# **Detailed Specifications & Technical Data**

**METRIC MEASUREMENT VERSION** 



# 8690 Multi-Conductor - Audio, Control and Instrumentation Cable



For more Information please call

1-800-Belden1



# **General Description:**

18 AWG stranded (16x30) tinned copper conductors, PVC insulation, twisted pairs, PVC jacket.

# **Physical Characteristics (Overall)**

### Conductor

## AWG:

# Pairs	airs AWG Strandir		Conductor Material		
3	18	16x30	TC - Tinned Copper		

Total Number of Conductors: 6

#### Insulation

#### **Insulation Material:**

Insulation Material	Wall Thickness (mm)
PVC - Polyvinyl Chloride	0.330

#### **Inner Shield**

#### Inner Shield Material:

Inner Shield Material
Unshielded

#### **Outer Shield**

# **Outer Shield Material:**

Outer Shield	Material
Unshielded	

### **Outer Jacket**

### **Outer Jacket Material:**

Outer Jacket Material	Nom. Wall Thickness (mm)
PVC - Polyvinyl Chloride	0.8128

### **Overall Cable**

Overall Nominal Diameter: 8.814 mm

#### Pair

## Pair Color Code Chart:

Number	Color
1	Black & Red
2	Black & White
3	Black & Green

### Pair Lay Length & Direction:

Lay Length (mm)	Twists (twist/m)	Direction
50.800	19.686	Left Hand

# **Mechanical Characteristics (Overall)**

Operating Temperature Range:	-20°C To +80°C
Non-UL Temperature Rating:	80°C (UL AWM Style 2464)
Bulk Cable Weight:	90.780 Kg/Km
Max. Recommended Pulling Tension:	596.059 N

Page 1 of 3 08-21-2013

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NEC/(UL) Specification:



## 8690 Multi-Conductor - Audio, Control and Instrumentation Cable

Min. Bend Radius/Minor Axis: 88.900 mm

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

## **Applicable Standards & Environmental Programs**

` ' '	
NEC Articles:	800
CEC/C(UL) Specification:	CMG
AWM Specification:	UL Style 2464 (300 V 80°C)
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

CMG

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**

CSA Flame Test: FT4

#### Suitability

Suitability - Indoor: Yes

#### Plenum/Non-Plenum

Plenum (Y/N): No

# **Electrical Characteristics (Overall)**

Nom. Inductance:

Inductance (µH/m) 0.55777

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m) 83.6655

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km) 19.2267

Max. Operating Voltage - UL:

Voltage 300 V RMS

Max. Recommended Current:

 Description
 Current

 10C Temperature Rise
 3.4 Amps per conductor @ 25°C ambient

# **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8690 060U500	152 MT	14.742 KG	CHROME		3 PR #18 PVC FRPVC
8690 060100	30 MT	3.175 KG	CHROME		3 PR #18 PVC FRPVC
8690 0601000	305 MT	29.484 KG	CHROME	С	3 PR #18 PVC FRPVC
8690 060500	152 MT	15.422 KG	CHROME	С	3 PR #18 PVC FRPVC
8690 0605000	1,524 MT	158.758 KG	CHROME		3 PR #18 PVC FRPVC

Notes:

C = CRATE REEL PUT-UP.

Page 2 of 3 08-21-2013

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## 8690 Multi-Conductor - Audio, Control and Instrumentation Cable

Revision Number: 3 Revision Date: 08-07-2013

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