INSULTHERM® TRU-FIT

HEAT TREATED, FRAY-RESISTANT, ACRYLIC COATED FIBERGLASS PROTECTS UP TO 1,200°F · USED IN LOW VOLTAGE APPLICATIONS

Techflex® INSULTHERM® TRU-FIT (FGL) is a braided fiberglass sleeving which has been heat treated and impregnated with an acrylic binder to reduce fraying and dusting, and improve usability and performance. FGL is engineered for applications where temperatures as high as 1,200°F may be encountered. FGL is used as primary insulation on low voltage applications such as leads in toasters, coffee makers, ranges and other appliances. FGL may also be used as insulation and protection for small heaters and resistors that operate at high temperatures, and to insulate over soldered connections when exposure to solder melt temperatures is possible. Insultherm® Tru-Fit provides a sturdy, long lasting and inexpensive insulation solution. It is flexible and expandable, and can easily be installed over applications with irregular shapes and tight turns. Standard color are Black and Natural, but other colors are available by special order.

SIZING CHART

Nominal Size	Part #	Diameter	Wall Thickness ±.005"	*Put-Ups		Available Colors	Lbs/ 100'
				M	L		
24	FGLG.24	.022"	.005"	250'	500'	6	0.08
22	FGLG.22	.027"	.005"	250'	500'	6	0.12
20	FGLG.20	.034"	.009"	250'	500'	6	0.12
18	FGLG.18	.042"	.011"	250'	500'	6	0.12
16	FGLG.16	.053"	.011"	250'	500'	6	0.17
14	FGLG.14	.066"	.011"	250'	500'	6	0.28
12	FGLG.12	.085"	.011"	100'	250'	6	0.30
11	FGLG.11	.095"	.011"	100'	250'	6	0.38
10	FGLG.10	.106"	.011"	100'	250'	6	0.35
9	FGLG.09	.118"	.011"	100'	250'	6	0.38
8	FGLG.08	.133"	.011"	100'	250'	6	0.30
7	FGLG.07	.148"	.013"	100'	250'	6	0.48
6	FGLG.06	.166"	.013"	100'	250'	6	0.48
5	FGLG.05	.186"	.013"	100'	250'	6	0.53
4	FGLG.05	.208"	.016"	100'	250'	6	0.63
3	FGLG.03	.234"	.016"	100'	250'	6	0.85
2	FGLG.02	.263"	.016"	100'	250'	6	1.02
1	FGLG.01	.294"	.016"	50'	100'	6	1.18
0	FGLG.00	.330"	.016"	50'	100'	6	1.78
3/8"	FGL0.38	.375"	.016"	50'	100'	6	1.79
7/16"	FGL0.44	.438"	.018"	50'	100'	6	2.04
1/2"	FGL0.50	.500"	.018"	50'	100'	6	2.28
5/8"	FGL0.63	.625"	.018"	50'	100'	6	2.56
3/4"	FGL0.75	.750"	.018"	50'	100'	6	4.16
7/8	FGL0.88	.880"	.018"	50'	100'	6	5.13
1"	FGL1.00	1.000"	.018"	50'	100'	6	6.11

*Put-Ups: ***"M"*** = Shop Spool and ***"L"*** = Bulk Spool



TECHFLEX
Braided Sleeving Products

HIGH TEMPERATURE
Technical Data Sheet

InsulTHERM® TRU·FIT

FEATURES

Material	**Acrylic Coated Fiberglass**
Grade	**FGL**
Wall Thickness	**Refer To Chart**
Drawing Number	**TF001FGL-WD**
Cutting	**Scissors**

ABRASION

Abrasion Resistance	**VERY HIGH**
Abrasion Test Machine	Taber 5150
Abrasion Test Wheel	Calibrase H-18
Abrasion Test Load	500g
Room Temperature	75°F
Humidity	15%
Slight Fraying	200 Test Cycles
Slight Fraying	1,000 Test Cycles
Fraying	1,700 Test Cycles
Material Destroyed	2,300 Test Cycles
Pre-Test Weight	15.3 g
Post-Test Weight	13.6 g
Test End Loss Of Mass Point Of Destruction	1.7 g

PHYSICAL PROPERTIES

Monofilament Diameter *(ASTM D-204)*	NA
Flammability Rating	VW-1
Recommended Cutting	Scissors
Colors	6
Wall Thickness	.005”-.018”
Tensile Strength (Yarn) *(ASTM D-2256 Lbs)*	NA
Specific Gravity *(ASTM D-792)*	1.0-1.8
Moisture Absorption % *(ASTM D-570)*	.01
Hard Vacuum Data *(ASTM E-595 at 10-5 torr)*	NA
TML	.02
CVCM	.01
WVR	.00
Smoke D-Max *(ASTM E-662)*	NA
Outgassing	Low
Oxygen Index *(ASTM D-2863)*	NA

CERTIFICATIONS

Prop 65 CLEAN · RoHS Compliant · **VW-1**

COLORS



Black (BK), Blue (BL), Red (RD), Yellow (YL), Natural (NT), White (WH)

** Some of the sizes in some colors are available for special order*

FLAMMABILITY

Rating	UL VW-1

OPERATING TEMPERATURES

Melt Point *(ASTM D-2117)*	2,048°F / 1,120°C
Maximum Continuous	1,202°F / 650°C
Minimum Continuous	-94°F / -70°C

CHEMICAL RESISTANCE

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

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