

# TISA-FLEX® TCSE

MECHANICAL PROTECTION

**-50°C +150°C**

## FEATURES AND ASSETS:

- **Highly expandable sleeve**
- **Excellent abrasion resistance**
- **Excellent cutting resistance**
- **Auto-extinguishing, halogen-free**
- **Lightweight**
- **Economic**
- **Recyclable**
- **Insensitive to condensation and fungus**

## TYPICAL APPLICATIONS:

- **Protection of bundles of cables**
- **Automotive**
- **Powered environments**

## SPECIFICATIONS :

**TISA-FLEX® TCSE** is braided flexible and expandable sleeve made of Polyester monofilaments of diameter 0.22 mm.

Its braiding is particularly designed for abrasion protection of bundles of electrical cables.



**TISA-FLEX® TCSE** is a recyclable product, efficient in terms of resistance and protection of electrical cables. Its expandability (ratio of 3:1) makes it easy to install while taking up significant differences in cross sections, elbows, connections, etc., without bends or flattening.

Hot cutting to length means there is no fraying of the ends.

The small range of sizes of **TISA-FLEX® TCSE** means it can cover all diameters from 3 to over 82mm thanks to its expandable capacity.

Supplied in coils or cut to length, **TISA-FLEX® TCSE** is an economic, efficient and esthetic solution to protect your electrical cables.



# TISA-FLEX® TCSE

FEATURE	METHOD, STANDARD, REGULATIONS	VALUE
Chemical nature of monofilament		Polyethylene terephthalate CAS No: 25038-59-9
Melting point		250°C
Continuous working temperature		from -50°C to +150°C
Peak temperature		175°C
Thermo-ageing	Automotive specification	Complies with automotive specification, resistance > 1000 h at 150°C
Flammability Toxicity and harm from smoke	- Renault D45 1333 and FMVSS 302 - UL 94 - FAR 25-853	- Complies - Raw material classed V2 - Complies - Halogen-free
RoHS	Directive 2002/95/CE	Complies
Environment	European regulations	Complies

REFERENCES		USE **		CONSTRUCTION		STANDARD PACKAGING ***
BLACK	GREY	MIN (mm.)	MAX (mm.)	Number of wires	Weight g/100m*	Coil (m.)
ETN 03	ETG 03	3	8	72	410	100
ETN 06	ETG 06	5	12	96	565	100
ETN 12	ETG 12	8	21	144	845	100
ETN 20	ETG 20	12	30	216	1295	100
ETN 30	ETG 30	18	55	288	1680	50
ETN 40	ETG 40	24	66	480	2900	50
ETN 50	ETG 50	30	82	600	3600	50

\* Weight as guidance for 100 mm.

\*\* Recommended range of use

\*\*\* Coils: Sleeving packed in coil, attached with ties, covered with plastic film.  
Rolls: Sleeving packed in rolls, covered with plastic film.



These references are those of our standard TISA-FLEX® TCSE range. Please contact us for any other construction, parameter, material, packaging, colour, etc.