# **Detailed Specifications & Technical Data**



## 9521 Multi-Conductor - 300V Power-Limited Tray Cable



For more Information please call

1-800-Belden1



#### **General Description:**

22 AWG pairs stranded (7x30) tinned copper conductors, twisted pairs, PVC insulation, overall Beldfoil® shield (100% coverage), PVC jacket.

Physical Characteristics (Overall) Conductor	
AWG:	
# Pairs AWG Stranding Conductor Material	
11 22 7x30 TC - Tinned Copper	
Total Number of Conductors:	22
Insulation	
Insulation Material:	
Insulation Material Dia. (mm)	
F-R PVC - Flame Retardant Polyvinyl Chloride 1.5748	
Outer Shield Outer Shield Material:	
Outer Shield Trade Name Type Outer Shield Material	Coverage (%)
Beldfoil® Tape Aluminum Foil-Polyeste	er Tape   100
Outer Shield Drain Wire AWG:	
AWG Stranding Drain Wire Conductor Material	
22 7x30 TC - Tinned Copper	
Zz 7x30 TC - Tillied Copper	
Duter Jacket	
Outer Jacket Material:	
Outer Jacket Material Nom. Wall	I Thickness (mm)
F-R PVC - Flame Retardant Polyvinyl Chloride 1.3462	
Outer Jacket Ripcord:	Yes
	165
Overall Cable	
Overall Nominal Diameter:	12.852 mm
Pair	
Pair Color Code Chart:	
Number Color	
1 Black & Red and Numbered	
2 Black & Red and Numbered	
3 Black & Red and Numbered	
4 Black & Red and Numbered	
5 Black & Red and Numbered	
6 Black & Red and Numbered	
7 Black & Red and Numbered	
8 Black & Red and Numbered	
9 Black & Red and Numbered	
10 Black & Red and Numbered	
11 Black & Red and Numbered	
echanical Characteristics (Overall)	
Operating Temperature Range:	-30°C To +105°C
UL Temperature Rating:	105°C
Max. Recommended Pulling Tension:	889.640 N
Min. Bend Radius/Minor Axis:	127 mm

### Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:

CMG, ITC-ER, PLTC-ER

# **Detailed Specifications & Technical Data**



## METRIC MEASUREMENT VERSION

# 9521 Multi-Conductor - 300V Power-Limited Tray Cable

EU Directive 2011H25E/U (RDHS II):     Yes       EU Directive 2009/SEC (EUV):     Yes       CA Prop S (CJ for Wire & Cable):     Yes       Ham Test:     UL 1685 FT4 Loading       (ULV) Flame Test:     1202       Subability - Indoor:     Yes       Subability - Indoor:     No       International Control (Control)     Yes       Subability - Indoor:     No       International Control Conductor:     Yes       Subability - Indoor:     No       International Control Conductor:     Yes       Subability - Indoor:     No       International Under Statiance:     Yes       Subability - Indoor:     No <th></th> <th></th>					
EU CE Mark:         Yes           EU Directive 2009/DEC (ULY):         Yes           EU Directive 2009/DEC (WEE):         Yes           EU Fame Test:         UL (BOS FT4 Loading           CUL) Fame Test:         UL (BOS FT4 Loading           CULV Fame Test:         UL (BOS FT4 Loading           CULV Fame Test:         UL (BOS FT4 Loading           Subability - Outdoor:         Yes           Subability - Outdoor:	CEC/C(UL) Specification:	CMG			
EU Directive 2002/BJEC (ELV):     Yos       EU Directive 2002/BJEC (VELS):     Yes       CA Prop 85 (CJ for Wire 6 Cable):     Yes       Min Order #38 (China RoH5):     Yes       UL Hame Test:     UL 1005/FT4 Laading       C(UL) Finam Test:     Yes       Suitability - Indoor:     Yes       Suitability - Indoor:     Yes       Suitability - Indoor:     Yes       Suitability - Indoor:     Yes       Suitability - Burnarity     No       VenumiNon-Plenum     Penum (Nr):       Penum (Nr):     No       Conscience (Domaine (Direction (Looreral))       Conscience (Domaine)       Cassoliance	EU Directive 2011/65/EU (ROHS II):	Yes			
EU Directive 2002/39/EC (RevIIS):     Yeis       EU Directive 2002/39/EC (WEEE):     Yeis       EU Directive 2002/39/EC (WEEE):     Yeis       EU Directive 2002/39/EC (WEEE):     Yeis       Mit Order #38 (China RoHS):     Yeis       Mit Order #38 (China RoHS):     Yeis       Mit France     U. Hasson Frait       U Flame Test:     U. Hasson Frait       UL Flame Test:     U. Hasson Frait       ElEE Flame Test:     1202       Suitability - Indoor:     Yeis       Suitability - Indoor:     Yeis       Suitability - Indoor:     Yeis       Suitability - Outdoor:     Yeis	EU CE Mark:	Yes			
EU RelS Compliance Date (mit/dlyyy):     04/01/2005       EU Directive 2022/BECK (WEEE):     Yes       EU Directive 2023/BECK (WEEE):     Yes       EU Directive 2023/BECK (WEEE):     Yes       Mit Order #39 (China RelK):     Yes       Mit Order #39 (China RelK):     Yes       UL Flame Test:     UL Host FT4 Loading       CQLU Flame Test:     1202       Suitability - Startal:     1202       Suitability - Indoor:     Yes       Plenum (N/h):     No       Interctical Characteristics (Overall)       Interctical Conductor to Conductor to Shield:       Experiment Conductor to Conductor to Shield:       Experiment Conductor to Conductor to Shield:       Experiment Conductor to Conductor	EU Directive 2000/53/EC (ELV):	Yes			
EU Directive 2002/MEC (WEEE):     Yes       EU Directive 2002/MEC (WEEE):     Yes       CA Prop 55 (CJ for Wire & Cabla):     Yes       CA Prop 55 (CJ for Wire & Cabla):     Yes       Min Oder #38 (China RoHS):     Yes       UL Ram Test:     UL 1885 FT4 Loading       QUL) Flame Test:     FT4       UEEEF Flame Test:     1202       Suitability - Outdoor:     Yes       Suitability - Outdoor:     Yes       Suitability - Suitability - Motoor:     Yes       Suitability - Motoor:     Yes       Suitability - Motoor:     Yes       Suitability - Motoor:     Yes       Suitability - Motoor:     No       Cufface Critity (G (Overall)     Solo       Com. Conductor & Conductor & Suitability     No	EU Directive 2002/95/EC (RoHS):	Yes			
EU Directive 2003/11/EC (BFR):         Yes           CA Prop 65 (CJ for Wire & Cable):         Yes           Mit Order #30 (China RoH5):         Yes           Imma Test:         UL 1685 FT4 Loading           Mit Directive 2003/11/EC (BFR):         FT4           Imma Test:         UL 1685 FT4 Loading           Mit Directive 2003/11/EC (BFR):         FT4           Imma Test:         UL 1685 FT4 Loading           Mit Directive 2003/11/EC (BFR):         FT4           Suitability - Imma Test:         1202           Suitability - Imma Test:         Yes           Suitability - Burala:         Yes           Suitability - Burala:         Yes           Suitability - Burala:         Yes           Plenum (Yik):         No           Undicatance (Imma Coordel)         Yes           Cettrical Characteristics (Overal)         Yes           Suitability - Burala:         No           Conductance (Imma Coordel)         Yes           Suitability - Burala:         Yes           Plenum (Yik):         No           Test Conductor Io Conductor:         Suitability - Burala:           Suitability - Burala:         Yes           Suitability - Burala:         Yes           Test Conductor Io C	EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005			
CAProp 65 (C.J for Wire 8 Cable);     Yes       MI Order R39 (China RoHS);     Yes       UL. Flame Test:     UL. flame Fiels:       QUU, Flame Test:     FT4       IEEE Flame Test:     1202       Suitability - Indoor:     Yes       Planum (YiN):     No       Uncase Conductor to Conductor:     Section Conductor:       Indoording:     No       Indoording:     Section Conductor:       Indoording:     Section Conductor:       Indoording:     Section Conductor:       Indoording:     Section Conductor:       Indoording:     Section Conductor: <td>EU Directive 2002/96/EC (WEEE):</td> <td>Yes</td>	EU Directive 2002/96/EC (WEEE):	Yes			
Mit Order #39 (China RoH5):         Yes           Mit Priam Test:         UL 1885 FT4 Loading           CULU, Fiama Test:         1202           EEEE Fiame Test:         1202           Suitability - Indoor:         Yes           Suitability - Outdoor:         No           Urdecence Lifting         Yes           Suitability - Outdoor:         Yes           Suitability - Outdoor:         Yes           Suitability - Outdoor:         Yes           Suitability - Outdoor:         Yes           Suitability - Outdoor: <td>EU Directive 2003/11/EC (BFR):</td> <td>Yes</td>	EU Directive 2003/11/EC (BFR):	Yes			
Image: Table Test:         UL 1085 FT4 Loading           QUU, Plame Test:         FT4           QUU, Plame Test:         1202           LEEE Flame Test:         1202           Suitability - Indoor:         Yes           Suitability - Burial:         Yes           Suitability - Burial:         Yes           Suitability - Burial:         Yes           Suitability - Burial:         Yes           Plenum (YM):         No           Ver         Yes           Plenum (YM):         No           Ver         Yes           Suitability - Burial:         Yes           Plenum (YM):         No           Ver         Yes           Ver         Yes           Suitability - Burial:         Yes           Ver         Yes           Ver         Yes           Ver         Yes           Suitability - Burial:         Yes           Ver         Yes           Suitability - Burial:         Yes           Ver         Yes           Ver         Yes           Suitability - Burial:         Yes           Ver         Yes           Suitability - Burial:	CA Prop 65 (CJ for Wire & Cable):	Yes			
ULReno Test:         ULRESS FT4 Loading           GULP Fame Test:         FT4           Subality - Indoor:         Voo           Subality - Indoor:         Voo           Subality - Indoor:         Voo           Subality - Jouria:         Voo           Subality - Buria:         Voo           Ponum (Yor):         No           Ponum (Yor):         No           Unductance:         Voo           Guasaliane Conductor to Conductor:         Solapitane Solapi	MII Order #39 (China RoHS):	Yes			
C(UL) Flame Test:         FT4           IEEE Flame Test:         1202           Suitability         Suitability           Suitability - Outdoor:         Yes           Plenum/Non-Plenum         Plenum (YN):           Plenum (YN):         No           uracce Printing (Overall)         Imm. Capacitance Outdoor to Conductor:           Gagacitance (Printing (Overall)         Imm. Capacitance Conductor to Conductor:           Gagacitance (Printing (Overall)         Imm. Capacitance Conductor to Conductor:           Gagacitance (Printing (Overall)         Imm. Conductor Conductor:           Gagacitance (Printing (Overall)         Imm. Conductor De Conductor & Shield:           Gagacitance (Printing (Overall)         Imm. Conductor Conductor & Shield:           Gagacitance (Printing (Overall)         Imm. Conductor Conductor & Shield:           Gagacitance (Printing (Overall)         Imm. Conductor & Shield:           Gagacitance (Printing (Overall)         Imm. Conductor & Shield:           Gagacitance (Printi	Flame Test				
IEEE Flame Test: 1202   Suitability Indoor:   Suitability Yes   Suitability Yes   Suitability Suitability   Suitability Yes   Penum (YN): No   Penum (YN): No Penum (YN): Penum (YN): No Penum (YN): Penum	UL Flame Test:	UL1685 FT4 Loading			
suitability - Indoor: Yes Suitability - Outdoor: Yes Suitability - Outdoor: Yes Suitability - Buriat: Yes Suitability - Buriat: Yes Suitability - Buriat: Yes Sunlight Resistance: Yes Penum (VN): No Penum / Penum (VN): No Penum / VN): No Penum / VN: Capacitance (DF/m) Com. Inductance: Inductance: Inductance (Hf/m) Cosson - Capacitance Conductor to Conduct	C(UL) Flame Test:	FT4			
Suitability - Indoor:       Yes         Suitability - Surial:       Yes         Suitability - Surial:       Yes         Suitability - Surial:       Yes         Suitability - Surial:       Yes         Plenum (Yin):       No         Vertice Characteristics (Overall)	IEEE Flame Test:	1202			
Suitability - Outdoor: Yes   Suitability - Burial: Yes   Sunlight Resistance: Yes   Plenum (YN): No   Underface Printing (Overall) Lectrical Characteristics (Overall) Lectrical Characteristi	Suitability				
Suitability - Surial:         Yes           Sunlight Resistance:         Yes           Plenum/Non-Plenum         No           Plenum (Y/N):         No           urface Printing (Overall)         Image: Comparison of Compar	Suitability - Indoor:	Yes			
Sunlight Resistance:       Yes         Plenum/Non-Plenum       No         Plenum (YiN):       No         urface Printing (Overall)       Inductance:         Inductance:       Inductance:         Inductance (µ/m)       0         068901       0         058901       0         058901       0         058901       0         058901       0         058901       0         058901       0         058901       0         058901       0         058901       0         058901       0         058901       0         058901       0         058901       0         058901       0         058901       0         058901       0         058901       0         058901       0         05901       0         147.645       0         147.645       0         147.645       0         147.645       0         149.215       0         159.010 C Resistance:       0         160CR 2020 C (hm/km)       0 <td>Suitability - Outdoor:</td> <td>Yes</td>	Suitability - Outdoor:	Yes			
Plenum/Non-Plenum         Plenum (YiN):       No         urface Printing (Overall)         ion: Inductance:	Suitability - Burial: Yes				
Plenu (YN):         No           urface Printing (Overall)	Sunlight Resistance:	Yes			
urface Printing (Overall)         lectrical Characteristics (Overall)         low. Inductance:         Inductance (µ/m)         0.68901         low. Lagacitance Conductor to Conductor:         Capacitance (pf/m)         65.306         obm. Capacitance Conductor & Shield:         Capacitance (pf/m)         147.645         Dom. Capacitance (pf/m)         147.645         conductor DC Resistance:         DCR @ 20°C (Ohm/km)         49.215         statistics         Atax. Operating Voltage - UL:         Voltage         300 V RMS         Atax. Recommended Current:         Current         2.4 Amps per conductor @ 25°C	Plenum/Non-Plenum				
Inductance   Inductance <th></th> <th></th>					
0.68901   tom. Capacitance Conductor to Conductor:   Capacitance (pF/m)   85.306   tom. Capacitance (pF/m)   147.645   tom. Conductor DC Resistance:   DCR @ 20°C (Ohm/km)   49.215   tominal Outre Shield DC Resistance:   DCR @ 20°C (Ohm/km)   49.215   tax. Operating Voltage - UL:   Voltage   300 VRMS   tax. Recommended Current:   Current   2.4 Amps per conductor @ 25°C	Nom. Inductance:				
Jon. Capacitance Conductor to Conductor:   Capacitance (pF/m)   85.306   Jon. Capacitance cond. to Other Conductor & Shield:   Capacitance (pF/m)   147.645   Jon. Conductor DC Resistance:   DCR @ 20°C (Ohm/km)   49.215   Jon. Coparating Voltage - UL:   Voltage   300 V RMS   Jax. Recommended Current:   Current   2.4 Amps per conductor @ 25°C					
Capacitance (pF/m)   85.306   tom. Capacitance Cond. to Other Conductor & Shield:   Capacitance (pF/m)   147.645   tom. Conductor DC Resistance:   DCR @ 20°C (Ohm/km)   49.215   tominal Outer Shield DC Resistance:   DCR @ 20°C (Ohm/km)   49.215   tominal Outer Shield DC Resistance:   Voltage   300 V RMS   Ata. Recommended Current:   Current   2.4 Amps per conductor @ 25°C					
Capacitance (pF/m)         147.645         Jom. Conductor DC Resistance:         DCR @ 20°C (Ohm/km)         49.215         Jominal Outer Shield DC Resistance:         DCR @ 20°C (Ohm/km)         49.215         Jax. Operating Voltage - UL:         Voltage         300 V RMS         Jax. Recommended Current:         Current         2.4 Amps per conductor @ 25°C	Capacitance (pF/m)				
147.645         Nom. Conductor DC Resistance:         DCR @ 20°C (Ohm/km)         49.215         Nominal Outer Shield DC Resistance:         DCR @ 20°C (Ohm/km)         49.215         Max. Operating Voltage - UL:         Voltage 300 V RMS         Max. Recommended Current:         Current 2.4 Amps per conductor @ 25°C	Nom. Capacitance Cond. to Other Conductor & Shield:				
DCR @ 20°C (Ohm/km) 49.215 Nominal Outer Shield DC Resistance: DCR @ 20°C (Ohm/km) 49.215 Max. Operating Voltage - UL: Voltage 300 V RMS Max. Recommended Current: Current 2.4 Amps per conductor @ 25°C					
DCR @ 20°C (Ohm/km) 49.215 Max. Operating Voltage - UL: Voltage 300 V RMS Max. Recommended Current: Current 2.4 Amps per conductor @ 25°C					
Aax. Operating Voltage - UL: Voltage 300 V RMS Aax. Recommended Current: Current 2.4 Amps per conductor @ 25°C					
300 V RMS         Max. Recommended Current:         Current         2.4 Amps per conductor @ 25°C	Max. Operating Voltage - UL:				
Current 2.4 Amps per conductor @ 25°C					
2.4 Amps per conductor @ 25°C	Max. Recommended Current:				
ut Ups and Colors:					
	ut Ups and Colors:				

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9521 0601000	1,000 FT	144.000 LB	CHROME	С	11 PR #22 PVC FS PVC
9521 060500	500 FT	71.500 LB	CHROME	С	11 PR #22 PVC FS PVC

Notes: C = CRATE REEL PUT-UP.

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#### METRIC MEASUREMENT VERSION

#### 9521 Multi-Conductor - 300V Power-Limited Tray Cable

Revision Number: 1 Revision Date: 10-21-2014

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product. Belden declares this product to be in compliance with EU LVD (Low Voltage Directive 73/23/EEC), as amended by directive 93/68/EEC.