Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

BELDEN
SENDING ALL THE RIGHT SIGNALS

8770 Multi-Conductor - Audio, Control and Instrumentation Cable

For more Information
please call

1-800-Belden1

RoHS COMPLIANT
ENVIRONMENTALLY FRIENDLY

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
3	18	16x30	TC - Tinned Copper

Total Number of Conductors: 3

Insulation
Insulation Material:

Insulation Material	Wall Thickness (in.)
PE - Polyethylene	.018

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 (in.)
PVC - Polyvinyl Chloride	.033

Overall Cable
Overall Cabling Lay Length & Direction:

Length (in.)	Direction	Twists (twist/ft)
2.700	Left Hand	4.400

Overall Cabling Color Code Chart:

Number	Color
1	Black
2	Red
3	Clear

Overall Nominal Diameter: 0.246 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-20°C To +60°C
UL Temperature Rating:	60°C (UL AWM Style 2093)
Bulk Cable Weight:	36 lbs/1000 ft.
Max. Recommended Pulling Tension:	74 lbs.
Min. Bend Radius/Minor Axis:	2.500 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM
NEC Articles:	800
CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 2093 (300 V 60°C)
EU Directive 2011/65/EU (ROHS II):	Yes

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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:

Impedance (Ohm)
69

Nom. Inductance:

Inductance (µH/ft)
0.180

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
24

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/ft)
48

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
6.6

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
8.5

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	C	3 #18 LDPE FS PVC
8770 06010000	10,000 FT	420.000 LB	CHROME	C Y	3 #18 LDPE FS PVC
8770 06010001	10,000 FT	420.000 LB	CHROME	C Z	3 #18 LDPE SH PVC
8770 06012000	12,000 FT	492.000 LB	CHROME	C Y	3 #18 LDPE SH PVC
8770 060500	500 FT	20.000 LB	CHROME	C	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.

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