

# TISA-TWIST® SW-FR

ELECTRICAL AND THERMAL INSULATING SLEEVING

Rated to +125°C

## FEATURES AND ASSETS:

- **UL Recognized**
- **UL file N° E174148**
- **Quick and easy installation**
- **Self wrapping product**
- **Excellent abrasion resistance**
- **Non-halogen**
- **Vibrations protection**
- **Impacts protection**
- **Lightweight**

## TYPICAL APPLICATIONS:

- **Cables bundle protection**
- **Railway**
- **Electronic industry**
- **Electrotechnic industry**

## SPECIFICATIONS :

**TISA-TWIST® SW-FR** is a self-wrapping weaved sleeve made up of saturated flame retardant polyester multifilaments and monofilament. Working with this product is non aggressive for hands, and the smooth texture is pleasant to feel.

The self-wrapping treatment allows for **TISA-TWIST® SW-FR** fast and easy sheath laying and taking up for assembly or maintenance.

The self-wrapping sheath is usually used when electrical harness is already done with its terminals and connectors.

Its shape makes it easy to install while taking up significant differences in cross sections, elbows, connections, etc.

**TISA-TWIST® SW-FR** can cover all diameters from 4 to over 38 mm. It is mainly used in railway industries for cables protection.

Supplied in coils or cut pieces\*, **TISA-TWIST® SW-FR** is an economic, efficient and esthetic solution to protect your electrical cables.

\*cut pieces minimum length : 100 mm

Standard colour : Black with white tracer

Assembly recommendation : **TISA-TWIST® SW-FR** should be tied at intervals if continuous working temperature exceeds +110°C.



# TISA-TWIST® SW-FR

FEATURE	METHOD, STANDARD, REGULATIONS	VALUE	
Chemical nature of monofilament		Flame retardant Polyester	
Filaments dimension		<b>Warp :</b> - 1100 dtex (1250 denier) multifilaments - Black + 2 white Stripes	<b>Weft :</b> - 0.22 / 0.254 mm monofilaments - Black
Finishing		Heat treated	
Melting point		+240°C	
Continuous working temperature		-50°C +125°C	
Flammability	- FMVS S302 - D45-1333 - PSA STE 96 230 915 99	- Complies - Self extinguishing type B - T3 (-40°C. +125°C)	
Abrasion resistance	- PSA D44 1722 - ISO 6722	R8	
Toxicity and harm from smoke - smoke opacity - Oxygen index - «I» and «F» classifications	- NFX 10-702-1 10-702-2 - NF-ISO 4589-2 - NF F 16-101 16-102	- Pass - Smoke Index : I2 - 36.1% - I2-F1	
Dielectric strength		> 1kVAC	
RoHS		Complies	
Environment	European regulations	Complies	
Electrical	Dielectric strength	From 1kVAC	

REFERENCES	USE *		CONSTRUCTION		STANDARD PACKAGING
	MIN (mm)	MAX (mm)	Nominal wall thickness (mm)	Weight (kg/km)	Spools (m)
SW-FR 05	4	5	0,90	10,25	150
SW-FR 08	5	8	0,90	13,30	100
SW-FR 13	10	13	0,90	21,20	50
SW-FR 16	13	16	0,90	25	50
SW-FR 19	16	19	0,90	28,70	25
SW-FR 25	19	25	0,90	42,20	25
SW-FR 29	25	29	0,90	44	15
SW-FR 32	29	32	0,90	48,10	15
SW-FR 38	32	38	0,90	58	15
SW-FR 50	38	50	0,90	93	15

\* Recommended range of use

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



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