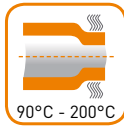




**SHRINK**  
T E C H

Product catalogue

## Notation:



Shrinking temperature



Shrinking ratio



Application temperature



Halogen-free product. It does not emit halogen while burning.



Flame retardant product



UV stabilised



Free from toxic heavy metal compounds  
(Restriction on Hazardous Substance)

## Dear Partners,

ShrinkTech S.r.o. was established in 2008 in Slovakia with the purpose of completely supporting our customers with our professional experiences and expertise, in order to actively facilitate your and your company's success.

Our main activity is the distribution of electrical insulations, especially heat-shrink tubing, silicone products for industrial use, teflon and PVC insulation tubes and fibreglass reinforced tubes with acrylic and silicone coating. Our company is represented in several countries of the European Union. In these countries we aim to communicate with our clients in their mother tongue. We put special emphasis on satisfying the personal expectations of our partners at the highest possible level of quality. We are well aware of how much the fierce competition burdens corporate management nowadays, when decisions influencing the long-term operation and efficiency of production have to be taken. Therefore our professional team is available every day of the week. Our goal is to support our partners with professional advice, competitive prices and flexible service.

## Corporate history:

### 2008-2009

In the first few years we had a minimal amount of warehouse stock and supplied our customers upon order. The rapid increase in the number of partners and the purpose of providing more flexible customer service required us to establish a larger amount of stock.

### 2010

Several development projects were concluded in January in the fields of stock management, storage, movement and registration. We simultaneously moved to a larger warehouse. During this period we stocked 100 km of goods to support the successful operation of your company. In this year we also improved our machinery, since our customers demanded products that cut to size according to custom needs, and we also provided marking service to heat-shrink tubes for some of our partners.

### 2012

We have developed a client registry system, which has since been extended to be an integrated enterprise resource planning system. In the same year we began transforming the company according to the requirements of the ISO 9001 qualification.

### 2013

We have further extended our warehouse to enable more flexible service to our partners, with products that had not previously been available on stock. We are now able to flexibly provide almost 40% of the 800 products and 40 product groups listed in the catalogue. We received ISO 9001 certification from TÜV Rheinland. We have developed a shrinking device operating with IR technology to enable the faster and more efficient shrinking of our tubes.

2014 ide kölktsed azt hogy kabelbindert bevezetjük nex kooperation van :D

### Vision:

We continuously develop our QMS system with the approval of our partners. In the coming years we are developing our warehouse stock to be able to rapidly deliver 60 percent of the available products. We intend to enter the markets of new Eastern European countries. We also plan to provide the manufacturing of certain products locally, to further optimise the development and sale processes, enabling faster, more flexible and cheaper supply to our partners. Therefore we intend to construct a new Eastern European manufacturing plant.

### Product quality:

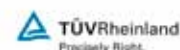
To our partners delivering to the American markets, we offer products with UL qualifications. Manufacturing is operated according to ISO9001 ISO14000 and ISO TS16949 process management. According to the requirements of producers of the automotive industry, our products are IMDS registered.

### Environment Protection:

The protection of the environment has become a primary aspect all over the world, therefore our company only offers quality materials that are not harmful to the environment. Our products comply with requirements of the 2011/65/EU ROHS, they are free from heavy metals and we continuously consider the protection of the environment in our everyday operations. We also comply with the EU 1907/2006/EK REACH regulation.

### Our product range:

In our catalogue we offer a wide selection of shrink tubes, which also includes products that can satisfy extreme needs such as extra high temperature shrinking or extra thin walls. Fibreglass tubes are available in the ranges of 1.5kV to 15kV, and 155 degrees Celsius to 900 degrees Celsius. We offer a wide range of teflon, silicone and PVC non-shrinking insulation tubes. In case you cannot find the item you require, please get in touch with us in order for us to be able to assist you personally. Our labelling and heat-shrink tube marking devices are recommended for all types of industrial usage. With the LCD screen of our welding device your colleagues will be able to shrink our product at the perfect temperature. We have developed the IR shrinker to enable our partners to operate even faster and more efficiently.





#### Our services:

We cut tubes to size according to our partners' requests. Depending on the sizes, our cutting capacity from diameters of 1.2 to the heat-shrink tube size of 39.1 (in case of thin wall tubes) may reach 1000000 pieces a day.

Heat-shrink tube marking: According to customer requests, we provide marking for cables and tubes in white, yellow and black in the requested size, and we can print images, bar-codes and texts in characters. In case your company uses heat-shrink tubes for marking, but in a quantity that would not require the purchase of a printer, our company is happy to produce the requested printer for you.

Should you have any further questions, do not hesitate to contact us.

We are looking forward to our future partnership.

Best Regards,  
ShrinkTech Team



Due to the explosive demand and shortening life cycle of consumer electronic goods, the issues hazardous substances become the major challenges on properly disposing the electronic wastes with for all humankind. Disposal all wastes into landless and threat caused by Electrical wastes, EU had established from contaminating the environment. In response to the incinerators along cannot prevent hazardous substances (Directive on the Waste Electronics and Electrical Equipment, WEEE) and „Electrical and Electronic Equipment Directive restricted hazardous substances (RoHS)” standards.

Effective from July 2006, these two standards restricted or prohibited the applications of six major hazardous substances on all electronic, information and communication devices.

Products that cannot meet the provisions will be restrict by the import ban.

Since July 2006, all Electronic products sold in the European territory must comply with the provisions of the EU's RoHS directive, other countries such as United States, Japan and China also have to follow the development of green-related laws.

RoHS Standard regulates the electric devices that operate in voltages under 1,000V AC or 1,500V DC.

The following are how they are further categorized:

- Large household appliances
- Small appliances
- Information technology and telecommunication equipment
- Consumer durable equipment
- Lighting, illumination equipment
- Electrical and electronic tools
- Toys, leisure and sports equipment
- Medical devices
- Surveillance, control equipment
- Vending machines

Products within the above categories are not permitted to use the following six hazardous substances:

- Cadmium (Cd): concentration less than <100ppm
- Lead (Pb): concentration less than <1000ppm
- Mercury (HG) concentration less than <1000ppm
- Hexavalent chromium (Cr6+) concentration less than <1000ppm
- Polybrominated biphenyl (PBB): concentration less than <1000ppm
- Polybrominated biphenyl ethers (PBDE): concentration less than <1000ppm

The last two substances are usually used as flame retardants. Lead are used to bonding chips and boards, but now are replaced by compounds made of tin, silver, and copper.

REACH a program designed by EU to keep record of substance registration, evaluation, authorization, and restrictions.

REACH (Registration, Evaluation, Authorization, and Restrictions of Chemicals) is a standard that set to promote better health for human beings and the environment protection. It focuses on the prevention of chemical pollution.

REACH replaces 40 existing EU chemicals-related directives and regulations. Started from June 1, 2007, REACH had begun to enforce registration, evaluation, authorization and implementation of safety monitoring on all chemical products trading in and out of Europe market.

REACH involved with wide range of registration and guidelines. It started in REACH's regulation, the chemicals in use will not and should not be the cause of releasing harmful substances from the original forms nor finished products.

The product categories fall under REACH's regulations including electrical unions, electronic devices, home appliances, textiles, clothing, shoes, toys, motor vehicles, and pharmaceutical products. More than 30,000 types of chemical substance are under REACH regulation. Of which, about 1,000 types of harmful substances are listed as toxic. Therefore, the products affected by REACH are estimated up to 500 million. According to the schedule, these 30,000 types of chemical substances will go through the process of registration, evaluation, authorization and restriction procedures by June 1, 2018.

#### Low Smoke, Halogen Free Product Specifications

After the European Union announced the ROHS directive, U.S., Japan, China and other countries have announced similar policies to promote Green process. In addition to the regulatory frameworks issued by these countries, Greenpeace further requested the manufacturers not to apply polyvinyl chloride (PVC) and Brominated flame retardants (BFRs) in their electronic products completely. The products that comply with this standard are qualify as the environmentally safe electric products that are both lead-free and halogen-free.

Halogen, refers to fluorine (F), chlorine (Cl), bromine (Br), iodine (I), astatine (At) and other non-metallic elements in the periodic table of chemistry. Many industrial raw materials and manufacturing process will be applied with halides, such as PVC, hydrochloric acid etc...However, some types of halides are the cause of pollution that damaged the ecology. Substances under the halide category are for example the ozone depletion substances CFC, Some examples of the well-known substance under the halide category is the ozone depletion substances CFC, polybrominated biphenyl (PBB), polybrominated biphenyl ethers (PBDE), and the well-known dioxin.

2008 Act of Norway PoHS standards has listed the brominated flame retardant as a banned substances. International organizations, such as IEC, IPC, and JPCA has also defined their specifications on halogen-free materials. Major brand names of electronic and appliances made their commitments on developing halogen-free products progressively in order to comply with the trend of green electronics.

Some specific industries, such as subway, rapid transit, power plants, chemical plants, high-floor, buildings, shopping malls, theaters, fire-fighting equipment etc., carries high responsibility on public safety. Therefore, the components used in those industries are usually complied with the most stringent guidelines of low smoke halogen-free and flame retardant standards.



### **Automotive:**

Shrinktech helps develop and implement productivity-boosting solutions for the automotive industry, creating a partnership that can help you keep production costs low.



### **Electronics**

We assist our partners with innovative solutions for improving cycle times and simplifying the installation of our products. We are in close cooperation with the electronics industry.



### **Railways:**

Our products for railways are characterised by innovative solutions and raw materials of excellent quality. For this special application we have developed materials with consistent performance in all conditions.



### **Electrical:**

We also offer solutions for our partners involved in the construction or operation of low-voltage grids. Shrinktech offers both heat shrink products and products that can be installed without use of an open flame to its partners, which allow them to provide the required power supply.





## Telecom

In addition to classic cable fittings we also offer innovative solutions for players in the telecommunications industry, whether involved with cable, satellite or mobile networks.



## Energy:

We provide solutions both for fossil fuel-based and wind or solar power plants. Our products are resistant to environmental effects, heat, cold, and UV radiation.



## Lighting:

Our products for this special field are manufactured from extremely heat-resistant materials, and can be incorporated into LED or traditional lighting technologies. Our comprehensive product spectrum offers solutions ranging from LED lights to the installation of public lighting.



## Electrical installation

Shrinktech offers a wide range of products to its electrician and electrical cabinet manufacturing partners for the installation, bundling, and marking of cables. You can count on our colleagues and wholesale partners anytime and anywhere.



## ShrinkTech Heat shrink product list

Name	Description	Material	Shrinkratio
<b>ST55</b>	125°C polyolefin tubing excellent general propertie	Poliiolefin	2:1
<b>STS</b>	125°C polyolefin tubing excellent general properties	Poliiolefin	2:1
<b>STYG</b>	Yellow-green high quality polyolefin tubing	Poliiolefin	2:1
<b>ST135</b>	135°C very flexible, high quality polyolefin tubing	Poliiolefin	2:1
<b>ST3X</b>	Offering 3:1 shrinking ratio	Poliiolefin	3:1
<b>ST4X</b>	Offering 4:1 shrinking ratio	Poliiolefin	4:1
<b>ST3XA</b>	Dual wall tubing with hot-melt adhesive, 3:1 shrink ratio	Poliiolefin	3:1
<b>ST4XA</b>	Dual wall tubing with hot-melt adhesive, 4:1 shrink ratio	Poliiolefin	4:1
<b>STL</b>	Very low shrinking temperature and high flexibility	Poliiolefin	2:1
<b>STHF</b>	Halogen-free heat shrink tube	Poliiolefin	2:1
<b>STU</b>	125°C Ultra thin wall polyolefin tubing	Poliiolefin	2:1
<b>ST150</b>	Shiny (black) or Crystal high performance tubing in PVDF	Kynar	2:1
<b>ST175</b>	PVDF tubing, high performance tubing	Kynar	2:1
<b>ST200</b>	Very high performance elastomeric tubing	Viton	2:1
<b>STDR</b>	Diesel resistant tubing for high performance cabling	Fruoroelastomer	2:1
<b>STCA</b>	Shiny surface (black) tube	Poliiolefin	2:1
<b>STM</b>	Medium wall heat shrink tube without adhesive	Poliiolefin	3:1
<b>STMA</b>	Medium wall heat shrink tube with adhesive	Poliiolefin	3:1
<b>STH</b>	Heavy wall heat shrink tube without adhesive	Poliiolefin	3:1
<b>STHA</b>	Heavy wall heat shrink tube With adhesive	Poliiolefin	3:1
<b>STEC</b>	Cable End caps for various cable applications	Poliiolefin	3:1
<b>STW</b>	Heat Shrinkable Wraparound Sleeves with hot melt adhesive	Poliiolefin	2:1
<b>STB</b>	High Voltage Insulating Tubes	Poliiolefin	3:1
<b>STP</b>	Printable heat shrinktube	Poliiolefin	2:1 3:1

## ShrinkTech Heat shrink product list



Name	Temperature	Halogenfree	RoHS	UL, VW-1	Flame retardant	Water proof	Page
ST55	125°C	✗	✓	✓	✓	✗	3
STS	125°C	✗	✓	✓	✓	✗	6
STYG	125°C	✗	✓	✓	✓	✗	7
ST135	135°C	✗	✓	✓	✓	✗	8
ST3X	125°C	✗	✓	✓	✓	✗	9
ST4X	125°C	✗	✓	✓	✓	✗	9
ST3XA	125°C	✓	✓	✓	✓	✓	10
ST4XA	125°C	✓	✓	✓	✓	✓	10
STL	125°C	✓	✓	✗	✗	✗	11
STHF	105°C	✓	✓	✓	✓	✗	12
STU	125°C	✗	✓	✓	✓	✗	13
ST150	150°C	✗	✓	✓	✓	✗	14
ST175	175°C	✗	✓	✓	✓	✗	15
ST200	200°C	✗	✓	✓	✓	✗	16
STDR	150°C	✗	✓	✓	✓	✗	17
STCA	105°C	✗	✓	✓	✓	✗	18
STM	110°C	✓	✓	✗	✗	✗	19
STMA	110°C	✓	✓	✗	✗	✓	19
STH	110°C	✓	✓	✗	✗	✗	20
STHA	110°C	✓	✓	✗	✗	✓	20
STEC	110°C	✓	✓	✗	✗	✓	21
STW	50°C	✓	✓	✗	✗	✓	22
STB	110°C	✓	✓	✗	✗	✗	23
STP	125-135°C	✗	✓	✓	✓	✗	29-32

## Overview of applications for Heat Shrink Tubing

When selecting the correct heat shrink tubing size, it is important to bear in mind the 80:20 rule. The heat shrink tubing must shrink by at least 20% and not more than 80% of its complete shrinkage capacity to achieve the right result. In our overview of applications you will find the best heat shrink tube for every cable diameter. The 80:20 rule has of course been taken into account in the table.

Heat Shrinkable Tubing with a shrink ratio of 2:1

Standard products:

STS, ST55, STYG, ST135, STL, STHF, STU,

Special products:

STS150, ST150, ST175, ST200, STDR, STCA

Heat Shrinkable Tubing with a shrink high ratio

Standard products:

ST300, ST350, ST3X, ST3XA, ST4XA

Special products:

STCA, ST4XA-GR

Shrink ratio 2:1		
Size mm		Cable/Wire diameter
1.2/0.6		0.7 mm
		1.1 mm
3.2/1.6	2.4/1.2	1.4 mm
		1.9 mm
	4.8/2.4	2.2 mm
		2.9 mm
6.4/3.2	9.5/4.7	3.8 mm
		4.3 mm
	12.7/6.4	5.7 mm
		5.8 mm
12.7/6.4	19.1/9.5	7.7 mm
		8.6 mm
	25.4/12.7	11.4 mm
		15.2 mm
25.4/12.7	38.1/19.1	17.2 mm
		22.9 mm
	76.2/38.1	30.5 mm
		34.3 mm
50.8/25.4		45.7 mm
		61.0 mm
		68.6 mm
101.6/50.8		91.4 mm

Shrink ratio 3:1		
Size mm		Cable/Wire diameter
1.5/0.5		0.7 mm
		1.3 mm
4.5/1.5	3/1	1.4 mm
		2.6 mm
	6/2	2.8 mm
		5.2 mm
18/6	12/4	5.6 mm
		8.4 mm
	24/8	10.4 mm
		11.2 mm
39/13		15.6 mm
		18.4 mm
		20.8 mm
		34.6 mm

Shrink ratio 4:1		
Size mm		Cable/Wire diameter
4/1		0.7 mm
		1.3 mm
	6/1.5	1.4 mm
		2.6 mm
8/2		2.8 mm
		5.2 mm
16/4	12/3	5.6 mm
		8.4 mm
	24/6	10.4 mm
		11.2 mm
40/10		15.6 mm
		18.4 mm
		20.8 mm
		34.6 mm

## Overview of applications for Heat Shrink Tubing

Conversion from imperial to metrics									
Zoll	1/32"	3/64"	1/16"	5/64"	3/32"	1/8"	3/16"	1/4"	3/8"
mm	0.8	1.2	1.6	2.0	2.4	3.2	4.8	6.4	9.5
Zoll	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"	3"	4"
mm	12.7	15.9	19.1	25.4	31.8	38.1	50.8	76.2	101.6

### The right Heat Shrink Tube

The 80:20 rule means that a heat shrink tube should shrink by a maximum of 80% and a minimum of 20%.

For example: A cable with a diameter of 5 mm is to be wrapped in heat shrinkable tubing. In theory both sizes 6/2 and 12/4 would be suitable since the required diameter of 5 mm lies within the shrink range of both tube sizes.

Maximum shrink (100%)



Maximum shrinkage = 4 mm

Optimum shrink max. ( 80%)



Shrinkage of 3.2 mm

Optimum shrink min. ( 20%)



Shrinkage of 0.8 mm

Size 6/2 has a range of application of between 2.8 mm and 5.2 mm and is therefore suitable for the cable diameter of 5 mm.

Maximum shrink (100%)



Maximum shrinkage = 8 mm

Optimum shrink max. ( 80%)



Shrinkage of 6.4 mm

Optimum shrink min. ( 20%)



Shrinkage of 1.6 mm

The smallest application diameter of size 12/4 is 5.6 mm. This size is therefore unsuitable for a cable diameter of 5 mm.

Insulating, identifying cables without changing the wire's diameter. The low shrink temperature recovery reduces installation time and eliminates heat damage on the application.



- Flexible
- UL224, 125°C, VW-1
- Environmental friendly,  
free from toxic heavy metal  
compounds

- **Material:**  
modified polyolefin
- **Colour:**  
black, red, green, blue,  
brown, white, yellow, transparent
- **Packaging:**  
spool or per meter



RoHS



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
STS-012	1.2	0.6	0.3	200	O
STS-016	1.6	0.8	0.3	200	O
STS-024	2.4	1.2	0.4	200	O
STS-032	3.2	1.6	0.5	200	O
STS-048	4.8	2.4	0.5	100	O
STS-064	6.4	3.2	0.6	100	O
STS-095	9.5	4.8	0.6	100	F
STS-127	12.7	6.4	0.6	50	F
STS-190	19.0	9.5	0.8	30	F
STS-254	25.4	12.7	0.9	30	F
STS-318	31.8	15.9	0.9	30	F
STS-381	38.1	19.0	1.0	30	F
STS-508	50.8	25.4	1.1	30	F





Used for electrical grounding, protecting and insulating wires and for identifying earth cables.

■ **Material:**

modified polyolefin

■ **Colour:**

Yellow-green striped

■ **Packaging:**

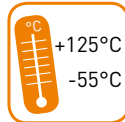
spool or per meter

■ UL 224, 125 °C, VW-1

■ Flexible

■ Flame retardant

■ Environmental friendly, free from toxic heavy metal compounds



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
STYG-012	1.2	0.6	0.3	200	O
STYG-016	1.6	0.8	0.3	200	O
STYG-024	2.4	1.2	0.4	200	O
STYG-032	3.2	1.6	0.5	200	O
STYG-048	4.8	2.4	0.5	100	O
STYG-064	6.4	3.2	0.6	100	O
STYG-095	9.5	4.8	0.6	100	F
STYG-127	12.7	6.4	0.6	50	F
STYG-190	19.0	9.5	0.8	30	F
STYG-254	25.4	12.7	0.9	30	F
STYG-318	31.8	15.9	0.9	30	F
STYG-381	38.1	19.0	1.0	30	F
STYG-508	50.8	25.4	1.1	30	F

# ST55

ShrinkTech ST55 Thin wall heat shrink tube for universal use

Insulating, identifying cables without changing the wire's diameter. The low shrink temperature recovery reduces installation time and eliminates heat damage on the application.



- UL 224, 125 °C, VW-1
- Flexible
- Flame retardant
- Environmental friendly, free from toxic heavy metal compounds

- **Material:**  
modified polyolefin
- **Colour:**  
Black, red, white, green, yellow, brown, blue
- **Packaging:**  
per meter in box



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	PCS / boc (m)	Shape
	Min.as supplied	Max. fully recovered			
ST55-024	2.4	1.2	0.4	20	O
ST55-032	3.2	1.6	0.5	20	O
ST55-048	4.8	2.4	0.5	15	O
ST55-064	6.4	3.2	0.6	10	O
ST55-095	9.5	4.8	0.6	10	F
ST55-127	12.7	6.4	0.6	10	F
ST55-190	19.0	9.5	0.8	10	F
ST55-254	25.4	12.7	0.9	10	F
ST55-318	31.8	15.9	0.9	5	F
ST55-381	38.1	19.0	1.0	5	F
ST55-508	50.8	25.4	1.1	5	F

## ShrinkTech High shrink ratio tubing without adhesive



Suitable for electronics and automotive industry, where components are of irregular sizes and shapes. Provides both insulation and sealing for protected articles. Recommended for open air use as well since it is UV stabilised.

### Material:

modified polyolefin

### Colour:

black

### Packaging:

per meter in box

### Without adhesive

UL 224, 125 °C, VW-1

Flexible

Flame retardant

Environmental friendly, free from toxic heavy metal compounds



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	PCS / box (m)	Shape
	Min. as supplied	Max. fully recovered			
ST300-024	2.4	0.8	0.3	20	O
ST300-030	3.0	1.0	0.4	20	O
ST300-048	4.8	1.6	0.5	15	O
ST300-060	6.0	2.0	0.5	10	O
ST300-090	9.0	3.0	0.6	10	O
ST300-120	12.0	4.0	0.6	10	F
ST300-180	18.0	6.0	0.6	10	F
ST300-240	24.0	8.0	0.6	10	F

# ST350

## ShrinkTech Dual wall tubing with adhesive

Manufactured by co-extrusion of polyolefin and hot-melt adhesive. Suitable for electronics and automotive industry where components are of irregular sizes, shapes and protection against water and moisture are important. Provides both insulation and sealing for protected articles.



- High shrink ratio
- Flame retardant
- Waterproof
- UL 224, 125C, VW-1
- Environmental friendly, free from toxic heavy metal compounds
- Very flexible
- **Material:**  
modified polyolefin
- **Colour:**  
black
- **Packaging:**  
per meter in box



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	PCS / box (m)	Shape
	Min. as supplied	Max. fully recovered			
ST350-030	3.0	1.0	1.0 + 0.50	20	0
ST350-048	4.8	1.6	1.0 + 0.50	15	0
ST350-060	6.0	2.0	1.0 + 0.60	10	0
ST350-090	9.0	3.0	1.4 + 0.60	10	0
ST350-120	12.0	4.0	1.6 + 0.70	10	0
ST350-180	18.0	6.0	2.1 + 0.80	10	0
ST350-240	24.0	8.0	2.5 + 1.10	10	0

## ShrinkTech Thin wall heat shrink tubing in box



Insulating, identifying cables without changing the wire's diameter. The low shrink temperature recovery reduces installation time and eliminates heat damage on the application.

### Material:

modified polyolefin

### Colour:

black, red, green, blue,  
brown, white, yellow, transparent

### Packaging:

spool or per meter

### Flexible

UL224, 125°C, VW-1

Environmental friendly,  
free from toxic heavy metal  
compounds



RoHS



UV  
stabilised



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
STSB-012	1.2	0.6	0.3	15	O
STSB-016	1.6	0.8	0.3	15	O
STSB-024	2.4	1.2	0.4	15	O
STSB-032	3.2	1.6	0.5	10	O
STSB-048	4.8	2.4	0.5	10	O
STSB-064	6.4	3.2	0.6	10	O
STSB-095	9.5	4.8	0.6	10	F
STSB-127	12.7	6.4	0.6	5	F
STSB-190	19.0	9.5	0.8	5	F
STSB-254	25.4	12.7	0.9	5	F

# ST135

## ShrinkTech 135 °C

Provides excellent insulation and good mechanical strength. Perfect for insulating, coding, bundling and protecting sets of cables and connections. Recommended for electronics and automotive industries.



- Environmental friendly, free from toxic heavy metal compounds
- Highly flame retardant
- Very flexible
- UL 224, 125°C, VW-1
- MIL-I-23053 military spec.
- Resistant to common fluids and solvents

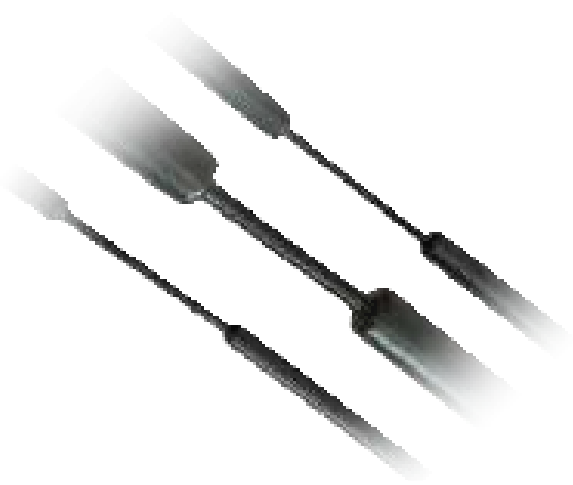
- **Material:**  
modified polyolefin
- **Colour:**  
black, transparent,  
other colors available on request
- **Packaging:**  
spool



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
ST135-012	1.2	0.6	0.3	200	O
ST135-016	1.6	0.8	0.3	200	O
ST135-024	2.4	1.2	0.4	200	O
ST135-032	3.2	1.6	0.5	200	O
ST135-048	4.8	2.4	0.5	100	O
ST135-064	6.4	3.2	0.6	100	O
ST135-095	9.5	4.8	0.6	100	F
ST135-127	12.7	6.4	0.6	50	F
ST135-190	19.0	9.5	0.8	30	F
ST135-254	25.4	12.7	0.9	30	F
ST135-318	31.8	15.9	0.9	30	F
ST135-381	38.1	19.0	1.0	30	F
ST135-508	50.8	25.4	1.1	30	F



## ShrinkTech High shrink ratio tubing without adhesive



Suitable for electronics and automotive industry, where components are of irregular sizes and shapes. Provides both insulation and sealing for protected articles. Recommended for open air use as well since it is UV stabilised.

■ **Material:**

modified polyolefin

■ **Colour:**

black

■ **Packaging:**

spool

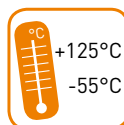
■ Without adhesive

■ UL 224, 125 °C, VW-1

■ Flexible

■ Flame retardant

■ Environmental friendly, free from toxic heavy metal compounds

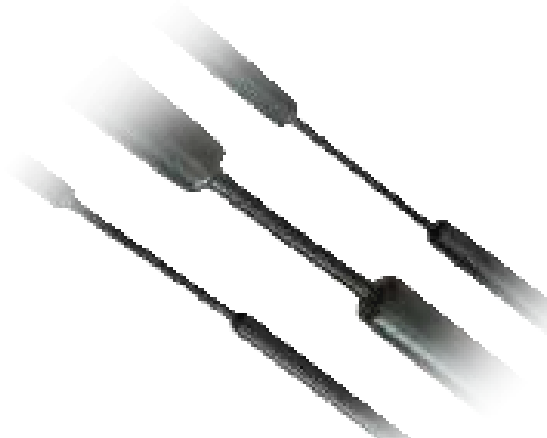


Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
ST3X-015	1.5	0.5	0.3	200	O
ST3X-024	2.4	0.8	0.3	150	O
ST3X-030	3.0	1.0	0.4	150	O
ST3X-048	4.8	1.6	0.5	75	O
ST3X-060	6.0	2.0	0.5	75	O
ST3X-090	9.0	3.0	0.6	75	O
ST3X-120	12.0	4.0	0.6	50	F
ST3X-180	18.0	6.0	0.6	50	F
ST3X-240	24.0	8.0	0.6	30	F
ST3X-390	39.0	13.0	0.8	30	F

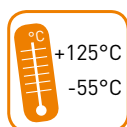
# ST4X

## ShrinkTech High shrink ratio tubing without adhesive

Suitable for electronics and automotive industry, where components are of irregular sizes and shapes. Provides both insulation and sealing for protected articles. Recommended for open air use as well since it is UV stabilised.



- **Material:**  
modified polyolefin
- **Colour:**  
black
- **Packaging:**  
spool
- Without adhesive
- UL 224, 125 °C, VW-1
- Flexible
- Flame retardant
- Environmental friendly, free from toxic heavy metal compounds



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min. as supplied	Max. fully recovered			
ST4X-040	4.0	1.0	0.4	200	O
ST4X-060	6.0	1.5	0.4	100	O
ST4X-080	8.0	2.0	0.5	100	O
ST4X-120	12.0	3.0	0.6	100	F
ST4X-160	16.0	4.0	0.5	100	F
ST4X-240	24.0	6.0	0.6	100	F
ST4X-320	32.0	8.0	0.8	50	F

## ShrinkTech Dual wall tubing with adhesive



Manufactured by co-extrusion of polyolefin and hot-melt adhesive. Suitable for electronics and automotive industry where components are of irregular sizes, shapes and protection against water and moisture are important. Provides both insulation and sealing for protected articles.

- High shrink ratio
- Flame retardant
- Waterproof
- UL 224, 125C, VW-1
- Environmental friendly, free from toxic heavy metal compounds
- Very flexible

- **Material:**  
modified polyolefin
- **Colour:**  
black
- **Packaging:**  
spool or per meter



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min. as supplied	Max. fully recovered			
ST3XA-030	3.0	1.0	1.0 + 0.50	150	0
ST3XA-048	4.8	1.6	1.0 + 0.50	75	0
ST3XA-060	6.0	2.0	1.0 + 0.60	75	0
ST3XA-090	9.0	3.0	1.4 + 0.60	75	0
ST3XA-120	12.0	4.0	1.6 + 0.70	50	0
ST3XA-180	18.0	6.0	2.1 + 0.80	50	0
ST3XA-240	24.0	8.0	2.5 + 1.10	30	0
ST3XA-390	39.0	13.0	2.5 + 1.20	30	0

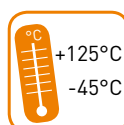
# ST4XA-GR

## Dual wall semirigid tubing with adhesive

High shrink ratio allows a few sizes to cover a wide range of splice and component diameter, mechanically tough tubing provides strain relief and abrasion protection of wire splices, terminals and other components. Suitable for electronics and automotive industry where components are of irregular sizes, shapes and protection against water and moisture are important.



- **Material:**  
modified polyolefin
- **Colour:**  
black, transparent
- **Packaging:**  
spool
- Environmental friendly, free from toxic
- Heavy metal compounds
- UL 224, 125°C, VW-1
- High shrink ratio
- Flamme retardant
- Waterspool
- Semirigid



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
ST4XA-057	5.7	1.27	1.3 + 0.56	50/1.22	0
ST4XA-075	7.5	1.65	1.65 + 0.76	50/1.22	0
ST4XA-115	11.5	2.45	2.0 + 1.02	25/1.22	0
ST4XA-180	18.0	4.8	2.5 + 1.37	25/1.22	0



Manufactured by co-extrusion of polyolefin and hot-melt adhesive. Suitable for electronics and automotive industry where components are of irregular sizes, shapes and protection against water and moisture are important. Provides both insulation and sealing for protected articles.

- High shrink ratio
- Flame retardant
- Waterproof
- UL 224, 125C, VW-1
- Environmental friendly, free from toxic heavy metal compounds
- Very flexible

- **Material:**  
modified polyolefin
- **Colour:**  
black
- **Packaging:**  
spool or per meter



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
ST4XA-040	4.0	1.0	1.0 + 0.50	150/1.22	0
ST4XA-060	6.0	1.5	1.2 + 0.60	100/1.22	0
ST4XA-080	8.0	2.0	1.6 + 0.75	50/1.22	0
ST4XA-120	12.0	3.0	1.9 + 1.00	50/1.22	0
ST4XA-160	16.0	4.0	2.1 + 1.05	50/1.22	0
ST4XA-180	18.0	4.5	2.4 + 1.20	25/1.22	0
ST4XA-240	24.0	6.0	2.5 + 1.25	25/1.22	0
ST4XA-320	32.0	8.0	2.5 + 1.25	25/1.22	0

Ideal for applications where heat sensitive components are used.  
Hence this special material starts shrinking on already 65 °C



- **Material:**  
modified polyolefin
- **Colour:**  
black
- **Packaging:**  
spools
- Halogen-free
- Flexible
- MVSS 302
- Environmental friendly, free from toxic heavy metal compounds



**RoHS**



**UV**  
stabilised



**Halogen-free**

Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
STL-016	1.6	0.8	0.5	200	O
STL-024	2.4	1.2	0.5	200	O
STL-032	3.2	1.6	0.5	200	O
STL-048	4.8	2.4	0.5	100	O
STL-064	6.4	3.2	0.6	100	O
STL-095	9.5	4.8	0.6	100	F
STL-127	12.7	6.4	0.6	50	F
STL-190	19.0	9.5	0.8	30	F
STL-254	25.4	12.7	0.9	30	F
STL-318	31.8	15.9	1.0	30	F
STL-381	38.1	19.0	1.0	30	F
STL-508	50.8	25.4	1.1	30	F

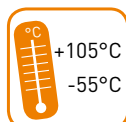




This tube responds to the highest environmental requests, made with specially designed halogen-free polyolefin. It produces neither toxic smoke nor harmful substances, ideal for underground applications where zero halogen cables & accessories are in demand.

- Halogen-free
- Low shrink temperature
- Flexible
- UL224, 125°C, VW-1
- Environmental friendly, free from toxic heavy metal compounds

- **Material:**  
modified polyolefin
- **Colour:**  
black
- **Packaging:**  
spools



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
STHF-012	1.2	0.6	0.20	200	O
STHF-016	1.6	0.8	0.20	200	O
STHF-024	2.4	1.2	0.25	200	O
STHF-032	3.2	1.6	0.25	200	O
STHF-048	4.8	2.4	0.25	100	O
STHF-064	6.4	3.2	0.28	100	O
STHF-095	9.5	4.8	0.28	100	F
STHF-127	12.7	6.4	0.28	50	F
STHF-190	19.0	9.5	0.35	30	F
STHF-254	25.4	12.7	0.40	30	F
STHF-318	31.8	15.9	0.90	30	F
STHF-381	38.1	19.0	1.00	30	F
STHF-508	50.8	25.4	1.10	30	F

# STU

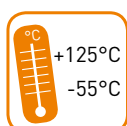
## ShrinkTech Ultra thin wall tubing

Insulating, identifying cables without changing the wire's diameter. The low shrink temperature recovery reduces installation time and eliminates heat damage on the application.



- Ultra thin wall
- Low shrink temperature
- Flexible
- UL 224, 125°C, VW-1
- Flame retardant
- Environmental friendly, free from toxic heavy metal compounds

- **Material:**  
modified polyolefin
- **Colour:**  
black
- **Packaging:**  
spools

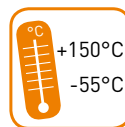


Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
STU-012	1.2	0.6	0.20	200	O
STU-016	1.6	0.8	0.20	200	O
STU-024	2.4	1.2	0.25	200	O
STU-032	3.2	1.6	0.25	200	O
STU-048	4.8	2.4	0.25	100	O
STU-064	6.4	3.2	0.28	100	O
STU-095	9.5	4.8	0.28	100	F
STU-127	12.7	6.4	0.28	50	F
STU-190	19.0	9.5	0.35	30	F
STU-254	25.4	12.7	0.40	30	F



It reliably protects wires, solder joint terminals, connections from most industrial fluid solvents and fluid chemicals. Can be used for jacketing and bundling of wires where abrasion resistance and flexibility are required.

- **Material:**  
modified polyolefin
- **Colour:**  
black
- **Packaging:**  
spools
- Highly flame-retardant
- Environmental friendly, free from toxic heavy metal compounds
- Flexible
- UL 224, 150 °C, VW-1 E360059



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min. as supplied	Max. fully recovered			
STS150-012	1.2	0.6	0.33	200	O
STS150-016	1.6	0.8	0.33	200	O
STS150-024	2.4	1.2	0.44	200	O
STS150-032	3.2	1.6	0.44	200	O
STS150-048	4.8	2.4	0.44	100	O
STS150-064	6.4	3.2	0.56	100	O
STS150-095	9.5	4.8	0.56	50	F
STS150-127	12.7	6.4	0.56	50	F
STS150-190	19.0	9.5	0.69	30	F
STS150-254	25.4	12.7	0.77	30	F
STS150-318	31.8	15.9	0.87	30	F

# ST150

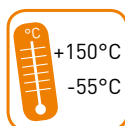
ShrinkTech 150°C

It reliably protects wires, solder joints terminals, connections from most industrial fluid solvents and fluid chemicals. Can be used for jacketing and bundling of wires where abrasion resistance and flexibility are required.



- Environmental friendly, free from toxic heavy metal compounds
- UL 224, 125°C, VW-1,
- Extremely resistant to mechanical and chemical damage
- Semi-rigid
- Flame retardant
- MIL-I-23053 Military spec.

- **Material:** Kynar  
modified polyvinyl fluoroid
- **Colour:**  
black, transparent
- **Packaging:**  
spool



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
ST150-012	1.2	0.6	0.25	200	O
ST150-016	1.6	0.8	0.25	200	O
ST150-024	2.4	1.2	0.27	200	O
ST150-032	3.2	1.6	0.27	200	O
ST150-048	4.8	2.4	0.27	100	O
ST150-064	6.4	3.2	0.33	100	O
ST150-095	9.5	4.8	0.33	50	F
ST150-127	12.7	6.4	0.33	50	F
ST150-190	19.0	9.5	0.43	30	F
ST150-254	25.4	12.7	0.48	30	F
ST150-318	31.8	15.9	0.48	30	F



High performance PVDF tubing. Excellent to insulate from high temperatures. It reliably protects wires, solder joints, terminals, connections and components from most industrial fuels, solvents and chemicals. Recommended for electronics and automotive industry.

- **Material:** Kynar  
modified polyvinyl fluoroid
- **Colour:**  
black, transparent
- **Packaging:**  
spool

- Environmental friendly, free from toxic heavy metal compounds
- Flame retardant
- Very flexible
- UL 224, 125 °C, VW-1
- MIL-I-23053 Military spec.
- Extremely thin walled



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
ST175-012	1.2	0.6	0.25	200	O
ST175-016	1.6	0.8	0.25	200	O
ST175-024	2.4	1.2	0.27	200	O
ST175-032	3.2	1.6	0.27	200	O
ST175-048	4.8	2.4	0.27	100	O
ST175-064	6.4	3.2	0.33	100	O
ST175-095	9.5	4.8	0.33	50	F
ST175-127	12.7	6.4	0.33	50	F
ST175-190	19.0	9.5	0.43	30	F
ST175-254	25.4	12.7	0.48	30	F
ST175-318	31.8	15.9	0.48	30	F

# ST200

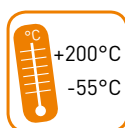
## ShrinkTech 200°C

Very high performance elastomeric tubing (Viton). Suitable for applications requiring high resistance to corrosive fluids, fuels, lubricants, acids and solvents at elevated temperature (up to 200 °C). Frequently used in harsh environments such as defence, aerospace or marine.



- MIL-I-23053 Military spec.
- UL 224, 125°C, VW-1,
- Very flexible
- Flame retardant
- Environmental friendly, free from toxic heavy metal compounds

- **Material:**  
Viton fluoroelastomer
- **Colour:**  
black
- **Packaging:**  
spool



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
ST200-032	3.2	1.6	0.76	61.0	O
ST200-048	4.8	2.4	0.90	61.0	O
ST200-064	6.4	3.2	0.90	30.5	O
ST200-095	9.5	4.8	0.90	30.5	F
ST200-127	12.7	6.4	1.10	30.5	F
ST200-190	19.0	9.5	1.30	15.0	F
ST200-254	25.4	12.7	1.65	1.22	F
ST200-381	38.1	19.0	1.90	1.22	F
ST200-508	50.8	25.4	2.80	1.22	F





Very flexible elastomer tube which preserves its quality in extreme weather conditions. Highly resistant to corrosive materials, fuels, hydraulic oil and diesel oil. Recommended for automotive, defence, aerospace and high tech industries.

■ **Material:**

Modified fluoroelastomer

■ **Colour:**

Black

■ **Packaging:**

Spool

■ Extremely resistant to mechanical and chemical damage

■ Diesel resistant

■ Wery flexible

■ Flame retardan

■ Environmental friendly, free from toxic heavy metal compounds

■ MIL-I-23053



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
STDR-032	3.2	1.6	0.76	50	O
STDR-048	4.8	2.4	0.85	50	O
STDR-064	6.4	3.2	0.90	50	O
STDR-095	9.5	4.8	1.03	50	O
STDR-127	12.7	6.4	1.23	30	O
STDR-190	19.0	9.5	1.43	30	F
STDR-254	25.4	12.7	1.80	30	F
STDR-318	31.8	15.9	2.40	15	F

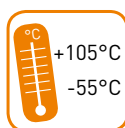
## ShrinkTech Heat shrink tube with high shine

Thin wall shiny heat shrink tube which is perfect for insulating and fixing components. Recommended for automotive and telecom industry. Extra shiny surface.



- Environmental friendly, free from toxic heavy metal compounds
- Age resistant
- Extremely shiny surface
- Resistant to fluids and oil
- Flame retardant

- **Material:**  
Modified polyolefine
- **Colour:**  
Shiny black
- **Packaging:**  
Spool or cutted pieces available on request
- Other sizes are available



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)	Shape
	Min.as supplied	Max. fully recovered			
STCA-024	2.40	1.20	0.30	200	0
STCA-032	3.20	1.60	0.30	200	0
STCA-048	4.80	2.40	0.35	100	0
STCA-064	6.40	3.20	0.35	100	0
STCA-095	9.50	4.80	0.35	100	0
STCA-127	12.7	6.40	0.45	50	0
STCA-191	19.1	9.50	0.50	50	0

## ShrinkTech Medium wall without adhesive, with adhesive



Perfect for numerous low voltage electrical and mechanical applications, where lighter weight and greater flexibility are important.

Recommended for applications where mechanical protection, waterproofing and sealing of connectors components within the tubing are essential.

### Material:

modified polyolefin

### Colour:

black

### Packaging:

per meter

Halogen-free

Waterproof

Extremely resistant to mechanical damage

Flexible

Environmental friendly



RoHS



UV  
stabilised



Halogen-free

Article No.		Internal diameter (mm)		Wall thickness fully recovered (mm)	Length (mm)
Without adhesive	With adhesive	Min.as supplied	Max. fully recovered		
STM-009	STMA-009	9.0	3.0	1.7	1000
STM-012	STMA-012	12.0	4.0	2.2	1000
STM-016	STMA-016	16.0	5.0	2.5	1000
STM-022	STMA-022	22.0	6.0	2.3	1000
STM-033	STMA-033	33.0	8.0	2.3	1000
STM-040	STMA-040	40.0	12.0	2.7	1000
STM-055	STMA-055	55.0	16.0	2.8	1000
STM-065	STMA-065	65.0	19.0	3.0	1000
STM-074	STMA-075	75.0	22.0	3.0	1000
STM-085	STMA-085	85.0	25.0	3.0	1000
STM-095	STMA-095	95.0	25.0	3.0	1000
STM-115	STMA-115	115.0	34.0	3.0	1000
STM-140	STMA-140	140.0	42.0	3.0	1000
STM-160	STMA-160	160.0	50.0	3.0	1000
STM-175	STMA-175	175.0	55.0	3.5	1000
STM-200	STMA-200	200.0	65.0	3.5	1000

# STH STHA

ShrinkTech Heavy wall tubing with or without internal adhesive

Designed for applications to seal and protect electrical and communication connections. Provides excellent mechanical protection to cable joints and terminations, flexible gas pipes, etc.



- Halogen-free
- Waterproof
- Extremely resistant to mechanical damage
- Environmental friendly, free from toxic heavy metal compounds

- **Material:**  
modified polyolefin
- **Colour:**  
black
- **Packaging:**  
per meter



**RoHS**



**UV**  
stabilised



**Halogen-free**

Article No.		Internal diameter (mm)		Wall thickness fully recovered (mm)	Length (mm)
Without adhesive	With adhesive	Min.as supplied	Max. fully recovered		
STH-009	STHA-009	9.0	3.0	1.8	1000
STH-013	STHA-013	13.0	4.0	2.4	1000
STH-022	STHA-022	22.0	6.0	2.7	1000
STH-033	STHA-033	33.0	8.0	3.2	1000
STH-040	STHA-040	40.0	12.0	4.1	1000
STH-045	STHA-045	45.0	13.0	4.1	1000
STH-055	STHA-055	55.0	16.0	4.1	1000
STH-065	STHA-065	65.0	19.0	4.3	1000
STH-075	STHA-075	75.0	22.0	4.3	1000
STH-085	STHA-085	85.0	25.0	4.3	1000
STH-095	STHA-095	95.0	29.0	4.3	1000
STH-115	STHA-115	115.0	34.0	4.3	1000
STH-130	STHA-130	130.0	36.0	4.3	1000
STH-160	STHA-160	160.0	55.0	4.3	1000
STH-175	STHA-175	175.0	55.0	4.3	1000



Recommended for use both in open air and on underground power distribution cables with PVC, lead or XLPE sheets. Definitive recovery with the layer of spiral coated hot melt adhesive. Protects power cables up to 1 kV and telecommunication cables. Resistant to oxydation, ozone, UV radiation.

- **Material:**  
modified polyolefin + internal adhesive
- **Colour:**  
black
- **Packaging:**  
per unit

- With valve or without valve
- Waterproof
- Environmental friendly, free from toxic and heavy metal compounds
- UV stabilised



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Length (m)	Cable diameter (mm)
	Min.as supplied	Max. fully recovered			
STEC-012	12	4.0	2.0	40	4-10
STEC-014	14	4.5	2.0	45	5-12
STEC-020	20	6.0	2.3	55	6-16
STEC-025	25	8.0	2.3	83	10-20
STEC-035	35	16.0	3.0	83	17-30
STEC-040	40	16.0	3.0	83	18-32
STEC-055	55	26.0	3.3	103	28-48
STEC-075	75	36.0	3.5	120	45-65
STEC-100	100	50.0	4.0	140	55-90
STEC-120	120	60.0	4.0	150	65-110
STEC-145	145	60.0	4.0	150	70-130
STEC-160	160	82.0	4.0	150	90-150
STEC-200	200	90.0	4.2	160	100-180

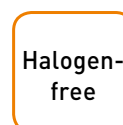
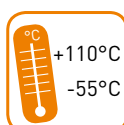
# STECL

## ShrinkTech Low Cost End Cap



Recommended for use both in open air and on underground power distribution cables with PVC, lead or XLPE sheets. Definitive recovery with the layer of spiral coated hot melt adhesive. Protects power cables up to 1 kV and telecommunication cables. Resistant to oxydation, ozone, UV radiation.

- **Material:**  
modified polyolefin + internal adhesive
- **Colour:**  
black
- **Packaging:**  
per unit
- Waterproof
- Environmental friendly, free from toxic and heavy metal compounds
- UV stabilised



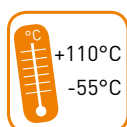
Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Length (m)	Cable diameter (mm)
	Min. as supplied	Max. fully recovered			
STECL-012	12	4.0	2.0	40	4-10
STECL-014	14	4.5	2.0	45	5-12
STECL-020	20	6.0	2.3	55	6-16
STECL-025	25	8.0	2.3	83	10-20
STECL-035	35	16.0	3.0	83	17-30
STECL-040	40	16.0	3.0	83	18-32
STECL-055	55	26.0	3.3	103	28-48
STECL-075	75	36.0	3.5	120	45-65



Shrinktech conductive end caps are used to seal cable ends where there are live power cables in the close proximity of the cable that has to be sealed. The conductive mastic coated end cap serves the function of neutralizing any potential induced in the cable due to the electric field around live cables. The end caps are made from thermally stabilized, cross linked, semi-conductive polymeric material.

- Waterproof
- Environmental friendly, free from toxic and heavy metal compounds
- UV stabilised

- **Material:**  
modified polyolefin + internal adhesive
- **Colour:**  
black
- **Packaging:**  
per unit



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Length (m)	Cable diameter (mm)
	Min. as supplied	Max. fully recovered			
STECC-012	12	4.0	2.0	40	4-10
STECC-014	14	4.5	2.0	45	5-12
STECC-020	20	6.0	2.3	55	6-16
STECC-025	25	8.0	2.3	83	10-20
STECC-035	35	16.0	3.0	83	17-30
STECC-040	40	16.0	3.0	83	18-32
STECC-055	55	26.0	3.3	103	28-48
STECC-075	75	36.0	3.5	120	45-65
STECC-100	100	50.0	4.0	140	55-90
STECC-120	120	60.0	4.0	150	65-110
STECC-145	145	60.0	4.0	150	70-130
STECC-160	160	82.0	4.0	150	90-150
STECC-200	200	90.0	4.2	160	100-180

# STBR

## ShrinkTech Low Voltage Cable Breakouts



Heat Shrinkable Cable Breakouts provide environmental seal to the crutch of 2,3,4,5,6 core Plastic and Paper insulated cables rated up to 1.1kV. The Breakouts are made from thermally stabilised cross-linked polymeric material and are internally coated with hot-melt adhesive.

- Rigid
- Waterproof
- Environmental friendly, free from toxic heavy metal compounds
- UV stabilised

- **Material**  
Modified polyolefin with adhesive
- **Colours**  
Black
- **Packaging**  
Per unit



**RoHS**



**UV**  
stabilised



Article No.	Internal diameter (mm)		Wall thickness fully recovered $\pm 20\%$ (mm)	Length $\pm 2$ (mm)
	Min. as supplied	Max. fully recovered		
STBR2-030	30 / 12	10 / 4	1.5 / 1.0	66 / 88
STBR2-050	50 / 21	24 / 7	3.0 / 2.5	86 / 120
STBR2-090	90 / 43	45 / 15	2.2 / 2.2	178 / 190
STBR3-030	25 / 9	9 / 3	2.5 / 1.8	52 / 16
STBR3-035	35 / 13	15 / 4	2.5 / 1.8	86 / 22
STBR3-055	55 / 25	23 / 8	3.3 / 2.5	132 / 36
STBR3-075	75 / 35	28 / 13	3.5 / 3.0	172 / 44
STBR3-110	110 / 50	35 / 17	4.0 / 3.5	182 / 52
STBR4-030	28 / 8	9 / 2	2.2 / 1.7	56 / 16
STBR4-035	35 / 13	15 / 4	2.5 / 1.8	82 / 22
STBR4-045	47 / 20	23 / 8	4.0 / 3.0	132 / 36
STBR4-060	60 / 25	25 / 8	4.2 / 2.5	152 / 34
STBR4-080	78 / 30	36 / 12	4.0 / 3.0	172 / 42
STBR4-095	95 / 35	36 / 14	3.5 / 3.0	172 / 50
STBR4-120	117 / 46	36 / 14	3.5 / 3.0	172 / 50
STBR5-035	35 / 20	15 / 3	2.5 / 1.8	78 / 20
STBR5-050	50 / 15	15 / 3	4.0 / 2.0	80 / 24
STBR5-065	65 / 20	21 / 8	3.5 / 2.3	132 / 36
STBR5-070	70 / 20	15 / 3	4.0 / 2.0	80 / 24



## ShrinkTech Straight plug-and-socket connector terminal casing

Straight plug-and-socket connector terminal casing. This style is used in conjunction with circular grooved adaptor, providing protection against environmental stresses. Typically used on airborne harnesses. Low profile and lightweight. Rib locates on circular backshell.

### Material

Modified polyolefin flexible up to 135 C  
Fluoropolymer up to 200 C  
Modified polyolefin semirigid oil and solvent retardant up to 135 C

### Flexible or semirigid

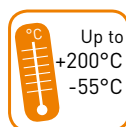
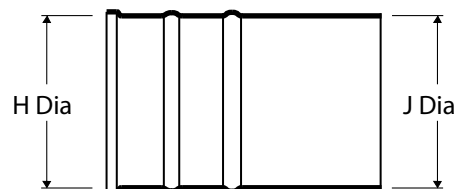
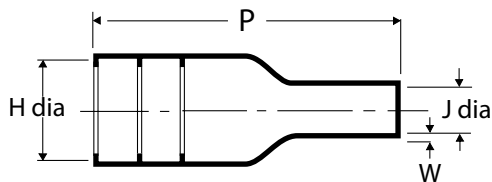
High operating temperature  
Low shrink temperature  
Environmental friendly, free from toxic heavy metal compounds

### Colours

Black

### Packaging

Per unit



Article No.	Internal diameter (mm) H/J		Wall thickness fully recovered (mm)	Length (mm)	Shape
	Min. as supplied	Max. fully recovered			
SMS1	19.0/6.0	13.5/3.5	1.8	53.0	I
SMS2	19.0/18.0	5.0/3.0	1.6	36.0	I
SMS3	24.0/24.0	10.0/5.0	1.9	38.0	I
SMS4	28.5/28.5	14.0/5.9	1.9	60.5	I
SMS5	31.0/31.0	17.0/6.6	2.0	75.0	I
SMS6	36.0/36.0	21.1/7.8	2.2	87.0	I
SMS7	43.0/43.0	28.0/10.8	2.2	113.5	I
SMS8	55.0/55.0	34.0/18.5	2.2	135.0	I

## ShrinkTech right angled moulded shapes

HeatShrinkable moulded shapes for plug-and-connectors. This style provides connector cable strain relief and can be installed directly onto connector rear thread. Strain relief for connector cable. Easy re-entry for repair when combined with hot melt adhesive. Used widely in military and aerospace industry

- Flexible or semirigid
- High operating temperature
- Low shrink temperature
- Environmental friendly, free from toxic heavy metal compounds

### Material

Modified polyolefin flexible up to 135 C

Fluoropolymer up to 200 C

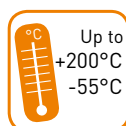
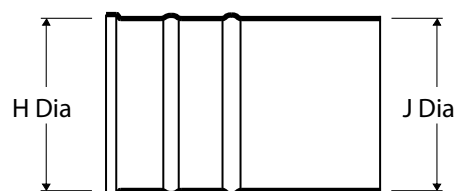
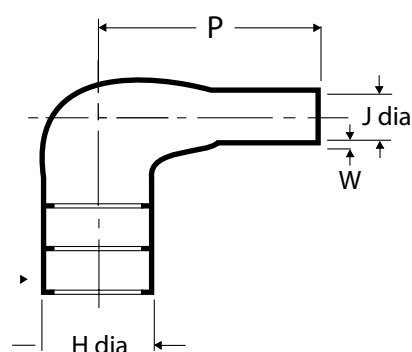
Modified polyolefin semirigid oil and solvent retardant up to 135 C

### Colours

Black

### Packaging

Per unit



Article No.	Internal diameter (mm) H/J		Wall thickness fully recovered (mm)	Length (mm)	Shape
	Min. as supplied	Max. fully recovered			
SMSC1	24.0/24.0	9.0/4.5	1.5	200	O
SMSC2	28.5/28.5	14.0/6.0	1.5	200	O
SMSC3	31.0/31.0	17.0/6.6	1.8	200	O
SMSC4	36.0/36.0	21.0/8.0	1.9	30	F
SMSC5	43.0/43.0	27.0/9.0	2.2	30	F
SMSC6	55.0/22.0	34.0/14.0	3.0	30	F

## ShrinkTech heat shrinkable 2 way moulded shape

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, and 4 core cables.

### Material

Modified polyolefin flexible up to 135 C  
Fluoropolymer up to 200 C  
Modified polyolefin semirigid oil and solvent retardant up to 135 C

Flexible or semirigid

High operating temperature

Low shrink temperature

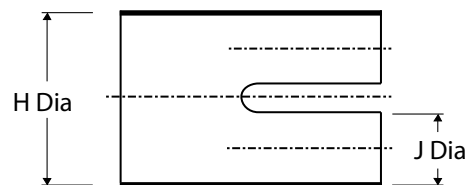
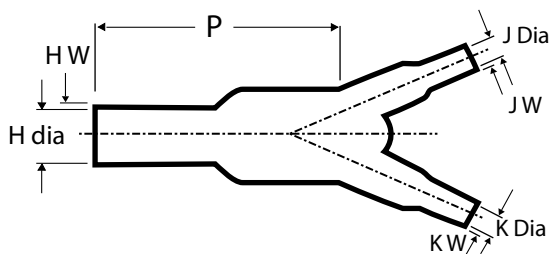
Environmental friendly, free from toxic heavy metal compounds

### Colours

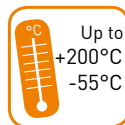
Black

### Packaging

Per unit



RoHS



UV  
stabilised



Article No.	Internal diameter (mm) H/J		Wall thickness fully recovered (mm)	Length (mm)	Shape
	Min. as supplied	Max. fully recovered			
SMYD1	14.5/7.0	7.0/2.2	5.5/1.2	50.0	0
SMYD2	26.5/26.5	13.0/2.5	12.0/1.5	90.0	0
SMYD3	39.0/27.0	17.0/3.2	17.0/2.5	160.0	0

## ShrinkTech heat shrinkable 3 way moulded shape

Cable breakouts are manufactured from a tough cross-linked polyolen 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, and 4 core cables.

- Flexible or semirigid
- High operating temperature
- Low shrink temperature
- Environmental friendly, free from toxic heavy metal compounds

### Material

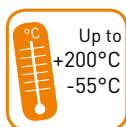
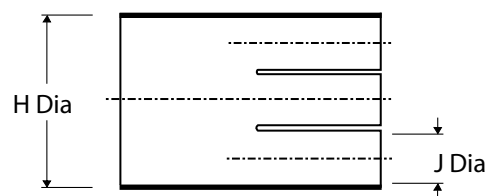
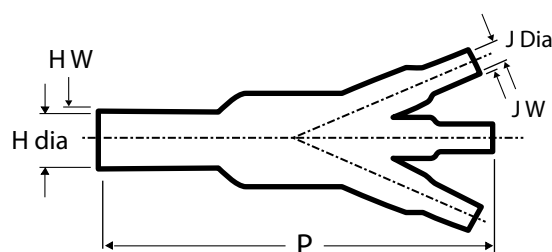
Modified polyolefin flexible up to 135 C  
Fluoropolymer up to 200 C  
Modified polyolefin semirigid oil and solvent retardant up to 135 C

### Colours

Black

### Packaging

Per unit



Article No.	Internal diameter (mm) H/J		Wall thickness fully recovered (mm)	Length (mm)	Shape
	Min. as supplied	Max. fully recovered			
SMYT1	13.0/7.0	6.0/3.0	1.8/1.2	55.0	0
SMYT2	27.0/13.0	13.5/6.9	2.5/2.2	112.0	0
SMYT3	39.0/19.0	16.5/8.5	3.2/2.5	150.0	0

## ShrinkTech heat shrinkable 4 way moulded shape

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, and 4 core cables.

### Material

Modified polyolefin flexible up to 135 C  
Fluoropolymer up to 200 C  
Modified polyolefin semirigid oil and solvent retardant up to 135 C

### Colours

Black

### Packaging

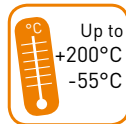
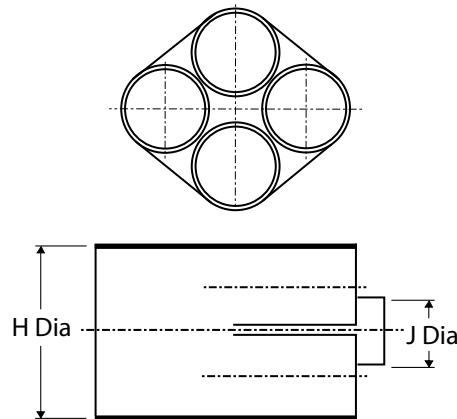
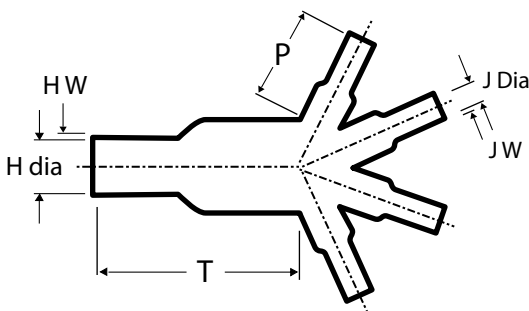
Per unit

Flexible or semirigid

High operating temperature

Low shrink temperature

Environmental friendly, free from toxic heavy metal compounds



Article No.	Internal diameter (mm) H/J		Wall thickness fully recovered (mm)	Length (mm)	Shape
	Min. as supplied	Max. fully recovered			
SMYQ1	13.0/7.0	5.5/3.0	2.0/1.2	70.0	Y
SMYQ2	27.0/13.0	13.5/6.0	2.5/1.8	108.0	Y
SMYQ3	39.0/19.0	18.0/8.5	3.0/2.0	150.0	Y

# SMT

## ShrinkTech Heat shrink T branch

90° (right angled) transition parts (T-joints) are used for simple time saving insulation of the branch point of cable, where it splits into single wires. Adhesive lined T-joints also serve to relieve the mechanical tension and protect against corrosion in cable harness.

- Flexible or semirigid
- High operating temperature
- Low shrink temperature
- Environmental friendly, free from toxic heavy metal compounds

### Material

Modified polyolefin flexible up to 135 C

Fluoropolymer up to 200 C

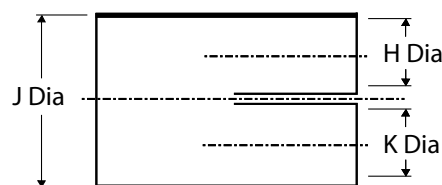
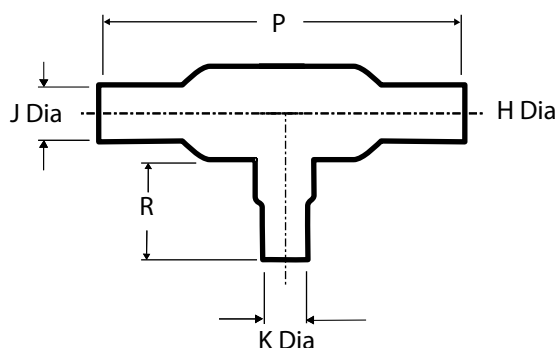
Modified polyolefin semirigid oil and solvent retardant up to 135 C

### Colours

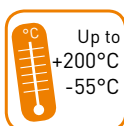
Black

### Packaging

Per unit



RoHS



Article No.	Internal diameter (mm) H/J		Wall thickness fully recovered (mm)	Length (mm)	Shape
	Min.as supplied	Max. fully recovered			
SMT1	13.0/7.0	3.6/3.6	1.8	30/15	T
SMT2	25.0/13.0	6.9/6.9	1.8	60/30	T
SMT3	50.0/27.0	13.5/13.5	2.2	120/60	T
SMT4	100.0/56.0	30.2/30.2	2.5	246/123	T

## ShrinkTech Heat Shrinkable Wraparound Sleeves with hot melt adhesive

This heat shrinkable flexible tape is a spirally hand wrapped, radiation cross-linked anticorrosion tape, used at the pipe bends where other semi-rigid or rigid tapes are not usable. The installation is carried out directly on the cleaned and prepared pipe surface without any primer. During installation STWRAP should be used around with a 50% overlapping. The backing layer is heated and shrinks well around the pipe, while the sealing adhesive melts and forced into all surface irregularities forming a thorough coating and a complete bond with the substrate. As it's easy to apply at any size at any length.

### Material:

modified polyolefin  
with hot melt adhesive

### Colour:

black

### Packaging:

spool

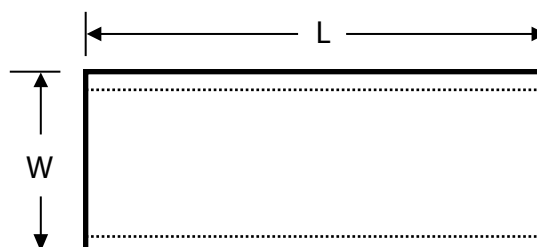
Waterproof

Extremely resistant to mechanical damage

Flexible

Environmental friendly

**L** length  
**W** width



Article No.	Widths W (mm) Min. as supplied	Wall thickness fully recovered (mm) $\pm 20\%$	Length L (m)
STW-050	50.0	0.8 + 0.7	15 or 30
STW-075	75.0	0.8 + 0.7	15 or 30
STW-100	100.0	0.8 + 0.7	15 or 30



SWRS, Wrap Around Repair Sleeves are mainly used for repairing outer/inner sheath of cables. These sleeves are also used for providing corrosion protection to the metallic parts of the cables that are exposed to polluted environment and for making telecom cable joints. WRS Sleeves are made from thermally stabilized cross linked weather resistant polymeric material and are coated internally with thermoresistant hot melt adhesive.

- With valve or without valve
- Waterproof
- Environmentally friendly, free from toxic and heavy metal compounds
- UV stabilised

- **Material:**  
modified polyolefin, internal adhesive  
With Stainless Steel Channel
- **Colour:**  
black
- **Packaging:**  
per unit



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm) min.	Length (mm)	Width (mm)
	Min. as supplied	Max. fully recovered			
SWRS-040	43	10	0,9	1000	145
SWRS-050	52	15	0,9	1000	175
SWRS-070	76	22	0,9	1000	260
SWRS-100	100	30	0,9	1000	355
SWRS-140	138	38	0,9	1000	450
SWRS-185	185	55	0,9	1000	590
SWRS-210	210	60	0,9	1000	720



## ShrinkTech High Voltage Insulating Tubes



Heat Shrinkable Insulating Tubes are used to build up insulation over the connector area in High voltage Plastic and Paper insulates cable straight through joints rated up to 36kV. The insulating tubes are made from thermally stabilised cross linked high resistance polymeric material.

■ **Material:**

modified polyolefin

■ **Colour:**

red

■ **Packaging:**

spool

■ High voltage resistance

■ Extremely resistant to mechanical damage

■ Flexible

■ Environmental friendly



RoHS



UV  
stabilised



Halogen-free

All dimension are in mm

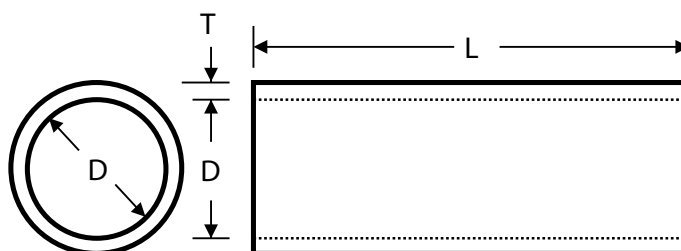
Drawing depicts typical dimensions

**E** as supplied

**S** after free recovery

**D** internal diameter

**L** Length as per requirement



Article No.	Internal diameter D v(mm)		Wall thickness fully recovered (mm) $\pm 20\%$	Length L (m)
	Min.as supplied E	Max. fully recovered S		
STB-020	20.0	7.0	2.5	50
STB-030	30.0	8.0	3.0	50
STB-040	40.0	12.0	3.5	30
STB-055	55.0	18.0	3.5	30
STB-065	65.0	21.0	4.0	30
STB-080	80.0	26.0	4.0	15
STB-110	110.0	37.0	4.5	15
STB-150	150.0	50.0	4.5	10
STB-180	180.0	65.0	4.5	10



## Label and heat shrink tube printer

**A4+M** The Centre-Aligned.

# ShrinkTech & cab

## a4+M PRINTER



**No adjustment of the print head for different widths of material.**

**Printing on very narrow or very thick continuous materials.**

### **1. Big graphic display**

White backlight guarantees optimal legibility.

### **2. Ribbon retainer**

Easy and centred insertion of the ribbon with the threepart tightening axles. Due to the imprinted spacer positioning of the ribbon is facilitated.

### **3. Easy adjustment**

The print head is pressed down with two sliding toggles. One is mounted to the left label margin, the other one is pushed to the right label margin.

### **4. Material guide**

Precise printing due to the material guide located directly behind the print roller. The width is adjusted with a spindle.

### **5. Peripheral connection**

Add-on modules like cutter, external rewinder, present sensor, peel-off adapter and applicators can be easily connected via USB peripheral interface. All peripheral devices are put onto the printer with two gudgeons and fixed with a bolt.



**The gap height at the material sensor for flat tubes and synthetic tapes is up to 4 mm.**

**The print speed for difficult printable materials is reduced to 30-125 mm/sec.**

### **6. Solid, buckling resistant metal chassis**

It is made of dye-cast aluminium.

All devices are assembled to it.

### **7. Roll holder**

Applicable for core diameters as of 38 mm. (we include adapters for core diameters from 76 mm for a better winding of the labels). The spring mounted margin stop ensures constant tension while feeding and therefore a highly precise imprint.

### **8. Only one tool for all maintenance tasks**

The Allen key is located ready to hand directly at the printer while feeding and therefore a highly precise imprint.

### **9. Integration into SAP R/3**

In collaboration with SAP cab developed the so-called "Replace method" in order to control the cab printers with SAPScript from SAP/R3.

As Silver Level-partner in SAP's Printer Vendor Program cab has access to the SAP development area for optimal printer support in an SAP environment.

### **10. Stand-alone operation**

The layout of the labels is created either with the label software or direct programming via text editor directly on the PC.

Label formats, fonts and graphic data, serial data and data base contents are saved or imported on the CF memory card or the internal IFFS printer memory.

Only variable data is sent to the printer via keyboard or host computer before being printed out. Data of a barcode scanner or a scale can be fed additionally.

# ShrinkTech & cab

## a4<sup>+</sup>M PRINTER

1. Print head		
Print method	Thermal transfer	Direct
Print resolution dpi	300 dpi	600dpi
Print speed up to mm/s	30-125	30-100
Print width mm	105.6	105.6
2. Material		
Labels, continous rolls or fan-folded	paper, cardboard, textile, Synthetics PE, PP, PVC, PA, PI,	
Material thickness mm		0.055-1.2
Weight g/m		60-250
Width	Label (mm)	4-106
	carrier material (mm)	25-110
	flat pressed tube up to 0,4 thick	3-110
Height (mm)		5-1000
Media roll:	Total diameter up to (mm)	210
	Core diameter (mm)	38-100
	Winding direction	outside or inside
Gap height: Material sensor, Cutter up to (mm)		4.5
3. Ribbon		
Ink	outside or inside	
Roll diameter up to mm		80
Core diameter mm		25
Ribbon length variable up to m		500
Width mm		50-114
4. Dimensions of the printer		
Height x Depth mm		270 x 446
Width mm		242
Weight kg		9
5. Label sensor		
See-through sensor	or leading edge of the label or punching marks and end of material	
Distance from the center to the left mm		0-53
6. Electronics		
Processor 32 Bit ColdFire (Mhz)		266
RAM MB		64
IFFS Memory MB Flash		8
Slot for memory CompactFlash-card Type I		yes
7. Operation panel		
Buttons/LED display	Pause, Feed, Cancel, Menue, Enter, 4 x Cursor	
LCD graphic display	Text 4 lines, ca. 20 digits per line	
Width x Height mm		60 x 40

8. Interfaces		
Standard	RS232 C 1.200 up to 230.400 Baud/8 Bit, USB 2.0 High Speed Slave for PC-connection, Ethernet 10/100 Base T, LPD, RawIP-Printing, ftp-Printing, DHCP, HTTP, FTP, SMTP, SNMP, TIME, Zeroconf, mDNS, SOAP	
Option	Centronics bi-directional acc. IEEE 1284, WLAN card 802.11b/g WEP/WPA PSK (TKIP)	
9. Monitoring		
Stop printing if	End of ribbon End of labels Printhead open Direct	
On the display	Data reception	Clock
	WLAN field intensity	Date sheet
	Ethernet state	abc Debug
	Used memory	Input buffer
	Temperature printhead	
	Access to memory card	
	Remaining quantity of ribbon	
10. Settings		
digital or analog clock		time
system settings		date
print parameters		interfaces
25 language settings		security
11. Test routines		
System diagnosis	When switched on with testing of printhead, font list, device list, WLAN state, profile of label, test grid, monitor mode, PPP state	
Status reports	Extensive status print with information about setting, e.g. print length counter, runtime counter etc. Request of machine state via software command. Detailed status messages on the display, e.g. network error-no link, barcode error etc.	
12. Fonts		
Font type	5 Bitmap fonts incl. OCR-A, OCR-B and 3 Vector fonts Swiss 721, Swiss 721 Bold and Monospace 821 available internally, loadable TrueType fonts. Optional Chinese (simplified Chinese) Optional Thai.	

# ShrinkTech & cab

## a4<sup>+</sup>M PRINTER



Character sets	Windows 1250 up to 1257, DOS 437, 737, 775, 850, 852, 857, 862, 864, 866, 869, EBCDIC 500, ISO 8859-1 up to -10 and -13 up to -16, WinOEM 720, UTF-8, Macintosh Roman, DEC MCS, KOI8-R. All West and East European latin, cyrillic, greek, hebrew and arabic characters are supported. Optional Thai and Chinese
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### 13. Graphics

Graphic elements	Line, arrow, box, circle, ellipse, filled and filled with fading
Graphic formats	PCX, IMG, BMP, TIF, MAC, GIF, PNG

### 14. Codes

Linear Barcodes	Code 39, Code 93 Interleaved 2/5, Code 39 Teljes ASCII, Ident- and lead, Code 128 A, B, C, EAN 8, 13 JAN 8, 13, EAN/UCC 128, MSI, EAN/UPC Appendix 2, Plessey, EAN/UPC Appendix 5 Postnet, FIM, RSS 14, HIBC, UPC A, E, E0
2D-Codes	Aztec, Codablock F, Data Matrix, PDF 417, Micro PDF 417, UPS Maxicode, QR-Code, RSS 14 truncated, limited, stacked and stacked omnidirectional, EAN-Datamatrix

All codes variable in height, module width and ratio.  
Orientation 0°, 90°, 180°, 270°.  
Optionally with check digit, printed characters and Start/Stop code depending on code type.

### 15. Software

Programming	J-Script direct programming abc-Basic Compiler Database Connector
System diagnosis/ Administration	printer monitoring Network Manager
Operating systems	2000, XP32/64 bit, 2003 32/64 bit, Vista 32/64 bit OS X printer driver from version 10.3 Suse 9.0, CUPS based

### 16. Operation data

Power supply	100 - 240V ~ 50/60 Hz, PFC
Power consumption	Max. 300 W
Temperature	10 - 35°C
Humidity	30 - 85% not condensing
Approvals	CE, FCC A, CD, CCC, UL

## Perforation cutter and cutter PCU4

Perforation cutter and cutter

The perforation cutter also permits the perforation of the material in order to separate it manually.

### 1. Cutting and performing

Cuts/min.	120
Cutting	150
Perforating	
Stop print job if	Final position not reached

### 2. Material

Weight	60-300 g/m2
Material thickness	0.05-1.2 mm
Width up to	110 mm
Cutting length	< 5 mm
Gap height up to	4.5 mm

### 3. Perforating

Web width	0.5 mm
Web distances	2.5/10 mm





## Label and heat shrink tube printer

# **EOS1 & EOS4**

# ShrinkTech & cab

## EOS1 & EOS4 PRINTER



Printhead				
Printing method		Thermal transfer/Thermal direct		
Print resolution dpi		203 / 300		
Print width up to mm		108 / 105,7		
Print speed mm/s		30, 40, 50, 75, 100, 125		
Material1) on rolls or fanfolded				
Labels	Paper, card-board, textiles, plastics such as PET, PE, PP, PVC, PU, acrylate, PI	Thick-ness mm	Width mm	Height2) mm
		0,055 - 0,7	singlelane 10 - 116 multi lane 5 - 116	6 - 1000
	linerpaper60-110 g/m2	0,055 - 0,10	25 - 120	endless
Continu-ous material	cardboard 80 - 180 g/m2	0,10-0,20	6 - 120	10-100
	plastic film PVC	0,30	6 - 60	
		0,50	6 - 30	
	flat pressed tubes	0,40 - 0,70	5 - 85	
Media roll		at core Ø mm	EOS1	EOS4
Outside Ø mm		38 /40	155	210
		76	152,4	203,2
Winding direction			outside or inside	
			only outside during cutting	
Ribbon				
Ink			outside or inside	
Roll diameter up to mm			72	
Core diameter mm			25,4	
Ribbon length variable up to m			360	
Width mm			50 - 114	
Printer dimensions			EOS1	EOS4
Height x Depth x Width mm			189 x 322 x 253	245 x 412 x 264
Weight kg			4	5
Label sensor				
Gap sensor			for leading edge of the label or punching marks and end of material	
Reflective sensor from the bottom			for black mark	
Distance from the center to the left mm			0 - 58	

Electronics	
Processor high speed 32 Bit clock rate MHz	400
RAM MB	64
Memory IFFS MB Flash	16
Battery buffer for real-time clock with printout of time and date Data storage on shut-down	
Warning signal: acoustic signal in case of error	
Interfaces	
RS232C 1.200 up to 230.400 Baud/8Bit Option	
USB 2.0 full speed device for PC connection	
Ethernet10/100BaseT, LPD, RawIP-Printing, ftp-Printing, DHCP, HTTP, FTP, SMTP, SNMP, TIME, Zeroconf, mDNS, SOAP	
Peripheral connection	
WLAN USB Stick 54 Mbps Option	
Nano Bluetooth USB Adapter V2.1 Option	
2 x USB Host on operation panel, connection up to 100 mA for memory stick, service key, WLAN or Bluetooth 1 x USB Host on the backside connection up to 500 mA for keyboard, scanner, WLAN or Bluetooth	
Operation panel	
Touchscreen display 160 x 255 pixels with backlight	
Diagonal measurement mm	96
Operating functions: Pause, Feed, Cancel, Menu, Enter, Numeric Pad	
Cutter	
Cutting length from mm	10
Cuts/min. up to	200
Winding	preferably outside
Monitoring	cutter pivoted, final position not reached
Label dispensing function only EOS4	
Label height mm	20 - 100
Printing and dispensing	with push button on request automatically after removal of the label
Monitoring	Label in dispensing position, dispensing module swivelled
Operating data	
Power supply	100 - 240 V ~ 50 / 60 Hz
Energy consumption	Power saving mode 1,8 W / typic 45 W / max. 100 W
Temperature/ Humidity	Operation: + 5 - 40°C / 10 - 85% not condensing Storage: + 0 - 60°C / 20 - 80% not condensing Transport: - 25 - 60°C / 20 - 80% not condensing
Approvals	CE, FCC class A, CB, CCC, UL



# ShrinkTech & cab

## EOS1 & EOS4 PRINTER

Settings			
	Digital or analog clock System settings Print parameters 25 language settings	Time Date Interfaces Security	
On the Display			
	Data reception Ethernet state Temperature print-head	Clock Date sheet Ribbon capacity	Bluetooth Cutter WLAN
Monitoring			
Stop printing if	End of ribbon End of labels Printhead open Final position of cutter not reached cutter pivoted		
Test routines			
System diagnosis	when switched on incl. printhead testing		
Short status, status print	Font list, device list, WLAN status, profile of label, test grid, monitor mode, PPP status		
Status reports	Printout informing about settings and print length counter, runtime counter. Status request via software commands. Status messages on the display such as network error – no link, barcode error, etc.		
Fonts / Graphics / Barcodes			
	All technical data identical with A4+M.		

1) All material details are approximate values.  
Small labels, very thin, narrow, thick or stiff materials as well as labels with strong adhesives need to be tested.

2) Please pay attention to the minimum label height when cutting and dispensing.



### EOS1 Cutter

The cutter is used to precisely cut all printable materials. An additional perforation and cutter, e.g. for heat shrink tubes, is available on demand.

■ The new EOS series combines all functions of a solid industrial printer with highest ease of operation.

**EOS1** the compact for small work space.  
For label rolls up to 155 mm diameter.

**EOS4** for label rolls up to 210 mm diameter. All technical data identical with EOS1.

■ Three USB interfaces connect a standard PC keyboard, scanner or USB memory stick.

■ The big, clearly laid out touchscreen LCD display is easy to operate.

■ In stand-alone mode the label data is entered via keyboard directly into the printer. A PC is not necessary any more.

■ Due to the high-tech electronics, the intelligent printhead and efficient power supply the EOS is particularly energy efficient and environmentally friendly.

■ The housing of the EOS devices are made of high-class ABS synthetic with translucent cover and are perfectly harmonized in their form and function.

■ The cab label software cablabel R2+ optimally supports all printer functions.

EOS1 with cutter and external roll retainer for roll diameters up to 400 mm.



# ShrinkTech & NiceLabel

## Professional labeling for industry



Professional label designer



EasyForms printing program

## Benefits

### Every feature you need for compliance labeling

The designer includes all the layout and data tools you need to design labels allowing easy compliance with industry standards.

### Work with large databases

You already have your label data in a database; why not use it to improve your labeling?

Using queries you can extract only the data that you need. You can also combine records from two or more tables in a database using Joins.

### EasyForms give you simple error-free printing

EasyForms give your operator simple label printing, all within one form. This reduces data-entry errors, label misprints and duplicate serial numbers associated with printing from multiple dialogue boxes or label design programs.

### Easily create complex variables

Variable label data can come from as many sources as you need. Full serialization, including non-decimal serial numbers, custom barcode check digits, global variables, output masks, date/ time arithmetic and scripting help you easily create complex variables.

Nice Label product	Label design	Label printing	Integration and connectivity	System management
Express	■ ■	■ ■	■ ■	N/A
Standard	■ ■ ■ ■ ■	■ ■ ■	■ ■ ■	■ ■ ■
Pro	■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■ ■ ■	■ ■ ■

## STS-P

### ShrinkTech standard printable heat shrink tube

Extra thin, flatten, printable heat shrink tube for universal use. Recommended for automotive, electronics industries for the purpose of labelling cables. The infinite form allows to apply in any size, so reducing the costs.



- Flexibility
- UL224, 125°C, VW-1
- Environmental friendly, free from toxic heavy metal compounds
- Extremely flat
- **Material**  
Modified polyolefin
- **Colours**  
Yellow, white
- **Packaging**  
100m spool



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)
	Min.as supplied	Max. fully recovered		
STS-032-P	3.2	1.6	0.3	100
STS-048-P	4.8	2.4	0.3	100
STS-064-P	6.4	3.2	0.4	100
STS-095-P	9.5	4.8	0.5	100
STS-127-P	12.7	6.5	0.5	100
STS-191-P	19.1	9.5	0.6	100
STS-254-P	25.4	12.7	0.6	100
STS-381-P	38.1	19.1	0.6	100

## ShrinkTech standard printable heat shrink tube



Extra thin, flatten, printable heat shrink tube for universal use. Recommended for automotive, electronics industries for the purpose of labelling cables. The infinite form allows to apply in any size, so reducing the costs.

■ **Material:**

Modified polyolefin

■ **Colour:**

Yellow, white,

■ **Packaging:**

100m spool

■ Flexibility

■ UL224, 125°C, VW-1

■ Environmental friendly,  
free from toxic heavy metal  
compounds

■ Extremely flat



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)
	Min.as supplied	Max. fully recovered		
STS-030-P3X	3.0	1.0	0.3	100
STS-045-P3X	4.5	1.5	0.3	100
STS-060-P3X	6.0	2.0	0.4	100
STS-090-P3X	9.0	9.0	0.5	100
STS-120-P3X	12.0	4.0	0.5	100
STS-180-P3X	18.0	6.0	0.6	100
STS-240-P3X	24.0	8.0	0.6	100
STS-390-P3X	39.0	13.0	0.6	100

## STD-P

### ShrinkTech diesel resistant printable heat shrink tube

Extra thin, flatten, printable heat shrink tube for universal use. Recommended for electronics and automotive industries for the purpose of identifying and labelling cables. The infinite form allows to apply in any size, so reducing the costs. The oil-resistant heat shrink tube and label is permanent solution in any circumstances.



- Flexible
- UL224, 125°C, VW-1
- Environmental friendly, free from toxic heavy metal compounds
- MIL-I-23053

- **Material**  
Modified polyolefin
- **Colours**  
Yellow, white
- **Packaging**  
100m spool



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)
	Min.as supplied	Max. fully recovered		
STD-030-P	3.0	1.0	0.3	100
STD-045-P	4.5	1.5	0.3	100
STD-060-P	6.0	2.0	0.4	100
STD-090-P	9.0	3.0	0.5	100
STD-120-P	12.0	4.0	0.5	100
STD-180-P	18.0	6.0	0.6	100
STD-240-P	24.0	8.0	0.6	100

## ShrinkTech printable tube with military standard



Extra thin, flatten, printable heat shrink tube for universal use. Recommended for automotive, high-tech, aerospace and defence industries for the purpose of labelling cables. The infinite form allows to apply in any size, so reducing the costs.

### Material

Modified polyolefin

### Colours

Yellow, white

### Packaging

100m spool

### Flexible

UL224, 125°C, VW-1

Environmental friendly, free from toxic heavy metal compounds

Military standard MIL-I-23053

Extremely flat



Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)
	Min.as supplied	Max. fully recovered		
STM-030-P	3.0	1.0	0.3	100
STM-045-P	4.5	1.5	0.3	100
STM-060-P	6.0	2.0	0.4	100
STM-090-P	9.0	3.0	0.5	100
STM-120-P	12.0	4.0	0.5	100
STM-180-P	18.0	6.0	0.6	100
STM-240-P	24.0	8.0	0.6	100
STM-032-P	3.2	1.6	0.3	100
STM-048-P	4.8	2.4	0.3	100
STM-064-P	6.4	3.2	0.4	100
STM-095-P	9.5	4.8	0.5	100
STM-127-P	12.7	6.5	0.5	100
STM-191-P	19.1	9.5	0.6	100
STM-254-P	25.4	12.7	0.6	100

## STHF-P

### ShrinkTech halogen free printable heat shrink tube

Extra thin, flatten, printable heat shrink tube for universal use. Recommended for electronics and automotive industries for the purpose of identifying and labelling cables. The infinite form allows to apply in any size, so reducing the costs. The oil-resistant heat shrink tube and label is permanent solution in any circumstances.



- Flexible
- UL224, 125°C, VW-1
- Environmental friendly, free from toxic heavy metal compounds
- Shrink tube and label resistant to diesel oil
- Halogen free

- **Material**  
Modified polyolefin
- **Colours**  
Yellow, white
- **Packaging**  
100m spool



RoHS

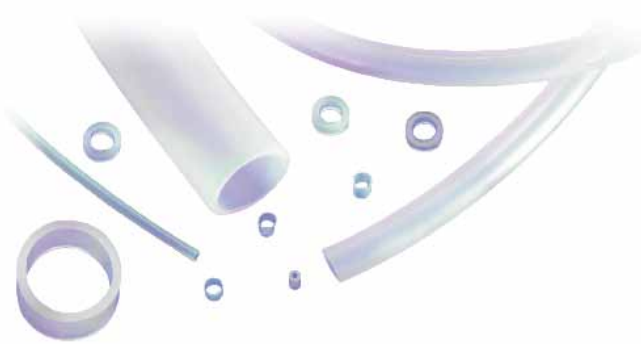


UV  
stabilised



Halogen-  
free

Article No.	Internal diameter (mm)		Wall thickness fully recovered (mm)	Spools (m)
	Min.as supplied	Max. fully recovered		
STHF-032-P	3.2	1.6	0.3	100
STHF-048-P	4.8	2.4	0.3	100
STHF-064-P	6.4	3.2	0.4	100
STHF-095-P	9.5	4.8	0.5	100
STHF-127-P	12.7	6.5	0.5	100
STHF-191-P	19.1	9.5	0.6	100
STHF-254-P	25.4	12.7	0.6	100



The silicon tube can be used in a wide range of temperature. It preserves its flexibility at extremely low and high temperature as well.

Ideal for application where the temperature is continuously high during operation. Recommended for electronics industries. It is available with or without talcum. Weather-proof even above 200 °C

■ **Material:**

Silicon

■ **Colour:**

Transparent

Other colour are available

■ **Packaging:**

spool

Other diameters are available

■ Very flexible

■ Extremely temperature resistant

■ 60 Shore A

Article No.	Internal diameter (mm)	Outer diameter Wall thickness 0,5 (mm)	Outer diameter Wall thickness 1,0 (mm)	Spools (m)
STSIL-005-	0.5	1.5	2.5	100
STSIL-010-	1.0	2.0	3.0	100
STSIL-015-	1.5	2.5	3.5	100
STSIL-020-	2.0	3.0	4.0	100
STSIL-025-	2.5	3.5	4.5	100
STSIL-030-	3.0	4.0	5.0	100
STSIL-035-	3.5	4.5	5.5	100
STSIL-040-	4.0	5.0	6.0	100
STSIL-050-	5.0	6.0	7.0	100
STSIL-060-	6.0	7.0	8.0	100
STSIL-070-	7.0	8.0	9.0	100
STSIL-080-	8.0	9.0	10.0	100
STSIL-090-	9.0	10.0	11.0	100

# STF

## ShrinkTech fiberglass tube

The fiberglass tube can be used in wide range of temperature. It preserves its flexibility at extremely low and high temperature as well. Very good electrical insulator, available with 1,5kV up to 15kV resistance. Recommended for electronics industries.



- Flexible
- High temperature
- 155 °C up to 255 °C
- Excellent resistance to ageing.
- They accept projections of hydrocarbons and mineral oils.

- **Material**  
Silicon fiberglass  
and Acril fiberglass
- **Colours:**  
Brown and white  
Other colours are available
- **Packaging:**  
spool  
Wall thickness 0.35 - 1.25 mm

Article No.	Internal diameter (mm)	Operating temperature °C	Spools (m)	
STFAcr-010	1.0	+155	200	3kV
STFAcr-015	1.5	+155	200	3kV
STFAcr-020	2.0	+155	200	3kV
STFAcr-025	2.5	+155	200	3kV
STFAcr-030	3.0	+155	200	3kV
STFAcr-040	4.0	+155	200	3kV
STFAcr-050	5.0	+155	200	3kV
STFAcr-060	6.0	+155	150	3kV
STFAcr-070	7.0	+155	150	3kV
STFAcr-080	8.0	+155	150	3kV
STFAcr-100	10.0	+155	100	3kV
STFAcr-120	12.0	+155	100	3kV



## ShrinkTech PVC Insulation tubing for universal use



PVC tubing is a flexible flame-retardant not heat shrinkable tubing which has excellent electrical and physical performances, and outstanding acid fastness and corrosion resistivity. This tubing is suitable for insulation purpose of electronics, automotive, lead wires of motors and transformers.

■ **Material:**

PVC

■ **Colour:**

black,

Other colours are available

Other diameters are available

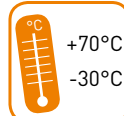
■ **Packaging:**

spool

■ Flexible

■ Environmental friendly,  
free from toxic heavy metal  
compounds

RoHS



UV  
stabilised



Article No.	Internal diameter (mm)	Wall thickness (mm)	Spools (m)	Shape
STI 70-020	2.0	0.4	1000	0
STI 70-030	3.0	0.5	1000	0
STI 70-040	4.0	0.5	1000	0
STI 70-050	5.0	0.6	800	0
STI 70-060	6.0	0.6	600	0
STI 70-070	7.0	0.6	500	0
STI 70-080	8.0	0.8	400	0
STI 70-090	9.0	0.9	250	0
STI 70-010	10.0	0.9	250	0
STI 70-012	12.0	1.0	200	0
STI 70-014	14.0	1.0	200	0
STI 70-016	16.0	1.0	200	0
STI 70-018	18.0	1.2	200	0

# STI 105

ShrinkTech PVC Insulation tubing for universal use

PVC tubing is a flexible flame-retardant not heat shrinkable tubing which has excellent electrical and physical performances, and outstanding acid fastness and corrosion resistivity. This tubing is suitable for insulation purpose of electronics, automotive, lead wires of motors and transformers.



- Flexible
- Environmental friendly,  
free from toxic heavy metal compounds

- **Material:**  
PVC
- **Colour:**  
black,  
Other colours are available  
Other diameters are available
- **Packaging:**  
spool



Article No.	Internal diameter (mm)	Wall thickness (mm)	Spools (m)	Shape
STI 105-020	2.0	0.4	1000	0
STI 105-030	3.0	0.5	1000	0
STI 105-040	4.0	0.5	1000	0
STI 105-050	5.0	0.6	800	0
STI 105-060	6.0	0.6	600	0
STI 105-070	7.0	0.6	500	0
STI 105-080	8.0	0.8	400	0
STI 105-090	9.0	0.9	250	0
STI 105-010	10.0	0.9	250	0
STI 105-012	12.0	1.0	200	0
STI 105-014	14.0	1.0	200	0
STI 105-016	16.0	1.0	200	0
STI 105-018	18.0	1.2	200	0



■ **Material:**

liquid silicone rubber

■ **Colour:**

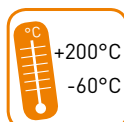
black, grey

■ **Packaging:**

per unit

- Provide electrical insulation for all solid dielectric (rubber and plastic) insulated wire and cable splicing rated to 36 kV
- Provide physical protection and moisture sealing for couplings hoses, connectors and terminal lugs
- Cable jacket and sheath repairs
- Environmental sealing for communication connectors and other non-electrical applications
- Corrosion protection for fittings and couplings

RoHS



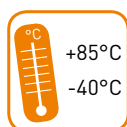
UV  
stabilised



Article No.	As supplied	After recovery		Application range	Length (mm)
	Internal diameter	Internal diameter	Wall thickness		
CST-020	20	6.0	2.0	8–15	450
CST-030	30	10.0	2.0	12–25	490
CST-035	35	14.0	2.0	16–28	450
CST-040	40	16.0	2.0	18–33	450
CST-047	47	19.0	2.0	21–40	470
CST-053	53	23.0	2.0	25–46	500
CST-065	65	23.0	3.0	25–55	500
CST-070	70	28.0	3.0	30–60	500
CST-080	80	34.0	3.0	36–70	500
CST-104	104	40.0	3.5	42–94	430
CST-111	110	35.0	6.0	37–100	430
CST-112	110	58.0	6.0	60–100	430

## Shrink Tech Standard Cable Tie

CTS serie could be used in any electrical cabinet, electrical and electronic harnesses to secure wire & cable bundles. CTS is the standard series suitable for standard application.



### Material:

Nylon 66 (Polyamid 6.6)

### Colour:

black, white

Other colours are available

### Packaging:

100 pcs / box or 1000 pcs / box

### Flexible

### UL 94V-2



Article No.	Width (mm)	Length (mm)	Max. bundle diameter (mm)	Min. bundle diameter (mm)	Max. tensile strength (kg)
CST-075A	2,4	75	18	1	8
CST-100A	2,5	100	25	1	8
CST-120A	2,5	120	30	1	8
CST-140A	2,5	142	35	1	8
CST-160A	2,5	165	44	1	8
CST-200A	2,5	203	55	1	8
CST-120B	33.2	120	30	2	18
CST-150B	3,6	150	39	2	18
CST-200B	3,6	203	55	2	18
CST-300B	3,6	292	85	2	18
CST-370B	3,6	368	102	2	18
CST-120C	4,8	120	30	2,5	22
CST-160C	4,8	160	42	2,5	22
CST-190C	4,8	190	52	3	22
CST-250C	4,8	250	74	3,5	22
CST-300C	4,8	310	89	3,5	22
CST-370C	4,8	368	102	3,5	22
CST-430C	4,8	450	133	3,5	22
CST-200D	7,6	203	55	10	55
CST-300D	7,6	300	88	10	55
CST-370D	7,6	380	110	15	55
CST-430D	8	450	133	40	55
CST-530D	8	550	166	40	55
CST-770D	9	762	236	40	80
CST-830D	9	812	246	40	80
CST-1168D	9	1168	360	40	80
CST-230E	12,7	230	53	8	114
CST-380	12,7	380	110	30	114
CST-550E	12,7	550	166	40	114
CST-730E	12,7	730	225	40	114
CST-1000E	12,7	1030	317	40	114



CTHR serie could be used in any electrical cabinet, electrical and electronic harnesses to secure wire & cable bundles



■ **Material:**

Nylon 66 (Polyamid 6.6)

■ **Colour:**

black,

Other colours are available

■ **Packaging:**

100 pcs / box

■ Flexible

■ Resistant to: oils and greases,  
salt and diluted acids.

RoHS



UV  
stabilised



Article No.	Width (mm)	Lenghst (mm)	Max. bundle diameter (mm)	Min. bundle diameter (mm)	Max. tensile strenght (kg)
CTHR-100A	2.5	100	20	1	8
CTHR-120A	2.5	120	25	1	8
CTHR-140A	2.5	140	32	1	8
CTHR-160A	2.5	160	38	1	8
CTHR-200A	2.5	200	50	1	8
CTHR-140B	3.6	140	32	1	18
CTHR-190B	3.6	190	38	1	18
CTHR-200B	3.6	200	50	1	18
CTHR-300B	3.6	300	77	1	18
CTHR370B	3.6	370	102	1	18
CTHR-200C	4.8	200	50	1	22
CTHR-300C	4.8	300	77	1	22
CTHR-370C	4.8	370	102	1	22
CTHR-200D	7.6	200	50	1	54
CTHR-300D	7.6	300	77	1	54
CTHR-370D	7.6	370	102	1	54
CTHR-770D	9.0	770	228	40	79.4AAA

**RoHS**



**UV**  
stabilised



- Flexible
- UL 94V-2
- Mil. Spec. 23190D
- Resistant to: oils and greases,  
salt and diluted acids.

■ **Material:**

Nylon 66 (Polyamid 6.6)

■ **Colour:**

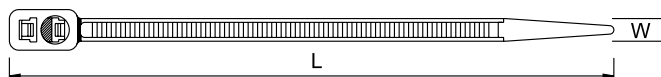
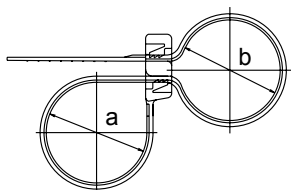
black,

Other colours are available

■ **Packaging:**

100 pcs / box or 1000 pcs / box

## CTDL Shrink Tech Double Loop Cable Tie



Article No.	Width (mm)	Length (mm)	Max. bundle diameter (mm)	Min. bundle diameter (mm)	Max. tensile strength (kg)
CTDL-200C	4.8	200	47/45	2.5/2.0	22
CTDL-300C	4.8	300	72/70	2.5/2.0	22
CTDL-370C	4.8	370	100/97	2.5/2.0	22

## CTMH Shrink Tech Mountable Head Cable Ties



Article No.	Width (mm)	Length (mm)	Max. bundle diameter (mm)	Hole diameter (mm)	Max. tensile strength (kg)
CTMH-100A	2.5	100	25	3.2	8.1
CTMH-150B	3.6	150	32	4.2	18.2
CTMH-200C	4.8	200	50	5.5	22.2
CTMH-200D	7.6	200	50	5.7	54.4
CTMH-300D	7.6	300	76	5.7	54.4
CTMH-370D	7.6	370	122	6.3	54.4

RoHS

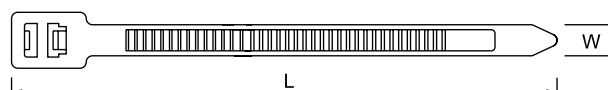


UV  
stabilised



## CTLS Shrink Tech Heat Lashing Cable Tie UL-94V-2

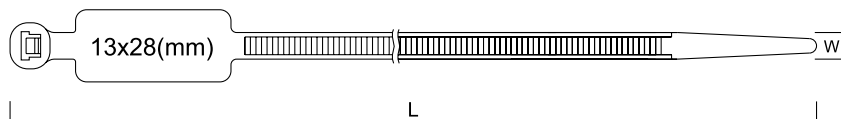
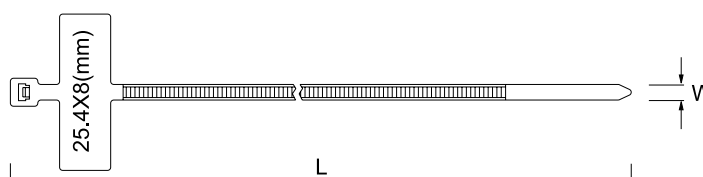
- Resistant to: oils and greases, salt and diluted acids. After fixing the binder, the rest of the binder can be inserted through the extra eye which increases its tensile force and prevents it slipping.



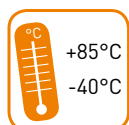
Article No.	Width (mm)	Length (mm)	Max. bundle diameter (mm)	Min. bundle diameter (mm)	CTLS-490E Max. tensile strenght (kg)
CTLS-240E	12.6	240	50	2	114
CTLS-490E	12.6	490	120	2	114
CTLS-590E	12.6	590	152	5	114
CTLS-740E	12.6	740	204	5	114
CTLS-890E	12.6	890	232	7	114
CTLS-1040E	12.6	1040	295	12	114

## CTIM, CTPM, Shrink Tech Marker Cable Tie UL94V-2

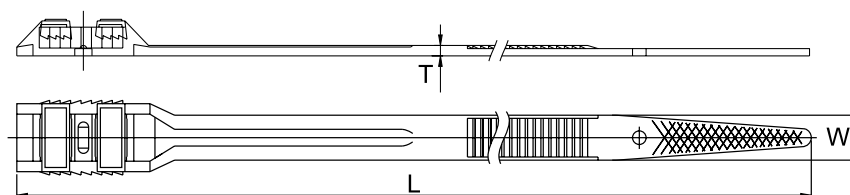
- Resistant to:  
oils and greases, salt and diluted acids.
- Installation temperature:  
10°C - 30°C



Article No.	Width (mm)	Length (mm)	Max. bundle diameter (mm)	Label dimension (mm)	Max. tensile strenght (kg)
CTIM-130A	2.5	130	25	28x20	8
CTIM-200C	4.6	200	50	28x13	22
CTIM-270C	4.6	270	75	28x13	22
CTPM-100A	2.5	100	25	25x8	8
CTPM-110A	2.5	110	25	25x8	8
CTMP-200A	2.5	200	50	30x15	8



## CTPA Shrink Tech Polyamid Cable Tie



- Colour: black, Other colours are available
- EDF tested - approached MIL-S-23190E.
- Resistant to: oils and greases, salt and diluted acids.

Article No.	Width (mm)	Lenghst (mm)	Max. bundle diameter (mm)	Min. bundle diameter (mm)	Max. tensile strenght (kg)
CTPA-180	9	180	40	3	35
CTPA-260	9	265	53	3	50
CTPA-360	9	360	83	3	50

## CTPP Shrink Tech Polypropylene Cable Tie UL94V-2

- Resistant to: acid resistant (special for the Chemical industry).
- Colour: seagreen, Other colours are available

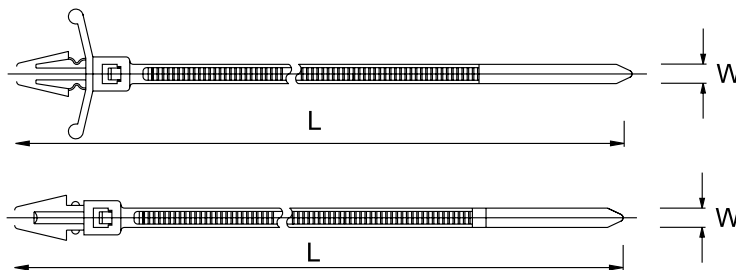


Article No.	Width (mm)	Lenghst (mm)	Max. bundle diameter (mm)	Min. bundle diameter (mm)	Max. tensile strenght (kg)
CTPP-100A	2.5	100	22	1	4.9
CTPP-190C	4.8	188	46	2	13.2
CTPP-300C	4.8	300	76	2	13.2
CTPP-370C	4.8	368	102	2	13.2
CTPP-200D	7.6	200	50	4	22.2
CTPP-370D	7.6	368	102	4	22.2





CTS serie could be used in any electrical cabinet, electrical and electronic harnesses to secure wire & cable bundles. CTS is the standard serie suitable for standard application.



■ **Material:**

Nylon 66 (Polyamid 6.6)

■ **Colour:**

black, white

Other colours are available

■ **Packaging:**

100 pcs / box or 1000 pcs / box

■ Flexible

■ UL 94V-2

■ Resistant to: oils and greases, salt and diluted acids

RoHS



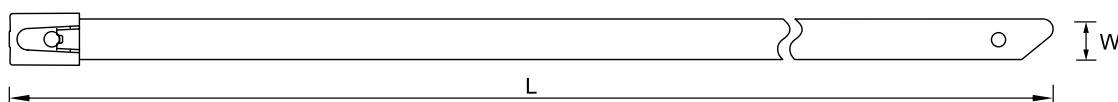
UV  
stabilised



Article No.	Width (mm)	Length (mm)	Hole diameter (mm)	Max. bundle diameter (mm)	D / S (mm)	Max. tensile strength (kg)
CTP-110A	2,5	110	4	22	2.4/4.8	8.1
CTP-130B	3.2	130	4.8	28	3.2/6.4	22.2
CTP-130C	4.8	130	6.4	25	3.2/6.4	22.2
CTP-170C	4.8	170	6.4	38	3.2/6.4	22.2
CTP-190C	4.8	190	6.4	45	3.2/6.4	22.2
CTPO-110A	2.5	110	4	22	2.4/4.8	8.1
CTP-150B	3.6	150	5.2	32	2.8/5.2	13.6
CTP-200C	4.8	200	6.3	45	3.6/6.3	22.2

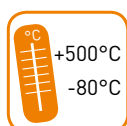


CTHR serie could be used in any electrical cabinet, electrical and electronic harnesses to secure wire & cable bundles



- Flexible
- Type AISI 302/304
- DIN 14300-14301

- **Material:**  
Steel
- **Colour:**  
Steel
- **Packaging:**  
100 pcs / box



Article No.	Width (mm)	Lenghst (mm)	Max. bundle diameter (mm)	Min. bundle diameter (mm)	Max. tensile strenght (kg)
CTSS-130C	4.5	130	33	3	46
CTSS-200C	4.5	200	50	3	46
CTSS-300C	4.5	300	76	3	46
CTSS-370C	4.5	370	102	3	46
CTSS-520C	4.5	520	156	3	46
CTSS-680C	4.5	680	207	3	46
CTSS-840C	4.5	840	257	3	46
CTSS-200D	8	200	50	5	114
CTSS-300D	8	300	76	5	114
CTSS-370D	8	370	102	5	114
CTSS-500D	8	500	150	5	114
CTSS-680D	8	680	207	5	114
CTSS-840D	8	840	257	5	114
CTSS-1020D	8	1020	312	5	114

## NOTES

[illegible]



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