# **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



## 83804 Multi-Conductor - Power-Limited Fire Protective, Control & Instrum Cable





For more Information please call

1-800-Belden1



#### **General Description:**

12 AWG stranded (7x20) TC conductors, conductors cabled, plenum, FEP insulation, Beldfoil® (100% coverage) + TC braid shield (85% coverage), FEP jacket.

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## **Physical Characteristics (Overall)**

## Conductor

AWG:



Total Number of Conductors:

#### Insulation

#### Insulation Material:

| Insulation Trade Name | Insulation Material                  | Wall Thickness (mm) |
|-----------------------|--------------------------------------|---------------------|
| Teflon®               | FEP - Fluorinated Ethylene Propylene | 0.4064              |

#### **Outer Shield**

#### Outer Shield Material:

| Layer # | Outer Shield Trade Name | Type  | Outer Shield Material        | Coverage (%) |
|---------|-------------------------|-------|------------------------------|--------------|
| 1       | Beldfoil®               | Таре  | Aluminum Foil-Polyester Tape | 100          |
| 2       |                         | Braid | TC - Tinned Copper           | 85           |

## **Outer Jacket**

#### Outer Jacket Material:

| Outer Jacket Trade Name | Outer Jacket Material                | Nom. Wall Thickness (mm) |  |
|-------------------------|--------------------------------------|--------------------------|--|
| Teflon®                 | FEP - Fluorinated Ethylene Propylene | 0.4318                   |  |

### **Overall Cable**

#### Overall Cabling Color Code Chart:

| Number | Color |
|--------|-------|
| 1      | Black |
| 2      | White |
| 3      | Red   |
| 4      | Green |

Overall Nominal Diameter:

9.119 mm

## **Mechanical Characteristics (Overall)**

| Operating Temperature Range:      | -70°C To +200°C |
|-----------------------------------|-----------------|
| UL Temperature Rating:            | 200°C           |
| Bulk Cable Weight:                | 205.372 Kg/Km   |
| Max. Recommended Pulling Tension: | 1805.969 N      |
| Min. Bend Radius/Minor Axis:      | 95.250 mm       |

## **Applicable Specifications and Agency Compliance (Overall)**

## Applicable Standards & Environmental Programs

| NEC/(UL) Specification:               | CMP, FPLP  |
|---------------------------------------|------------|
| NEC Articles:                         | 760        |
| CEC/C(UL) Specification:              | CMP        |
| EU Directive 2011/65/EU (ROHS II):    | Yes        |
| EU CE Mark:                           | Yes        |
| EU Directive 2000/53/EC (ELV):        | Yes        |
| EU Directive 2002/95/EC (RoHS):       | Yes        |
| EU RoHS Compliance Date (mm/dd/yyyy): | 04/01/2005 |
|                                       |            |

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|     | EU Directive 2002/96/EC (WEEE):   | Yes      |  |
|-----|-----------------------------------|----------|--|
|     | EU Directive 2003/11/EC (BFR):    | Yes      |  |
|     | CA Prop 65 (CJ for Wire & Cable): | Yes      |  |
|     | MII Order #39 (China RoHS):       | Yes      |  |
| Fla | Flame Test                        |          |  |
|     | UL Flame Test:                    | NFPA 262 |  |
|     | CSA Flame Test:                   | FT6      |  |
| Ple | Plenum/Non-Plenum                 |          |  |
|     | Plenum (Y/N):                     | Yes      |  |

#### **Electrical Characteristics (Overall)**

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 104.992

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 180.455

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 5.5777

Max. Operating Voltage - UL:

300 V RMS (UL AWM Style 1424)

Max. Recommended Current:

Current 20 Amps per conductor @ 25°C

#### Notes (Overall)

Notes: Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

#### **Put Ups and Colors:**

| Item #        | Putup    | Ship Weight | Color | Notes | Item Desc       |
|---------------|----------|-------------|-------|-------|-----------------|
| 83804 0021000 | 1,000 FT | 143.000 LB  | RED   | С     | 4#12 FEP SH FEP |
| 83804 002500  | 500 FT   | 73.000 LB   | RED   | С     | 4#12 FEP SH FEP |

### Notes:

C = CRATE REEL PUT-UP.

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product.

Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 2014/35/EU).

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