

- **Resin Saturated, Heavy Weight Braided Fiberglass Won't Burn, Melt, or Become Brittle**
- **Minimal Dusting When Cut & Handled**
- **Cut and Abrasion Resistant**
- **Easy to Install - Cuts with Scissors**
- **Resists Gasoline and Engine Chemicals**

## Resin Saturated Fiberglass Protects Up To 1,200°F

INSULTHERM (FGN) is an extremely high temperature resistant sleeve commonly used as thermal protection for wires, cables, and hoses that are subjected to continuous and extreme high temperature environments, such as engine manifolds and exhaust systems.

Insultherm is braided from fiberglass yarns and saturated with high temperature resins. FGN is tough and durable, maintaining its tight structure under extreme vibration, abrasion, mechanical stress, and temperature variations.

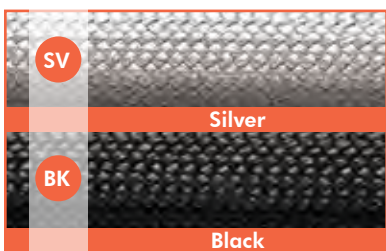
FGN is available in a wide range of diameters. It installs easily over a variety of applications to either deflect or retain heat in environments up to 1,200°F.



Insultherm resin saturated braided fiberglass sleeving is ideal in areas where fire and extremely high temperatures create a hazard to personnel and equipment.

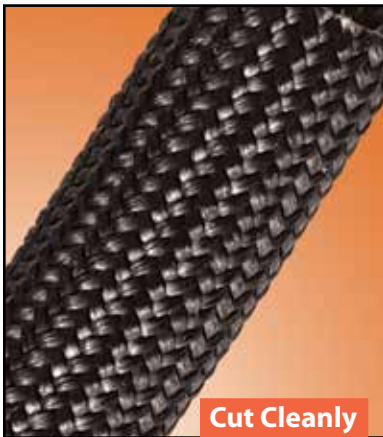


Hoses insulated with Insultherm can perform better in the demanding environments where multi terrain equipment is used.



Nominal Size	Part #	Maximum Diameter	Wall Thickness	Standard Spool Put-Ups		Available Colors	Lbs/ 100'
				Bulk Spool	Shop Spool		
1/4"	FGN0.25	3/8"	.031"	200'	50'	SV & BK	2.00
3/8"	FGN0.38	5/8"	.043"	200'	50'	SV & BK	3.30
1/2"	FGN0.50	3/4"	.046"	200'	50'	SV & BK	4.80
5/8"	FGN0.63	7/8"	.046"	200'	50'	SV & BK	5.30
3/4"	FGN0.75	1 1/8"	.046"	200'	50'	SV & BK	6.40
7/8"	FGN0.88	1 1/4"	.046"	200'	50'	SV & BK	8.70
1"	FGN1.00	1 5/8"	.057"	100'	25'	SV & BK	10.50
1 1/2"	FGN1.50	2 5/8"	.061"	100'	25'	SV & BK	16.00
2 1/2"	FGN2.50	4 1/8"	.071"	100'	25'	SV & BK	19.70

- **UL Recognized**
- **Resin Coated, Heavy Weight  
Fiberglass Won't Burn, Melt  
Or Become Brittle**
- **Easy To Install-Cuts With  
Scissors**
- **Resists Gasoline And  
Engine Chemicals**
- **Cut And Abrasion Resistant**



**Cut Cleanly  
Scissors**

**Material**

**Resin Coated Fiberglass**

**Grade**

**FGN**

**Wall Thickness**

**Refer to Chart**

**Drawing Number**

**TF001INS-WD**

**Put-Ups**

Nominal Size	Part #	Maximum Diameter	Wall Thickness	Bulk Spool	Shop Spool	Available Colors	Lbs/100'
1/4"	FGN0.25	3/8"	0.031"	200'	50'	2	2.00
3/8"	FGN0.38	5/8"	0.043"	200'	50'	2	3.30
1/2"	FGN0.50	3/4"	0.046"	200'	50'	2	4.80
5/8"	FGN0.63	7/8"	0.046"	200'	50'	2	5.30
3/4"	FGN0.75	1 1/8"	0.046"	200'	50'	2	6.40
7/8"	FGN0.88	1 1/4"	0.046"	200'	50'	2	8.70
1"	FGN1.00	1 5/8"	0.057"	100'	25'	2	10.50
1 1/2"	FGN1.50	2 5/8"	0.061"	100'	25'	2	16.00
2 1/2"	FGN2.50	4 1/8"	0.071"	100'	25'	2	19.70

**Resin Coated Fiberglass  
Protects To 1,200°F**

INSULTHERM (FG) is an extremely high temperature resistant sleeve commonly used as thermal protection for wires, cables and hoses that are subjected to continuous and extreme high temperature environments, such as engine manifolds and exhaust systems.

FG is braided from fiberglass yarns and coated with high temperature resins. FG is tough and durable, maintaining its tight structure under extreme vibration, abrasion, mechanical stress and temperature variations.

FG installs easily over a variety of applications to either deflect or retain heat in environments up to 1,200° F.

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

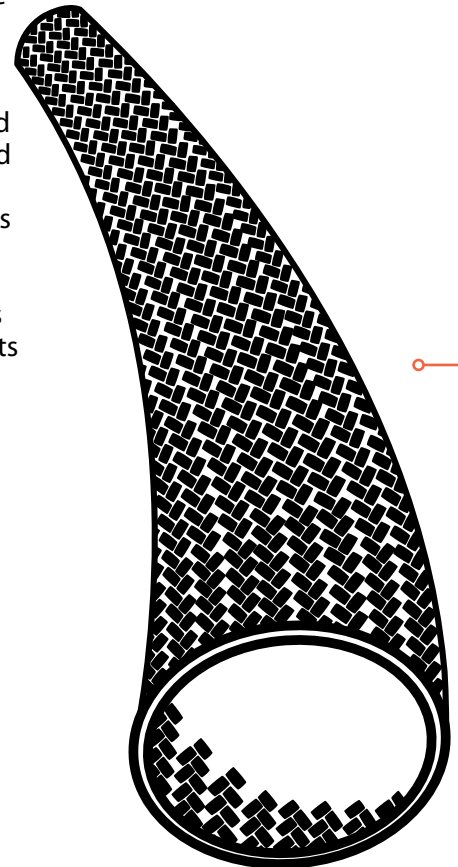
*Peter Mercier - Engineer Team Bucknum Racing  
www.bucknum.com*

Colors Available:



Black (BK) and Silver (SV).

■ **Colors Available:**  
2 = BK and SV



## ABRASION FLAMMABILITY

**Abrasion Resistance**  
**High**

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

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

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

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

**Room Temperature**  
**73°F**

**Humidity**  
**55%**

**Visible Minor Scuffing**  
**200 Test Cycles**

**Scuffing And Wear**  
**Continues**  
**300 Test Cycles**

**Scuffing And Wear**  
**Continues**  
**500 Test Cycles**

**Several Broken Strands**  
**1,300 Test Cycles**

**Material Destroyed**  
**1,650 Test Cycles**

**Pre-Test Weight**  
**19,411.6 mg**

**Post-Test Weight**  
**17,154.5 mg**

**Test End Loss Of Mass**  
**Point Of Destruction**  
**2,257.1 mg**

## CHEMICAL RESISTANCE

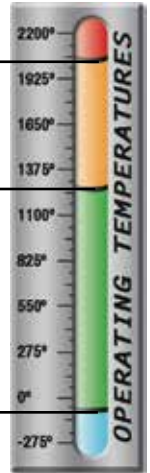
1=No Effect      4=More Affected  
2=Little Effect    5=Severely Affected  
3=Affected

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  
*ASTM D-204*  
Flammability Rating \_\_\_\_\_ VW-1  
Recommended Cutting \_\_\_\_\_ Scissor  
Colors \_\_\_\_\_ 2  
Wall Thickness \_\_\_\_\_ .031-.061  
Specific Gravity *ASTM D-792* \_\_\_\_\_ 1.0-1.8  
Moisture Absorption \_\_\_\_\_ .01  
% *ASTM D-570*  
Hard Vacuum Data \_\_\_\_\_  
*ASTM E-595*  
TML \_\_\_\_\_ .02  
CVCM \_\_\_\_\_ .01  
WVR \_\_\_\_\_ .00  
Outgassing \_\_\_\_\_ Low