Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION





88770 Multi-Conductor - Audio, Control and Instrumentation Cable

For more Information please call

1-800-Belden1



General Description:

18 AWG stranded (19x30) TC conductors, conductors cabled, plenum, FEP insulation, overall Beldfoil® shield (100% coverage), 20 AWG stranded TC drain wire, FEP jacket.

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Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
3	18	19x30	TC - Tinned Copper

Total Number of Conductors:

Insulation

Insulation Material:

Insulation Material	Wall Thickness (mm)
FEP - Fluorinated Ethylene Propylene	0.1778

Outer Shield

Outer Shield Material:

Outer Shield Trade Name Type		Outer Shield Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester Tape w/Shorting Fold	100

Outer Shield Drain Wire AWG:

AWG	Stranding	Drain Wire Conductor Material		
20	19x32	TC - Tinned Copper		

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)	Direction	Twists (twist/m)
44.450	Left Hand	22.639

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	White
3	Red

Overall Nominal Diameter: 3.937 mm

Mechanical Characteristics (Overall)

Operating Temperature Range:	-70°C To +200°C
Bulk Cable Weight:	41.670 Kg/Km
Max. Recommended Pulling Tension:	329.167 N
Min. Bend Radius/Minor Axis:	44 450 mm

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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			
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			
Suitability				
Suitability - Indoor:	Yes			
Suitability - Outdoor:	Yes			
Suitability - Burial:	Yes			
Plenum/Non-Plenum				
Plenum (Y/N):	Yes			
Non-Plenum Number:	8770			

Electrical Characteristics (Overall)

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 177.174

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m) 314.976

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 20.9984

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km) 23.9513

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

Description	Current
35C temperature rise	8 Amps per conductor @ 25°C ambient

Notes (Overall)

Notes: Chemical Resistance: Gasoline, Oil.

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Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
88770 0021000	1,000 FT	30.000 LB	RED	CZ	3 #18 FEP FS FEP
88770 002500	500 FT	15.500 LB	RED	CZ	3 #18 FEP FS FEP
88770 0025000	5,000 FT	145.000 LB	RED	CZ	3 #18 FEP FS FEP

Notes:

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND(+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

Revision Number: 4 Revision Date: 08-02-2013

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