

CLEAN CUT FR

- **Cuts Easily, Neatly and Maintains a Fray Resistant End**
- **Expands For Ease Of Installation**
- **Cut And Abrasion Resistant**
- **Mil-202 & VW-1 Approved**
- **Halogen Free**



Cut Cleanly Scissors

Material
Polyethylene Terephthalate

Grade
CCF

Monofilament Diameter
.008"

Drawing Number
TF001CCF-WD

Put-Ups

| Nominal Size | Part # | Expansion Range | | Bulk Spool | Shop Spool | Retail | Clam | Bag | Available Colors | Lbs/100' |
|--------------|---------|-----------------|---------|------------|------------|--------|------|-----|------------------|----------|
| | | Min | Max | | | | | | | |
| 1/8" | CCF0.13 | 1/8" | 1/4" | 1,000' | 100' | 50' | 25' | 10' | 2 | 0.40 |
| 1/4" | CCF0.25 | 5/32" | 7/16" | 1,000' | 100' | 50' | 25' | 10' | 2 | 0.46 |
| 3/8" | CCF0.38 | 3/16" | 5/8" | 500' | 100' | 50' | 25' | 10' | 2 | 0.74 |
| 1/2" | CCF0.50 | 1/4" | 3/4" | 500' | 100' | 50' | 25' | 10' | 2 | 0.82 |
| 3/4" | CCF0.75 | 5/8" | 1" | 250' | 75' | 40' | 25' | 10' | 2 | 1.11 |
| 1" | CCF1.00 | 3/4" | 1 3/16" | 250' | 50' | 25' | n/a | 10' | 2 | 1.24 |
| 1 1/4" | CCF1.25 | 1" | 1 1/2" | 250' | 50' | 25' | n/a | 10' | 2 | 1.56 |
| 1 1/2" | CCF1.50 | 1 1/4" | 2" | 250' | 50' | 25' | n/a | 10' | 2 | 1.85 |

Scissor Cut For Field Installation, Will Not Support Combustion

CLEAN CUT FR has all of the same qualities that make our standard CC so easy to cut and install, with the added advantage of a flame inhibitor to provide an extra level of safety in certain applications.

Under normal conditions, Clean Cut FR will quickly self-extinguish and minimize flame spread and incidental damage to surrounding components.

The combination of flame retardance, ease of installation and nearly complete coverage makes CC an ideal solution for many industrial and engineering applications.

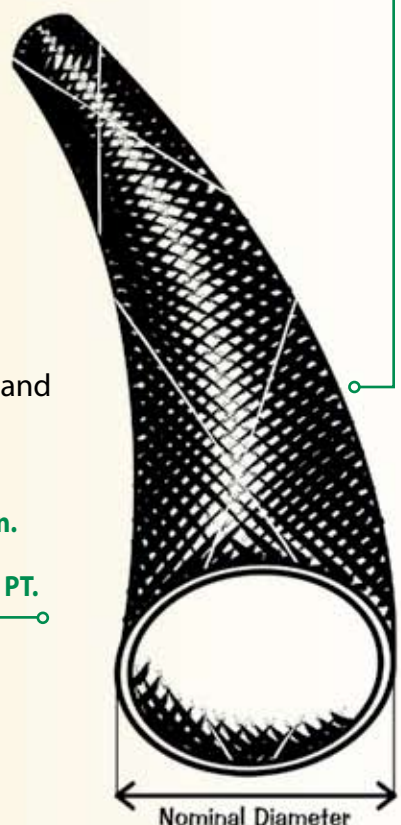
Cuts easily and neatly with regular scissors and maintains a fray resistant end during installation. When scissor cut, the end of CC will withstand heavier handling without fraying than standard PT.

Colors Available:



White with Black Tracer (TW) and Black with White Tracer (TB).

Colors Available:
2 = TW & TB





CLEAN CUT FR



Abrasion Resistance
Medium

Abrasion Test Machine
Taber 5150

Abrasion Test Wheel
Calibrase H-18

Abrasion Test Load
500g

Room Temperature
80°F

Humidity
70%

Very Minor Scuffing
100 Test Cycles

Strands Frayed
And Rough Surface
400 Test Cycles

Scuffing And Several
Broken Strands
500 Test Cycles

Material Destroyed
700 Test Cycles

Pre-Test Weight
3,602.0 mg

Post-Test Weight
3,373.9 mg

Test End Loss Of Mass
Point Of Destruction
228.1 mg



Rating _____ **UL VW-1**



Chemical Resistance

1=No Effect 4=More Affected
 2=Little Effect 5=Severely Affected
 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 MIL-H-5606 | _____ | 1 |
| Lube Oil MIL-L-7808 | _____ | 1 |
| De-icing Fluid MIL-A-8243 | _____ | 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 |

Melt Point
 ASTM D-2117
482°F (250°C)

Maximum Continuous
 Mil-I-23053
257°F (125°C)

Minimum Continuous
-94°F (-70°C)



PHYSICAL PROPERTIES

| | | |
|-----------------------------|--------------------------------|------------|
| Monofilament Diameter | _____ | .008 |
| <i>ASTM D-204</i> | | |
| Flammability Rating | _____ | VW-1 |
| <i>FMVSS-302 Approved</i> | | |
| Recommended Cutting | _____ | Scissor/HK |
| Colors | _____ | 2 |
| Wall Thickness | _____ | .024 |
| Tensile Strength (Yarn) | _____ | 4 |
| <i>ASTM D-2256 Lbs</i> | | |
| Specific Gravity ASTM D-792 | _____ | 1.38 |
| Moisture Absorption | _____ | .1-.2 |
| <i>% ASTM D-570</i> | | |
| Hard Vacuum Data | <i>ASTM E-595 at 10-5 torr</i> | |
| TML | _____ | .19 |
| CVCM | _____ | .04 |
| WVR | _____ | .06 |
| Smoke D-Max | _____ | 275 |
| <i>ASTM E-662</i> | | |
| Outgassing | _____ | Med |
| Oxygen Index | _____ | 31 |
| <i>ASTM D-2863</i> | | |

