# **Detailed Specifications & Technical Data**



## 9156 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:	
AWG:	
# Pairs         AWG         Stranding         Conductor         Material           2         18         16x30         TC - Tinned Copper	
Total Number of Conductors:	4
Insulation Insulation Material:	
Insulation Material Wall Thickness (in.)	
PVC - Polyvinyl Chloride 0.013	
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 (in.)	
PVC - Polyvinyl Chloride .035	
Overall Cable	
Overall Nominal Diameter:	0.333 in.
Pair	
Pair Color Code Chart:	
Number Color	
1         Black & Red           2         Black & White	
2 Black & White	
2 Black & White Pair Lay Length & Direction:	
Image: 2     Black & White       Pair Lay Length & Direction:       Lay Length (in.)     Twists (twist/ft)     Direction       2.000     6.000     Left Hand	
2     Black & White       Pair Lay Length & Direction:       Lay Length (in.) Twists (twist/ft) Direction	-20°C To +80°C
2       Black & White         Pair Lay Length & Direction:         Lay Length (in.)       Twists (twist/ft)       Direction         2.000       6.000       Left Hand    Mechanical Characteristics (Overall)	-20°C To +80°C 48 lbs/1000 ft.
2       Black & White         Pair Lay Length & Direction:         Lay Length (in.)       Twists (twist/ft)         2.000       6.000       Left Hand    Mechanical Characteristics (Overall) Operating Temperature Range:	
2       Black & White         Pair Lay Length & Direction:         Lay Length (in.) Twists (twist/ft) Direction         2.000       6.000         Left Hand             Mechanical Characteristics (Overall)         Operating Temperature Range:         Bulk Cable Weight:	48 lbs/1000 ft.
2       Black & White         Pair Lay Length & Direction:         Lay Length (in.)       Twists (twist/ft)       Direction         2.000       6.000       Left Hand         Mechanical Characteristics (Overall)         Operating Temperature Range:         Bulk Cable Weight:       Max. Recommended Pulling Tension:	48 lbs/1000 ft. 90 lbs. 3.500 in.
2       Black & White         Pair Lay Length & Direction:         Lay Length (in.) Twists (twist/ft) Direction         2.000       6.000         Left Hand             Mechanical Characteristics (Overall)         Operating Temperature Range:         Bulk Cable Weight:         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:	48 lbs/1000 ft. 90 lbs. 3.500 in.
2       Black & White         Pair Lay Length & Direction:         Lay Length (in.) Twists (twist/ft) Direction         2.000       6.000         Left Hand         Mechanical Characteristics (Overall)         Operating Temperature Range:         Bulk Cable Weight:         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency Compliance (O	48 lbs/1000 ft. 90 lbs. 3.500 in.
2       Black & White         Pair Lay Length & Direction:         Lay Length (in.) Twists (twist/ft) Direction         2.000       6.000         Left Hand         Mechanical Characteristics (Overall)         Operating Temperature Range:         Bulk Cable Weight:         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency Compliance (O         Applicable Standards & Environmental Programs	48 lbs/1000 ft. 90 lbs. 3.500 in.
2       Black & White         Pair Lay Length & Direction:         Lay Length (in.)       Twists (twist/ft)       Direction         2.000       6.000       Left Hand         Mechanical Characteristics (Overall)         Operating Temperature Range:       Bulk Cable Weight:         Max.       Recommended Pulling Tension:         Min.       Bend Radius/Minor Axis:         Applicable Specifications and Agency Compliance (O         Applicable Standards & Environmental Programs         NEC/(UL)       Specification:	48 lbs/1000 ft. 90 lbs. 3.500 in. Verall) CMG
2       Black & White         Pair Lay Length & Direction:         Lay Length (in.) Twists (twist/ft) Direction         2.000       6.000         Left Hand         Mechanical Characteristics (Overall)         Operating Temperature Range:         Bulk Cable Weight:         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency Compliance (O         Applicable Standards & Environmental Programs         NEC/(UL) Specification:         NEC Articles:	48 lbs/1000 ft. 90 lbs. 3.500 in. Everall) CMG 800
2       Black & White         Pair Lay Length & Direction:         Lay Length (in.) Twists (twist/ft) Direction         2.000       6.000         Left Hand         Mechanical Characteristics (Overall)         Operating Temperature Range:         Bulk Cable Weight:         Max. Recommended Pulling Tension:         Min. Bend Radius/Minor Axis:         Applicable Specifications and Agency Compliance (O         Applicable Standards & Environmental Programs         NEC/(UL) Specification:         NEC Articles:         CEC/C(UL) Specification:	48 lbs/1000 ft. 90 lbs. 3.500 in. <b>Verall)</b> CMG 800 CMG

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#### ENGLISH MEASUREMENT VERSION

### 9156 Multi-Conductor - Audio, Control and Instrumentation Cable

EU Diractive 2000/S2EC (ELV):       Yes         EU Diractive 2002/95/EC (RoHS):       04/01/2005         EU RoHS Compliance Date (mm/ddlyyyy):       04/01/2005         EU Diractive 2002/95/EC (WEEE):       Yes         EU Diractive 2002/95/EC (WEEE):       Yes         EU Diractive 2002/95/EC (WEEE):       Yes         EU Diractive 2003/11/EC (BFR):       Yes         CA Prop 55 (CJ for Wire & Cablo):       Yes         MII Ord # 359 (China RoHS):       Yes         Vire Sattisting - Indone Table:       UL1685 FT4 Loading         CSA Flame Test:       UL1685 FT4 Loading         Suitability - Indoor:       Yes         Suitability - Indoor:       Yes         Plenum /Non-Plenum       Yes         Plenum /Non-Plenum       No         Eccentristics (Overall)       No         Non. Capacitance Conductor to Conductor:       Sistability - Indoor:         25.5       Non. Conductor DC Resistance:         Image: Conductor DC Resistance:       Sistability - Indoor:         Source:       Sistability - Indoor:         25.5       Name Separatione Conductor to Conductor:         Sistability - Indoor:       Sistability - Indoor:         Source:       Sistability - Indoor:         Source:       Sistability -		
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 85 (CJ for Wire & Cable):       Yes         MII Order #39 (China RoHS):       Yes         Flame Test       UL 1885 FT4 Loading         CSA Flame Test:       UL 1885 FT4 Loading         Sutability       Sutability         Sutability       Yes         Plenum/Non-Plenum       Yes         Plenum/Non-Plenum       No         Plenum/Non-Plenum       No         Plenum/Non-Plenum       No         Sutability       Solatability         Nom. Capacitance Conductor to Conductor:       Capacitance (pf/ft)         Z5.5       Solatability         Nom. Copacitance Uncestance:       Voltage         Voltage       200 V (Nimity)         Max. Rogenating Voltage - UL:       Voltage         Voltage       200 V RMS         Max. Recommended Current:       Lite	EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/86/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 1685 FT4 Loading         CSA Flame Test:       UL 1685 FT4 Loading         Suitability       Suitability         Suitability       Yes         Plenum/Non-Plenum       Yes         Plenum/Non-Plenum       No         Plenum (YiN):       No         Capacitance Conductor to Conductor:       Capacitance (pf/ft)         25.5       State         Nom. Capacitance Conductor to Conductor:       Capacitance (pf/ft)         25.5       Sate         Name. Conductor DC Resistance:       Vitage         Vottage       Sate         Max. Rocrommended Current:       Vitage	EU Directive 2002/95/EC (RoHS):	Yes
EU Directive 2003/11/EC (BFR):       Yes         CA Prop 65 (CJ for Wire & Cable):       Yes         Mil Order #39 (China RoHS):       Yes         Flame Test       UL flame Test:         UL Flame Test:       UL 1685 FT4 Loading         CSA Flame Test:       V1485         Suitability       Yes         Plenum/Non-Plenum       Yes         Plenum/Non-Plenum       No         Electrical Characteristics (Overall)       No         Nom. Capacitance (orf/fi)       Solutability is 5.5         Nom. Conductor DC Resistance:       UL flame is 5.5         DCR @ 20°C (Ohm/1000 ft)       5.36         Max. Recommended Current:       UL:	EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
CA Prop 65 (CJ for Wire & Cable):         Yes           MII Order #39 (China RoHS):         Yes           Flame Test:         UL f685 FT4 Loading           CSA Flame Test:         UL 1685 FT4 Loading           CSA Flame Test:         VI 1685 FT4 Loading           Suitability         Suitability           Suitability         Yes           Plenum/Non-Plenum         Yes           Plenum (Y/N):         No           Etectrical Characteristics (Overall)         No           Nom. Capacitance Conductor to Conductor:         Capacitance (pF/f)           Soft         Saft           Max. Operating Voltage - UL:         Voltage           Voltage         Saft           Max. Recommended Current:         Saft	EU Directive 2002/96/EC (WEEE):	Yes
MI Order #39 (China RoHS):       Yes         Flame Test:       UL f8ds FT4 Loading         UL Flame Test:       FT4         Suitability       suitability - Indoor:         Suitability       Yes         Plenum/Non-Plenum       Yes         Plenum (Y/N):       No         Etectrical Characteristics (Overall)       No         Nom. Capacitance (op/fit)       Solution (Conductor to Conductor)         Capacitance (op/fit)       Solution (Conductor)         Max. Operating Voltage - UL:       Voltage         Voltage       300 V RMS         Max. Recommended Current:       Line (Conductor)	EU Directive 2003/11/EC (BFR):	Yes
Flame Test:       UL 1685 FT4 Loading         CSA Flame Test:       FT4         Suitability       suitability         Suitability - Indoor:       Yes         Plenum/Non-Plenum       No         Plenum (Y/N):       No         Electrical Characteristics (Overall)       No         Nom. Capacitance (pF/ft)       25.5         Nom. Conductor DC Resistance:       Voltage         DSR @ 20°C (Ohm/1000 ft)       s.88         Max. Operating Voltage - UL:       Voltage         Voltage       300 V RMS	CA Prop 65 (CJ for Wire & Cable):	Yes
UL Flame Test:     UL 1685 FT4 Loading       CSA Flame Test:     FT4       Suitability     Yes       Plenum/Non-Plenum     No       Plenum (Y/N):     No       Electrical Characteristics (Overall)       Nom. Capacitance Conductor to Conductor:       Capacitance (pF/ft)       25.5       Nom. Conductor DC Resistance:       DCR @ 20°C (Ohm/1000 ft)       5.86       Max. Operating Voltage - UL:       Voltage       300 V RMS	MII Order #39 (China RoHS):	Yes
CSA Flame Test:     FT4       Suitability     Suitability       Suitability     Yes       Plenum/Non-Plenum     No       Plenum (Y/N):     No       Electrical Characteristics (Overall)       Nom. Capacitance Conductor to Conductor:       Capacitance (pF/ft)       25.5       Nom. Conductor DC Resistance:       DCR @ 20°C (Ohm/1000 ft)       5.86       300 V RMS       Max. Recommended Current:	Flame Test	
Suitability       Yes         Plenum/Non-Plenum       No         Plenum (Y/N):       No         Electrical Characteristics (Overall)       Nom. Capacitance Conductor to Conductor:         Capacitance (pF/ft)       25.5         Nom. Conductor DC Resistance:       DCR @ 20°C (Ohm/1000 ft)         5.86       Max. Operating Voltage - UL:         Voltage 300 V RMS       Max. Recommended Current:	UL Flame Test:	UL1685 FT4 Loading
Suitability - Indoor:     Yes       Plenum/Non-Plenum     No       Plenum (Y/N):     No       Electrical Characteristics (Overall)       Nom. Capacitance Conductor to Conductor:       Capacitance (pF/ft)       25.5       Nom. Conductor DC Resistance:       DCR @ 20°C (Ohm/1000 ft)       5.86       Max. Operating Voltage - UL:       Voltage 300 V RMS       Max. Recommended Current:	CSA Flame Test:	FT4
Plenum/No-Plenum         Plenum (Y/N):       No         Electrical Characteristics (Overall)         Nom. Capacitance Conductor to Conductor:         Capacitance (pF/ft)         25.5         Nom. Conductor DC Resistance:         DCR @ 20°C (Ohm/1000 ft)         5.86         Max. Operating Voltage - UL:         Voltage 300 V RMS         Max. Recommended Current:	Suitability	
Plenum (Y/N): No   Electrical Characteristics (Overall) Nom. Capacitance Conductor to Conductor:   Capacitance (pF/ft)   25.5   Nom. Conductor DC Resistance:   DCR @ 20°C (Ohm/1000 ft)   5.86   Max. Operating Voltage - UL:   Voltage   300 V RMS   Max. Recommended Current:	Suitability - Indoor:	Yes
Electrical Characteristics (Overall) Nom. Capacitance Conductor to Conductor: Capacitance (pF/ft) 25.5 Nom. Conductor DC Resistance: DCR @ 20°C (Ohm/1000 ft) 5.86 Max. Operating Voltage - UL: Voltage 300 V RMS Max. Recommended Current:	Plenum/Non-Plenum	
Nom. Capacitance Conductor to Conductor:         Capacitance (pF/ft)         25.5         Nom. Conductor DC Resistance:         DCR @ 20°C (Ohm/1000 ft)         5.86         Max. Operating Voltage - UL:         Voltage         300 V RMS         Max. Recommended Current:	Plenum (Y/N):	No
Nom. Capacitance Conductor to Conductor:         Capacitance (pF/ft)         25.5         Nom. Conductor DC Resistance:         DCR @ 20°C (Ohm/1000 ft)         5.86         Max. Operating Voltage - UL:         Voltage         300 V RMS         Max. Recommended Current:	Electrical Characteristics (Overall)	
25.5 Nom. Conductor DC Resistance: DCR @ 20°C (Ohm/1000 ft) 5.86 Max. Operating Voltage - UL: Voltage 300 V RMS Max. Recommended Current:		
DCR @ 20°C (Ohm/1000 ft)         5.86         Max. Operating Voltage - UL:         Voltage         300 V RMS         Max. Recommended Current:		
5.86         Max. Operating Voltage - UL:         Voltage         300 V RMS         Max. Recommended Current:	Nom. Conductor DC Resistance:	
Voltage 300 V RMS Max. Recommended Current:		
300 V RMS Max. Recommended Current:	Max. Operating Voltage - UL:	
Description Current	Max. Recommended Current:	
10C Temperature Rise 3.9 Amps per conductor @ 20°C ambient	• • • •	

#### Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9156 060U1000	1,000 FT	49.000 LB	CHROME		2 #18 PR PVC PVC
9156 060U500	500 FT	25.000 LB	CHROME		2 #18 PR PVC PVC
9156 0601000	1,000 FT	51.000 LB	CHROME	С	2 #18 PR PVC PVC
9156 060500	500 FT	27.000 LB	CHROME	С	2 #18 PR PVC PVC
9156 0605000	5,000 FT	260.000 LB	CHROME	CZ	2 #18 PR PVC PVC

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.

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