ADVANCED ENGINEERING **Technical Data Sheet**



FLEXO® FR

- Economical And Easy **To Install**
- Expands Up To 150%
- Resists Gasoline And **Engine Chemicals**
- Cut And Abrasion Resistant
- Mil-202, FAR-25, FMVSS 302, VW-1, FR-1 Approved
- Halogen Free



Hot Knife

Material **Polyethylene Terepthalate**

Grade FRN

Monofilament Diameter .010"

Drawing Number TF001FR-WD



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				i ut-ops						
Nominal Size	Part #		on Range	Bulk	Shop	Retail	Clam	Bag	Available Colors	Lbs/ 100'
Size	#	Min	Max	Spool	Spool				Colors	100
1/8″	FRN0.13	3/32″	1/4″	1,000′	225′	110′	25′	10′	5	0.16
1/4″	FRN0.25	1/8″	7/16″	1,000′	200′	100′	25′	10′	5	0.24
3/8″	FRN0.38	3/16″	5/8″	500′	125′	60′	25′	10′	5	0.57
1/2″	FRN0.50	1/4″	3/4″	500′	100′	50′	25′	10′	5	0.72
3/4″	FRN0.75	1/2″	1 1/4″	250′	75′	35′	25′	10′	5	0.87
1″	FRN1.00	5/8″	1 5/8″	250′	65′	25′	n/a	10′	5	1.34
1 1/4″	FRN1.25	3/4″	1 3/4″	250′	50′	25′	n/a	10′	5	1.60
1 1/2″	FRN1.50	1″	2 1/2"	200′	40′	25′	n/a	10′	4	1.96
1 3/4″	FRN1.75	1 1/4″	2 3/4″	200′	30′	25′	n/a	10′	5	2.70
2″	FRN2.00	1 1/2″	3 1/2″	200′	50′	25′	n/a	10′	5	3.30
2 1/2″	FRN2.50	1 3/4″	4 1/2″	200′	50′	25′	n/a	10′	5	3.80
3″	FRN3.00	2 1/2"	4 3/4″	100′	50′	25′	n/a	10′	4	4.00
3 End Construction										
1/4″	FR30.25TB	1/8″	3/8″	1,000'	200′				TB	0.39

Put-Ups -

Flame Retardant, Economical Sleeving Solution

Flexo[®] PET Flame Retadant (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 terepthalate gives FR an Underwriters Lab and CSA flame resistance rating of VW-1.

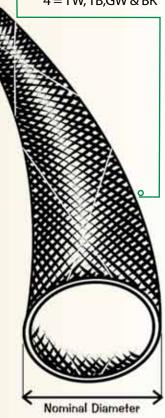
FR meets or exceeds automotive and aircraft engineering standards for flammability and flame retardance.

Colors Available:



Spyder (SP) - Custom Color, White with Black Tracer (TW), Black with White Tracer (TB, Gray with White Tracer (GW), and Black with No Tracer (BK).

Colors Available: 5 = SP, TW, TB, GW & BK4 = TW, TB, GW & BK







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Abrasion Resistance Medium

Abrasion Test Machine Taber 5150

Abrasion Test Wheel Calibrase H-18

Abrasion Test Load 500g

Room Temperature 80°F

Humidity 70%

Minor Scuffing Is Visible **100 Test Cycles**

Several Broken Strands And Small Hole Developing **500 Test Cycles**

Material Destroyed 700 Test Cycles

Pre-Test Weight 4124.0 mg

Post-Test Weight 3884.7 mg

Test End Loss Of Mass Point Of Destruction 239.3 mg



VW-1 Rating

Chemical

Resistance	
1=No Effect 4=More Affect 2=Little Effect 5=Severely A 3=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 <i>MIL-H-5606</i>	1
Lube Oil MIL-L-7808	1
De-Icing Fluid <i>MIL-A-824</i> 3	1
Strong Acids	3
Strong Oxidants	2
Esters/Keytones	2
UV Light	1
Petroleum	1
Fungus ASTM G-21	1
Halogen Free	Yes
RoHS	Yes
SVHC	_None



	700*	S
Melt Point	800*	JRE
ASTM D-2117 482°F (250°C)—	500*	ATI
· · ·	400*	PER
Maximum Continuous Mil-I-23053	300-	EMI
257°F (125°C)	200*	1.5
	100*	INC
Minimum Continuous		RAT

PHYSICAL PROPERTIES

-94°F (-70°C)

Monofilament Diameter	.010
Flammability Rating FMVSS-302 Approved	VW-1
Recommended CuttingH	ot Knife
Colors	5
Wall Thickness	.025
Tensile Strength (Yarn) ASTM D-2256 Lbs	5
Specific Gravity ASTM D-792	1.38
Moisture Absorption % ASTM D-570	.12
Hard Vacuum Data ASTM E-595 a	<mark>t 10</mark> -5 torr
TML	.19
CVCM	.04
WVR	.06
Smoke D-Max ASTM E-662	275
Outgassing	Med
Oxygen Index ASTM D-2863	31

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