



Product Highlights

- Operating temperature up to +150°C (+302°F)
- High level of abrasion resistance
- Extremely lightweight and thin
- Excellent flexibility
- Self-wrapping design
- Attractive appearance

Typical Applications

- Instrument panel harnesses
- Engine compartment harnesses
- Tubing, hose, and cable assemblies

TwistTube® 1964 is a self-wrapping sleeve designed to provide abrasion protection. Woven of both monofilament and multifilament polyester yarns the product offers a high level of component protection and is both flexible and lightweight featuring low profile. The polyester construction eliminates problems associated with trapped heat and humidity and also eliminates operator skin irritation during assembly.

TwistTube 1964 offers superior abrasion protection and maintains a circular profile when flexed. Its self-wrapping design allows for quick and easy bundling of wire and cable assemblies. The unique design easily allows for breakouts and can be installed over completed assemblies. The lightweight design was developed specifically to meet the lightweight design requirements of automobiles industry and can effectively reduce product weight while still maintaining excellent product performance.



Our manufacturing sites are certified ISO 9001, IATF 16949, or AS/EN 9100, ISO 14001 and ISO 45001 (Selected Sites)

Performance Data – TwistTube® 1964

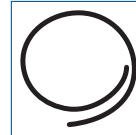
Property	Test Method	Result
Temperature Rating	240 hrs at +175°C (+150°C rating)	Pass +150°C (+302°F)
Abrasion Performance	ISO 6722	Level 3
Low Temperature Flexibility	BH100-016A	Pass -70°C (-94°F)
Flammability	SAE J369	Self-extinguishing
Fluid Resistance	BH100-003B	Pass

All numeric performance data shows average or typical values. Please consult your sales representative for product drawings, test reports and OEM approvals.

Construction and Typical Product Characteristics

Warp Yarn: Polyester (PET) Multifilament

Fill Yarn: Polyester (PET) Monofilament



End view of TwistTube 1964 illustrating self-curling wrappable construction with nominal overlap.

Standard Sizes

Nominal Diameter mm	Recommended Application Range mm	
	Min Ø	Max Ø
5	1	5
8	5	8
10	8	10
13	10	13
16	13	16
19	16	19
25	19	25
29	25	29
32	29	32
38	32	38

* Max diameter is defined as a nominal 90° sleeve overwrap. A variety of application-based variables will dictate the appropriate sleeve size for use on each harness. Proper sleeve sizing is at the discretion of the end user.

A reduced overlap could be acceptable in certain applications allowing for a larger max diameter harness. Please consult your local sales representative for recommendations and guidance.

Availability

Standard sizes are listed here, Additional sizes could be available upon request.

Available in spools and custom cut lengths. Recommended cut lengths are in 5mm increments. Please see regional drawings for cut length tolerances.

Standard color is black. Additional colors are available.

Please consult your local sales representative for regional packaging details and standards.

TwistTool is available as an installation aid for sizes 5, 8 and 13 mm.



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EMEA: (33) 3 44 39 06 06 • Japan: (81) 45 330 0300 • China: (86) 21 6182 7560

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