# **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION



# 83606 Multi-Conductor - Audio, Control and Instrumentation Cable



For more Information please call

1-800-Belden1



## **General Description:**

20 AWG stranded (7x28) TC conductors, conductors cabled, plenum, FEP insulation, overall Beldfoil® (100% coverage) + TC braid shield (85% coverage), FEP jacket.

6

# **Physical Characteristics (Overall)**

## Conductor

AWG:

| # Conductors | AWG | Stranding | Conductor Material |
|--------------|-----|-----------|--------------------|
| 6            | 20  | 7x28      | TC - Tinned Copper |

Total Number of Conductors:

#### Insulation

#### Insulation Material:

| Insulation Trade Name | Insulation Material                  | Wall Thickness (mm) |  |
|-----------------------|--------------------------------------|---------------------|--|
| Teflon®               | FEP - Fluorinated Ethylene Propylene | 0.1524              |  |

#### **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 Material                | Nom. Wall Thickness (mm) |  |  |
|--------------------------------------|--------------------------|--|--|
| FEP - Fluorinated Ethylene Propylene | 0.3556                   |  |  |

## **Overall Cable**

#### Overall Cabling Color Code Chart:

| Number | Color  |
|--------|--------|
| 1      | Black  |
| 2      | White  |
| 3      | Red    |
| 4      | Green  |
| 5      | Orange |
| 6      | Blue   |

**Overall Nominal Diameter:** 

5.258 mm

#### **Mechanical Characteristics (Overall)**

| Operating Temperature Range:      | -70°C To +200°C |
|-----------------------------------|-----------------|
| Bulk Cable Weight:                | 63.993 Kg/Km    |
| Max. Recommended Pulling Tension: | 556.025 N       |
| Min. Bend Radius/Minor Axis:      | 57.150 mm       |

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

## **Applicable Standards & Environmental Programs**

| NEC/(UL) Specification:               | CMP        |
|---------------------------------------|------------|
| NEC Articles:                         | 800        |
| 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 | me Test                           |          |
|     | UL Flame Test:                    | NFPA 262 |
|     | CSA Flame Test:                   | FT6      |
| Sui | tability                          |          |
|     | Suitability - Indoor:             | Yes      |
|     | Suitability - Outdoor:            | Yes      |
| Ple | num/Non-Plenum                    |          |
|     | Plenum (Y/N):                     | Yes      |
|     |                                   |          |

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

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 85.306

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 167.331

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 28.2166

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 13.4521

Max. Operating Voltage - UL:

300 V RMS

Max. Recommended Current:

| Description          | Current                               |
|----------------------|---------------------------------------|
| 10C Temperature Rise | 2.7 Amps per conductor @ 25°C ambient |

### 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       |
|---------------|----------|-------------|-------|-------|-----------------|
| 83606 002100  | 100 FT   | 6.200 LB    | RED   | С     | 6#20 FEP SH FEP |
| 83606 0021000 | 1,000 FT | 47.000 LB   | RED   | С     | 6#20 FEP SH FEP |
| 83606 002500  | 500 FT   | 23.000 LB   | RED   | С     | 6#20 FEP SH FEP |

#### Notes:

C = CRATE REEL PUT-UP.

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