



## FLEXO<sup>®</sup> FLAME RETARDANT COMPLIES TO HL2 ACCORDING TO THE RAILWAY STANDARD DIN EN 45545-2 EXPANDS UP TO 150%

Flexo<sup>®</sup> PET Flame Retardant (FR) sleeving is the perfect choice for electronic and high tech applications where flame retardance and durability are primary concerns. Ease of installation makes FR an efficient choice for long runs of wire or cable. The addition of an organic combustion inhibitor to our standard polyethylene terephthalate gives FR an Underwriters Lab and CSA flame resistance rating of VW-1. FR meets or exceeds automotive and aircraft engineering standards for flammability and flame retardance.

### SIZING CHART

Nominal Size	Part #	Min Expansion	Max Expansion	*Put-Ups		Available Colors	Kgs/100m
				M	L		
3,2mm	FRN0.13	2,4mm	6,4mm	68,6m	304,8m	7	0,24
6,4mm	FRN0.25	3,2mm	11,1mm	61,0m	304,8m	7	0,36
8,0mm	FRN0.31	4,0mm	11,9mm	45,7m	152,4m	7	0,74
9,5mm	FRN0.38	4,8mm	12,7mm	45,7m	152,4m	7	0,85
11,1mm	FRN0.44	5,6mm	15,9mm	45,7m	152,4m	7	1,01
12,7mm	FRN0.50	6,4mm	19,1mm	30,5m	152,4m	7	1,07
14,3mm	FRN0.56	8,0mm	22,2mm	30,5m	152,4m	7	1,20
19,1mm	FRN0.75	12,7mm	31,8mm	22,9m	76,2m	7	1,59
25,4mm	FRN1.00	15,9mm	41,3mm	19,8m	76,2m	7	1,99
31,8mm	FRN1.25	19,1mm	44,5mm	15,2m	76,2m	7	2,31
38,1mm	FRN1.50	25,4mm	63,5mm	12,2m	61,0m	7	2,91
44,5mm	FRN1.75	31,8mm	69,9mm	9,1m	61,0m	7	4,02
50,8mm	FRN2.00	38,1mm	88,9mm	15,2m	61,0m	7	4,91
63,5mm	FRN2.50	44,5mm	92,1mm	15,2m	61,0m	7	5,66
76,2mm	FRN3.00	63,5mm	120,7mm	15,2m	30,5m	7	5,95

### 3 END CONSTRUCTION

6,4mm	FR30.25	3,2mm	9,5mm	61,0m	304,8m	TB,GW, TW	0,58
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\*Put-Ups: "M" = Shop Spool and "L" = Bulk Spool



### FEATURES

Material	Polyethylene Terephthalate
Grade	FRN
Monofilament Diameter	0,25mm
Drawing Number	TF001FRN-WD
Cutting	Hot Knife

### CERTIFICATIONS





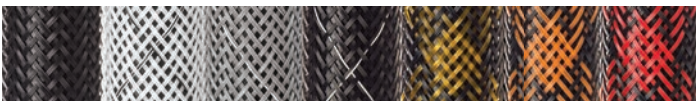
## ABRASION

Abrasion Resistance	<b>MEDIUM</b>
Abrasion Test Machine	Taber 5150
Abrasion Test Wheel	Calibrase H-18
Abrasion Test Load	500g
Room Temperature	80°F / 27°C
Humidity	70%
Minor Scuffing	100 Test Cycles
Several Broken Strands & Small Hole	500 Test Cycles
Material Destroyed	700 Test Cycles
Pre-Test Weight	4 124,0mg
Post-Test Weight	3 884,7mg
Test End Loss Of Mass Point Of Destruction	239,3mg

## PHYSICAL PROPERTIES

Monofilament Diameter (ASTM D-204)	0,25mm
Flammability Rating (FMVSS-302 Approved)	VW-1
Recommended Cutting	Hot Knife
Colors	7
Wall Thickness	0,64mm
Tensile Strength (Yarn) (ASTM D-2256 Lbs)	5
Specific Gravity (ASTM D-792)	1,38
Moisture Absorption % (ASTM D-570)	0,1 - 0,2%
Hard Vacuum Data (ASTM E-595 at 10 <sup>-5</sup> torr)	
TML	0,19
CVCM	0,04
WVR	0,06
Smoke D-Max (ASTM E-662)	275
Outgassing	Medium
Oxygen Index (ASTM D-2863)	31

## COLORS



Black (BK), White w/Black Tracer (TW), Gray w/White Tracer (GW), Black w/White Tracer (TB), Black w/Yellow Tracer (YS), Black w/Orange Tracer (OS), Black w/Red Tracer (SP)

## FLAMMABILITY

Rating (FMVSS 302 and SAE J369)	UL VW-1 Pass
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## OPERATING TEMPERATURES

Melt Point (ASTM D-2117)	482°F / 250°C
Maximum Continuous (Mil-I-23053)	257°F / 125°C
Minimum Continuous (Mil-I-23053)	-94°F / -70°C

## CHEMICAL RESISTANCE

1=No Effect 2=Little Effect 3=Affected 4=More Affected 5=Severely Affected

Aromatic Solvents	2
Aliphatic Solvents	1
Chlorinated Solvents	3
Weak Bases	1
Salts	1
Strong Bases	2
Salt Water (0-S-1926)	1
Hydraulic Fluid (MIL-H-5606)	1
Lube Oil (MIL-L-7808)	1
De-Icing Fluid (MIL-A-8243)	1
Strong Acids	3
Strong Oxidants	2
Esters/Ketones	2
UV Light	1
Petroleum	1
Fungus (ASTM G-21)	1
Halogen Free	Yes
RoHS	Yes
SVHC	None