.5	1.5	1.5	3.3	1.0	21.4	7.1	32	411-07070

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



T-Shapes, VG style/MIL style

Helashrink 1200 Series

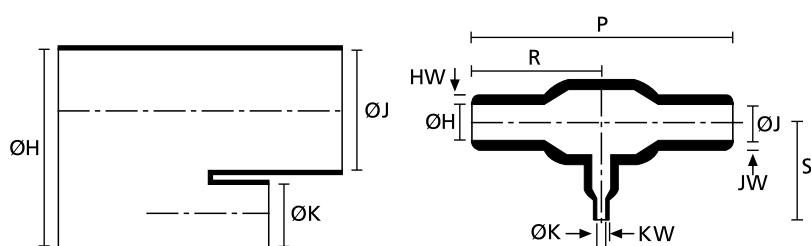
Heat Shrinkable moulded shapes for use in Electrical and Electronic Cable Harness Applications.

Features and benefits

- Strain relief, sealing and mechanical protection on cable harnesses



1202-1-G recovered onto a cable harness.



a: Expanded form (supplied)

b: Fully recovered form (after heating)

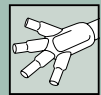
PART DESCRIPTION	ØH/J min. a	ØH/J max. b	ØK min. a	ØK max. b	P ± 10%	R ± 10%	HW ± 20%	JW ± 20%	JW ± 30%	Tools	S ± 10%	KW ± 20%	Designation as per VG-Norm	Article-No.
1209-1-G-PO-X-BK	-	-	13.2	6.0	108.0	54.0	2.5	2.5	2.5	32	38.6	1.5	-	412-09018
1202-1-B7W8-PO-X-BK	-	-	13.2	6.1	58.7	29.2	1.5	1.5	1.5	32	29.2	1.5	-	412-02002
1207-1-B7W8-PO-X-BK	-	-	26.9	12.4	120.1	55.9	2.5	2.5	2.5	32	55.9	2.5	-	412-07005
1207-1-G-PO-X-BK	-	-	26.9	12.4	120.1	55.9	2.5	2.5	2.5	32	55.9	2.5	-	412-07023
1202-1-G-PO-X-BK	13.0	7.0	13.0	7.0	59.0	29.5	1.5	1.5	1.5	32	29.2	1.5	VG 95343 T08 A 010 A	412-02180

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Angled T-Shapes, VG style

Helashrink 1300 Series, 30° & 45° angle

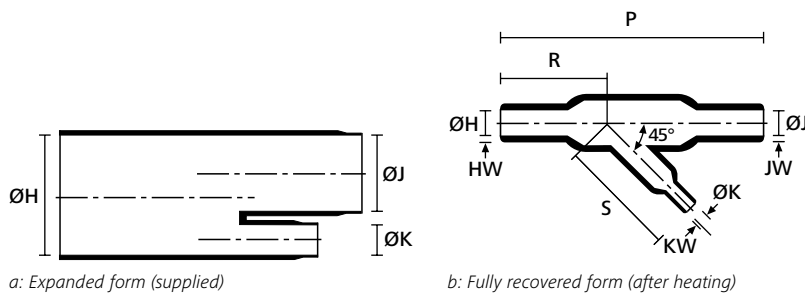
Heat Shrinkable moulded shapes for use in Electrical and Electronic Cable Harness Applications.

Features and benefits

- Strain relief, sealing and mechanical protection on cable harnesses
- Branching part 30° & 45° Y-joint
- Mechanical strain relief for cable harnesses



1303-1-G supplied / fully recovered.



PART	ØH min. a	ØH max. b	ØJ min. a	ØJ max. b	ØK min. a	ØK max. b	P ± 10 %	R ± 10 %	HW ± 30 %	JW ± 30 %	KW ± 20 %	S ± 10 %	Angle	Designation as per VG-Norm	Tools	Article-No.
1311-1-GW24- PO-X-BK	30.4	15.0	30.4	15.0	20.3	10.0	82.6	32.0	2.5	2.5	1.8	51.0	30°	-	32	413-11011
1311-1-G-PO- X-BK	30.4	15.2	30.4	15.2	20.3	10.2	82.6	31.8	2.5	2.5	1.8	50.8	30°	VG 95343 T08 B 003 A	32	413-11180
1311-1-HW8- PO-X-BK	30.4	15.2	30.4	15.2	20.3	10.2	82.6	31.8	-	-	1.8	50.8	30°	-	32	413-11028

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.
All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Low Profile Transition Boots

Helashrink 412H Series, side breakout

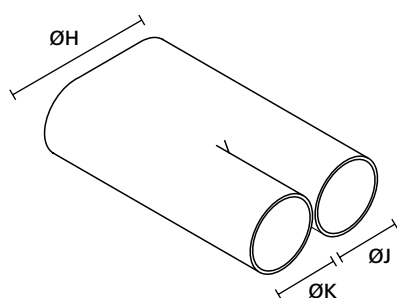
Heat Shrinkable Moulded Shapes for use in Electrical and Electronic Cable Harness Applications

Features and benefits

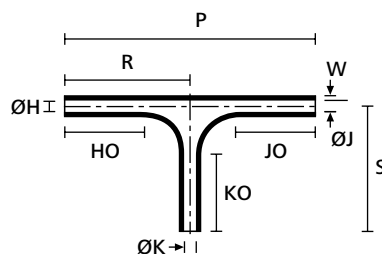
- Connector cable strain relief
- Used with circular adaptors



412H622-625 Series supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

PART DESCRIPTION	ØH min. a	ØH max. b	HO/JO/KO ± 10%	W nom.	R/S nom.	Tools	Article-No.
412H622-7-PO-X-BK	19.8	6.6	25.4	1.0	40.3	32	422-40031

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

Low Profile Transition Boots

Helashrink 492H Series, 1 to 2 cables

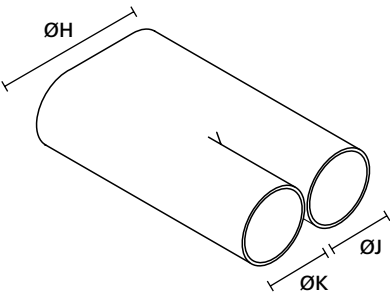
Military and general performance harnessing.

Features and benefits

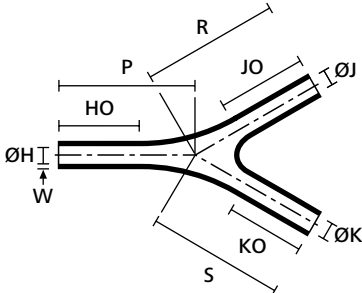
- For cable harness breakouts or transitions
- Strain relief, sealing and mechanical protection



492H412-415 Series supplied / fully recovered.



a: Expanded form (supplied)



b: Fully recovered form (after heating)

PART DESCRIPTION	ØH min. a	ØH max. b	ØJ/K min. a	ØJ/K max. b	HO/JO/KO ± 15%	W nom.	P/R/S nom.	Tools	Article-No.
492H413-9-PO-X-BK	34.2	11.4	22.8	11.4	41.1	1.3	62.9	32	422-50101

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.
All dimensions in mm. Subject to technical changes.



Hot Melt Tape for Heat Shrinkable Tubing and Shapes

HMT200A

Designed for use with heat shrink sleeving and mouldings.

Features and benefits

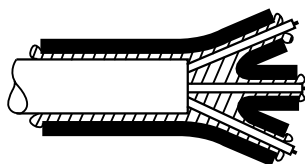
- Hot melt tape flows when heated to seal against moisture
- For heat shrink tubing and mouldings



HMT200A-Tape.



Adhesive tape HMT200A for sealing against humidity.



HMT200A in combination with unlined heat shrinkable shapes

PART DESCRIPTION	Thickness (T)	Width (W)	Reel Length	Tools	Article-No.
HMT200A-EVA-CL	0.25	25.0	10 m	32	354-02260
	0.25	25.0	50 m	32	354-02259

Recommended Tools: 32=CHG900. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.



Two-Component Adhesive for Heat Shrinkable Tubing and Shapes

V9500

Features and benefits

- High performance, two-part epoxy adhesive
- Very resistant to most solvents and fuels, even at elevated temperatures
- Two different packages available
- V9500 available in 10g sachets for manual mixing
- Processing set: emery paper, small mixing bowl and wooden spatula
- High performance bonding
- Meets military requirements for heat shrinkable components for harnesses



Two-component epoxy adhesive V9500.



The V9500 applicator gun guarantees the clean and precise coating of special fittings.

PART DESCRIPTION	Description	Designation as per VG-Norm	Article-No.
V9500NOZZLE-N10-PO-CL	-	VG 95343 T15 MA	627-95011
V9500 Epoxy Kit-EP-BK/GY	5 x 10g sachets (50g), 5 x mixing pots, 5 x mixing sticks, 5 x emery papers	-	627-95000
V9500 Epoxy Kit-EP-BK	1 x dual cartridge, 5 x mixing pots, 5 x mixing sticks, 5 x emery papers	VG 95343 T15 A 002 B	627-95001
V9500 Epoxy Cartridge-EP-BK	Two-component adhesive cartridge	-	627-95002
V9500 Applicator Gun-PO-GY	Applicator gun	VG 95343 T15 DA	627-95003

All dimensions in mm. Subject to technical changes.



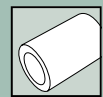
Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

Discover the diversity of our heat shrink tubing for your individual automotive needs!

HellermannTyton uses high quality materials to ensure long lasting performance under extreme conditions. Our products provide reliable insulation and protection for your cables and wires, perfectly suited to your specific application requirements.

MADE FOR REAL 





Chloroprene tubing and grommets

Helsyn H

The chloroprene tubings are ideally suited to rigorous environments such as automotive, aerospace, mass transit and defence markets. As the material is highly elastic, it's original size can be expanded 500% on application and 200% in continuous use. To save time and effort when fitting the tubing, try the HellermannTyton three prong tools and the Hellerine lubricant, which are specially designed for use with HellermannTyton chloroprene tubing.

Features and benefits

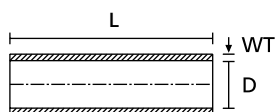
- Highly elastic, easy to fit chloroprene tubing
- Withstands up to 120 °C intermittent temperature
- Covers many cable diameters with one size
- Available in cut lengths



H rubber tubing is highly flexible and easy to apply.

MATERIAL	Chloroprene Rubber (CR)	
Operating Temperature	-65 °C to +95 °C, intermittent +120 °C	
Flammability	UL 94 HB	UL 94 HB, FMVSS 302
Elongation at break (min.)	500 %	

RoHS



Chloroprene tubing



PART DESCRIPTION	Supplied Ø D min.	Wall (WT)	Bundle Ø max.	Length (L)	Pack Cont.	Tools	Article-No.
H30X25BK-CR-BK	3.0	0.80	6.0	25.0	1000 pcs.	37;39	600-02938
H75X30BK-CR-BK	7.5	1.25	13.0	30.0	250 pcs.	37-40	600-02198

Recommended Tools: 36=NA1K/3, 39=VA2.5/5. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

Helsyn H

PART DESCRIPTION	Supplied Ø D min.	Wall (WT)	Bundle Ø max.	Pack Cont.	Tools	Article-No.
H50 tubing-CR-YE	5.0	1.05	9.0	500 pcs.	36;39	600-02005
H75 tubing-CR-PK	7.5	1.25	13.0	-	39-40	608-01115

Recommended Tools: 36=NA1K/3, NA4/5, 39=VA2.5/5. For more information on toolings please refer to the Application Tooling chapter on page 308.

All dimensions in mm. Subject to technical changes.

DEF STAN

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Chloroprene tubing and grommets

Helsyn TH - thin wall

The chloroprene tubings are ideally suited to rigorous environments such as automotive, aerospace, mass transit and defence markets.

As the material is highly elastic, it's original size can be expanded 500% on application and 200% in continuous use.

To save time and effort when fitting the tubing, try the HellermannTyton NA three prong tools (see Chapter 6.3) and the Hellerine lubricant (see end of Chapter 2.3), which are specially designed for use with HellermannTyton chloroprene tubing.



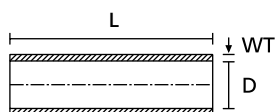
H rubber tubing is highly flexible and easy to apply.

Features and benefits

- Highly elastic, easy to fit chloroprene tubing
- Withstands up to 120°C intermittent temperature
- Covers many cable diameters with one size
- Available in cut lengths

MATERIAL	Chloroprene Rubber (CR)
Operating Temperature	-65 °C to +95 °C, intermittent +120 °C
Flammability	UL 94 HB
Elongation at break (min.)	500 %

RoHS ✓



Chloroprene tubing

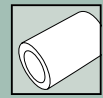


PART DESCRIPTION	Wall (WT)	Bundle Ø max.	Pack Cont.	Article-No.
TH20 tubing-CR-PK	0.60	3.5	1000 pcs.	600-02375

All dimensions in mm. Subject to technical changes.

DEF STAN

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Installation aid for tubing and grommets

Hellerine

Hellerine lubricant for tubing and grommets installations.

Features and benefits

- Effective aid for affixing elastomer sleeves
- Universally employable
- Evaporates after installation
- Consists of 99% vegetable oils
- Discoloration-free
- Offered in 250 ml bottle or in cans of 5 l or 20 l



Hellerine lubricant in 250 ml plastic bottle.

PART DESCRIPTION	Description	Article-No.
HELLERINE 0.25 LITER-CL	Hellerine assembly aid, 0.25 liter	625-00250
Hellerine M 284 ml	Hellerine assembly aid, 0.284 liter	625-00001
HELLERINE 5 LITER-CL	Hellerine assembly aid, 5 liter	625-05000
HELLERINE 20 LITER-CL	Hellerine assembly aid, 20 liter	625-06000

All dimensions in mm. Subject to technical changes.



3.1 Spiral-Reinforced Conduit Systems

FlexiGuard Conduits and Fittings

FG PVC conduit, steel wire spiral-reinforced	234
FG-UH IP54 fitting with mounting bracket	235



3.2 Conduit System Accessories

HelaGuard Accessories

Conduit Clips	PACC for corrugated conduits	236
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3.3 Protective Tubing and Spiral Binding

Helawrap Cable Cover and Accessories

HWPP in polypropylene	for industrial applications	237, 238
	for home and office use	239
Helawrap in polyamide 6, UL94 V0		240
HWBase		241

Spiral Binding

SBPE standard polyethylene	242
SBPTFE, PTFE	243
SBPAVO polyamide 6, flame-retardant	244
SPF wide pitch	245
Spiralwrap in Polyamide 6	246
Spiralwrap in Polyethylene	247



3.4 Protective Sleeves

Expandable Braided Sleeves

HEGP standard polyester	248
HEGPETFR polyester, flame-retardant	249
HEGPA66 polyamide 6.6, abrasion-resistant	250

Self-closing braided sleeving

Helagaine Twist-In-FR series	251
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Expandable Braided Sleeves

HEGMAN non-flammable meta-aramid	252
HEGMANWO non-flammable meta-aramid, water and oil-resistant	253

Open Woven Sleeves

Twist-In-EMIZ self-closing sleeving, EMI shielding	254
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Electromagnetic Shielding Sleeves

HEGEMIP electromagnetic protection	255
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3.5 Wiring Ducts

Rigid PVC Wiring Ducts		
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3.6 Edge Protection

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Grommet Strip	
Flexiform G51N polyamide 6 edge protection	269



3.7 Grommets

Edge Protection Grommets	270, 271
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FlexiGuard conduits and fittings

PVC Conduits with steel wire spiral-reinforcement

FlexiGuard protective hoses are used to protect cables in machines and plant construction, and robotics as well as leads to switch cabinets.

Features and benefits

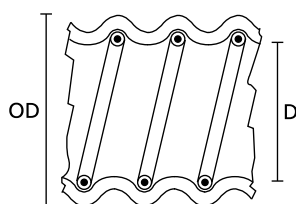
- Extremely flexible
- Excellent mechanical protection
- Good resistance to oils, acids and alkalis
- Good resistance to chemicals



FlexiGuard FG with FG-UH fitting.

MATERIAL	Flexible Polyvinyl Chloride, cadmium free (PVC), Steel (ST)
Operating Temperature	-20 °C to +70 °C, (+80 °C, 200 h)
Flammability	UL 94 HB

RoHS ✓



FlexiGuard

PART DESCRIPTION	Nominal Ø	Inside Ø (ID)	Outside Ø (OD)	Min. Bending Radius (R)	Reel Length	Article-No.
FG14-PVC/ST-GY	14	10.0	14.0	14	10 m	167-00209
FG17-PVC/ST-GY	17	13.0	17.0	17	10 m	167-00211
FG19-PVC/ST-GY	19	15.0	19.0	19	10 m	167-00213
FG21-PVC/ST-GY	21	16.0	21.0	21	10 m	167-00216
FG27-PVC/ST-GY	27	21.0	27.0	27	10 m	167-00221
FG36-PVC/ST-GY	36	30.0	36.0	36	10 m	167-00229
FG45-PVC/ST-GY	45	38.0	45.0	45	10 m	167-00236
FG56-PVC/ST-GY	56	48.0	56.0	56	10 m	167-00248

All dimensions in mm. Subject to technical changes.



Fittings for FlexiGuard spiral-reinforced PVC Conduits

FG-UH straight fitting with mounting bracket, IP54

Straight swivel bracket.
Fulfil IP54 with FlexiGuard FG conduits.

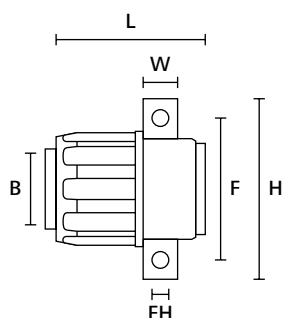
Features and benefits

- One piece, easy fit
- Swivel bracket
- Vibration and tension resistant
- Large bore size
- Inner ferrule protects cables
- Good resistance to chemicals



FG-UH fitting with bracket.

MATERIAL	Polypropylene (PP)
Operating Temperature	-35 °C to +80 °C
Flammability	UL 94 V2



FlexiGuard fitting, straight with bracket

PART DESCRIPTION	Nominal Ø	Min. Bore Size (B)	Length (L)	Width (W)	Height (H)	Hole Ø (FH)	Fixing Hole Centres (F)	Article-No.
FG14-UH-PP-GY	14	8.8	41.5	10.0	40.0	5.7	29.0	167-00520
FG17-UH-PP-GY	17	11.1	45.0	12.0	50.0	5.7	37.0	167-00521
FG19-UH-PP-GY	19	13.0	47.5	12.0	50.0	5.7	37.0	167-00522
FG21-UH-PP-GY	21	14.8	49.5	12.0	50.0	5.7	37.0	167-00523
FG27-UH-PP-GY	27	19.4	52.0	12.5	57.0	5.7	43.0	167-00524
FG36-UH-PP-GY	36	27.9	54.8	13.0	67.0	6.7	53.0	167-00525
FG45-UH-PP-GY	45	35.6	58.0	14.0	79.5	6.7	65.0	167-00526
FG56-UH-PP-GY	56	45.9	60.0	16.5	92.5	6.7	76.0	167-00527

All dimensions in mm. Subject to technical changes.



HelaGuard accessories

PACC Clip for corrugated conduits

Corrugated tubes can be securely fastened with the PACC clamp.

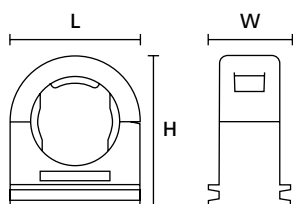
Features and benefits

- Easy and quick assembly with non-metallic conduits
- Lid is integrated
- Hole for fastening with screw
- Inner rib prevents conduit from slipping

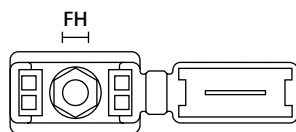


HelaGuard PACC Conduit Clip.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-50 °C to +135 °C
Flammability	UL 94 V2



HelaGuard conduit clip, side views



HelaGuard conduit clip, top view

PART DESCRIPTION	Nominal Ø	Height (H)	Width (W)	Length (L)	Hole Ø (FH)	Pack Cont.	Article-No.
PACC10-PA66-BK	10	26.0	12.0	23.0	M5	10 pcs.	166-25707
PACC13-PA66-BK	13	26.0	12.0	23.0	M5	10 pcs.	166-25700
PACC16-PA66-BK	16	30.0	12.0	26.0	M5	10 pcs.	166-25701
PACC21-PA66-BK	21	36.0	15.0	32.0	M6	10 pcs.	166-25702
PACC28-PA66-BK	28	45.0	15.0	41.0	M6	10 pcs.	166-25703
PACC34-PA66-BK	34	51.0	15.0	48.0	M6	10 pcs.	166-25704
PACC42-PA66-BK	42	60.0	15.0	57.0	M6	5 pcs.	166-25705
PACC54-PA66-BK	54	72.0	15.0	70.0	M6	5 pcs.	166-25706

All dimensions in mm. Subject to technical changes.



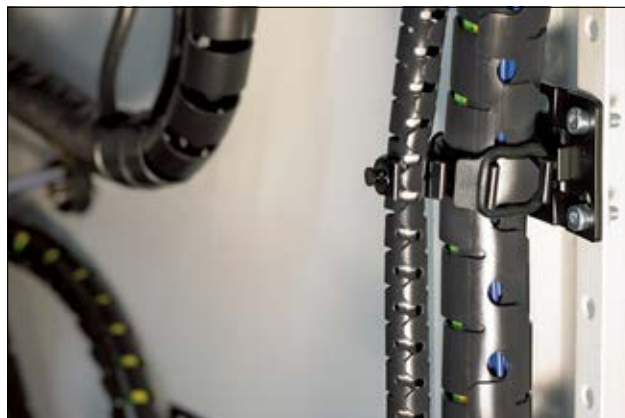
Helawrap cable cover

HWPP for industrial applications

Helawrap is used to bundle and protect cables and wires in the electrical industry, panel building, machine building and many other industrial applications. Helawrap is the time-saving solution for industrial applications.

Features and benefits

- Ideal solution for bundling, protecting and fixing cables
- Quick and effortless to apply
- Good abrasion protection
- Special profile enables branching off cable at any point
- Can be removed and reapplied often
- Available in several colours and sizes
- Handy HAT applicator tool included



Protecting and fixing cables with the Helawrap cable cover and accessory set, for instance in wiring cabinets.



Insert one or more cables into the insertion slot of the HAT applicator tool.



Place the HAT applicator tool in one end of the Helawrap cable cover.



Simply slide the HAT applicator tool through the Helawrap cover.

MATERIAL	Polypropylene (PP)
Operating Temperature	-60 °C to +110 °C, intermittent +140 °C
Flammability	UL 94 HB



PART DESCRIPTION	Bundle Ø max.	Reel Length	Application Tool	Article-No.
HWPP8-PP-BK	9.0	25 m	HAT8	161-64101
HWPP8-PP-GY	9.0	25 m	HAT8	161-64102
HWPP8-PP-SR	9.0	25 m	HAT8	161-64103
HWPP8-PP-WH	9.0	25 m	HAT8	161-64104
HWPP16-PP-BK	16.0	25 m	HAT16	161-64201
HWPP16-PP-GY	16.0	25 m	HAT16	161-64202
HWPP16-PP-SR	16.0	25 m	HAT16	161-64203
HWPP16-PP-WH	16.0	25 m	HAT16	161-64207

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Helawrap cable cover

HWPP for industrial applications

PART DESCRIPTION	Bundle Ø max.	Reel Length	Application Tool	Article-No.
HWPP20-PP-BK	21.0	25 m	HAT20	161-64301
HWPP20-PP-GY	21.0	25 m	HAT20	161-64302
HWPP20-PP-SR	21.0	25 m	HAT20	161-64303
HWPP20-PP-WH	21.0	25 m	HAT20	161-64304
HWPP25-PP-BK	27.0	25 m	HAT25	161-64401
HWPP25-PP-GY	27.0	25 m	HAT25	161-64402
HWPP25-PP-SR	27.0	25 m	HAT25	161-64403
HWPP25-PP-WH	27.0	25 m	HAT25	161-64407
HWPP30-PP-BK	32.0	25 m	HAT30	161-64501
HWPP30-PP-GY	32.0	25 m	HAT30	161-64502
HWPP30-PP-SR	32.0	25 m	HAT30	161-64503
HWPP30-PP-WH	32.0	25 m	HAT30	161-64504
HWPP40-PP-BK	42.0	15 m	HAT40	161-64601

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Helawrap cable cover

HWPP for home and office use

Helawrap HWPP in practical 2 metre lengths is designed for home and office use. It puts an end to the cable chaos of PCs, TVs and Hi-Fi systems.

Features and benefits

- Ideal solution for bundling, protecting, mounting and routing cables
- Quick and effortless to apply
- Good abrasion protection
- Special profile enables branching off cable at any point
- Can be removed and reapplied often
- Available in several colours and sizes
- Handy applicator tool included

Complete set including application tool.



Helawrap - Office Desktop Cable Management.



Helawrap Cable Cover - HWPP - 2 m black.



Insert one or more cables into the insertion slot of the HAT applicator tool.



Place the HAT applicator tool in one end of the Helawrap cable cover.



Simply slide the HAT applicator tool through the Helawrap cover.

MATERIAL	Polypropylene (PP)
Operating Temperature	-60 °C to +110 °C, intermittent +140 °C
Flammability	UL 94 HB



PART DESCRIPTION	Bundle Ø max.	Length (L)	Application Tool	Article-No.
HWPP16L2-PP-BK	16.0	2.0 m	HAT16	161-64204
HWPP16L2-PP-GY	16.0	2.0 m	HAT16	161-64205
HWPP16L2-PP-SR	16.0	2.0 m	HAT16	161-64206
HWPP16L2-PP-WH	16.0	2.0 m	HAT16	161-64215
HWPP25L2-PP-BK	27.0	2.0 m	HAT25	161-64404
HWPP25L2-PP-GY	27.0	2.0 m	HAT25	161-64405
HWPP25L2-PP-SR	27.0	2.0 m	HAT25	161-64406
HWPP25L2-PP-WH	27.0	2.0 m	HAT25	161-64415

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



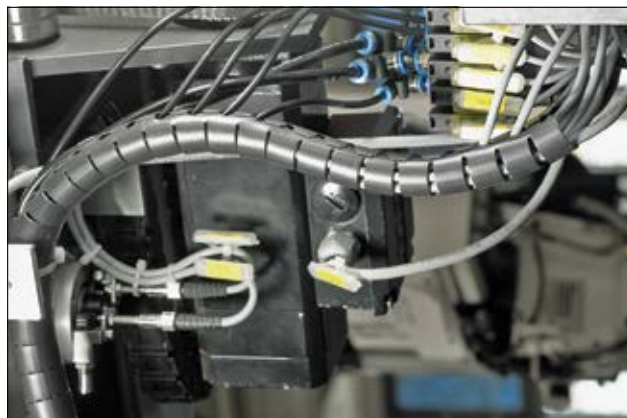
Helawrap cable cover

HWPAV0 flame-retardant and abrasion-resistant

Helawrap HWPAV0 is used to bundle and protect cable and wires, especially if there is vibration and abrasion. HWPAV0 has excellent flame-retardant properties and is halogen-free.

Features and benefits

- Ideal solution for bundling, protecting and fixing cables
- Quick and effortless to apply
- Self-extinguishing according to UL94 V0
- Very good abrasion protection
- Special profile enables branching off cable at any point
- Can be removed and reapplied often
- Handy applicator tool included



Cables can be branched off at any point for better, more flexible protection.

MATERIAL	Polyamide 6 V0 (PA6V0)
Operating Temperature	-40 °C to +90 °C, intermittent +120 °C
Flammability	UL 94 V0
EN 45545-2 Classification	R22 HL2, R23 HL3

HF ✓

RoHS ✓

PART DESCRIPTION	Bundle Ø max.	Reel Length	Application Tool	Article-No.
HWPAV08-PA6V0-BK	9.0	25 m	HAT8	161-63101
HWPAV016-PA6V0-BK	16.0	25 m	HAT16	161-63201
HWPAV020-PA6V0-BK	21.0	25 m	HAT20	161-63301
HWPAV025-PA6V0-BK	27.0	25 m	HAT25	161-63401
HWPAV030-PA6V0-BK	32.0	25 m	HAT30	161-63501

All dimensions in mm. Subject to technical changes.

EN 45545-2



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Accessories for Helawrap Cable Cover

HWClips

To complete the Helawrap cable management system various Helawrap Clips in compatible sizes are available.
The mounting clips can be combined and adjusted individually.
Attached to a mounting base the assembly can be screw mounted or directly stuck to the surface.

Features and benefits

- Mounts and routes Helawrap cable cover flexibly and efficiently
- Fit snugly around the cable cover and holds it tight
- Each clip can be joined to mounting plate or other clips of any size
- Each clip rotates freely
- Easily released and re-used



Helawrap self-adhesive and screw mount bases and clips.

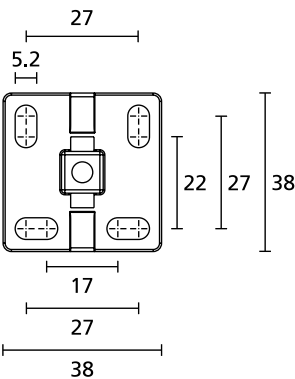
MATERIAL	Polyamide 6.6, high impact modified, heat stabilised (PA66HIRHS)
Operating Temperature	-40 °C to +105 °C
Flammability	UL 94 HB



PART DESCRIPTION	for Helawrap size	Pack Cont.	Article-No.
HWCLIP08-PA66HIRHS-BK	8	50 pcs.	161-64002
HWCLIP16-PA66HIRHS-BK	16	50 pcs.	161-64004
HWCLIP20-PA66HIRHS-BK	20	50 pcs.	161-64006
HWCLIP25-PA66HIRHS-BK	25	50 pcs.	161-64008
HWCLIP30-PA66HIRHS-BK	30	50 pcs.	161-64010

All dimensions in mm. Subject to technical changes.

HWBase



Helawrap HWBase/HWBaseA

PART DESCRIPTION	Pack Cont.	Article-No.
HWBASE-PA66HIRHS-BK	50 pcs.	161-64015

All dimensions in mm. Subject to technical changes.



PE General Purpose Spiral Binding

SBPE

SBPE spiral binding is suitable for standard electrical applications and panel building and plant engineering. Sizes 4 and 9 are also available in practical 5 metre lengths.

Features and benefits

- Organises and protects cables and hoses
- Suitable for retro-fitting
- Cables branch out at any point
- Wide range of diameters and colours



HellermannTyton SBPE Spiral Wrap.

MATERIAL	Polyethylene (PE)
Operating Temperature	-60 °C to +80 °C, intermittent +120 °C
Flammability	UL 94 HB



PART DESCRIPTION	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Reel Length	Article-No.
SBPE1.5-PE-NA	1.5	0.80	6.0	1.6	8.0	30 m	161-41000
SBPE1.5-PE-BK	1.5	0.80	6.0	1.6	8.0	30 m	161-41001
SBPE1.5-PE-GY	1.5	0.80	6.0	1.6	8.0	30 m	161-41002
SBPE4-PE-NA	4	1.00	7.8	5.0	20.0	30 m	161-41100
SBPE4-PE-BK	4	1.00	7.8	5.0	20.0	30 m	161-41101
SBPE4-PE-GY	4	1.00	7.8	5.0	20.0	30 m	161-41102
SBPE4D-PE-NA	4	1.00	7.8	5.0	20.0	5 m	161-41103
SBPE4D-PE-BK	4	1.00	7.8	5.0	20.0	5 m	161-41104
SBPE4D-PE-GY	4	1.00	7.8	5.0	20.0	5 m	161-41105
SBPE6-PE-NA	6	1.20	10.0	7.5	40.0	30 m	161-41150
SBPE6-PE-BK	6	1.20	10.0	7.5	40.0	30 m	161-41151
SBPE6-PE-GY	6	1.20	10.0	7.5	40.0	30 m	161-41154
SBPE6D-PE-NA	6	1.20	10.0	7.5	40.0	5 m	161-41152
SBPE6D-PE-BK	6	1.20	10.0	7.5	40.0	5 m	161-41153
SBPE6D-PE-GY	6	1.20	10.0	7.5	40.0	5 m	161-41155
SBPE9-PE-NA	9	1.40	12.5	10.0	100.0	30 m	161-41200
SBPE9-PE-BK	9	1.40	12.5	10.0	100.0	30 m	161-41201
SBPE9-PE-GY	9	1.40	12.5	10.0	100.0	30 m	161-41202
SBPE9D-PE-NA	9	1.40	12.5	10.0	100.0	5 m	161-41203
SBPE9D-PE-BK	9	1.40	12.5	10.0	100.0	5 m	161-41204
SBPE9D-PE-GY	9	1.40	12.5	10.0	100.0	5 m	161-41205
SBPE16-PE-NA	16	1.60	16.0	20.0	150.0	30 m	161-41300
SBPE16-PE-BK	16	1.60	16.0	20.0	150.0	30 m	161-41301
SBPE16-PE-GY	16	1.60	16.0	20.0	150.0	30 m	161-41302

All dimensions in mm. Subject to technical changes.



PTFE High temperature spiral binding

SBPTFE

SBPTFE is recommended wherever superior protection against chemical and extreme temperatures are important.

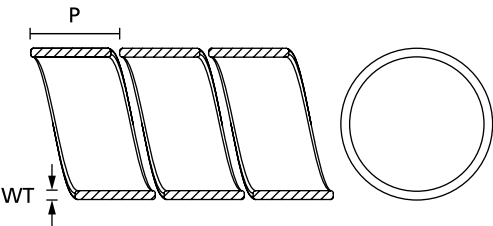
Features and benefits

- High temperature resistance
- Excellent fire protection
- Self-extinguishing according to UL94 V0
- Very good solvent and acid resistance
- Organises and protects cables and hoses
- Suitable for retro-fitting
- Cables branch out at any point



Spiral binding SBPTFE is ideal for extreme conditions.

MATERIAL	Polytetrafluoroethylene (PTFE)
Operating Temperature	-60 °C to +260 °C, intermittent +350 °C
Flammability	UL 94 V0



Spiral binding

PART DESCRIPTION	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Reel Length	Article-No.
SBPTFE1.5-PTFE-NA	1.5	0.50	6.0	1.6	8.0	5 m	161-45000
SBPTFE4-PTFE-NA	4	0.70	7.8	5.0	20.0	5 m	161-45100
SBPTFE9-PTFE-NA	9	1.00	12.5	10.0	100.0	5 m	161-45200

All dimensions in mm. Subject to technical changes.



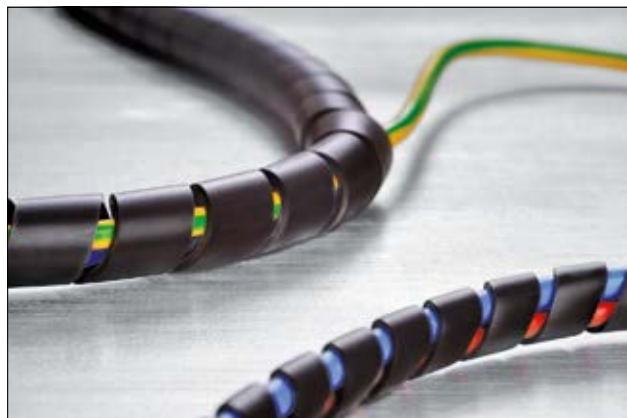
PA Flame-retardant Spiral Binding

SBPAV0

Due to its excellent flame protection properties, SBPAV0 spiral binding is particularly suitable for the rail and aviation industries as well as public buildings.

Features and benefits

- Organises and protects cables and hoses
- Self-extinguishing according to UL94 V0
- Very good protection against abrasion
- Suitable for retro-fitting
- Cables branch out at any point
- Wide range of diameters

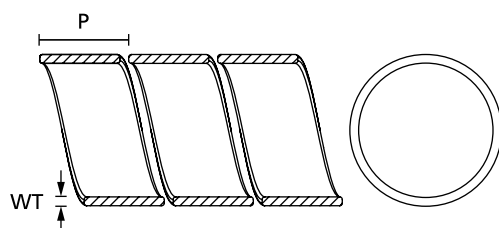


Spiral binding SBPAV0.

MATERIAL	Polyamide 6 V0 (PA6V0)
Operating Temperature	-40 °C to +95 °C, intermittent +130 °C
EN 45545-2 Classification	R22 HL2, R23 HL3
Flammability	UL 94 V0

HF ✓

RoHS ✓



Spiral binding

PART DESCRIPTION	Nominal Ø	Wall (WT)	Pitch (P)	Bundle Ø min.	Bundle Ø max.	Reel Length	Article-No.
SBPAV04-PA6V0-BK	4	0.60	7.8	5.0	20.0	30 m	161-44100
SBPAV06-PA6V0-BK	6	0.80	10.0	7.5	40.0	30 m	161-44150
SBPAV09-PA6V0-BK	9	1.00	12.5	10.0	100.0	30 m	161-44200
SBPAV016-PA6V0-BK	16	1.20	16.0	20.0	150.0	30 m	161-44300

All dimensions in mm. Subject to technical changes.

EN 45545-2

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



PP High Abrasion-resistant Wide Pitch Spiral Binding

SPF

SPF spiral binding is especially suitable wherever high abrasion resistance and much larger cable diameters are needed, for example in the petrochemical industry and in plant construction.

Features and benefits

- Heavy-walled and very robust
- Excellent protection from mechanical stress
- Very high abrasion resistance
- Very good resistance to oils
- Available in diameters up to 50 mm
- Ideal for larger cable bundles



SPF spiral binding is extremely robust and abrasion resistant.

MATERIAL	Polypropylene (PP)
Operating Temperature	-30 °C to +100 °C
Flammability	UL 94 HB



PART DESCRIPTION	Ø (D)	Wall (WT)	Pitch (P)	Bundle Ø max.	Outside Ø (OD)	Length (L)	Article-No.
SPF10-PP-BK	10.0	1.50	10.0	13.0	13.0	1.0 m	162-20100
SPF15-PP-BK	15.0	1.50	13.0	18.0	18.0	1.0 m	162-20150
SPF20-PP-BK	20.0	1.50	18.0	23.0	23.0	1.0 m	162-20200
SPF25-PP-BK	25.0	2.00	19.0	29.0	29.0	1.0 m	162-20250
SPF30-PP-BK	30.0	2.00	20.0	34.0	34.0	1.0 m	162-20300
SPF50-PP-BK	50.0	3.00	22.0	56.0	56.0	-	162-20550

All dimensions in mm. Subject to technical changes.

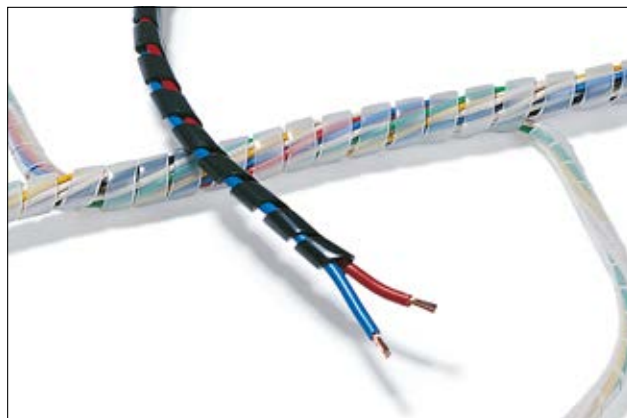


Spiralwrap - General Purpose

Spiralwrap in Polyamide 6

Features and benefits

- Used for organising and protecting wires, cables and tubes
- Available in a wide range of diameters and colours
- Can be fitted onto cables, wires or tubes in situ
- Wires can branch out at any point and in any direction



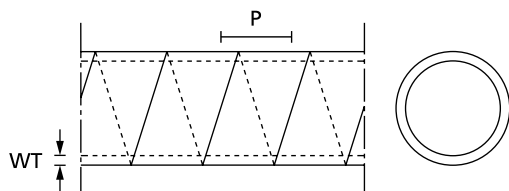
Sheathing allows flexible routing and lead-out of cables.

MATERIAL	Polyamide 6 (PA6)	
Operating Temperature	-40 °C to +121 °C	-40 °C to +95 °C
Halogen-free	Yes	
Flammability	UL 94 HB	

HF ✓

RoHS ✓

RoHS ✓



Spiral binding

PART DESCRIPTION	Ø (D)	Wall (WT)	Pitch (P)	Bundle Ø max.	Reel Length	Article-No.
1N-PA6-NA	2.0	0.30	4.2	12.0	3 m	161-00125
1N-PA6-BK	2.0	0.30	4.2	12.0	100 m	161-00128
2N-PA6-NA	5.1	0.60	9.5	50.0	3 m	161-00033
3N-PA6-NA	11.1	0.80	11.5	100.0	3 m	161-00051
3N-PA6-BK	12.7	0.89	12.7	102.0	30 m	161-05050
4N-PA6-BK	19.1	0.81	19.1	127.0	30 m	161-05071
4N-PA6-NA	19.1	0.81	19.1	127.0	30 m	161-05072
6N-PA6-NA	21.0	1.40	9.5	42.0	30 m	161-00122
6N-PA6-BK	21.0	1.40	9.5	42.0	30 m	161-00178
5N-PA6-BK	25.4	0.81	25.4	178.0	30 m	161-05078
5N-PA6-NA	25.4	0.81	25.4	178.0	30 m	161-05085

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

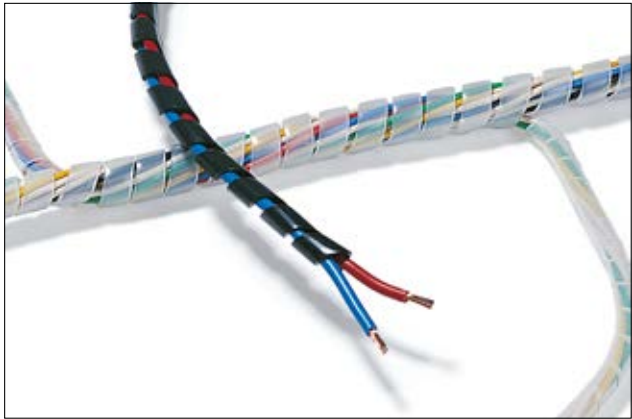


Spiralwrap - General Purpose

Polyethylene Spiralwrap

Features and benefits

- For organising and protecting wires, cables and tubes
- Wide range of diameters and colours
- Capable of retro-fitting
- Wires can branch out at any point, in any direction



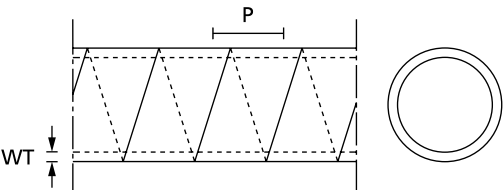
Sheathing allows flexible routing and lead-out of cables.

MATERIAL	Polyethylene (PE)	
Operating Temperature	-60 °C to +88 °C	
Halogen-free	No	Yes

RoHS

HF

RoHS



Spiral binding

PART DESCRIPTION	Ø (D)	Wall (WT)	Pitch (P)	Bundle Ø max.	Halogen-free	Reel Length	Article-No.
1NFP-PE-BK	3.2	0.81	4.8	12.7	No	30 m	161-05004
1NFP-PE-NA	3.2	0.81	4.8	12.7	Yes	30 m	161-05013
2NFP-PE-BK	6.4	1.14	9.5	50.8	No	30 m	161-05036
2NFP-PE-NA	6.4	1.14	9.5	50.8	Yes	30 m	161-05043
3NFP-PE-BK	12.7	1.57	14.3	102.0	No	30 m	161-05052
3NFP-PE-NA	12.7	1.57	14.3	102.0	Yes	30 m	161-05055

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Standard polyester braided sleeving

Helagaine HEGP

Helagaine HEGP braided sleeving provides abrasion protection in the automotive industry, in machine building, in panel building and in electrical appliances.

Features and benefits

- Made of sturdy polyester
- Highly flexible
- High abrasion resistance
- Very high surface coverage



Helagaine HEGP braided sleeving.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C
Melting Point	+250 °C
EN 45545-2 Classification	R22 HL3, R23 HL3

HF ✓

RoHS ✓

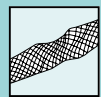
PART DESCRIPTION	Bundle Ø min.	Bundle Ø max.	Reel Length	Tools	Article-No.
HEGP05-PET-BK	3.0	9.0	200 m	45	170-10500
HEGP06-PET-BK	4.0	11.0	100 m	45	170-10600
HEGP08-PET-BK	5.0	12.0	100 m	45	170-10800
HEGP10-PET-BK	7.0	15.0	100 m	45	170-11000
HEGP15-PET-BK	10.0	20.0	100 m	45	170-11500
HEGP20-PET-BK	14.0	26.0	50 m	45	170-12000
	14.0	26.0	200 m	45	170-12003
HEGP25-PET-BK	18.0	34.0	50 m	45	170-12500
HEGP30-PET-BK	20.0	40.0	50 m	45	170-13000
HEGP40-PET-BK	30.0	50.0	50 m	45	170-14000
HEGP50-PET-BK	40.0	66.0	50 m	45	170-15000

Recommended Tools: 45=HSG0. For more information on toolings please refer to the Application Tooling chapter on page 310.

All dimensions in mm. Subject to technical changes. Colour grey available on request. Cuts in any lengths. Minimum Order Quantity (MOQ) may differ from package content.

EN 45545-2 **ECE R-118**

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Flame-retardant polyester braided sleeving

Helagaine HEGPETFR

This sleeve is particularly designed for abrasion protection of bundles of electrical cables. Helagaine HEGPETFR is therefore particularly recommended in applications such as public transport, aircraft industry, telecommunications, underground cables, etc.

Features and benefits

- Made of sturdy polyester
- Self-extinguishing
- Highly flexible
- Easy to apply over irregular shapes
- Good abrasion resistance



Helagaine HEGPETFR braided sleeving.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C
Melting Point	+250 °C
EN 45545-2 Classification	R22 HL2, R23 HL3



PART DESCRIPTION	Bundle Ø min.	Bundle Ø max.	Flammability	Reel Length	Tools	Article-No.
HEGPETFR03-PET-BK	2.0	5.0	FMVSS 302, Type B	100 m	45	170-81000
HEGPETFR04-PET-BK	3.0	7.0	FMVSS 302, Type B	200 m	45	170-81001
HEGPETFR05-PET-BK	4.0	9.0	FMVSS 302, Type B, UL 1441 VW-1	200 m	45	170-81002
HEGPETFR06-PET-BK	5.0	11.0	FMVSS 302, Type B, UL 1441 VW-1	100 m	45	170-81003
HEGPETFR08-PET-BK	7.0	13.0	FMVSS 302, Type B, UL 1441 VW-1	100 m	45	170-81004
HEGPETFR10-PET-BK	9.0	15.0	FMVSS 302, Type B, UL 1441 VW-1	100 m	45	170-81005
HEGPETFR12-PET-BK	11.0	17.0	FMVSS 302, Type B, UL 1441 VW-1	100 m	45	170-81006
HEGPETFR15-PET-BK	13.0	20.0	FMVSS 302, Type B, UL 1441 VW-1	100 m	45	170-81007
HEGPETFR20-PET-BK	18.0	25.0	FMVSS 302, Type B, UL 1441 VW-1	50 m	45	170-81008
HEGPETFR25-PET-BK	22.0	30.0	FMVSS 302, Type B, UL 1441 VW-1	50 m	45	170-81009
HEGPETFR30-PET-BK	27.0	40.0	FMVSS 302, Type B, UL 1441 VW-1	50 m	45	170-81010
HEGPETFR40-PET-BK	35.0	50.0	FMVSS 302, Type B, UL 1441 VW-1	50 m	45	170-81011
HEGPETFR50-PET-BK	45.0	60.0	FMVSS 302, Type B, UL 1441 VW-1	50 m	45	170-81012

Recommended Tools: 45=HSG0. For more information on toolings please refer to the Application Tooling chapter on page 310.

All dimensions in mm. Subject to technical changes.

EN 45545-2



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Abrasion-resistant polyamide braided sleeving

Helagaine HEGPA66

Helagaine HEGPA66 is particularly suitable for vehicle manufacturing as well as plant construction.

Features and benefits

- Made from heavy-duty polyamide yarn
- Excellent abrasion resistance
- Highly flexible
- Easy to apply over irregular shapes
- Eases application by expanding when compressed
- Very high surface covering



Helagaine HEGPA66 braided sleeving.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-60 °C to +150 °C
Melting Point	+255 °C
EN 45545-2 Classification	R22 HL3, R23 HL3

HF ✓

RoHS ✓

PART DESCRIPTION	Bundle Ø min.	Bundle Ø max.	Reel Length	Tools	Article-No.
HEGPA6604-PA66-BK	3.0	6.0	200 m	45	170-40400
HEGPA6606-PA66-BK	4.0	8.0	100 m	45	170-40600
HEGPA6608-PA66-BK	5.0	10.0	100 m	45	170-40800
HEGPA6610-PA66-BK	7.0	12.0	100 m	45	170-41000
HEGPA6612-PA66-BK	8.0	14.0	100 m	45	170-41200
HEGPA6616-PA66-BK	12.0	18.0	50 m	45	170-41600
HEGPA6620-PA66-BK	15.0	23.0	50 m	45	170-42000
HEGPA6625-PA66-BK	18.0	28.0	50 m	45	170-42500
HEGPA6630-PA66-BK	25.0	32.0	50 m	45	170-43000
HEGPA6640-PA66-BK	30.0	44.0	50 m	45	170-44000
HEGPA6660-PA66-BK	50.0	65.0	50 m	45	170-46000

Recommended Tools: 45=HSG0. For more information on toolings please refer to the Application Tooling chapter on page 310.

All dimensions in mm. Subject to technical changes.

EN 45545-2 **ECE R-118**

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Self-closing polyester sleeving

Helagaine Twist-In

Helagaine Twist-In is used to bundle and protect pre-terminated cables in machine-building and automation, electrical installations and automobile and truck manufacturing. Helagaine Twist-In is also available in practical 2 m and 5 m lengths for use in the home or office.

Features and benefits

- Self-closing sleeve made of sturdy polyester
- Provides very good protection against abrasion
- Ideal for retro-fitting
- Quick and easy installation and removal
- Allows for inspection and maintenance



Helagaine Twist-In enables easy access to cables and wires for assembly, inspection and maintenance.

MATERIAL	Polyester (PET)
Operating Temperature	-50 °C to +150 °C
Melting Point	+240 °C

RoHS ✓

PART DESCRIPTION	Bundle Ø min.	Bundle Ø max.	Reel Length	Article-No.
HELAGaine TWIST-IN-FR 05-PET-BK	4.0	5.0	150 m	170-65082
HELAGaine TWIST-IN-FR 08-PET-BK	5.0	8.0	100 m	170-65083
HELAGaine TWIST-IN-FR 13-PET-BK	10.0	13.0	50 m	170-65084
HELAGaine TWIST-IN-FR 16-PET-BK	13.0	16.0	50 m	170-65085
HELAGaine TWIST-IN-FR 19-PET-BK	16.0	19.0	25 m	170-65086
HELAGaine TWIST-IN-FR 25-PET-BK	19.0	25.0	25 m	170-65087
HELAGaine TWIST-IN-FR 29-PET-BK	25.0	29.0	15 m	170-65088
HELAGaine TWIST-IN-FR 32-PET-BK	29.0	32.0	15 m	170-65089
HELAGaine TWIST-IN-FR 38-PET-BK	32.0	38.0	15 m	170-65090
HELAGaine TWIST-IN-FR 50-PET-BK	38.0	50.0	15 m	170-65091

All dimensions in mm. Subject to technical changes.

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Meta-aramid braided sleeving

Helagaine HEGMAN

Helagaine HEGMAN provides excellent mechanical protection for applications involving high temperatures and fire-protection, particularly in the aerospace, military, railway and ship-building industries.

Features and benefits

- Made of non-flammable meta-aramid
- Extremely flexible
- High expansion for easy installation over long lengths
- Optimal mechanical protection for harnesses
- Able to withstand the most severe environments
- Superior protection against abrasion, flames and high temperatures
- Highly resistant to radiation and fluids



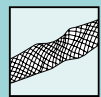
Helagaine HEGMAN braided sleeving.

MATERIAL	Polyaramid Polymetaphenylene Isophthalamide (PMPI)
Operating Temperature	-60 °C to +240 °C
Melting Point	Does not melt / Carbonisation above +370 °C

RoHS ✓

PART DESCRIPTION	Bundle Ø min.	Bundle Ø max.	Reel Length	Article-No.
HEGMAN-02-PMPI-GN	1.0	2.0	100 m	170-02100
HEGMAN-04-PMPI-GN	2.0	4.0	100 m	170-02101
HEGMAN-06-PMPI-GN	4.0	8.0	100 m	170-02102
HEGMAN-08-PMPI-GN	6.0	12.0	50 m	170-02103
HEGMAN-10-PMPI-GN	8.0	16.0	50 m	170-02104
HEGMAN-15-PMPI-GN	10.0	20.0	50 m	170-02105
HEGMAN-20-PMPI-GN	12.0	24.0	50 m	170-02106
HEGMAN-25-PMPI-GN	15.0	30.0	50 m	170-02107
HEGMAN-30-PMPI-GN	20.0	40.0	50 m	170-02108

All dimensions in mm. Subject to technical changes.



Water and oil repellent meta-aramid braided sleeving

Helagaine HEGMANWO

Helagaine HEGMANWO is especially resistant to water and oil and is designed for applications requiring mechanical protection at high temperatures, particularly in the aerospace, military, railway and ship-building industries.

Features and benefits

- Made of non-flammable meta-aramid
- Water and oil-repellent
- Extremely flexible
- High expansion for easy installation over long lengths
- Optimal mechanical protection for harnesses
- Able to withstand the most severe environments
- Superior protection against abrasion, flames and high temperatures
- Highly resistant to radiation, microorganisms and fluids
- Also very resistant to acids and alkali



Helagaine HEGMANWO braided sleeving.

MATERIAL	Polyaramid Polymetaphenylene Isophthalamide (PMPI)
Operating Temperature	-60 °C to +240 °C
Melting Point	Does not melt / Carbonisation above +370 °C

RoHS ✓

PART DESCRIPTION	Bundle Ø min.	Bundle Ø max.	Reel Length	Article-No.
HEGMANWO-02-PMPI-GN	1.0	2.0	100 m	170-02000
HEGMANWO-04-PMPI-GN	2.0	4.0	100 m	170-02001
HEGMANWO-06-PMPI-GN	4.0	8.0	100 m	170-02002
HEGMANWO-08-PMPI-GN	6.0	12.0	50 m	170-02003
HEGMANWO-10-PMPI-GN	8.0	16.0	50 m	170-02004
HEGMANWO-15-PMPI-GN	10.0	20.0	50 m	170-02005
HEGMANWO-20-PMPI-GN	12.0	24.0	50 m	170-02006
HEGMANWO-25-PMPI-GN	15.0	30.0	50 m	170-02007
HEGMANWO-30-PMPI-GN	20.0	40.0	50 m	170-02008

All dimensions in mm. Subject to technical changes.



Self-closing, EMI protective sleeving

Helagaine Twist-In-EMIZ

Helagaine Twist-In-EMIZ is used to bundle and protect cables against ElectroMagnetic Interferences (EMI). Designed specifically for the railway industry, Twist-In-EMIZ can also be used in many other sectors, such as the naval and automotive industries.

Features and benefits

- Self-closing sleeve made of tinned copper and polyester monofilament
- High-performance electromagnetic protection thanks to its patented System Z
- Its EMC shielding capabilities(> 60 dB) provide highly effective attenuation of electromagnetic interference, protecting people and systems
- Optimal fire protection
- Very good protection against abrasion, vibration, impact and salt spray
- Certified conformity with railway standard EN45545-2: R22 HL3, R23 HL3
- Lightweight, repositionable and very flexible
- Quick and easy installation
- Allows for inspection, maintenance and retro-fitting
- For effective EMI protection, we recommend grounding at both ends, ideally with 360° shielding, on metal connectors



Twist-In-EMIZ shielding cables from electromagnetic interference (EMI).

MATERIAL	Tin-plated copper (SNCU), Polyester (PET)
Operating Temperature	-65 °C to +150 °C
EMI requirements	Tested from 10 kHz to 100 MHz according to IEC 62153-4-3 (triaxial method) Results on request
EN 45545-2 Classification	R22 HL3, R23 HL3

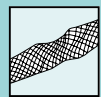


PART DESCRIPTION	Bundle Ø min.	Bundle Ø max.	Reel Length	Article-No.
Twist-In-EMIZ-05-SNCU/PET-ML	1.0	5.0	100 m	170-01250
Twist-In-EMIZ-08-SNCU/PET-ML	5.0	8.0	100 m	170-01251
Twist-In-EMIZ-13-SNCU/PET-ML	8.0	13.0	50 m	170-01252
Twist-In-EMIZ-19-SNCU/PET-ML	13.0	19.0	25 m	170-01253
Twist-In-EMIZ-25-SNCU/PET-ML	19.0	25.0	25 m	170-01254
Twist-In-EMIZ-32-SNCU/PET-ML	25.0	32.0	15 m	170-01255
Twist-In-EMIZ-38-SNCU/PET-ML	32.0	38.0	15 m	170-01256
Twist-In-EMIZ-50-SNCU/PET-ML	38.0	50.0	15 m	170-01257
Twist-In-EMIZ-80-SNCU/PET-ML	50.0	80.0	10 m	170-01258

All dimensions in mm. Subject to technical changes.

EN 45545-2

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



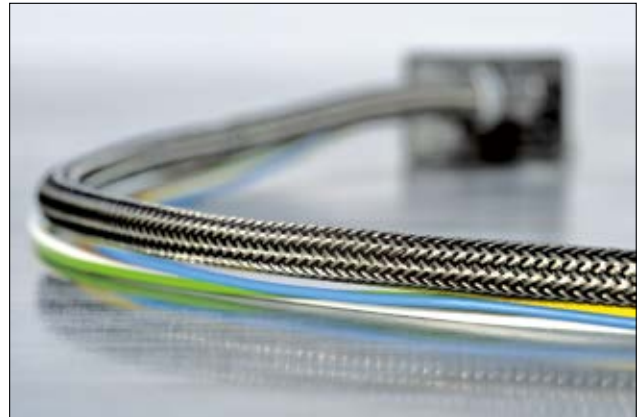
Braided sleeving for electromagnetic protection

Helagaine HEGEMIP

Helagaine HEGEMIP braided sleeving is used for highly sensitive electronics, such as in machines, military equipment and automobiles.

Features and benefits

- Excellent electromagnetic protection
- Extremely flexible, expandable and easy to apply
- No kinks or ruptures even when bent at sharp angles
- Superior abrasion protection
- Particularly suitable for applications with restricted space or requiring movement
- Inner disposable tube protects sleeve from deformation and allows for easy insertion of cables
- Fulfils the requirements of IEC CISPR25 for radio disturbances in vehicles, boats and engines



HEGEMIP braided sleeving: reliable protection from electromagnetic radiation.

MATERIAL	Polyester, halogen free (PET), Tin-plated copper (SNCU)
Operating Temperature	-40 °C to +150 °C
Melting Point	+329 °F (200 °C)
EMI requirements	10 kHz to 1 GHz according to CISPR25 (DIN VDE 0879-2)

HF ✓

RoHS ✓

PART DESCRIPTION	Ø (D)	Bundle Ø min.	Bundle Ø max.	Weight	Reel Length	Article-No.
HEGEMIP04-PET/SNCU-BK/ML	4.0	4.0	6.0	22 g/m	100 m	173-00400
HEGEMIP08-PET/SNCU-BK/ML	8.0	8.0	11.0	36 g/m	100 m	173-00800
HEGEMIP10-PET/SNCU-BK/ML	10.0	8.0	13.0	44 g/m	50 m	173-01000
HEGEMIP12-PET/SNCU-BK/ML	12.0	10.0	15.0	48 g/m	50 m	173-01200
HEGEMIP14-PET/SNCU-BK/ML	14.0	12.0	18.0	58 g/m	100 m	173-01400
HEGEMIP16-PET/SNCU-BK/ML	16.0	14.0	20.0	73 g/m	100 m	173-01600
HEGEMIP18-PET/SNCU-BK/ML	18.0	16.0	22.0	79 g/m	50 m	173-01800
HEGEMIP20-PET/SNCU-BK/ML	20.0	18.0	25.0	100 g/m	50 m	173-02000

All dimensions in mm. Subject to technical changes.



Electromagnetic protection braided sleeving for defence applications

Helagaine HEGEMIP-VG

Helagaine HEGEMIP-VG provides electromagnetic protection for the defence industry.

Features and benefits

- Excellent electromagnetic protection
- Very flexible, expandable and easy to apply
- Especially suitable for applications in tight areas or requiring movement
- Inner disposable tube protects sleeve from deformation and allows for easy insertion of cables
- Very good abrasion resistance
- Approved to military norm VG 96936-10 / Type A



HEGEMIP-VG braided sleeving with VG approval for defence applications.

MATERIAL	Tin-plated copper (SNCU)
Operating Temperature	-65 °C to +150 °C

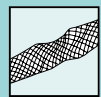
RoHS ✓

PART DESCRIPTION	Ø (D)	Bundle Ø min.	Bundle Ø max.	Weight	Reel Length	Article-No.
HEGEMIP-VG03-SNCU-ML	3.0	3.5	5.0	19 g/m	500 m	173-00200
HEGEMIP-VG04-SNCU-ML	4.0	4.5	7.0	30 g/m	500 m	173-00201
HEGEMIP-VG06-SNCU-ML	6.0	5.5	8.5	37 g/m	500 m	173-00202
HEGEMIP-VG07.5-SNCU-ML	7.5	7.5	13.5	71 g/m	500 m	173-00203
HEGEMIP-VG10-SNCU-ML	10.0	13.0	17.5	96 g/m	250 m	173-00204
HEGEMIP-VG12.5-SNCU-ML	12.5	15.0	19.5	100 g/m	200 m	173-00205
HEGEMIP-VG20-SNCU-ML	20.0	19.0	30.0	265 g/m	100 m	173-00206

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Electromagnetic protection braided sleeving for hybrid automobiles

Helagaine HEGEMIP-HY

Helagaine HEGEMIP-HY provides electromagnetic protection in hybrid automobiles.

Features and benefits

- Excellent electromagnetic protection
- Extremely flexible, expandable and easy to apply
- No kinks or ruptures even when bent at sharp angles
- Superior abrasion protection
- Special copper alloy for enhanced protection against salt spray
- Particularly suitable for applications with restricted space or requiring movement
- Fulfils the requirements of IEC CISPR25 for radio disturbances in vehicles, boats and engines



HEGEMIP-HY braided sleeving: EMI protection for hybrid automobiles.

MATERIAL	Polyester (PET), Tin-plated copper (SNCU)
Operating Temperature	-40 °C to +150 °C
EMI requirements	10 kHz to 1 GHz according to CISPR25 (DIN VDE 0879-2)

HF ✓

RoHS ✓

PART DESCRIPTION	Ø (D)	Bundle Ø min.	Bundle Ø max.	Weight	Reel Length	Article-No.
HEGEMIP-HY20-PET/SNCU-OG/SR	20.0	19.0	27.0	72 g/m	50 m	173-02001
HEGEMIP-HY30-PET/SNCU-OG/SR	30.0	25.0	35.0	101 g/m	50 m	173-03000
HEGEMIP-HY35-PET/SNCU-OG/SR	35.0	30.0	40.0	120 g/m	50 m	173-03501
HEGEMIP-HY40-PET/SNCU-OG/SR	40.0	30.0	50.0	180 g/m	50 m	173-04000
HEGEMIP-HY50-PET/SNCU-OG/SR	50.0	40.0	60.0	204 g/m	50 m	173-05000
HEGEMIP-HY60-PET/SNCU-OG/SR	60.0	50.0	70.0	299 g/m	25 m	173-06000

All dimensions in mm. Subject to technical changes.



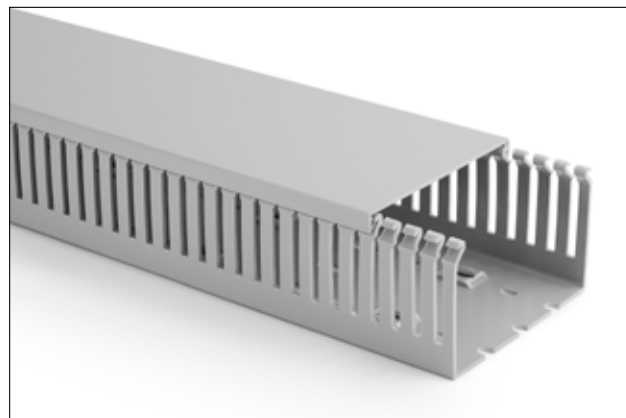
Rigid PVC wiring ducts

HelaDuct HTWD-PN for small-diameter wires (metric sizes)

HelaDuct HTWD-PN wiring ducts are used to route and protect wires in control panels and switching systems.

Features and benefits

- Narrow slots suitable for small-diameter wires
- Smooth, burr-free edges protect installers from injury and wires from damage
- Fingers can be removed with no sharp edges at pre-notched snap-off points
- Further pre-notched snap-off point at base of sidewall allow cutting out and removing sections of sidewall with no sharp edges
- Raised mounting points for easily and securely fastening wire retainers and other accessories prior to cabling
- Wire retainers and accessories leave no protruding parts below surface of duct
- Duct covers are easy to mount and remove, yet hold securely even in a vertical position and under vibration
- Cover is flush with side of duct, allowing for tight, contiguous placement of ducts
- Additional retainer nub on fingers on ducts height 80 and above to prevent cables from slipping
- Base perforation according to DIN EN 50085

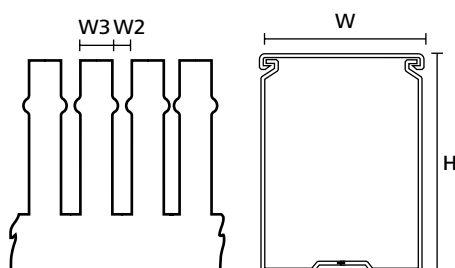
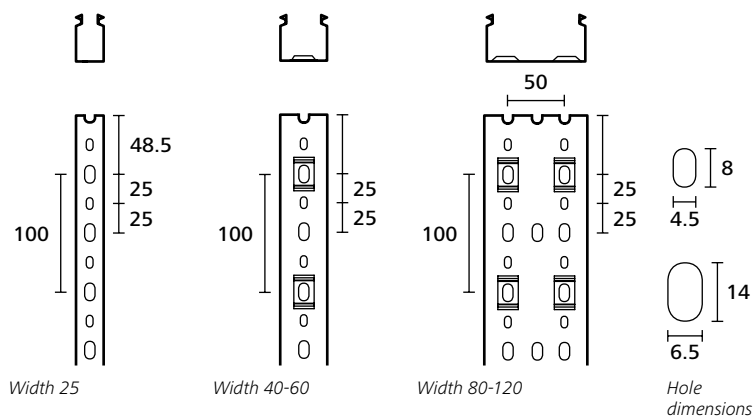


HelaDuct HTWD-PN - narrow finger wiring duct.

MATERIAL	Polyvinylchloride (PVC)
Length (L)	2 m
Operating Temperature	-5 °C to +65 °C
Flammability	UL 94 V0

RoHS ✓

Base perforation according to DIN EN50085, HelaDuct wiring ducts HTWD-PN / PW



Wiring duct HTWD-PN



Rigid PVC wiring ducts

HelaDuct HTWD-PN for small-diameter wires (metric sizes)

PART DESCRIPTION	Width (W)	Height (H)	Width (W2)	Width (W3)	Pack Cont.	Article-No.
HTWD-PN-25X40-PVC-GY	25.0	40.0	4.0	6.0	72 m	184-10068
HTWD-PN-25X60-PVC-GY	25.0	60.0	4.0	6.0	48 m	184-10138
HTWD-PN-25X80-PVC-GY	25.0	80.0	4.0	6.0	48 m	184-10198
HTWD-PN-40X40-PVC-GY	40.0	40.0	4.0	6.0	40 m	184-10078
HTWD-PN-40X60-PVC-GY	40.0	60.0	4.0	6.0	36 m	184-10148
HTWD-PN-40X80-PVC-GY	40.0	80.0	4.0	6.0	32 m	184-10208
HTWD-PN-40X100-PVC-GY	40.0	100.0	4.0	6.0	16 m	184-10258
HTWD-PN-60X40-PVC-GY	60.0	40.0	4.0	6.0	24 m	184-10088
HTWD-PN-60X60-PVC-GY	60.0	60.0	4.0	6.0	24 m	184-10158
HTWD-PN-60X80-PVC-GY	60.0	80.0	4.0	6.0	24 m	184-10218
HTWD-PN-60X100-PVC-GY	60.0	100.0	4.0	6.0	8 m	184-10268
HTWD-PN-80X40-PVC-GY	80.0	40.0	4.0	6.0	24 m	184-10098
HTWD-PN-80X60-PVC-GY	80.0	60.0	4.0	6.0	24 m	184-10168
HTWD-PN-80X80-PVC-GY	80.0	80.0	4.0	6.0	24 m	184-10228
HTWD-PN-80X100-PVC-GY	80.0	100.0	4.0	6.0	8 m	184-10329
HTWD-PN-100X40-PVC-GY	100.0	40.0	4.0	6.0	16 m	184-10108
HTWD-PN-100X60-PVC-GY	100.0	60.0	4.0	6.0	16 m	184-10178
HTWD-PN-100X80-PVC-GY	100.0	80.0	4.0	6.0	16 m	184-10238
HTWD-PN-100X100-PVC-GY	100.0	100.0	4.0	6.0	8 m	184-10278
HTWD-PN-120X60-PVC-GY	120.0	60.0	4.0	6.0	16 m	184-10188
HTWD-PN-120X80-PVC-GY	120.0	80.0	4.0	6.0	16 m	184-10248

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



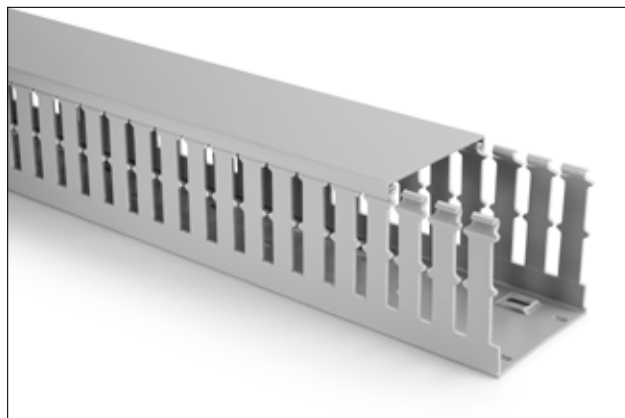
Rigid PVC wiring ducts

HelaDuct HTWD-PW for large-diameter wires (metric sizes)

HelaDuct HTWD-PW wiring ducts are used to route and protect wires in control panels and switching systems.

Features and benefits

- Wide slots suitable for large-diameter wires
- Wide fingers provide additional wire support
- Smooth, burr-free edges protect installers from injury and wires from damage
- Fingers can be removed with no sharp edges at pre-notched snap-off points
- Further pre-notched snap-off point at base of sidewall allow cutting out and removing sections of sidewall with no sharp edges
- Raised mounting points for easily, quickly and securely fastening wire retainers and other accessories prior to cabling
- Wire retainers and accessories leave no protruding parts below surface of duct
- Duct covers are easy to mount and remove, yet hold securely even in a vertical position and under vibration
- Cover is flush with side of duct, allowing for tight, contiguous placement of ducts
- Additional retainer nub on fingers on ducts height 80 and above to prevent cables from slipping
- Base perforation according to DIN EN 50085

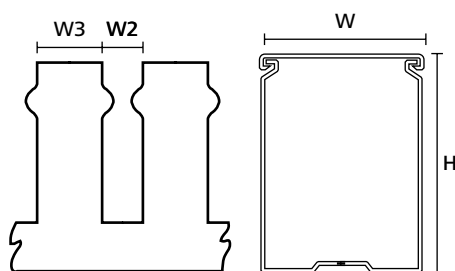
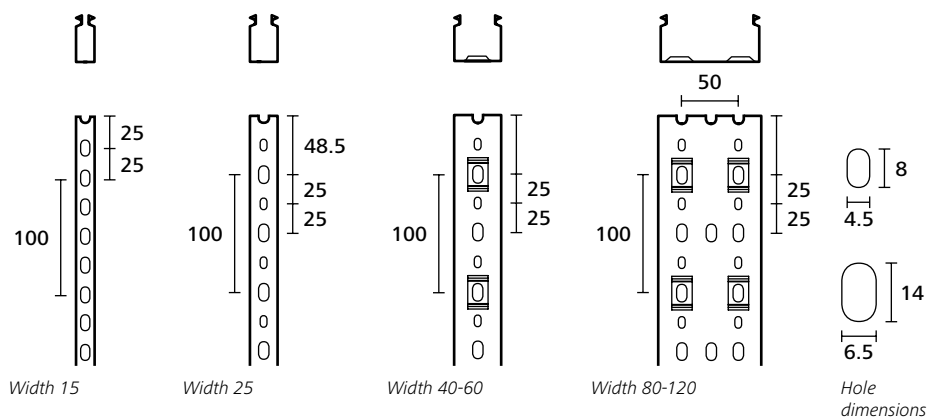


HelaDuct HTWD-PW - wide finger wiring duct.

MATERIAL	Polyvinylchloride (PVC)
Length (L)	2 m
Operating Temperature	-5 °C to +65 °C
Flammability	UL 94 V0

RoHS ✓

Base perforation according to DIN EN50085, HelaDuct wiring ducts HTWD-PN / PW



Wiring duct HTWD-PW/
HTWD-PWB



Rigid PVC wiring ducts

HelaDuct HTWD-PW for large-diameter wires (metric sizes)

PART DESCRIPTION	Width (W)	Height (H)	Width (W2)	Width (W3)	Pack Cont.	Article-No.
HTWD-PW-15X60-PVC-GY	15.0	60.0	5.0	7.5	32 m	181-10118
HTWD-PW-25X40-PVC-GY	25.0	40.0	8.0	12.0	72 m	181-10068
HTWD-PW-25X60-PVC-GY	25.0	60.0	8.0	12.0	48 m	181-10138
HTWD-PW-25X80-PVC-GY	25.0	80.0	8.0	12.0	48 m	181-10198
HTWD-PW-40X40-PVC-GY	40.0	40.0	8.0	12.0	40 m	181-10078
	40.0	40.0	8.0	12.0	40 m	181-10080
HTWD-PW-40X60-PVC-GY	40.0	60.0	8.0	12.0	36 m	181-10148
HTWD-PW-40X80-PVC-GY	40.0	80.0	8.0	12.0	32 m	181-10208
HTWD-PW-40X100-PVC-GY	40.0	100.0	8.0	12.0	16 m	181-10258
HTWD-PW-60X40-PVC-GY	60.0	40.0	8.0	12.0	24 m	181-10088
HTWD-PW-60X60-PVC-GY	60.0	60.0	8.0	12.0	24 m	181-10158
HTWD-PW-60X80-PVC-GY	60.0	80.0	8.0	12.0	24 m	181-10218
HTWD-PW-60X100-PVC-GY	60.0	100.0	8.0	12.0	8 m	181-10268
HTWD-PW-80X60-PVC-GY	80.0	60.0	8.0	12.0	24 m	181-10168
HTWD-PW-80X80-PVC-GY	80.0	80.0	8.0	12.0	24 m	181-10228
HTWD-PW-100X60-PVC-GY	100.0	60.0	8.0	12.0	16 m	181-10178
HTWD-PW-100X80-PVC-GY	100.0	80.0	8.0	12.0	16 m	181-10238
HTWD-PW-120X80-PVC-GY	120.0	80.0	8.0	12.0	16 m	181-10248

All dimensions in mm. Subject to technical changes.



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Rigid PVC wiring ducts

HelaDuct HTWD-PD (DIN-sizes)

HelaDuct HTWD-PD wiring ducts are used to route and protect wires in control panels and switching systems.

Features and benefits

- Narrow slots suitable for small-diameter wires
- Smooth, burr-free edges protect installers from injury and wires from damage
- Fingers can be removed with no sharp edges at pre-notched snap-off points
- Further pre-notched snap-off point at base of sidewall allow cutting out and removing sections of sidewall with no sharp edges
- Duct covers are easy to mount and remove, yet hold securely even in a vertical position and under vibration
- Cover is flush with side of duct, allowing for tight, contiguous placement of ducts
- Base perforation according to DIN EN 50085

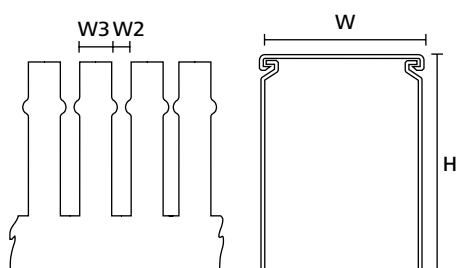
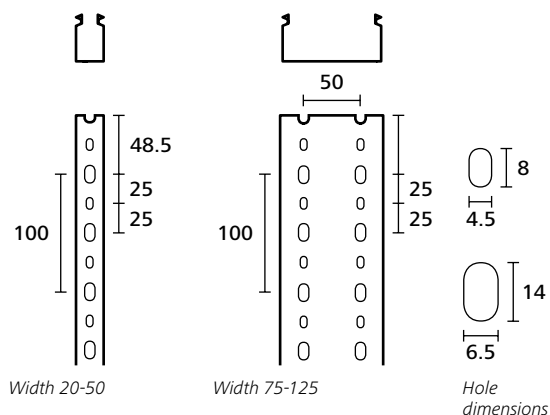


HelaDuct HTWD-PD - DIN sized wiring duct.

MATERIAL	Polyvinylchloride (PVC)
Length (L)	2 m
Operating Temperature	-5 °C to +60 °C
Flammability	UL 94 V0

RoHS

Base perforation according to DIN EN50085, HelaDuct wiring ducts HTWD-PD



Wiring duct HTWD-PD



Rigid PVC wiring ducts

HelaDuct HTWD-PD (DIN-sizes)

PART DESCRIPTION	Width (W)	Height (H)	Width (W2)	Width (W3)	Pack Cont.	Article-No.
HTWD-PD-20X20-PVC-GY	20.0	20.0	4.0	6.0	64 m	185-42020
HTWD-PD-20X37.5-PVC-GY	20.0	37.5	4.0	6.0	32 m	185-42037
HTWD-PD-20X50-PVC-GY	20.0	50.0	4.0	6.0	20 m	185-42050
HTWD-PD-25X25-PVC-GY	25.0	25.0	5.0	7.5	48 m	185-42525
HTWD-PD-25X50-PVC-GY	25.0	50.0	5.0	7.5	18 m	185-42550
HTWD-PD-25X75-PVC-GY	25.0	75.0	5.0	7.5	32 m	185-42575
HTWD-PD-37.5X25-PVC-GY	37.5	25.0	5.0	7.5	64 m	185-43725
HTWD-PD-37.5X37.5-PVC-GY	37.5	37.5	5.0	7.5	32 m	185-43737
HTWD-PD-37.5X50-PVC-GY	37.5	50.0	5.0	7.5	40 m	185-43750
HTWD-PD-37.5X75-PVC-GY	37.5	75.0	5.0	7.5	40 m	185-43775
HTWD-PD-50X50-PVC-GY	50.0	50.0	5.0	7.5	48 m	185-45050
HTWD-PD-50X75-PVC-GY	50.0	75.0	5.0	7.5	20 m	185-45075
HTWD-PD-50X100-PVC-GY	50.0	100.0	5.0	7.5	24 m	185-45010
HTWD-PD-75X50-PVC-GY	75.0	50.0	5.0	7.5	20 m	185-47550
HTWD-PD-75X75-PVC-GY	75.0	75.0	5.0	7.5	16 m	185-47575
HTWD-PD-75X100-PVC-GY	75.0	100.0	5.0	7.5	16 m	185-47510
HTWD-PD-100X50-PVC-GY	100.0	50.0	5.0	7.5	24 m	185-41050
HTWD-PD-100X75-PVC-GY	100.0	75.0	5.0	7.5	16 m	185-41075
HTWD-PD-100X100-PVC-GY	100.0	100.0	5.0	7.5	8 m	185-41010
HTWD-PD-125X50-PVC-GY	125.0	50.0	5.0	7.5	18 m	185-41250
HTWD-PD-125X75-PVC-GY	125.0	75.0	5.0	7.5	12 m	185-41275

All dimensions in mm. Subject to technical changes.



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Halogen-free wiring ducts

HelaDuct HTWD-HF (metric sizes)

HelaDuct HTWD-HF wiring ducts are used to route and protect wires in control panels and switching systems where there are high demands on personal or material safety in case of fire, such as in public transport, tunnels, data-processing centers or public buildings.

Features and benefits

- Excellent fire-safety characteristics according to UL94 und EN 45545-2
- Narrow slots suitable for small-diameter wires
- Smooth, burr-free edges protect installers from injury and wires from damage
- Fingers can be removed with no sharp edges at pre-notched snap-off points
- Further pre-notched snap-off point at base of sidewall allow cutting out and removing sections of sidewall with no sharp edges
- Duct covers hold securely even in a vertical position and under vibration
- Cover is flush with side of duct, allowing for tight, contiguous placement of duct
- Base perforation according to DIN EN 50085



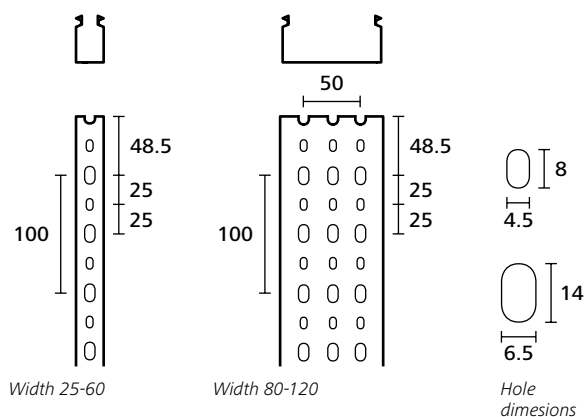
HelaDuct HTWD-HF (metric), halogenfree wiring duct.

MATERIAL	Acrylonitrile Butadiene Styrene alloyed with Polycarbonate (PC/ABS)
Length (L)	2.0 m
Operating Temperature	-25 °C to +90 °C
Flammability	UL 94 V0
EN 45545-2 Classification	R22 HL2, R23 HL2

HF ✓

RoHS ✓

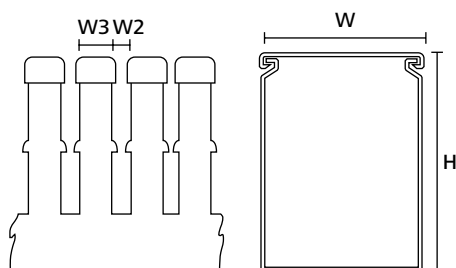
Base perforation according to DIN EN50085, HelaDuct wiring ducts HTWD-HF





Halogen-free wiring ducts

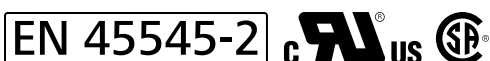
HelaDuct HTWD-HF (metric sizes)



HelaDuct Wiring ducts
HTWD-HF

PART DESCRIPTION	Width (W)	Height (H)	Width (W2)	Width (W3)	Pack Cont.	Article-No.
HTWD-HF-25X25-PC/ABS-GY	25.0	25.0	6.0	6.5	50.0 m	183-22525
HTWD-HF-25X40-PC/ABS-GY	25.0	40.0	6.0	6.5	48.0 m	183-22540
HTWD-HF-25X60-PC/ABS-GY	25.0	60.0	6.0	6.5	60.0 m	183-25060
HTWD-HF-25X80-PC/ABS-GY	25.0	80.0	6.0	6.5	20.0 m	183-22580
HTWD-HF-40X25-PC/ABS-GY	40.0	25.0	6.0	6.5	48.0 m	183-24025
HTWD-HF-40X40-PC/ABS-GY	40.0	40.0	6.0	6.5	50.0 m	183-24040
HTWD-HF-40X60-PC/ABS-GY	40.0	60.0	6.0	6.5	40 m	183-24060
HTWD-HF-40X80-PC/ABS-GY	40.0	80.0	6.0	6.5	20.0 m	183-24080
HTWD-HF-60X40-PC/ABS-GY	60.0	40.0	6.0	6.5	40 m	183-26040
HTWD-HF-60X60-PC/ABS-GY	60.0	60.0	6.0	6.5	24.0 m	183-26060
HTWD-HF-60X80-PC/ABS-GY	60.0	80.0	6.0	6.5	20.0 m	183-26080
HTWD-HF-60X100-PC/ABS-GY	60.0	100.0	6.0	6.5	12.0 m	183-26010
HTWD-HF-80X40-PC/ABS-GY	80.0	40.0	6.0	6.5	20.0 m	183-28040
HTWD-HF-80X60-PC/ABS-GY	80.0	60.0	6.0	6.5	20.0 m	183-28060
HTWD-HF-80X80-PC/ABS-GY	80.0	80.0	6.0	6.5	12.0 m	183-28080
HTWD-HF-80X100-PC/ABS-GY	80.0	100.0	6.0	6.5	10.0 m	183-28010
HTWD-HF-100X40-PC/ABS-GY	100.0	40.0	6.0	6.5	20.0 m	183-22040
HTWD-HF-100X60-PC/ABS-GY	100.0	60.0	6.0	6.5	16.0 m	183-21060
HTWD-HF-100X80-PC/ABS-GY	100.0	80.0	6.0	6.5	12.0 m	183-21080
HTWD-HF-100X100-PC/ABS-GY	100.0	100.0	6.0	6.5	8.0 m	183-21010
HTWD-HF-120X60-PC/ABS-GY	120.0	60.0	6.0	6.5	12.0 m	183-21260
HTWD-HF-120X80-PC/ABS-GY	120.0	80.0	6.0	6.5	16.0 m	183-21280

All dimensions in mm. Subject to technical changes.



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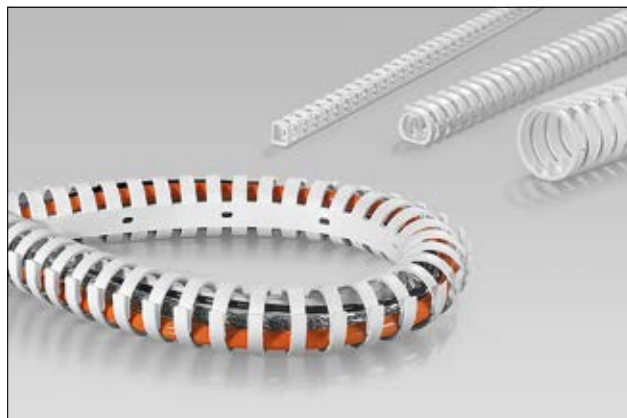
Flexible cable support

HelaDuct Flex

HelaDuct flexible cable supports are commonly used in switching cabinets. They are also used in the furniture industry, where cables need to be routed rapidly and attractively.

Features and benefits

- Space-saving wiring system
- Highly flexible, can be installed at angles of 90° and higher
- Cable clearly open to view
- Rapid mounting with screws or adhesive strip with high-quality foam bonding layer



HelaDuct Flex can be installed at angles above 90°.

MATERIAL	Polypropylene (PP)	
Operating Temperature	-20 °C to +70 °C	
Fixation Method	Screw Mounting	Screw Mounting and Adhesive
Adhesive		Synthetic rubber with base of polyethylene foam
Flammability	UL 94 V0 (excluding adhesive)	

HF ✓

RoHS ✓

PART DESCRIPTION	Nominal Ø	Fixation Method	No. of Wires	No. of Wires	Length (L)	Pack Cont.	Article-No.
HelaDuct Flex20-PP-WH	20	Screw Mounting	22 x 1.50 ² mm ²	14 x 2.50 ² mm ²	500.0	70 pcs.	164-21008
HelaDuct Flex20SK-PP-WH	20	Screw Mounting and Adhesive	22 x 1.50 ² mm ²	14 x 2.50 ² mm ²	500.0	70 pcs.	164-21108
HelaDuct Flex30-PP-WH	30	Screw Mounting	50 x 1.50 ² mm ²	34 x 2.50 ² mm ²	500.0	40 pcs.	164-31008
HelaDuct Flex30SK-PP-WH	30	Screw Mounting and Adhesive	50 x 1.50 ² mm ²	34 x 2.50 ² mm ²	500.0	40 pcs.	164-31108
HelaDuct Flex40-PP-WH	40	Screw Mounting	81 x 2.50 ² mm ²	60 x 2.50 ² mm ²	500.0	24 pcs.	164-41008
HelaDuct Flex40SK-PP-WH	40	Screw Mounting and Adhesive	81 x 2.50 ² mm ²	60 x 2.50 ² mm ²	500.0	24 pcs.	164-41108

All dimensions in mm. Subject to technical changes.



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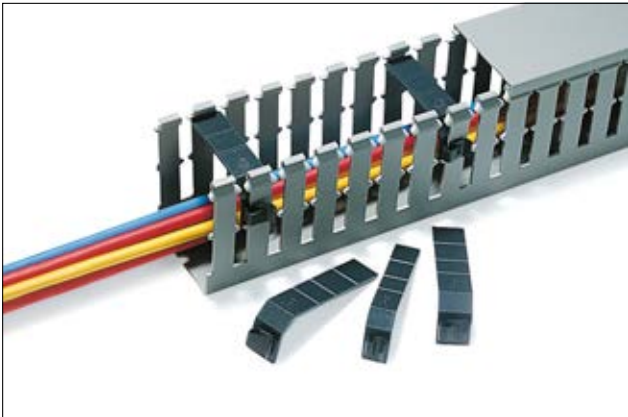
For mounting to duct fingers

HelaDuct HTWD-NFWR and HTWD-WFWR Wire Retainers

The Narrow Finger and Wide Finger Wire Retainers HTWD-NFWR and HTWD-WFWR are easily attached to HelaDuct wiring duct fingers to hold wires securely in place during installation and when the cover is removed.

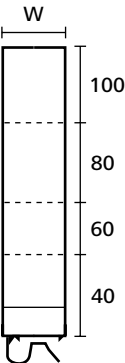
Features and benefits

- Prevents wires from falling out even when vertical routed
- Easily inserted onto single fingers of duct
- Height can be freely adjusted
- Does not block insertion of wirings into slots
- One retainer for all duct widths: length of retainer can be shortened at break-off points to duct width
- HTWD-NFWR is compatible with HelaDuct HTWD-PN and HTWD-HF (metric sizes)
- HTWD-WFWR is compatible with HelaDuct HTWD-PW ducts



HTWD-NFWR and HTWD-WFWR hold wires in place even when cover is removed.

MATERIAL	Acrylonitrile Butadiene Styrene (ABS)
Operating Temperature	-40 °C to +80 °C
Flammability	UL 94 HB



HTWD-NFWR, -WFWR

PART DESCRIPTION	For Wiring Ducts	Width (W)	Pack Cont.	Article-No.
HTWD-NFWR-ABS-BK	HTWD-PN, HTWD-HF	14.0	100 pcs.	181-10020
HTWD-WFWR-ABS-BK	HTWD-PW	18.0	100 pcs.	181-10010

All dimensions in mm. Subject to technical changes.



Edge protection

EdgeGuard

EdgeGuard is used to cover panel edging to prevent chafing and provide an attractive finish.

Features and benefits

- Very flexible
- Easy to apply
- Protects cables from chafing on bulkheads



EdgeGuard protection against sharp panel edges.

MATERIAL	Polyvinylchloride (PVC)
Operating Temperature	-65 °C to +105 °C, intermittent +135 °C
Flammability	UL 94 HB



PART DESCRIPTION	Width (W)	Width (W2)	Width (W3)	Width (W4)	Height (H)	Height (H2)	Pack Cont.	Article-No.
PS1-PVC-BK	1.2	0.6	-	-	5.0	3.2	75 m	800-00200
SM1-PVC-BK	5.0	1.0	1.8	4.2	6.3	4.9	75 m	800-00004
RA1-PVC-BK	6.4	2.4	-	-	7.1	5.6	75 m	800-00001

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



Edge protection for cut-out sections

Flexiform G51N PA6 grommet strip

Flexiform grommet strips are used to protect cables and wires routed through sharp-edged cutout sections.

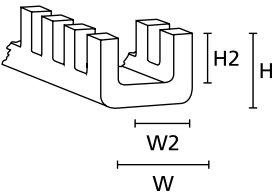
Features and benefits

- Very flexible
- Easily and securely applied without adhesives
- Very high abrasion resistance
- Close-fitting rail for effective, orderly-looking protection
- Flexiform G51N made of PA6 offers very good abrasion resistance



Optimal protection of cables and wires at panel edges.

MATERIAL	Polyamide 6 (PA6)
Operating Temperature	-60 °C to +95 °C
Flammability	UL 94 HB



Flexiform edge protection

PART DESCRIPTION	Panel Thickness	Width (W)	Width (W2)	Height (H)	Height (H2)	Pack Cont.	Article-No.
G51NB-PA6-NA	1.3 - 2.1	4.6	2.4	4.3	2.7	25 m	251-21209

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



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



For punched or drilled metal sheets

Edge protection grommets

Edge protection grommets are used wherever cable and wires are routed through apertures. HellermannTyton grommets offer excellent mechanical protection.

Features and benefits

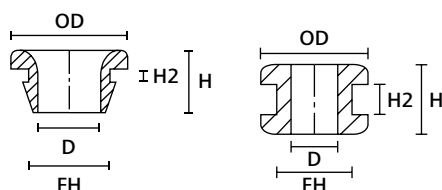
- Protects cables from sharp edges
- Provides additional strain relief
- Flexible and easy to apply
- High resistance to chemicals and environmental influences



Edge protection grommets.

MATERIAL	Polyvinylchloride (PVC)	Polyvinylchloride, flame retardant (PVC-FR)
Operating Temperature	-30 °C to +60 °C	
Shore Hardness A	70±5	55±5
Flammability	UL 94 HB	UL 94 V0

RoHS ✓

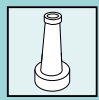


HV1502

HV1201 - HV1218

PART DESCRIPTION	Drawing	Bundle Ø max.	Outside Ø (OD)	Hole Ø (FH)	Ø (D)	Height (H)	Height (H2)	Variant	Pack Cont.	Article-No.
HV1101-PVC-FR-BK		25.5	25.5	19.0	12.0	10.0	1.6	Round	500 pcs.	633-01010
HV1212-PVC-FR-BK		9.0	9.0	6.0	4.0	7.0	1.0	Round	2000 pcs.	633-02120
HV1201-PVC-FR-BK		9.5	9.5	6.4	4.0	5.6	1.6	Round	2000 pcs.	633-02010
HV1215-PVC-FR-BK		10.0	10.0	8.0	6.0	5.0	1.0	Round	2000 pcs.	633-02150
HV1209-PVC-FR-BK		11.0	11.0	9.0	4.0	5.5	1.5	Round	1000 pcs.	633-02090
HV1208-PVC-FR-BK		14.0	14.0	9.5	8.0	8.0	1.5	Round	1000 pcs.	633-02080
HV1207-PVC-FR-BK		14.0	14.0	10.0	6.0	6.4	1.5	Round	1000 pcs.	633-02070
HV1204-PVC-FR-BK		17.5	17.5	12.0	10.0	8.8	4.0	Round	1000 pcs.	633-02040
HV1205-PVC-FR-BK		17.5	17.5	13.5	10.0	8.7	4.0	Round	1000 pcs.	633-02050
HV1201B-PVC-FR-BK		-	9.5	6.4	4.0	6.5	2.5	Round	2000 pcs.	633-02020
HV1218-PVC-FR-BK		-	14.0	10.0	6.0	9.0	4.0	Round	1000 pcs.	633-02180
HV1216-PVC-FR-BK		-	14.5	8.0	5.0	6.5	1.5	Round	2000 pcs.	633-02160
HV1210-PVC-FR-BK		-	15.0	9.0	6.0	10.5	2.0	Round	1000 pcs.	633-02100
HV1203-PVC-FR-BK		-	17.5	12.0	10.0	6.8	2.0	Round	1000 pcs.	633-02030
HV1206-PVC-FR-BK		-	17.5	12.0	10.0	10.8	6.0	Round	1000 pcs.	633-02060

All dimensions in mm. Subject to technical changes.



For punched or drilled metal sheets

Edge protection grommets

PART DESCRIPTION	Drawing	Bundle Ø max.	Outside Ø (OD)	Hole Ø (FH)	Ø (D)	Height (H)	Height (H2)	Variant	Pack Cont.	Article-No.
HV1301-PVC-FR-BK		15.9	15.9	11.0	8.0	7.0	1.0	Round	1000 pcs.	633-03010
HV1303-PVC-FR-BK		15.9	15.9	11.0	8.0	6.4	1.6	Round	1000 pcs.	633-03030
HV1302-PVC-FR-BK		-	15.9	11.0	8.0	9.0	3.0	Round	1000 pcs.	633-03020
HV1304-PVC-FR-BK		-	15.9	11.0	8.0	10.8	6.0	Round	1000 pcs.	633-03040
HV1305-PVC-FR-BK		-	24.0	18.0	14.0	7.0	3.0	Round	500 pcs.	633-03050
HV1305-PVC-FR-WH		-	24.0	18.0	14.0	7.0	3.0	Round	500 pcs.	633-03059
HV1401-PVC-FR-BK		-	15.9	9.5	5.0	4.8	0.8	Round	1000 pcs.	633-04010
HV1402-PVC-FR-BK		-	23.0	18.5	6.0	7.0	2.0	Round	1000 pcs.	633-04020
HV1502-PVC-BK		-	11.5	8.0	6.5	8.0	1.5	Round	2000 pcs.	633-05020
HV1606-PVC-FR-GY		-	31.0	25.0	17.0	11.0	3.0	Oval	500 pcs.	633-06068
HV1607-PVC-FR-GY		-	43.0	37.0	29.0	11.0	3.0	Oval	250 pcs.	633-06078
HV1608-PVC-FR-GY		-	58.0	52.0	44.0	11.0	3.0	Oval	250 pcs.	633-06088

All dimensions in mm. Subject to technical changes.





4.1 Electrical and Technical Tapes

Vinyl Electrical Tapes		
All Purpose Electrical Tape	HelaTape Flex 15	274
Conductive Tapes		
Electrical Semi-Conducting Tape	HelaTape Shield 310	275
Self-amalgamating Tapes		
Low Voltage Rubber Tape	HelaTape Power 600	276
Electrical Insulation Mastic	HelaTape Power 650	277
Rubber Mastic Tape	HelaTape Power 660 RM	278
Vinyl Mastic Tape	HelaTape Power 670 VM	279
Silicone Rubber Tape	HelaTape Power 800	280
	HelaTape Power 810	281
High Voltage Rubber Tape	HelaTape Power 820 (Linerless)	282
Wire Harness Tapes		
Hand-tearable Cloth Tape	Protect 180	283
Soft and Flexible Fleece Tape	Protect 300	284
Strong, High Temperature Cloth Tape	Protect 250	285



4.2 Connection Products

Solar panel connector	
MC4 compatible	286
Nylon Cable Glands	
NGM Glands	287



Vinyl Electrical Tapes – Commercial Grade Vinyl Electrical Tape

HelaTape Flex 15

Primary electrical insulation for all wire and cable splices up to 1 kV.
Protective jacketing for low, medium and high voltage splices.
Wrapping of wire harnesses and cables.
Used for indoor and outdoor applications.

Features and benefits

- Vinyl electrical tape in many different colours
- Used for insulation, protection, fixing, maintenance, colour coding and more
- Good resistance to abrasion, sunlight, moisture, chemicals and varying weather conditions
- Highly flexible with outstanding adhesion performance
- Harnessing of wires and cables
- Suitable for mechanical and electrical applications up to 1 kV
- VDE approved according to IEC 60454-3-1-6/F-PVCP/90
- Flame retardant according to IEC 60454-2



HelaTape Flex 15 – Vinyl Electrical Tapes.

MATERIAL	Polyvinylchloride (PVC)
Dielectric Strength	45 kV/mm
Adhesion to Steel	2.2 N/10 mm
Adhesion to Backing	2.0 N/10 mm
Elongation at break (min.)	200 %
Breaking Strength	28 N/10 mm
Operating Temperature	-10 °C to +90 °C

RoHS

PART DESCRIPTION	Thickness (T)	Width (W)	Length (L)	Article-No.
HTAPE-FLEX15-15x10-PVC-CL	0.15	15.0	10.0 m	710-00147
HTAPE-FLEX15-15x10-PVC-OG	0.15	15.0	10.0 m	710-00110
HTAPE-FLEX15-15x10-PVC-VT	0.15	15.0	10.0 m	710-00109
HTAPE-FLEX15-15x10-PVC-GY	0.15	15.0	10.0 m	710-00108
HTAPE-FLEX15-15x10-PVC-BN	0.15	15.0	10.0 m	710-00107
HTAPE-FLEX15-15x10-PVC-GNYE	0.15	15.0	10.0 m	710-00106
HTAPE-FLEX15-15x10-PVC-WH	0.15	15.0	10.0 m	710-00105
HTAPE-FLEX15-15x10-PVC-BK	0.15	15.0	10.0 m	710-00104
HTAPE-FLEX15-15x10-PVC-GN	0.15	15.0	10.0 m	710-00103
HTAPE-FLEX15-15x10-PVC-YE	0.15	15.0	10.0 m	710-00102
HTAPE-FLEX15-15x10-PVC-RD	0.15	15.0	10.0 m	710-00101
HTAPE-FLEX15-15x10-PVC-BU	0.15	15.0	10.0 m	710-00100

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Conductive Tapes – Electrical Semi-Conducting Tape

HelaTape Shield 310

Features and benefits

- Self-amalgamating conducting tape made from ethylene propylene rubber
- Provides good conducting properties
- Prevents partial discharges
- Moisture and UV-resistant and easy to apply
- Guidance and/or finishing of the semiconductive layer in case of repairs and connections of medium to high voltage cables.



HelaTape Shield 310 self-amalgamating conducting tape for shielding high voltage splices and terminations.

MATERIAL	Ethylene Propylene Rubber (EPR)
Operating Temperature	-40 °C to +90 °C
Intermittent Operating Temperature	+130 °C
Water Absorption	0.02 %
Adhesion to Steel	2.2 N/10 mm
Elongation at break (min.)	600 %
Volume Resistance	870 Ω cm
Adhesion to Backing	2 N/10 mm
Breaking Strength	2 N/10 mm



PART DESCRIPTION	Thickness (T)	Width (W)	Length (L)	Article-No.
HTAPE-SHIELD310-EPR-BK	0.76	19.0	4.6 m	711-10000
	0.76	38.0	9.1 m	711-10001

All dimensions in mm. Subject to technical changes.



Self-amalgamating Tapes – Low Voltage Rubber Tape

HelaTape Power 600

HellermannTyton offers a wide range of products for bundling, insulating, sealing and labeling cables and wires. PVC insulation tapes for low-voltage applications are available in various colors and dimensions. Self-welding, rubber-based tapes are ideal for insulating and sealing cables and connections from low to high and extra-high voltage ranges. HelaTape Tex fabric tapes are versatile and easy to write on.

Features and benefits

- Self-amalgamating low voltage rubber tape
- Primary insulation at not more than 1 kV
- Easily suitable to irregular shapes and surfaces
- Compatible with all extruded dielectric cable insulations
- Weather resistant and flame retardant according to UL 510
- Excellent for repairing e.g. damaged cable sheaths against moisture ingress, where finishing with some layers of HelaTape Flex will do the mechanical protection.



HelaTape Power 600 is a self-amalgamating low voltage rubber tape.

MATERIAL	Isobutene-Isoprene-Rubber (butyl rubber) (IIR)
Operating Temperature	-40 °C to +80 °C
Intermittent Operating Temperature	+95 °C
Tensile Strength	2 N/mm ²
Elongation at break (min.)	300 %
Dielectric Strength	14 kV/mm

HF ✓

RoHS ✓

PART DESCRIPTION	Thickness (T)	Width (W)	Length (L)	Article-No.
HTAPE-POWER600-19x6.7-IIR-BK	0.76	19.0	6.7 m	711-10200
HTAPE-POWER600-38x6.7-IIR-BK	0.76	38.0	6.7 m	711-10201

All dimensions in mm. Subject to technical changes.



Self-amalgamating Tapes – Electrical Insulation Mastic

HelaTape Power 650

HellermannTyton offers a wide range of products for bundling, insulating, sealing and labeling cables and wires. PVC insulation tapes for low-voltage applications are available in various colors and dimensions. Self-welding, rubber-based tapes are ideal for insulating and sealing cables and connections from low to high and extra-high voltage ranges. HelaTape Tex fabric tapes are versatile and easy to write on.

Features and benefits

- Self-amalgamating insulation compound for sealing and padding cable jackets up to 1 kV
- Easily moulded by hand to conform to irregular shapes even during low temperatures
- Permanently elastic and resistant to ageing
- Perfect adhesion to metal and all types of cable insulations and jackets
- Provides excellent moisture sealing
- Resistant to salt water, ozone, oil and corrosive chemicals
- Excellent for repairing e.g. damaged cable sheaths against moisture ingress, where finishing with some layers of HelaTape Flex will do the mechanical protection



HelaTape Power self-amalgamating mastic is highly flexible.

MATERIAL	Isobutene-Isoprene-Rubber (butyl rubber) (IIR)
Operating Temperature	-10 °C to +105 °C
Intermittent Operating Temperature	+130 °C
Water Absorption	0.1 %
Volume Resistance	$10^{15} \Omega \text{ cm}$
Dielectric Strength	19.7 kV/mm



PART DESCRIPTION	Thickness (T)	Width (W)	Length (L)	Article-No.
HTAPE-POWER650-IIR-BK	3.20	38.0	1.5 m	711-10300

All dimensions in mm. Subject to technical changes.



Self-amalgamating Tapes – Rubber Mastic Tape

HelaTape Power 660 RM

HellermannTyton offers a wide range of products for bundling, insulating, sealing and labeling cables and wires. PVC insulation tapes for low-voltage applications are available in various colors and dimensions. Self-welding, rubber-based tapes are ideal for insulating and sealing cables and connections from low to high and extra-high voltage ranges. HelaTape Tex fabric tapes are versatile and easy to write on.

Features and benefits

- Self-amalgamating rubber mastic tape
- EPR backing coated with a tacky, temperature-stable mastic adhesive
- Designed for electrical insulating and moisture sealing applications
- Can be used as cable jacket replacement
- Perfect adhesion and sealing for copper and aluminium wires
- Easily suitable to irregular shapes and surfaces
- Compatible with all extruded cable insulations
- UV, moisture, corrosion and chemical resistant
- Primary electrical insulation for bus bar connections rated up to 35 kV
- Excellent for repairing e.g. damaged cable sheaths against moisture ingress, where finishing with some layers of Helatape Flex will do the mechanical protection



HelaTape Power 660 is a very flexible rubber mastic sealing and padding tape.

MATERIAL	Ethylene Propylene Rubber (EPR), Isobutene-Isoprene-Rubber (butyl rubber) (IIR)
Operating Temperature	-30 °C to +90 °C
Intermittent Operating Temperature	+130 °C
Water Absorption	0.1 %
Tensile Strength	1.5 N/mm ²
Dielectric Strength	19.7 kV/mm

HF ✓

RoHS ✓

PART DESCRIPTION	Thickness (T)	Width (W)	Length (L)	Article-No.
HTAPE-POWER 660-RM-EPR/IIR-BK	1.65	50.8	3.0 m	711-00307

All dimensions in mm. Subject to technical changes.



Self-amalgamating Tapes – Vinyl Mastic Tape

HelaTape Power 670 VM

HellermannTyton offers a wide range of products for bundling, insulating, sealing and labeling cables and wires. PVC insulation tapes for low-voltage applications are available in various colors and dimensions. Self-welding, rubber-based tapes are ideal for insulating and sealing cables and connections from low to high and extra-high voltage ranges. HelaTape Tex fabric tapes are versatile and easy to write on.

Features and benefits

- Easy to apply vinyl mastic tape
- Self-adhesive application - without stretching
- Mastic layer is very sticky and provides excellent moisture sealing
- Vinyl top layer provides additional protection
- Performs continuously. Even at low temperatures
- Primary insulation up to 1 kV
- Applicable to all extruded cable insulations
- UV and weather resistant



HelaTape Power 670 provides additional vinyl film protection to the mastic compound.

MATERIAL	Polyvinylchloride (PVC), Isobutene-Isoprene-Rubber (butyl rubber) (IIR)
Operating Temperature	-30 °C to +80 °C
Intermittent Operating Temperature	+95 °C
Water Absorption	0.9 %
Tensile Strength	16 N/mm ²
Elongation at break (min.)	200 %
Volume Resistance	10 ¹² Ω cm
Dielectric Strength	19.7 kV/mm

HF ✓

RoHS ✓

PART DESCRIPTION	Thickness (T)	Width (W)	Length (L)	Article-No.
HTAPE-POWER 670-VM-PVC/IIR-BK	1.20	100.0	3.0 m	711-00304

All dimensions in mm. Subject to technical changes.



Self-amalgamating Tapes – Silicone Rubber Tape

HelaTape Power 800

HelaTape Power 800 is made from a special silicone and is Self-amalgamating Tapes. It is very suitable for sealing (waterproof and airtight), insulating and repairing. HelaTape Power 800 is not a conventional adhesive tape. It does not stick to other surfaces, but welds itself by wrapping it multiple times in an overlapping manner.

Features and benefits

- Self-amalgamating and self-cleaning, chemically cross-linked silicone rubber tape
- Triangular cross-section with centre line for precise half-overlapping
- Resistant to creepage and surface erosion
- Fuses into solid mass after application
- Weather, UV and oil resistant
- Recommended use for high temperature silicone insulated cables and outdoor machinery and transformers



HelaTape Power 800 is a silicone rubber tape with triangular cross-section.

MATERIAL	Silicone (SI)
Operating Temperature	-54 °C to +180 °C
Intermittent Operating Temperature	+260 °C
Tensile Strength	7.0 N/mm ²
Elongation at break (min.)	400 %
Volume Resistance	10 ¹⁴ Ω cm
Dielectric Strength	23.5 kV/mm



PART DESCRIPTION	Thickness (T)	Width (W)	Length (L)	Article-No.
HTAPE-POWER800-SI-GY	0.51	25.0	9.1 m	711-10400

All dimensions in mm. Subject to technical changes.



Self-amalgamating Tapes – High Voltage Rubber Tape

HelaTape Power 810

HellermannTyton offers a wide range of products for bundling, insulating, sealing and labeling cables and wires. PVC insulation tapes for low-voltage applications are available in various colors and dimensions. Self-welding, rubber-based tapes are ideal for insulating and sealing cables and connections from low to high and extra-high voltage ranges. HelaTape Tex fabric tapes are versatile and easy to write on.

Features and benefits

- Self-amalgamating tape for insulating and jacketing splices up to 69 kV
- Halogen-free with outstanding corona, ozone and UV-resistance
- Ideal for sealing of terminations, electrical connections and cable jacket repair
- Void-free, electrically stable layering
- Protects e.g. bus bars against corrosion and contact
- Excellent moisture, corrosion and chemical resistance
- Compatible with all extruded cable insulations



HelaTape Power 810 for primary insulation up to 69 kV.

MATERIAL	Ethylene Propylene Rubber (EPR)
Operating Temperature	+90 °C
Intermittent Operating Temperature	+130 °C
Water Absorption	0.06 %
Tensile Strength	2.4 N/mm ²
Elongation at break (min.)	750 %
Volume Resistance	10 ¹⁶ Ω cm
Dielectric Strength	30 kV/mm

HF ✓

RoHS ✓

PART DESCRIPTION	Thickness (T)	Width (W)	Length (L)	Article-No.
HTAPE-POWER810-EPR-BK	0.76	19.0	9.1 m	711-10401

All dimensions in mm. Subject to technical changes.



Self-amalgamating Tapes – High Voltage Rubber Tape (Linerless)

HelaTape Power 820

HellermannTyton offers a wide range of products for bundling, insulating, sealing and labeling cables and wires. PVC insulation tapes for low-voltage applications are available in various colors and dimensions. Self-welding, rubber-based tapes are ideal for insulating and sealing cables and connections from low to high and extra-high voltage ranges. HelaTape Tex fabric tapes are versatile and easy to write on.

Features and benefits

- Self-amalgamating, linerless tape for insulating and jacketing splices up to 69 kV
- Excellent electrical, chemical and physical properties
- Building stress cones and jacketing of terminations, bus bars and joints
- Quicker application due to linerless design
- The lack of liner causes less waste
- Uniform and void-free layering
- Very flexible to conform to the most complex shapes
- Compatible with all extruded cable insulations



HelaTape Power 820 provides substantial time saving due to the linerless design.

MATERIAL	Ethylene Propylene Rubber (EPR)
Operating Temperature	-30 °C to +90 °C
Intermittent Operating Temperature	+130 °C
Water Absorption	0.06 %
Tensile Strength	2.8 N/mm ²
Elongation at break (min.)	750 %
Volume Resistance	10 ¹⁶ Ω cm
Dielectric Strength	31.5 kV/mm

RoHS ✓

PART DESCRIPTION	Thickness (T)	Width (W)	Length (L)	Article-No.
HTAPE-POWER820-EPR-BK	0.76	19.0	9.1 m	711-10402

All dimensions in mm. Subject to technical changes.



Wire Harness Tape – Hand-tearable Cloth Tape

HelaTape Protect 180

HelaTape Protect tapes are preferably used for cable harnessing in different industries.

Features and benefits

- High quality polyester fabric harnessing tape
- Rubber-based adhesive offers very good heat and media resistance
- High temperature stability from -40 °C to +125 °C
- Temperature resistance tested according to LV312
- Very good resistance against abrasion
- Material is very flexible and tearable by hand
- Excellent ageing resistance, and resistant to rotting in wet or damp conditions such as e.g. white goods and automotive, etc.



HelaTape Protect 180 is very flexible and used for cable harnessing.

MATERIAL	Polyester (PET)
Operating Temperature	-40 °C to +125 °C
Adhesion to Steel	3.0 N/10 mm
Adhesion to Backing	3.0 N/10 mm
Elongation at break (min.)	15 %
Breaking Strength	65 N/10 mm



PART DESCRIPTION	Thickness (T)	Width (W)	Length (L)	Article-No.
HTAPE-PROTECT180-PET-BK	0.18	19.0	25.0 m	712-10002

All dimensions in mm. Subject to technical changes.



Wire Harness Tape – Soft and Flexible Fleece Tape

HelaTape Protect 300

HelaTape Protect tapes are preferably used for cable harnessing in different industries.

Features and benefits

- Soft polyester fleece harnessing tape
- High noise reduction and very high resistance against abrasion
- Synthetic rubber based adhesive offers good heat and media resistance
- High temperature stability from -40 °C to +105 °C
- Material is very flexible and tearable by hand
- Excellent ageing resistance, and resistant to rotting in wet or damp conditions such as e.g. white goods and automotive, etc.



HelaTape Protect 300 provides high noise reduction and media resistance.

MATERIAL	Polyester (PET)
Operating Temperature	-40 °C to +105 °C
Adhesion to Steel	2.0 N/10 mm
Adhesion to Backing	2.0 N/10 mm
Elongation at break (min.)	10 %
Breaking Strength	30 N/10 mm



PART DESCRIPTION	Thickness (T)	Width (W)	Length (L)	Article-No.
HTAPE-PROTECT300-PET-BK	0.30	19.0	25.0 m	712-10001

All dimensions in mm. Subject to technical changes.



Wire Harness Tape – Strong, High Temperature Cloth Tape

HelaTape Protect 250

HelaTape Protect tapes are preferably used for cable harnessing in different industries.

Features and benefits

- High temperature polyester fabric harnessing tape
- Special acrylate-based adhesive offers very good heat and media resistance
- Very high temperature stability from -40 °C to +150 °C
- Temperature and humidity resistance tested according to LV312
- Very good resistance against abrasion
- Material is very flexible and easy to handle
- Provides long term reliability under varying and extreme environmental conditions
- Excellent ageing resistance, and resistant to rotting in wet or damp conditions such as e.g. white goods and automotive, etc.



HelaTape Protect 250 is designed for cable harnessing and offers a very high temperature resistance.

MATERIAL	Polyester (PET)
Operating Temperature	-40 °C to +150 °C
Adhesion to Steel	3.2 N/10 mm
Adhesion to Backing	3.2 N/10 mm
Elongation at break (min.)	20 %
Breaking Strength	180 N/10 mm



PART DESCRIPTION	Thickness (T)	Width (W)	Length (L)	Article-No.
HTAPE-PROTECT250-PET-BK	0.25	19.0	25.0 m	712-10003

All dimensions in mm. Subject to technical changes.



Connector used for solar panel DC connections

Solar panel connector - MC4 compatible

The solar panel connectors offer quality connections for the solar industry. It uses high quality materials that guarantee long-term reliability, lower contact resistance and higher current transfer capability to ensure high product efficiency.

Features and benefits

- Wide operating temperature range from -40 °C to 85 °C
- UL94-V0 flame retardant certification
- IP68 protection
- UV resistant
- Certified by TUV/UL/IEC/CE standards
- NEC locking system provides security and can be unlocked using the hand-operated tool



Solar panel connector - MC4 compatible.



MATERIAL	Polyamide 6.6, glass-fibre reinforced (PA66GF25), Metal (MET)
Operating Temperature	-40 °C to +85 °C
Voltage range	1500V
Flammability	UL 94 V0

HF ✓

LFH ✓

RoHS ✓

PART DESCRIPTION	Description	Height (H)	Ø (D)	Resistance	Article-No.
PVP_HT20_N_SET-PA66GF25/MET-BK	Negative connector	69.0	18.8	≤0.5mΩ	721-00003
PVP_HT20_P_SET-PA66GF25/MET-BK	Positive connector	64.5	18.8	≤0.5mΩ	721-00002
PVP_HT20_SET-PA66GF25/MET-BK	Set (positive+negative)	-	18.8	≤0.5mΩ	721-00011

All dimensions in mm. Subject to technical changes.



Connection Products

Nylon Cable Glands

Nylon domed headed cable glands are quick and easy to install and cater for a wide range of cable sizes.

A range of quality nylon cable glands that can be used on a wide range of applications when connecting cable to electrical equipment (but not steel wire armoured cable).

Features and benefits

- Material Nylon 66
- Low smoke, zero halogen
- IP rating IP 68
- Metric thread
- available in red, black, white, grey, dark grey
- Complete with lock nut and washer
- Euro slot packaging



MATERIAL	Polyamide 6.6 (PA66)
IP-Rating	IP68



PART DESCRIPTION	Thread Size	Hole Ø (FH)	Pack Cont.	Article-No.
NGM12BK-PA66-BK	M12	3.0 - 6.5	10 pcs.	901-02000
NGM12DGY-PA66-GY	M12	3.0 - 6.5	10 pcs.	901-02001
NGM12GY-PA66-GY	M12	3.0 - 6.5	10 pcs.	901-02002
NGM12RD-PA66-RD	M12	3.0 - 6.5	10 pcs.	901-02003
NGM12WE-PA66-WH	M12	3.0 - 6.5	10 pcs.	901-02004
NGM16BK-PA66-BK	M16	5.0 - 10.0	10 pcs.	901-02005
NGM16DGY-PA66-GY	M16	5.0 - 10.0	10 pcs.	901-02006
NGM16GY-PA66-GY	M16	5.0 - 10.0	10 pcs.	901-02007
NGM16RD-PA66-RD	M16	5.0 - 10.0	10 pcs.	901-02008
NGM16WE-PA66-WH	M16	5.0 - 10.0	10 pcs.	901-02009
NGM20SBK-PA66-BK	M20	6.0 - 12.0	10 pcs.	901-02014
NGM20BK-PA66-BK	M20	10.0 - 14.0	10 pcs.	901-02010
NGM20SDGY-PA66-GY	M20	6.0 - 12.0	10 pcs.	901-02015
NGM20DGY-PA66-GY	M20	10.0 - 14.0	10 pcs.	901-02011
NGM20SGY-PA66-GY	M20	6.0 - 12.0	10 pcs.	901-02016
NGM20GY-PA66-GY	M20	10.0 - 14.0	10 pcs.	901-02012
NGM20SRD-PA66-RD	M20	6.0 - 12.0	10 pcs.	901-02017
NGM20RD-PA66-RD	M20	10.0 - 14.0	10 pcs.	901-02013
NGM20SWE-PA66-WH	M20	6.0 - 12.0	10 pcs.	901-02018
NGM20WE-PA66-WH	M20	10.0 - 14.0	10 pcs.	901-02019
NGM25BK-PA66-BK	M25	13.0 - 18.0	10 pcs.	901-02020
NGM25DGY-PA66-GY	M25	13.0 - 18.0	10 pcs.	901-02021
NGM25GY-PA66-GY	M25	13.0 - 18.0	10 pcs.	901-02022
NGM25RD-PA66-RD	M25	13.0 - 18.0	10 pcs.	901-02023
NGM25WE-PA66-WH	M25	13.0 - 18.0	10 pcs.	901-02024
NGM32BK-PA66-BK	M32	18.0 - 25.0	5 pcs.	901-02025
NGM32DGY-PA66-GY	M32	18.0 - 25.0	5 pcs.	901-02026
NGM32GY-PA66-GY	M32	18.0 - 25.0	5 pcs.	901-02027
NGM32RD-PA66-RD	M32	18.0 - 25.0	5 pcs.	901-02028

All dimensions in mm. Subject to technical changes.



Connection Products

Nylon Cable Glands

PART DESCRIPTION	Thread Size	Hole Ø (FH)	Pack Cont.	Article-No.
NGM32WE-PA66-WH	M32	18.0 - 25.0	5 pcs.	901-02029
NGM40BK-PA66-BK	M40	22.0 - 32.0	5 pcs.	901-02030
NGM40DGY-PA66-GY	M40	22.0 - 32.0	5 pcs.	901-02031
NGM40GY-PA66-GY	M40	22.0 - 32.0	5 pcs.	901-02032
NGM40RD-PA66-RD	M40	22.0 - 32.0	5 pcs.	901-02033
NGM40WE-PA66-WH	M40	22.0 - 32.0	5 pcs.	901-02034
NGM50BK-PA66-BK	M50	30.0 - 38.0	2 pcs.	901-02035
NGM50DGY-PA66-GY	M50	30.0 - 38.0	2 pcs.	901-02036
NGM50GY-PA66-GY	M50	30.0 - 38.0	2 pcs.	901-02037
NGM50RD-PA66-RD	M50	30.0 - 38.0	2 pcs.	901-02038
NGM50WE-PA66-WH	M50	30.0 - 38.0	2 pcs.	901-02039
NGM63BK-PA66-BK	M63	34.0 - 44.0	2 pcs.	901-02040
NGM63DGY-PA66-GY	M63	34.0 - 44.0	2 pcs.	901-02041
NGM63GY-PA66-GY	M63	34.0 - 44.0	2 pcs.	901-02042
NGM63RD-PA66-RD	M63	34.0 - 44.0	2 pcs.	901-02043
NGM63WE-PA66-WH	M63	34.0 - 44.0	2 pcs.	901-02044

All dimensions in mm. Subject to technical changes.

What you do today can improve all your tomorrows.

The standards you set yourself are the best motivation. HellermannTyton is the world's leading cable management pioneer. Every year we file dozens of patents – and we are also dedicated to ecological solutions. Take Robusto, for example, the first cable tie made from sustainable castor oil. Thinking of tomorrow – today.

MADE FOR REAL







5.1 Wire and Cable Markers

Shrinkable markers "Continuous Tube", thermal transfer	
TULT – 3:1 Military and Electronics	292, 293
TLFX – 2:1 Rail Limited Fire Hazard	294, 295
Identification tags for cable bundle, thermal transfer	
TIPTAG PU – UV-stabilised Tiptags, Polyurethane	296
Identification for marking cable bundles	
Arrowtag – Identification plates	297
IT Ties – Identification cable ties	298
Helvin P, high-grade PVC markers	300, 301
SLP marker, silicone markers	302



5.2 Printers and Software

Thermal transfer printers	
TT431, Small to medium volume printing	303
TT4030, High volume printing	304
TT4030DS, High volume double side printing	305
Thermal transfer ribbons for	
Adhesive Labels	306
Thermal printer ribbons for	
Heatshrink and Tiptags	307



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 – good mechanical strength and resistance to organic solvents and chemicals.



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

MATERIAL	Polyolefin, cross-linked (PO-X)
Operating Temperature	-55 °C to +135 °C
Min. Shrink Temperature	+90 °C
Shrink Ratio	3:1
Recommended Ribbon Type	TTDTHOUT, TTRW, TT822OUT8
Thermal Transfer Printer	TT431, TT4030DS, TT4030

RoHS



PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Article-No.
TULT3-1BK-PO-X-BK	3.0	1.0	0.56	176 m	553-40352
TULT3-1BU-PO-X-BU	3.0	1.0	0.56	176 m	553-40353
TULT3-1RD-PO-X-RD	3.0	1.0	0.56	176 m	553-40354
TULT3-1WH-PO-X-WH	3.0	1.0	0.56	176 m	553-40351
TULT3-1YE-PO-X-YE	3.0	1.0	0.56	176 m	553-40350
TULT4.8-1.6BK-PO-X-BK	4.8	1.6	0.56	110 m	553-40452
TULT4.8-1.6BU-PO-X-BU	4.8	1.6	0.56	110 m	553-40453
TULT4.8-1.6RD-PO-X-RD	4.8	1.6	0.56	110 m	553-40454

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Shrinkable markers "Continuous Tube", thermal transfer

TULT – 3:1 Military and Electronics

PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Article-No.
TULT4.8-1.6WH-PO-X-WH	4.8	1.6	0.56	110 m	553-40451
TULT4.8-1.6YE-PO-X-YE	4.8	1.6	0.56	110 m	553-40450
TULT6-2BK-PO-X-BK	6.0	2.0	0.64	110 m	553-40652
TULT6-2BU-PO-X-BU	6.0	2.0	0.64	110 m	553-40653
TULT6-2RD-PO-X-RD	6.0	2.0	0.64	110 m	553-40654
TULT6-2WH-PO-X-WH	6.0	2.0	0.64	110 m	553-40651
TULT6-2YE-PO-X-YE	6.0	2.0	0.64	110 m	553-40650
TULT9-3BK-PO-X-BK	9.0	3.0	0.64	72 m	553-40952
TULT9-3BU-PO-X-BU	9.0	3.0	0.64	72 m	553-40953
TULT9-3RD-PO-X-RD	9.0	3.0	0.64	72 m	553-40954
TULT9-3WH-PO-X-WH	9.0	3.0	0.64	72 m	553-40951
TULT9-3YE-PO-X-YE	9.0	3.0	0.64	72 m	553-40950
TULT12-4BK-PO-X-BK	12.0	4.0	0.68	54 m	553-41252
TULT12-4BU-PO-X-BU	12.0	4.0	0.68	54 m	553-41253
TULT12-4RD-PO-X-RD	12.0	4.0	0.68	54 m	553-41254
TULT12-4WH-PO-X-WH	12.0	4.0	0.68	54 m	553-41251
TULT12-4YE-PO-X-YE	12.0	4.0	0.68	54 m	553-41250
TULT18-6BK-PO-X-BK	18.0	6.0	0.90	26 m	553-41852
TULT18-6BU-PO-X-BU	18.0	6.0	0.90	26 m	553-41853
TULT18-6RD-PO-X-RD	18.0	6.0	0.90	26 m	553-41854
TULT18-6WH-PO-X-WH	18.0	6.0	0.90	26 m	553-41851
TULT18-6YE-PO-X-YE	18.0	6.0	0.90	26 m	553-41850
TULT24-8BK-PO-X-BK	24.0	8.0	0.98	26 m	553-42452
TULT24-8BU-PO-X-BU	24.0	8.0	0.98	26 m	553-42453
TULT24-8RD-PO-X-RD	24.0	8.0	0.98	26 m	553-42454
TULT24-8WH-PO-X-WH	24.0	8.0	0.98	26 m	553-42451
TULT24-8YE-PO-X-YE	24.0	8.0	0.98	26 m	553-42450
TULT39-13BK-PO-X-BK	39.0	13.0	1.08	10 m	553-43952
TULT39-13BU-PO-X-BU	39.0	13.0	1.08	10 m	553-43953
TULT39-13RD-PO-X-RD	39.0	13.0	1.08	10 m	553-43954
TULT39-13WH-PO-X-WH	39.0	13.0	1.08	10 m	553-43951
TULT39-13YE-PO-X-YE	39.0	13.0	1.08	10 m	553-43950

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



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
- Available in yellow or white
- Cable range 50.8 mm to 1.2 mm
- Delivery in convenient storage boxes



TLFX- high performance halogen free heat shrink tube.



TLFX – European rail approved heat shrink marker material.

MATERIAL	Polyolefin, cross-linked (PO-X)
Operating Temperature	-55 °C to +125 °C
Min. Shrink Temperature	+70 °C
Shrink Ratio	2:1
Recommended Ribbon Type	TTDTHOUT
EN 45545-2 Classification	R22 HL3, R23 HL3
Thermal Transfer Printer	TT431, TT4030DS, TT4030

HF ✓

LFH ✓

RoHS ✓



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

All dimensions in mm. Subject to technical changes.

EN 45545-2

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Shrinkable markers "Continuous Tube", thermal transfer

TLFX – 2:1 Rail Limited Fire Hazard

PART DESCRIPTION	Supplied Ø D min.	Recov. Ø d max.	Wall (WT)	Pack Cont.	Article-No.
TLFX48YE-PO-X-YE	4.8	2.4	0.61	108 m	554-51201
TLFX64WH-PO-X-WH	6.4	3.2	0.61	90 m	554-51300
TLFX64YE-PO-X-YE	6.4	3.2	0.61	90 m	554-51301
TLFX95WH-PO-X-WH	9.5	4.8	0.66	72 m	554-51400
TLFX95YE-PO-X-YE	9.5	4.8	0.66	72 m	554-51401
TLFX127WH-PO-X-WH	12.7	6.4	0.68	54 m	554-51500
TLFX127YE-PO-X-YE	12.7	6.4	0.68	54 m	554-51501
TLFX190WH-PO-X-WH	19.0	9.5	0.69	30 m	554-51600
TLFX190YE-PO-X-YE	19.0	9.5	0.69	30 m	554-51601
TLFX254WH-PO-X-WH	25.4	12.7	0.69	30 m	554-51700
TLFX254YE-PO-X-YE	25.4	12.7	0.69	30 m	554-51701
TLFX381WH-PO-X-WH	38.1	19.0	0.70	13 m	554-51800
TLFX381YE-PO-X-YE	38.1	19.0	0.70	13 m	554-51801
TLFX508WH-PO-X-WH	50.8	25.4	0.73	10 m	554-50900
TLFX508YE-PO-X-YE	50.8	25.4	0.73	10 m	554-50901

All dimensions in mm. Subject to technical changes.

EN 45545-2

Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

Identification tags for cable bundle, thermal transfer

TIPTAG PU – 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 PU's 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

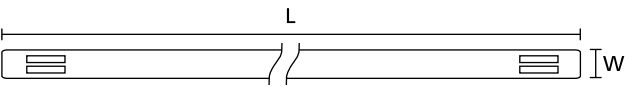


TIPTAG PU – printed mark has a tattoo-like permanency.



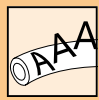
TIPTAG PU - Identification markers suitable for harsh environments.

MATERIAL	Polyurethane (PUR)
Operating Temperature	-65 °C to +120 °C, intermittent +150 °C
Flammability	UL 94 V0 (3 mm)
UV-Stabilised	Yes
Recommended Ribbon Type	TTRC+
Thermal Transfer Printer	TT431, TT4030



PART DESCRIPTION	Length (L)	Width (W)	Pack Cont.	Article-No.
TTAGPU15X65YE-PUR-YE	65.0	15.0	190 pcs.	556-25011

All dimensions in mm. Subject to technical changes.



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.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-40 °C to +85 °C
Flammability	UL 94 V2

HF ✓

RoHS ✓



AT1



AT2



AT3



PART DESCRIPTION	Length (L)	Width (W)	Strap Width max. (G)	Pack Cont.	Article-No.
AT1-PA66-BK	62.5	4.7	7.4	100 pcs.	151-41110
AT1-PA66-NA	62.5	4.7	7.4	100 pcs.	151-41119
AT2-PA66-BK	63.0	9.0	6.4	100 pcs.	151-41210
AT2-PA66-NA	63.0	9.0	6.4	100 pcs.	151-41219
AT3-PA66-BK	100.0	9.0	6.4	100 pcs.	151-41310
AT3-PA66-NA	100.0	9.0	6.4	100 pcs.	151-41319

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

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.

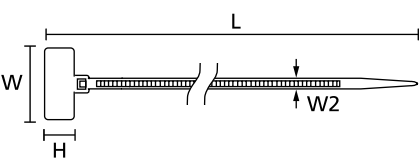
Features and benefits

- 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)

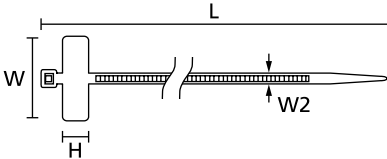


One operation with two user benefits.

MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-40 °C to +85 °C
Flammability	UL 94 V2



IT18FL



IT18R



PART DESCRIPTION	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Length (L)	Width (W2)		Recommended Labels	Pack Cont.	Tools	Article-No.
IT18FL-PA66-NA	1.5	19.0	20.5	9.0	110.0	2.5	80	TAG18-07TD1	100 pcs.	2;5	111-81900
	1.5	22.0	20.6	9.3	110.0	2.5	80	TAGN1L-9372	100 pcs.	4	111-00591
IT18FL-PA66-BK	1.5	22.0	20.6	9.3	110.0	2.5	80	TAGN1L-9372	100 pcs.	4	111-00592
IT18R-PA66-NA	7.0	23.0	25.0	8.0	100.0	2.5	80	TAGN1L-9372	100 pcs.	4	111-00600
IT18R-PA66-BK	7.0	23.0	25.0	8.0	100.0	2.5	80	TAGN1L-9372	100 pcs.	4	111-00601

Recommended Tools: 2=MK20, 4=MK3PNSP2, 5=EVO7i. For more information on toolings please refer to the Application Tooling chapter on page 310.
All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.

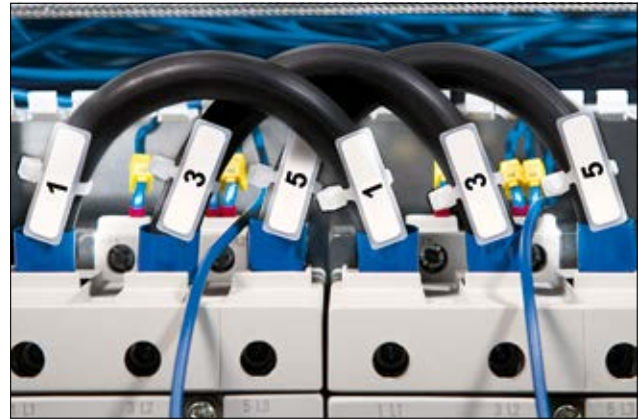
Identification ties and plates for marking cable bundles

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)

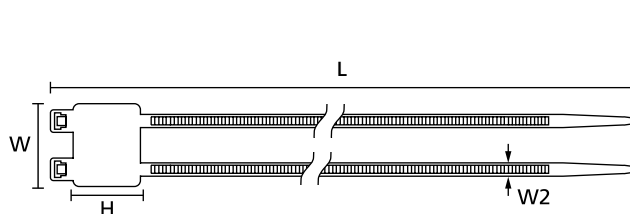


One operation with two user benefits.

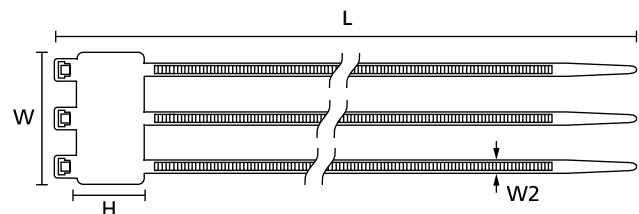
MATERIAL	Polyamide 6.6 (PA66)
Operating Temperature	-40 °C to +85 °C
Flammability	UL 94 V2

HF ✓

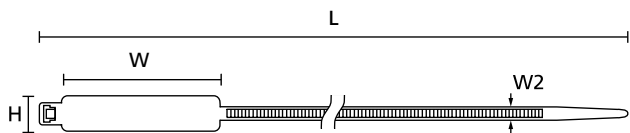
RoHS ✓



IT50RD



IT50RT



IT50L

PART DESCRIPTION	Bundle Ø min.	Bundle Ø max.	Width (W)	Height (H)	Length (L)	Width (W2)	N	Recommended Labels	Pack Cont.	Tools	Article-No.
IT50RD-PA66-NA	10.0	44.0	29.0	26.3	203.2	4.7	225	TAG26-21TD1	50 pcs.	2;5	111-85219
IT50RD-PA66-BK	10.0	44.0	29.0	26.3	203.2	4.7	225	TAG26-21TD1	50 pcs.	2;5	111-85201
IT50RT-PA66-NA	10.0	44.0	46.0	26.3	203.2	4.7	225	TAG43-21TD1	50 pcs.	2;5	111-85119
IT50RT-PA66-BK	10.0	44.0	46.0	26.3	203.2	4.7	225	TAG43-21TD1	50 pcs.	2;5	111-85100

Recommended Tools: 2=MK20, 5=EVO7i, MK7P. For more information on toolings please refer to the Application Tooling chapter on page 310.

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



High-grade PVC markers

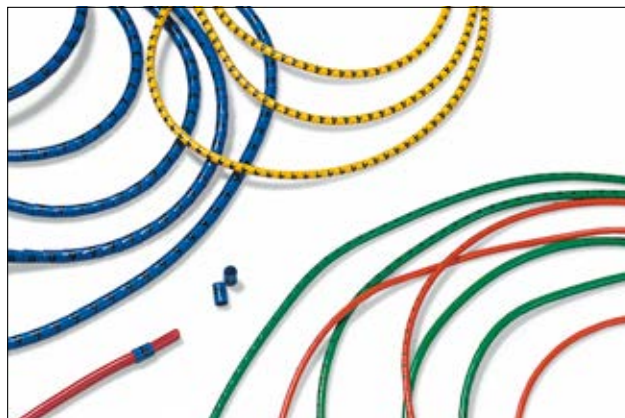
Helvin, P

These high-grade PVC markers (P) have a thin wall that makes them ideal for identifying wire in areas where space is at a premium. They are supplied in a fully severed / loose method.

Markers are available in white or yellow material marked in black, and international resistor colour coding. Characters are 0-9, A-Z, and standard electrical symbols.

Features and benefits

- Thin wall
- Light, very flexible, and space effective



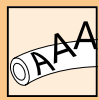
Cable marker, hotfoil print.

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

RoHS ✓

PART DESCRIPTION		Length (L)	Wall (WT)	Ø (D)	Pack Cont.	Article-No.
P8 Marker-PVC-BK	0	3.0	0.35	0.8	1000 pcs.	604-00100
P10 Marker-PVC-BK		3.0	0.35	1.0	1000 pcs.	604-00202
P15 Marker-PVC-BK		3.0	0.35	1.5	1000 pcs.	604-00402
P8 Marker-PVC-BN	1	3.0	0.35	0.8	1000 pcs.	604-00101
P10 Marker-PVC-BN		3.0	0.35	1.0	1000 pcs.	604-00203
P12 Marker-PVC-BN		3.0	0.35	1.2	1000 pcs.	604-00301
P15 Marker-PVC-BN	2	3.0	0.35	1.5	1000 pcs.	604-00403
P8 Marker-PVC-RD		3.0	0.35	0.8	1000 pcs.	604-00102
P12 Marker-PVC-RD		3.0	0.35	1.2	1000 pcs.	604-00302
P15 Marker-PVC-RD	3	3.0	0.35	1.5	1000 pcs.	604-00404
P8 Marker-PVC-OG		3.0	0.35	0.8	1000 pcs.	604-00103
P12 Marker-PVC-OG		3.0	0.35	1.2	1000 pcs.	604-00303
P15 Marker-PVC-OG	4	3.0	0.35	1.5	1000 pcs.	604-00405
P8 Marker-PVC-YE		3.0	0.35	0.8	1000 pcs.	604-00104
P12 Marker-PVC-YE		3.0	0.35	1.2	1000 pcs.	604-00304
P15 Marker-PVC-YE	5	3.0	0.35	1.5	1000 pcs.	604-00406
P20 Marker-PVC-YE		5.0	0.35	2.0	1000 pcs.	604-00551
P8 Marker-PVC-GN		3.0	0.35	0.8	1000 pcs.	604-00105
P10 Marker-PVC-GN	6	3.0	0.35	1.0	1000 pcs.	604-00207
P12 Marker-PVC-GN		3.0	0.35	1.2	1000 pcs.	604-00305
P15 Marker-PVC-GN		3.0	0.35	1.5	1000 pcs.	604-00407
P8 Marker-PVC-BU		3.0	0.35	0.8	1000 pcs.	604-00106
P10 Marker-PVC-BU		3.0	0.35	1.0	1000 pcs.	604-00208
P12 Marker-PVC-BU		3.0	0.35	1.2	1000 pcs.	604-00306
P15 Marker-PVC-BU		3.0	0.35	1.5	1000 pcs.	604-00408

All dimensions in mm. Subject to technical changes.



High-grade PVC markers

Helvin, P

PART DESCRIPTION		Length (L)	Wall (WT)	Ø (D)	Pack Cont.	Article-No.
P8 Marker-PVC-VT	7	3.0	0.35	0.8	1000 pcs.	604-00107
P10 Marker-PVC-VT		3.0	0.35	1.0	1000 pcs.	604-00209
P12 Marker-PVC-VT		3.0	0.35	1.2	1000 pcs.	604-00307
P12 Marker-PVC-GY	8	3.0	0.35	1.2	1000 pcs.	604-00308
P10 Marker-PVC-WH	9	3.0	0.35	1.0	1000 pcs.	604-00211
P12 Marker-PVC-WH		3.0	0.35	1.2	1000 pcs.	604-00309
P15 Marker-PVC-WH		3.0	0.35	1.5	1000 pcs.	604-00411
P8 Marker-PVC-GY	8	3.0	0.35	0.8	1000 pcs.	604-00108
P8 Marker-PVC-WH	9	3.0	0.35	0.8	1000 pcs.	604-00109

All dimensions in mm. Subject to technical changes.

Silicone markers

SLP marker

The silicone markers (SLP) are halogen free and ideally suited to rigorous environments such as aerospace, mass transit, and defence markets.

As the material is highly elastic, it's original size can be expanded 500% on application, and 200% in continuous use.

Markers are available in white or yellow material marked in black, and international resistor colour coding. Characters are 0-9, A-Z, and standard electrical symbols.

Features and benefits

- High elasticity of the material ensures many cable diameters can be covered with one size of marker
- Can withstand up to 250° C intermittent temperature

More colours and sizes availabe on request.



MATERIAL	Silicone (SI)
Operating Temperature	-65 °C to +180 °C, intermittent +250 °C
Flammability	UL 94 HB

HF✓

RoHS✓

PART DESCRIPTION		Length (L)	Ø (D)	Article-No.
SLP15 Marker-SI-BK	0	3.0	1.5	606-00030

All dimensions in mm. Subject to technical changes.



Thermal transfer printer

TT431, Small to medium volume printing

The TT431 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 TT431 integrates seamlessly into any workstation. It is easy to use due to its intuitive colour LCD 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

- Small to medium volume single sided printing
- Print on HellermannTyton cable markers and labels
- Uses standard ribbons
- Barcodes: standard and 2D
- Print speed up to 150 mm/s
- Adjustable label sensor
- Multiple language selection
- Windows drivers: 32/64 Bit Windows Vista, 7, 8, 10, 11, Windows Server 2008, 2008 R2, 2012, 2012 R2, 2016, 2019



TT431 thermal transfer printer designed for ease of operation.

Print Method	thermal transfer print
Print Head Type	300 dpi, flat type
Print Speed	up to 150 mm/s
Max. Print Width	105.70 mm
Print Material Height Max (metric)	4000 mm
Interfaces	USB 2.0, Ethernet 10/100 Base T, RS232
Supported Barcodes	Standard and 2D
Printer Memory	256 MB RAM
Dimensions W x H x D	253mm x 189mm x 322mm
Weight	5.52 kg

RoHS ✓

PART DESCRIPTION	Description	Article-No.
TT Printer Adapter-PL-BK	Printer Adapter for TT Printers	556-00012
TT431-PL-GY	Thermal transfer printer TT431	556-00400
TT430/TT431 300dpi Printhead-DIV-BK	Printhead for TT431	556-00453
TT430/TT431 Print Roller-DIV-BK	Print Roller for TT431	556-00454
S430 Cutter-DIV-GY	Cutter for TT431	556-00452
P430 Perforator-DIV-GY	Perforator for TT431	556-00456
TT External Reel Holder-MET/PL-GY	External Reel Holder	556-00451
TTER120-MET-BU	External label rewinder	556-00013

All dimensions in mm. Subject to technical changes.





Thermal transfer printer

TT4030, High volume printing

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.

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, 11



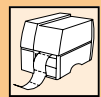
TT4030 thermal transfer printer for high volumes.

Print Method	thermal transfer print
Print Head Type	300 dpi, flat type
Print Speed	up to 300mm/s
Max. Print Width	105.70 mm
Print Material Height Max (metric)	2000 mm
Interfaces	RS232 C, USB 2.0, Ethernet 10/100 Base T
Supported Barcodes	Standard, 2D
Printer Memory	256 MB RAM
Dimensions W x H x D	252mm x 288mm x 460mm
Weight	11.38 kg

RoHS ✓

PART DESCRIPTION	Description	Article-No.
TT Printer Adapter-PL-BK	Printer Adapter for TT Printers	556-00012
TT4030-PL-GY	Thermal transfer printer TT4030	556-04037
TT4030 Printhead-DIV-GY	Printhead for TT4030	556-04041
Printer Roller TT4030/TT4000+-DIV-GN	Printer Roller for TT4030/TT4000+	556-04005
S4030 Cutter-DIV-GY	S4030 Cutter for TT4030	556-04050
P4030 Perforator-DIV-GY	Perforator for TT4030	556-04051
TT External Reel Holder-MET/PL-GY	External Reel Holder	556-00451
TTER120-MET-BU	External label rewinder	556-00013

Subject to technical changes.



Thermal transfer printer

TT4030DS, Double Sided

The TT4030DS 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 TT4030DS 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 colour touchscreen 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 heat shrink ladder style products
- Colour touchscreen display
- Print resolution 300 dpi
- Print heating can be assigned separately to each print head
- Printing labels using only print head 2
- Optimized printing by ribbon saving option
- Multiple language selection



TT4030DS thermal transfer printer, ideal for shrinkable cable markers.

Print Method	thermal transfer print
Print Head Type	300 dpi, flat type
Print Speed	150 mm/s max.
Max. Print Width	105.7 mm
Interfaces	RS232 C, USB 2.0, Ethernet 10/100 Base T
Dimensions W x H x D	248mm x 395mm x 594mm
Weight	24.7 kg

RoHS

PART DESCRIPTION	Description	Article-No.
TT4030DS-MET-GY	Thermal transfer printer TT4030DS	556-04061
TT4030 Printhead-DIV-GY	Printhead for TT4030	556-04041
Printer Roller TT4030/TT4000 ⁺ -DIV-GN	Printer Roller for TT4030/TT4000 ⁺	556-04005
S4030 Cutter-DIV-GY	S4030 Cutter for TT4030	556-04050
P4030 Perforator-DIV-GY	Perforator for TT4030	556-04051
TT External Reel Holder-MET/PL-GY	External Reel Holder	556-00451
TTER120-MET-BU	External label rewinder	556-00013

All dimensions in mm. Subject to technical changes.



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

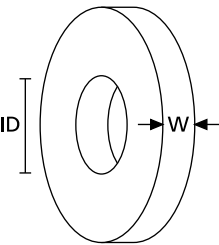


Easy application of ribbons on HellermannTyton thermal transfer printers.



Ribbons for printing on adhesive labels.

ID: The standard inside core diameter for all the ribbons is 25.4 mm.



PART DESCRIPTION	Recommended Material	Width (W)	Reel Length	Article-No.
TT822OUT 60MM-PET-BK	323, 892, 934, 1203, 1204, 1206, 1211, 1213, 1221, 1232, 1251	60.0	300 m	556-00111
TT822OUT 110MM-PET-BK	323, 892, 1203, 1204, 1206, 1211, 1213, 1220, 1221, 1232, 1251	110.0	300 m	556-00101
TT932DOUT 85MM-PET-BK	323, 896	85.0	300 m	556-00117
TT932DOUT 110MM-PET-BK	323, 896	110.0	300 m	556-00118

All dimensions in mm. Subject to technical changes.



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 heat shrink tubing and Tiptag identification tags
- Ribbons are specifically designed to maximize print performance for the recommended material

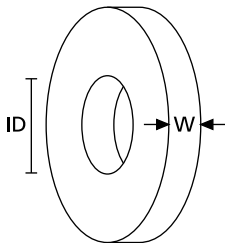


Easy application of ribbons on HellermannTyton thermal transfer printers.



Ribbons for printing on tubes and Tiptags.

ID: The standard inside core diameter for all the ribbons is 25.4 mm.



PART DESCRIPTION	Recommended Material	Width (W)	Reel Length	Article-No.
TTDTHOUT 40MM-PET-BK	TCGT, TULT(DS), TLFX(DS), TDRT(DS), TLFD DS, TIPTAG	40.0	300 m	556-00139
TTDTHOUT 60MM-PET-BK	TCGT, TULT(DS), TLFX(DS), TDRT(DS), TLFD DS, TIPTAG	60.0	300 m	556-00140
TTDTHOUT 100MM-PET-BK	TCGT, TULT(DS), TLFX(DS), TDRT(DS), TLFD DS, TIPTAG	100.0	300 m	556-00141
TTRHTWH 70MM-PET-WH	THTT/THTT DS/TAGHT	70.0	300 m	556-00209
TT822OUT8 110MM-PET-SR	TULT/TCGT	110.0	300 m	556-00161

All dimensions in mm. Subject to technical changes.





6.1 Automatic Cable Tying System

Automatic bundling up to Ø 20 mm	
Autotool CPK hybrid T18RA	310
Cable ties for Autotool CPK hybrid	311
Waste-free bundling up to Ø 100 mm	
Autotool System ATS flex	312
Cable ties for Autotool System ATS	313



6.2 Application Tooling for Cable Ties

Battery-powered tool, tensioning and cutting hand-applied cable ties	
ProCut	314
Manual tensioning tool plastic housing	
EVO7i, EVO7iSP	315
EVO9i, EVO9iSP, EVO9iHT, EVO9SG	316
Exclusive tester for Tymate series	
Tymate digital matser	317
Accessory for EVO family	
CALTOOL	317
Manual tensioning tool for KR-Series	
EVO KR	318
KR6/8	318
Manual tensioning tool for metal ties MBT-Series	
MK9SST	319
KST-STG200	319



6.3 Application Tooling for Cutting Plastic Ties

Manual cutting tool for plastic ties	
EVO cut	320



6.3 Application Tooling for Non Shrinkable Tubing

Three-pronged pliers for sleeves and grommets	
K, S, SS	321



6.3 Application Tooling for Braided Sleeves

Helagaine Braided Sleeving	
HSG0 hot cutting tool	322



Automatic bundling up to Ø 20 mm

Autotool CPK hybrid

The Autotool CPK hybrid T18RA offers full flexibility for automated cable tying. Choose your option: Cordless operation with rechargeable batteries, corded with main power via power pack or a mixture of both – When working on several projects, at different locations or in tight spaces without power supply.

The CPK hybrid has been developed to: Speed up bundling processes, make the production more consistent and efficient and simplify the operation and user-friendly ergonomics. It offers a display for the settings and presets, user information and the software "HT Data Management CPK".

The CPK hybrid is ideally suited for handling high volume applications – With either the Bench mount kit CPK or the Overhead suspension CPK, the CPK hybrid is suitable for both stationary and flexible applications.

Features and benefits

- Cable tying system operated electrically via Power supply (Power pack CPK – Input: 100-240 V a.c., 50/60 Hz; Output: 25.2 V d.c., max. 150 W) or use with 18V 2,0 Ah quick rechargeable Li-Ion Battery (8.000 bindings can be applied with a fully charged battery)
- Well established cooperation with metabo for battery and charger
- Removable handle for space-saving integration into fully automated production lines (Power pack CPK with control box necessary)
- HT Data Management CPK software (included for extensive data evaluation and export function for manufacturing data, further service functions and consistent documentation of every binding process)
- Smart Cable for updating the tool without Power pack
- Bandoliers of 50 cable ties as well as reels of 3,500 cable ties can be used
- Bench mount kit CPK for stationary use or Overhead suspension CPK for flexible use



Battery-operated Autotool CPK hybrid applying cable ties from bandolier.



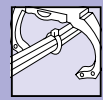
Bench mount kit CPK with foot pedal (also shown Autotool CPK hybrid, Power pack CPK and T18RA3500).



Overhead suspension CPK with Autotool CPK hybrid battery operated (also shown T18RA3500).

PART DESCRIPTION	Description	Weight	Article-No.
Autotool_CPK_hybrid-MET/PL-BU	Autotool CPK hybrid T18RA	2.617 kg	106-60000
Bench mount kit CPK-AL-ML	Bench mount kit CPK	-	106-00040
Autotool_CPK_hybrid_Battery_Set-PL/MET-BU	CPK hybrid Battery Set	2.617 kg	106-66000
NP CPK smart cable-DIV-BK	CPK smart cable	-	123-90142
Overhead suspension CPK-MET-ML	Overhead suspension CPK	-	106-00050
Power pack CPK-AL-GY	Power pack CPK	0.255 kg	106-00100
Power pack CPK with control box-AL-GY	Power pack CPK with control box	0.255 kg	106-00110
SP_CAS_Battery_18V_2Ah-DIV-BK	CAS Battery 18V 2Ah	0.023 kg	106-06020
SP_CAS_Battery_Charger-DIV-BK	CAS Battery Charger	0.058 kg	106-06021

All dimensions in mm. Subject to technical changes.



Automatic Cable Tying Systems

Cable ties for Autotool CPK hybrid

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

Features and benefits

- Available in bandoliers of 50 cable ties or reels of 3,500 cable ties
- Repetitive tension on the bundles
- Easily recyclable



Cable ties for Autotool CPK hybrid.

MATERIAL	Polyamide 6.6, heat stabilised (PA66HS)	Polyamide 6.6, heat and UV-resistant (PA66HSW)	Polyamide 4.6 (PA46)
Operating Temperature	-40 °C to +105 °C, (+145 °C, 500 h)		-40 °C to +150 °C, (+195 °C, 500 h)
Flammability	UL 94 V2		

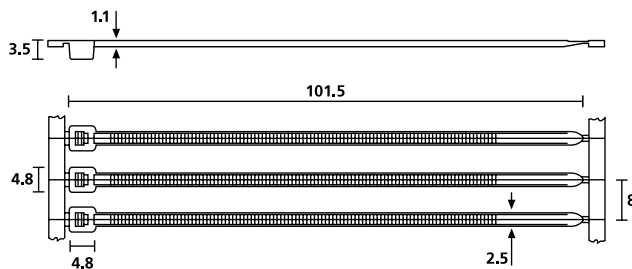
HF ✓

RoHS ✓

HF ✓

LFH ✓

RoHS ✓



Bandolier T18RA

PART DESCRIPTION	Bundle Ø max.	N	Pack Cont.	Article-No.
T18RA50-PA66HSW-BK	20.0	80	2000 pcs.	120-40020
T18RA50-PA66HS-NA	20.0	80	2000 pcs.	120-40019
T18RA3500-PA66HSW-BK	20.0	80	3500 pcs.	120-50010
T18RA3500-PA66HS-NA	20.0	80	3500 pcs.	120-50009
T18RA3500-PA46-NA	20.0	80	3500 pcs.	120-46009

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Waste-free bundling up to Ø 100 mm

Autotool System ATS flex

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

The advantage of three quick-changeable jaw sizes allows the Autotool System ATS flex to adapt perfectly to different bundle diameters up to Ø 100 mm.

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

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



Autotool ATS flex on the harness board (also shown: Overhead suspension ATS).

Features and benefits

- Electrically operated cable tying system (Power pack ATS flex)
- Power supply through Power pack ATS flex - Input: 240/150 V a.c., 50/60 Hz; Output: 24 V d.c., max. 100 W
- High quality, waste-free bundling up to Ø 100 mm with flush cut off
- Jaws with diameters of 30, 50 and 80 mm - included in delivery
- 100 mm jaw size solution as accessory on request
- Cycle time 1.1-2.4 seconds depending on bundle diameter
- Bundle diameter mechanically detected
- Integration into Bench mount kit ATS (vertical or horizontal) for stationary use or Overhead suspension ATS for flexible use possible
- Integration into fully automated production lines possible
- Foot part bundling with custom jaw design Ø 50 mm



Bench mount kit ATS (also shown: Autotool System ATS flex).



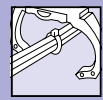
Overhead suspension ATS (also shown: Autotool System ATS flex and consumables).

PART DESCRIPTION	Description	Weight	Article-No.
ATS_flex-MET-BU	Autotool System ATS flex	2.443 kg	102-60000
Bench_mount_kit_automatic_ATS-AL-ML	Bench mount kit automatic ATS	17.0 kg	102-00042
Bench_mount_kit_horizontal_ATS-AL-ML	Bench mount kit horizontal ATS	14.0 kg	102-00041
Bench_mount_kit_ATS-AL-ML	Bench mount kit movable ATS	25.3 kg	102-00040
Overhead_suspension_ATS-ML	Overhead suspension ATS	11.0 kg	102-00050
Power_pack_ATS_flex_24V-MET-BU	Power pack ATS flex	1.034 kg	102-00150

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Waste-free bundling up to Ø 100 mm

Cable ties for Autotool System ATS

The outside serrated strap is perfectly suitable for sensitive surfaces and can be used for bundling and fixing of cables, pipes and hoses, as well as for bag sealing.

The materials are particularly appropriate for high volume bundling applications in cable assembly, automotive, industrial and packaging applications.

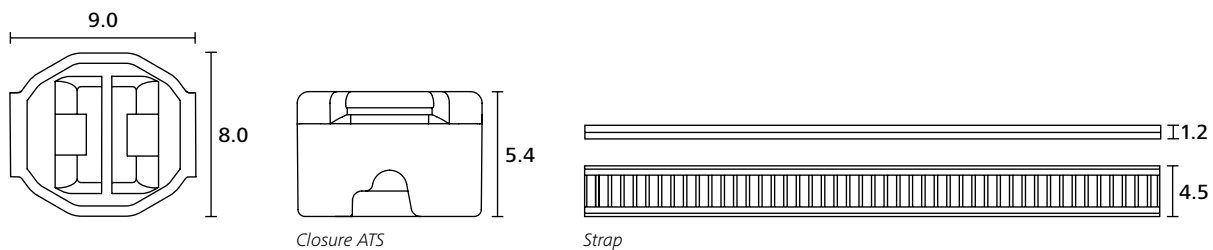
Features and benefits

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



Closures and strap for Autotool System ATS.

MATERIAL	Polyamide 6.6, high impact modified, heat and UV-stabilised (PA66HIRHSUV)	Polyamide 6.6, heat and UV-stabilised (PA66HSUV)	
Operating Temperature	-40 °C to +95 °C, (+105 °C, 5000 h; +145 °C, 500 h)	-40 °C to +105 °C	-40 °C to +105 °C, (+145 °C, 500 h)
Flammability	UL 94 HB	UL 94 V2	



PART DESCRIPTION	Description	Bundle Ø max.	N	Pack Cont.	Article-No.
Closures_Black_ATS-PA66HSUV-BK	Closures Black ATS	100.0	225	5000 pcs.	102-66210
Closures_Natural_ATS-PA66HSUV-NA	Closures Natural ATS	100.0	225	5000 pcs.	102-66209
Strap_Black_ATS-PA66HIRHSUV-BK	Strap Black ATS	100.0	225	500 m	102-66110
Strap_Natural_ATS-PA66HIRHSUV-NA	Strap Natural ATS	100.0	225	500 m	102-66109

All dimensions in mm. Subject to technical changes.



Please note: Some or all of the products listed here have these approvals, or have one or more sustainable attributes. Please see our website for the latest details.



Battery-powered tool for tensioning and cutting cable ties

ProCut

The ProCut battery powered cable tie tool system automatically tensions and cuts T50-T250 and wide strap cable ties. A single pull of the trigger does all the work. Its 16 tension settings ensure precision results. Designed for professionals with an ergonomic, soft-grip handle and low-force trigger to reduce hand strain. A secondary trigger button on the rear assists in hard-to-reach applications. The ProCut can produce up to 2,000 cycles per charge utilizing the included Metabo CAS battery (also used on our CPK Hybrid tool) and charger.



ProCut: battery-powered application tool for cable tying in heavy-duty.

Features and benefits

- Cordless operation means less hand strain and no cord to get in the way.
- Auto calibration after every cycle means exceptionally consistent performance.
- Flush cut nose piece and blade ensure clean, safe cuts.
- Included Metabo CAS 2.0 Ah battery and charger are compatible with several other tool brands.

PART DESCRIPTION	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
ProCut 9 no battery-MET/PL-BU	ProCut	13.5	2.0	0.5 kg	104-10010
ProCut_Battery_Set-MET/PL-BU	ProCut Set (incl. 2 batteries and 1 charger)	13.5	2.0	-	104-11000
SP_CAS_Battery_18V_2Ah-DIV-BK	CAS Battery 18V 2Ah	-	-	0.023 kg	106-06020
SP_CAS_Battery_Charger-DIV-BK	CAS Battery Charger	-	-	0.058 kg	106-06021

All dimensions in mm. Subject to technical changes.



Manual tensioning tool plastic housing

EVO7i up to 4.8 mm strap width

HellermannTyton's EVO7i industrial-grade, mechanical hand tool is ergonomically designed to reduce the risks of repetitive stress injuries to operators while simultaneously increasing productivity. The EVO7i Tension/Lock/Cut Technology delivers performance, safety and comfort for operators. Calibrated tensioning assures consistent wire-bundle tension before flush cut-off. Available in a standard grip span (EVO7i) or short grip span (EVO7ISP), for smaller hands. Additional accessories are available.

Features and benefits

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



The EVO7i: Maximum performance with minimum effort.

PART DESCRIPTION	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
EVO7i-MET/PL-BU	EVO7i	4.8	1.5	0.236 kg	110-77001
EVO7ISP-MET/PL-BU	EVO7ISP	4.8	1.5	0.279 kg	110-77002
SP EVO7 NOSEPIECE 3MM-ST-MIX	Nosepiece	-	-	0.007 kg	110-70133
SP EVO7 Blade Kit-ST-MIX	Blade-Kit	-	-	0.002 kg	110-70106

All dimensions in mm. Subject to technical changes.



Manual tensioning tool plastic housing

EVO9i up to 13.5 mm strap width

HellermannTyton's EVO9i industrial-grade, mechanical hand tool is ergonomically designed to reduce the risks of repetitive stress injuries to operators while simultaneously increasing productivity. The EVO9i Tension/Lock/Cut Technology delivers performance, safety and comfort for operators. Calibrated tensioning assures consistent wire-bundle tension before flush cut-off. Available in a standard grip span (EVO9i) or short grip span (EVO9iSP) for smaller hands. The EVO9iHT is the "high tension" version of the EVO9i family. Additional accessories are available.

Features and benefits

- Ergonomic, slip-proof handle for a comfortable and secure grip
- Extremely low-maintenance
- Fast and precise application with minimum effort (TLC mechanism)
- Convenient and simple tension adjustment
- Housing made of resilient and lightweight glass fibre-reinforced polyester
- Standard grip span (90 mm) and short grip span (80 mm) available
- EVO9iHT for high tension applications
- EVO9SG is a modified EVO9 tool that is suitable for the application of Soft Grip ties



Manual tensioning tool EVO9i.

EVO9SG for the application of Soft Grip ties!

PART DESCRIPTION	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
EVO9i-MET/PL-BU	EVO9i	13.5	2.0	0.369 kg	110-88001
EVO9iHT-MET/PL-BU	EVO9iHT	13.5	2.0	0.37 kg	110-88003
EVO9iSP-MET/PL-BU	EVO9iSP	13.5	2.0	0.369 kg	110-88002
SP EVO9 Blade-SS-ML	EVO9 Blade	-	-	0.002 kg	110-80037

All dimensions in mm. Subject to technical changes.



Exclusive tester for Tymate series

Tymate digital matser

Digital master is a exclusive tool for tension management of Tymante series.

Features and benefits

- Can be seen the tension level of tool and easy to confirm if the tool does work steadily.



Calibrated tool for EVO9i series.

PART DESCRIPTION	Article-No.
DGT500-EVO7	110-07603
DGT500-EVO9	110-07602

All dimensions in mm. Subject to technical changes.

Manual Processing Tools

CALTOOL for calibration of EVO family

The CALTOOL serves for the fine or readjustment of the EVO family.

Features and benefits

- The factory setting (setting 0-8) of the EVO family can be changed



CALTOOL for calibration of EVO family.

PART DESCRIPTION	Weight	Article-No.
EVO Calibration Tool-ST-MIX	0.000001 kg	110-70089

All dimensions in mm. Subject to technical changes.



Manual tensioning tool for KR-Series

EVO KR

The EVO KR is designed to apply KR cable ties. Due to its special design the application is secure and offers a high vibration resistance. The EVO KR tool crimps the glass-fibre-reinforced locking pin of the KR seal and leads to plastic deformation of the tie ends. This produces a very proof permanent connection. One reason for customers, especially in the railway and automotive industry, to take this system as a preferred solution.

Features and benefits

- One-hand operation
- Sideway insertion of the cable tie
- Lightweight plastic housing
- One front plate to apply 6 mm and 8 mm KR cable ties
- Tension adjustment and possibility to calibrate EVO KR tool



The manual tensioning tool EVO KR for KR-Series cable ties.

PART DESCRIPTION	Description	For Ties	Strap Width max.	Weight	Article-No.
EVO-KR-PL-BU	EVO KR	KR6, KR8	8.0	0.537 kg	121-68000

All dimensions in mm. Subject to technical changes.

Manual tensioning tool for KR-Series

KR6/8

Application tool KR6/8 crimps the glass-fibre-reinforced locking pin of the KR seal and leads to plastic deformation of the tie ends. This produces a very proof permanent connection.

Features and benefits

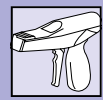
- Tough metal tool for applying KR cable ties only
- For tensioning, fixing and cutting KR cable ties
- Simply change the front plate to apply 6 mm or 8 mm straps



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

PART DESCRIPTION	Description	For Ties	Strap Width max.	Article-No.
KR6/8PA12-MET-BU/RD	KR6/8PA12	KR6, KR8	-	121-00681
KR6/8-MET-BU/RD	KR6/8	KR6, KR8	8.0	121-00680

All dimensions in mm. Subject to technical changes.



Manual tensioning tool for metal ties MBT-Series

MK9SST up to 16.0 mm strap width

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

Features and benefits

- Glass fiber reinforced housing for extra durability.
- Ergonomic design protects against repetitive strain injuries.
- Calibrated for consistent tensioning and cutting of MBT/MAT-series metal ties.



MK9SST.

PART DESCRIPTION	Description	Strap Width max.	Strap Thickness max.	Weight	Article-No.
MK9SST-PA66GF30-GY	MK9SST	16.0	0.5	0.315 kg	110-95000
SP MK9SST replacement blade-ST-GY	Replacement Blade	-	-	0.000001 kg	110-95273

All dimensions in mm. Subject to technical changes.

Manual tensioning tool for metal ties MBT-Series

KST-STG200 up to 12.3 mm strap width

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

Features and benefits

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



KST-STG200.

PART DESCRIPTION	Strap Width max.	Strap Thickness max.	Weight	Article-No.
KST-STG200-MET-BK/ML	12.3	0.4	0.000001 kg	110-09950

All dimensions in mm. Subject to technical changes.



Manual cutting tool for plastic ties

EVO cut

The EVO cut is a cutting tool for plastic ties, which ensures the cut of the strap or head while preserving wires and harnesses from being damaged.

This applies to flexible cables, bundles and lines as well as rigid bundled goods. Its use is recommended in many applications for which wires and harnesses have a high value added. Especially for sensitive cable harnesses the use of the EVO cut is recommended.

The cutting tool is made of a lightweight plastic housing and an ergonomic, non-slip handle for a comfortable and secure grip.

The tool includes eight interchangeable nosepieces for plastic cable ties and KR-Series ties of varying widths and thicknesses.

Features and benefits

- Cutting tool for plastic ties and KR-Series
- Tie can be cut off at any part of the strap or the cable tie head
- Ensures the cable isolation from being damaged
- Light-weighting plastic housing, ergonomic design
- Single-handed operation
- Includes eight interchangeable nosepieces for respective cable tie width, thickness and head size



Zip tie cutter EVO cut: Cutting tool for plastic cable ties and heads.



Zip tie cutter EVO cut: Securely removes cable ties from bundling good.



Zip tie cutter EVO cut: Nosepieces designed for secure cutting.



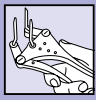
Secure cutting of cable tie straps with the EVO cut zip tie cutter.



Zip tie cutter EVO cut: Easily exchanged nosepieces.

PART DESCRIPTION	Strap Width max.	Strap Thickness max.	Weight	Article-No.
EVO_cut-PL-BU	8.0	2.1	0.317 kg	110-05105

All dimensions in mm. Subject to technical changes.



Three-pronged pliers for sleeves and grommets

K, S, SS

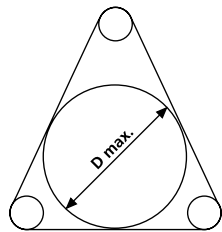
Three-pronged expansion tools are used to ensure speedy and precise application of expandable markers and sleeves.

Features and benefits

- For speedy application of markers and sleeves
- Hellerine lubricant recommended for easy operation
- Handy D KIT contains a tool body, prong sets in all 3 sizes (SS, S, K) and a small bottle of Hellerine lubricant



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



Three-prong pliers D = max.
application diameter

PART DESCRIPTION	Description	Bundle Ø min.	Bundle Ø max.	Ø D max.	Max. length of marker	Article-No.
SS TOOL-MET-BU	Three-pronged plier	1.2	2.0	15.0	20	621-80008
S TOOL-MET-BU	Three-pronged plier	2.5	4.0	15.0	20	621-80009
K TOOL-MET-BU	Three-pronged plier	5.0	10.0	17.0	32	621-80007
D KIT-MET-BU	Three-pronged plier kit	1.2	10.0	17.0	32	621-80005

All dimensions in mm. Subject to technical changes.



Hot cutting tool

HSG0

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

Features and benefits

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



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

PART DESCRIPTION	Description	Weight	Article-No.
HSG0-BU	Hot cutting tool	1.15 kg	170-99001
HSG0BLADE-MET-ML	Replacement blade	0.027 kg	170-99002

Subject to technical changes.

Even big things have small beginnings.

You have to work with what you've got – and that was exactly what our company founder Paul Hellermann did back in 1935. Inspired by the small rubber tube in bicycle valves, he developed a process for binding electric cables with rubber: the Hellermann grommet and three-pronged pliers. The first two of the hundreds of patents filed since then.

www.HellermannTyton.co.in/made-for-real

MADE FOR REAL







7.1 Product Approvals and Specifications

Standards Overview

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7.2 Numerical Index

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7.3 Alphanumeric Index

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Standards/Standards Organisations/Authorities

ABS	American Bureau of Shipping	USA	
ASN	AeroSpatiale Normalisation	France	
ASTM	ASTM International	USA	
BS	British Standard	Great Britain	
DAN	Deutsche Airbus Norm	Europe	
DEF STAN	Defence Standard	Great Britain	
DNV	Det Norske Veritas	Norway	
ECE	World Vehicle and Vehicle Law Harmonization Forum	Europe	
EN 45545-2	European Standard EN 45545-2	Europe	
EN 50343	European Standard EN 50343	Europe	
FCC	Federal Communications Commission	USA	
LEA	Liste des Equivalences Approuvés	France	
MIL	Military Specification	USA	
MS	Military Standard	USA	
NASM	National Aerospace Standard, Metric	USA	
NF F	Norme Française Ferroviaire	France	
RINA	Registro Italiano Navale (RINA)	Italy	
SAE	Society of Automotive Engineers	USA	



Standards/Standards Organisations/Authorities

STD	Standard for Dassault	France	
UL	Underwriters Laboratories	USA	
UNI CEI	Ente Nazionale Italiano di Unificazione Comitato Elettrotecnico Italiano	Italy	
VG	Verteidigungsgerätenorm der Bundeswehr	Germany	

References

NSA	Norm Sud Aviation	France	
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Testing Institute/Certifying Company

BV	Bureau Veritas	France	
CSA	Canadian Standards Association	Canada	
DEMKO	Danske Elektriske Materialekontrol	Denmark	
DNV	Det Norske Veritas	Norway	
IMQ	Certificazione di prodotti	Italy	
FIMKO	Suomalainen testaus ja sertifiointiyritys	Finland	
KEMA KEUR	KEMA Quality B.V.	Netherlands	
LR	Lloyd's Register	Great Britain	
NEMKO	Norges Elektriske Materiellkontroll	Norway	
SEMKO	Sveriges Elektriska Materielkontroll	Sweden	
UL Recognized	Underwriters Laboratories Recognized Canada and US	Canada, USA	
VDE	Verband der Elektrotechnik, Elektronik, Informationstechnik	Germany	



Certification mark

ATEX	ATEX (Atmosphères Explosibles) Directive	International	
CE	Conformité Européenne	Europe	
CEBEC	Comité for electrotechnical Belgium European Community	Belgium	
ECE	World Vehicle and Vehicle Law Harmonization Forum	Europe	
EN 45545-2	European Standard EN 45545-2	Europe	
EN 50343	European Standard EN 50343	Europe	
ENEC	European Norms Electrical Certification	Europe	
GS	Geprüfte Sicherheit	Europe	
JAR/FAR	Joint Aviation Regulations / Federal Aviation Regulations	Europe, USA	
JN	Particular Specification developed for Eurofighter Program		
NFPA	National Fire Protection Association	USA	
UL	Underwriters Laboratories	USA	
UL Recognized	Underwriters Laboratories Recognized	USA	
cULus	Canadian Underwriters Laboratories	Canada, USA	
VDE	Verband der Elektrotechnik, Elektronik, Informationstechnik	Germany	

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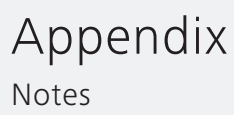


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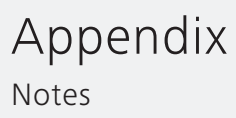


Appendix

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Appendix

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