

- UL Recognized
- Continuous Filament E-Type Glass
- Resists Abrasion, Vibration, And Mechanical Stress
- Easy To Install - Cuts With Scissors
- Stays Flexible In Low Temps



**Cut Cleanly**  
**Scissors**

Nominal Size	Diameter	Part #	Wall Thickness	Expansion Range		Standard Spool Put-Ups		Available Colors
				Min.	Max.	Bulk Spool	Shop Spool	
24	0.022"	FHNG.24NT	.005"	0.020"	0.027"	500'	250'	Natural (NT)
22	0.027"	FHNG.22NT	.005"	0.025"	0.032"	500'	250'	Natural (NT)
20	0.034"	FHNG.20NT	.009"	0.032"	0.039"	500'	250'	Natural (NT)
18	0.042"	FHNG.18NT	.011"	0.040"	0.049"	500'	250'	Natural (NT)
17	0.047"	FHNG.17NT	.011"	0.045"	0.054"	500'	250'	Natural (NT)
16	0.053"	FHNG.16NT	.011"	0.051"	0.061"	500'	250'	Natural (NT)
14	0.066"	FHNG.14NT	.011"	0.064"	0.074"	500'	250'	Natural (NT)
13	0.076"	FHNG.13NT	.011"	0.072"	0.082"	500'	250'	Natural (NT)
12	0.085"	FHNG.12NT	.011"	0.081"	0.091"	250'	100'	Natural (NT)
11	0.095"	FHNG.11NT	.011"	0.091"	0.101"	250'	100'	Natural (NT)
10	0.106"	FHNG.10NT	.011"	0.102"	0.112"	250'	100'	Natural (NT)
9	0.118"	FHNG.09NT	.011"	0.114"	0.124"	250'	100'	Natural (NT)
8	0.133"	FHNG.08NT	.011"	0.129"	0.141"	250'	100'	Natural (NT)
7	0.148"	FHNG.07NT	.013"	0.144"	0.158"	250'	100'	Natural (NT)
6	0.166"	FHNG.06NT	.013"	0.152"	0.178"	250'	100'	Natural (NT)
5	0.186"	FHNG.05NT	.013"	0.182"	0.198"	250'	100'	Natural (NT)
4	0.208"	FHNG.04NT	.016"	0.204"	0.224"	250'	100'	Natural (NT)
3	0.234"	FHNG.03NT	.016"	0.229"	0.249"	250'	100'	Natural (NT)
2	0.263"	FHNG.02NT	.016"	0.258"	0.278"	250'	100'	Natural (NT)
1	0.294"	FHNG.01NT	.016"	0.289"	0.311"	100'	50'	Natural (NT)
0	0.330"	FHNG.00NT	.016"	0.325"	0.347"	100'	50'	Natural (NT)
1/4"	0.250"	FHN0.25NT	.010"	0.250"	0.313"	100'	50'	Natural (NT)
5/16"	0.313"	FHN0.31NT	.016"	0.313"	0.333"	100'	50'	Natural (NT)
3/8"	0.375"	FHN0.38NT	.012"	0.375"	0.500"	100'	50'	Natural (NT)
7/16"	0.438"	FHN0.44NT	.018"	0.438"	0.462"	100'	50'	Natural (NT)
1/2"	0.500"	FHN0.50NT	.013"	0.500"	0.625"	100'	50'	Natural (NT)
5/8"	0.625"	FHN0.63NT	.024"	0.625"	0.750"	100'	50'	Natural (NT)
3/4"	0.750"	FHN0.75NT	.024"	0.750"	0.875"	100'	50'	Natural (NT)
1"	1.000"	FHN1.00NT	.024"	1.000"	1.250"	100'	50'	Natural (NT)

### Braided Fiberglass Protects up to 1,200°F

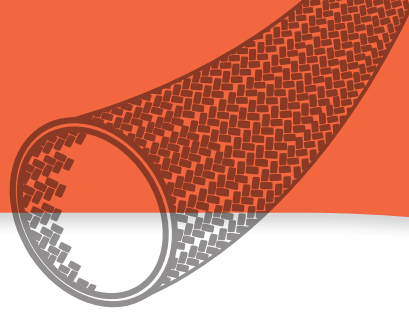
INSULTHERM® ULTRA FLEX® fiberglass sleeving is ideal for the protection of wires and hoses exposed to the heat generated from high performance engine and exhaust components.

The heat treated sleeving cuts with scissors and is compatible with most bonding and saturation systems.

Ultra Flex® expands slightly, allowing it to slide easily over wires and follow curves and contours without binding.

**"...will withstand extreme heat...  
provides the protection needed"**





**ABRASION**  **FLAMMABILITY**

**Abrasion Resistance**  
**Medium**

Rating \_\_\_\_\_ VW-1

**Abrasion Test Machine**  
**Taber 5150**

**Abrasion Test Wheel**  
**Calibrase H-18**

**Abrasion Test Load**  
**500g**

**Room Temperature**  
**78°F**

**Humidity**  
**72%**

**Material Destroyed**  
**1000 Test Cycles**

**Pre-Test Weight**  
**3,374.0 mg**

**Post-Test Weight**  
**2,839.3 mg**

**Test End Loss Of Mass**  
**Point Of Destruction**  
**534.7 mg**

 **CHEMICAL  
RESISTANCE**

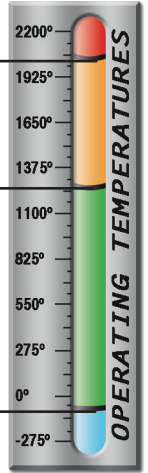
1=No Effect      4=More Affected  
2=Little Effect    5=Severely Affected  
3=Affected

Aromatic Solvents _____	1
Aliphatic Solvents _____	1
Chlorinated Solvents _____	1
Weak Bases _____	1
Salts _____	1
Strong Bases _____	1
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 _____	2
Strong Oxidants _____	2
Esters/Ketones _____	1
UV Light _____	2
Petroleum _____	1
Fungus ASTM G-21 _____	1
Halogen Free _____	Yes
RoHS _____	Yes
SVHC _____	None

**Melt Point**  
*ASTM D-2117*  
**2,048°F (1,120°C)**

**Maximum Continuous**  
*Mil-I-23053*  
**1,202°F (650°C)**

**Minimum Continuous**  
**-94°F (-70°C)**



 **PHYSICAL  
PROPERTIES**

Monofilament Diameter _____	NA
<i>ASTM D-204</i>	
Flammability Rating _____	VW-1
Recommended Cutting _____	Scissor
Colors _____	1
Wall Thickness _____	.010"-.024"
Tensile Strength (Yarn) _____	
<i>ASTM D-2256 Lbs</i>	
Specific Gravity ASTM D-792 ____	1.0-1.8
Moisture Absorption _____	.01
<i>% ASTM D-570</i>	
Hard Vacuum Data _____	
<i>ASTM E-595 at 10-5 torr</i>	
TML _____	.01
CVCM _____	.00
WVR _____	.00
Smoke D-Max _____	
<i>ASTM E-662</i>	
Outgassing _____	Low
Oxygen Index _____	
<i>ASTM D-2863</i>	