# **Detailed Specifications & Technical Data**

## **METRIC MEASUREMENT VERSION**



# 8770 Multi-Conductor - Audio, Control and Instrumentation Cable



For more Information please call

1-800-Belden1



## **General Description:**

18 AWG stranded (16x30) tinned copper conductors, conductors cabled, polyethylene insulation, overall Beldfoil® shield (100% coverage), 20 AWG stranded tinned copper drain wire, PVC jacket.

## **Physical Characteristics (Overall)** Conductor AWG: # Conductors AWG Stranding Conductor Material 16x30 TC - Tinned Copper 18 **Total Number of Conductors:** 3 Insulation Insulation Material: Insulation Material Wall Thickness (mm) PE - Polyethylene 0.4572 **Outer Shield** Outer Shield Material: Outer Shield Trade Name Type Outer Shield Material Coverage (%) Beldfoil® (w/ shorting fold) | Tape | Aluminum Foil-Polyester Tape w/Shorting Fold | 100.000 Outer Shield Drain Wire AWG: AWG Stranding Drain Wire Conductor Material 20 Stranded TC - Tinned Copper **Outer Jacket Outer Jacket Material:** Outer Jacket Material Nom. Wall Thickness (mm) PVC - Polyvinyl Chloride 0.8382 **Overall Cable** Overall Cabling Lay Length & Direction: Length (mm) Direction Twists (twist/m) 68.580 Left Hand 14.436 **Overall Cabling Color Code Chart:** Number Color Black Red Clear **Overall Nominal Diameter:** 6 248 mm **Mechanical Characteristics (Overall)** Operating Temperature Range: -20°C To +60°C **UL Temperature Rating:** 60°C (UL AWM Style 2093) **Bulk Cable Weight:** 53.575 Kg/Km 329.167 N Max. Recommended Pulling Tension: Min. Bend Radius/Minor Axis: 63.500 mm Applicable Specifications and Agency Compliance (Overall) **Applicable Standards & Environmental Programs** NEC/(UL) Specification: **NEC Articles:** 800 CEC/C(UL) Specification: **AWM Specification:** UL Style 2093 (300 V 60°C) EU Directive 2011/65/EU (ROHS II):

Page 1 of 3 07-21-2016

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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):	01/01/2004
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:	UL1685 UL Loading
CSA Flame Test:	FT1
Suitability	
Suitability - Indoor:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	No
Plenum Number:	88770

# **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:



Nom. Inductance:



Nom. Capacitance Conductor to Conductor:



Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 157.488

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 21.6546

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 27.8885

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Description	Current	
10C temperature rise	5.3 Amps per conductor @ 25°C ambient	

# **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8770 060U1000	1,000 FT	37.000 LB	CHROME		3 #18 LDPE FS PVC
8770 060U500	500 FT	19.000 LB	CHROME		3 #18 LDPE FS PVC
8770 0601000	1,000 FT	39.000 LB	CHROME	С	3 #18 LDPE FS PVC
8770 06010000	10,000 FT	420.000 LB	CHROME	CY	3 #18 LDPE FS PVC
8770 06010001	10,000 FT	420.000 LB	CHROME	CZ	3 #18 LDPE SH PVC
8770 06012000	12,000 FT	492.000 LB	CHROME	CY	3 #18 LDPE SH PVC
8770 060500	500 FT	20.000 LB	CHROME	С	3 #18 LDPE FS PVC
8770 0605000	5,000 FT	190.000 LB	CHROME		3 #18 LDPE FS PVC

Notes:
C = CRATE REEL PUT-UP.
Y = FINAL PUT-UP LENGTH MAY VARY -10% TO +20% FROM LENGTH SHOWN.MAY CONTAIN 2 PIECES. MINIMUM LENGTH OF ANY ONE PIECE IS 1500'.
Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

Page 2 of 3 07-21-2016

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# 8770 Multi-Conductor - Audio, Control and Instrumentation Cable

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Page 3 of 3 07-21-2016