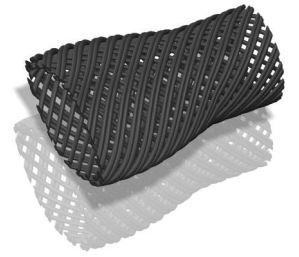


Expandable Sleeve



LANGOFLEX G-FR

LANGOFLEX G-FR is a tough, lightweight expandable sleeving made of PET .010" (0.25mm) monofilaments braided into a cylindrical sleeve.

LANGOFLEX G-FR provides excellent abrasion resistance and good mechanical properties.

The flexible open braid construction allows each size to expand up to three times its original diameter for easy installation and provides complete drainage preventing heat, condensation and moisture.

LANGOFLEX G-FR is the **flame retardant** version of the LANGOFLEX G. It is designed to protect wires, cables, wire harnesses, tubes and hoses.

Typical applications include: lighting fixtures; transportation (mass transit, rail cars, locomotives...); recreational vehicles; pleasure boats and commercial marine; industrial equipment (tow motors, overhead cranes, aerial platforms...); technology, media and telecommunications; custom car markets; wind turbines and solar panels; heavy truck market; and in many other industrial fields.

Characteristics

- **Color:** standard colors are black with white tracer and white with black tracer.
- **Specifications:** Flammability UL 1441 VW-1. UL File #E131769 and CSA File # LR92464. RoHS and WEEE compliant.

Physical properties	Specification	Unit	Value
Maximum operating temperature	UL 224	°C (°F)	150 (302)
Melting temperature	ASTM D 2117	°C (°F)	240 (464)
Low temperature flexibility	MIL-I-23053	°C (°F)	-70 (-94)
Flammability	UL 224	-	VW-1/FR1
Thermal aging	ASTM D 3045	°C (°F)	175 (347) for 3 hrs
Tensile strength	ASTM D 876	psi	100,000
Elongation	ASTM D 876	%	25
Specific gravity	ASTM D 792	g/cm ³	1.31
Shrinkage @ 180°C	-	%	4.2
Flexural modulus psi @ 73°C	ASTM D 790	psi	410,000
Moisture absorption 24 hrs	ASTM D 570	%	0.08
Fungus resistance	MIL-STD-810 (508)	-	no growth
Copper corrosiveness	MIL-I-23053	-	no effect
Chemical resistance	Resists the majority of chemicals and automotive fluids (cleaning fluid, deicing fluid, fuel oil, gasoline, hydraulic fluid, lubricating oil, salt water and solvents)		

Dimensions

Designation	Nominal internal Ø		Maximum internal Ø		Ends (per carrier)
	(mm)	(inches)	(mm)	(inches)	
LANGOFLEX G-FR 03	3	0.118	7	0.276	1
LANGOFLEX G-FR 06	6	0.236	10	0.394	1
LANGOFLEX G-FR 06	6	0.236	10	0.394	3
LANGOFLEX G-FR 06	6	0.236	10	0.394	2
LANGOFLEX G-FR 10	10	0.394	16	0.630	1
LANGOFLEX G-FR 10	10	0.394	16	0.630	3
LANGOFLEX G-FR 13	13	0.512	19	0.748	2
LANGOFLEX G-FR 13	13	0.512	19	0.748	3
LANGOFLEX G-FR 19	19	0.748	32	1.260	3
LANGOFLEX G-FR 19	19	0.748	32	1.260	3
LANGOFLEX G-FR 32	32	1.260	44	1.732	3
LANGOFLEX G-FR 44	44	1.732	63	2.480	4
LANGOFLEX G-FR 50	50	1.969	70	2.756	3
LANGOFLEX G-FR 50	50	1.969	70	2.756	4
LANGOFLEX G-FR 63	63	2.480	76	2.992	5
LANGOFLEX G-FR 63	63	2.480	100	3.937	6

Packaging

LANGOFLEX G-FR is delivered in coils or in cut lengths upon request.

Data and photos for information only. Delfingen makes no warranties as to the accuracy or completeness of this information. Delfingen reserves the right to make changes in materials or processing without notification.

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