



PRODUCT DATA

FLEX-GUARD FPE

Expandable Monofilament Sleeving

DESCRIPTION

FLEX-GUARD FPE is a braided sleeving produced by braiding specially formulated flame retardant polyester PET (Polyethylene terephthalate) monofilament into a tubular sleeve. **FLEX-GUARD FPE** is a tough yet lightweight sleeving typically used to jacket cable assemblies, wire harnesses, flat ribbon cable, tubing and industrial hoses. This sleeving is a UL recognized VW-1 component, CSA approved and rated for use up to 125°C. It is available in a tight weave (FPE/TW) construction for more critical applications. **FLEX-GUARD FPE** is provided in black or white with an opposite color cross strand for ease of identification.

FEATURES

FLEX-GUARD FPE demonstrates excellent chemical and fungus resistance while providing good mechanical properties. Its resistance to abrasion and cut through makes it ideal for many industrial and electrical applications. **FLEX-GUARD FPE** passes most tests for low flammability, limited flame travel and self extinguishing requirement, thus providing its UL recognition an additional safety factor. It has an open weave construction, thus allowing each size to enlarge up to three times its original diameter. This expansion quality makes it easy to apply and slip on quickly over irregular shapes. Its good flexibility, which is retained at low temperatures, allows for easy flexing in any direction and it can neatly capture a number of different size items within one length.

APPLICATIONS

FLEX-GUARD FPE is commonly used over wires, wire bundles and harnesses, cable assemblies, flat ribbon cable, tubing and hoses where it provides a tough, durable protection. The open weave construction allows for complete drainage, prevents condensation and provides for dissipation of heat and moisture. Its excellent chemical resistance permits its use in harsh fluid environments including oils, salt water, fuels, most common cleaners and solvents and many chemicals. Its flexing capability makes the product ideal for application in machine tools, automatic equipment and robotics where wires and tubes are often required to flex freely during operating cycles. The low temperature properties of **FLEX-GUARD FPE** make it suitable for exposure to all weather conditions.

STANDARD COLORS

Black with White crisscross tracer strands and White with Black crisscross tracer strands.

FLEX-GUARD FPE

PROPERTIES

PROPERTY	TEST METHOD	PERFORMANCE
Tensile Strength	ASTM D-876	55,000 psi
Elongation	ASTM D-876	25%
Specific Gravity	ASTM D-876	1.31
Moisture Absorption (24 hours)	ASTM D-570	0.08%
Shrinkage @ 180°C		4.2%
Max. Operating Temperature	UL 224	125°C
Melt Temperature	ASTM D-2117	200°C
Low Temperature Flexibility	MIL I 23053-E	-70°C
Flammability	UL 224	VW-1/FR-1
Flexural Modulus 10 ³ psi @ 73°F	ASTM D-790	410
Fungus Resistance	MIL STD 810 (508)	No Growth
Copper Corrosivity	MIL I 23053	No Effect

FLUID RESISTANCE

Testing verifies that there is virtually no effect on the tensile strength or elongation of FLEX-GUARD FPE when exposed to the following fluids: Cleaning Fluid, De-icing Fluid, Fuel Oil, Gasoline, Hydraulic Fluid, Lubricating Oil, Salt Water, and Solvents.

DIMENSIONS

Size Nominal I.D.	Size Range (inches)	Approx. Weight lbs./1000 feet	Std. Spool put-up
1/8"	3/32" - 1/4"	1.9	1000 ft.
1/4"	1/8" - 3/8"	2.7	1000 ft.
3/8"	1/4" - 5/8"	6.0	500 ft.
1/2"	1/4" - 3/4"	7.5	500 ft.
3/4"	1/2" - 1-1/4"	12.5	250 ft.
1-1/4"	7/8" - 1-3/4"	15.9	250 ft.
1-1/2"	1" - 2"	19.6	250 ft.
1-3/4"	1-1/4" - 2-3/4"	26.3	200 ft.
2"	1-1/2" - 3-1/2"	34.0	200 ft.
2-1/2"	1-3/4" - 4-1/2"	46.5	100 ft.
3"	1-7/8" - 4-1/2"	47.0	100 ft.

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