Detailed Specifications & Technical Data



METRIC MEASUREMENT VERSION

8641 Multi-Conductor - Single-Pair Cable

For more Information please call

1-800-Belden1



General Description:

24 AWG stranded (7x32) TC conductors, polyethylene insulation, twisted pair, overall Beldfoil shield (100% coverage), 24 AWG stranded TC drain wire, PVC jacket.

Physical Characteristics (Overall)	
Conductor	
AWG:	
# Pairs AWG Stranding Conductor Material 1 24 7x32 TC - Tinned Copper	
1 24 7x32 TC - Tinned Copper	
Total Number of Conductors:	2
Insulation	
Insulation Material:	
Insulation Material Wall Thickness (mm) PE - Polyethylene 0.432	
Outer Shield	
Outer Shield Material:	
Outer Shield Trade Name Type Outer Shield Mater	rial Coverage (%)
Beldfoil® Tape Aluminum Foil-Poly	ester Tape 100
Outer Shield Drain Wire AWG:	
AWG Stranding Drain Wire Conductor Material	
24 7x32 TC - Tinned Copper	
Outer Jacket	
Outer Jacket Material:	
Outer Jacket Material Nom. Wall Thickness (mm) PVC - Polyvinyl Chloride 0.635	
Overall Cable	
Overall Nominal Diameter:	4.267 mm
Pair	
Pair Color Code Chart: Number Color	
1 Black & Clear	
Mechanical Characteristics (Overall)	
Operating Temperature Range:	-20°C To +80°C
UL Temperature Rating:	60°C (UL AWM Style 2092)
Bulk Cable Weight:	17.858 Kg/Km
Max. Recommended Pulling Tension:	48.930 N
Min. Bend Radius/Minor Axis:	44.450 mm
Applicable Specifications and Agency C	

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

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NEC/(UL) Specification:
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СМ

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CEC/C(UL) Specification:	СМ
AWM Specification:	UL Style 2092 (300 V 60°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
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
Plenum/Non-Plenum	
Plenum (Y/N):	No
Plenum Number:	88641, 82641

Electrical Characteristics (Overall)

Nom. Characteristic	Impedance:
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Impedance	(Ohm)
80	

Nom. Inductance:

Inductance (µH/m)

0.72182

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

72.182

Nom. Capacitance Cond. to Other Conductor & Shield:

Capacitance (pF/m)

137.802

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)

82.025

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)

47.9026

Max. Operating Voltage - UL:

Voltage 300 V RMS (UL AWM Style 2092)

Max. Recommended Current:

Current

2.2 Amps per conductor @ 25°C

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8641 060U1000	1,000 FT	14.000 LB	CHROME		1 #24 FS PR PE PVC
8641 060U500	500 FT	7.500 LB	CHROME		1 #24 FS PR PE PVC
8641 060100	100 FT	2.000 LB	CHROME		1 #24 FS PR PE PVC
8641 0601000	1,000 FT	14.000 LB	CHROME	С	1 #24 FS PR PE PVC

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8641 060500	500 FT	7.000 LB	CHROME	1 #24 FS PR PE PVC
8641 0605000	5,000 FT	65.000 LB	CHROME	1 #24 FS PR PE PVC

Notes:

C = CRATE REEL PUT-UP.

Revision Number: 2 Revision Date: 08-14-2012

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