# **Detailed Specifications & Technical Data**

#### METRIC MEASUREMENT VERSION





## 83506 Multi-Conductor - Audio, Control and Instrumentation Cable

For more Information please call

1-800-Belden1



## **General Description:**

24 AWG stranded (7x32) TC conductors, conductors cabled, plenum, FEP insulated, overall Beldfoil® (100% coverage) + TC braid shield (85% coverage), FEP jacket.

## **Physical Characteristics (Overall)**

#### Conductor

#### AWG:

# Conductors	AWG	Stranding	<b>Conductor Material</b>
6	24	7x32	TC - Tinned Copper

Total Number of Conductors:

6

#### Insulation

#### **Insulation Material:**

Insulation Material	Wall Thickness (mm)
FEP - Fluorinated Ethylene Propylene	0.1524

#### **Outer Shield**

#### **Outer Shield Material:**

ľ	Layer # Outer Shield Trade Name Type		Outer Shield Material	Coverage (%)	
	1	Beldfoil®	Tape	Aluminum Foil-Polyester Tape	100
E	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 Lay Length & Direction:

**Length (mm)** 44.449825

#### **Overall Cabling Color Code Chart:**

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

Overall Nominal Diameter: 4.191 mm

## **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-70°C To +200°C
Bulk Cable Weight:	38.693 Kg/Km
Max. Recommended Pulling Tension:	165.473 N
Min. Bend Radius/Minor Axis:	44.450 mm

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

#### **Applicable Standards & Environmental Programs**

Applicable Standards & Environmental Prog	rams
NEC/(UL) Specification:	CMP
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
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
Flame Test	
UL Flame Test:	NFPA 262
CSA Flame Test:	FT6

## **Electrical Characteristics (Overall)**

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 65.62

Plenum/Non-Plenum Plenum (Y/N):

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 118.116

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 78.744

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 19.0298

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Current 1.4 Amps per conductor @ 25°C

## Notes (Overall)

Notes: Plenum Cables, except for Flamarrest® jacket, are suitable for Outdoor and Direct Burial application.

Yes

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
83506 0021000	1,000 FT	28.000 LB	RED	С	6#24 FEP SH FEP
83506 002500	500 FT	15.000 LB	RED	С	6#24 FEP SH FEP

#### Notes:

C = CRATE REEL PUT-UP.

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### 83506 Multi-Conductor - Audio, Control and Instrumentation Cable

Revision Number: 2 Revision Date: 08-21-2012

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