# **Detailed Specifications & Technical Data**

### **METRIC MEASUREMENT VERSION**



# 8641 Multi-Conductor - Single-Pair Cable

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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	
Total Number of Conductors:	2
Insulation	
Insulation Material: Insulation Material Wall Thickness (mm)	
PE - Polyethylene   0.432	
Outer Shield	
Outer Shield Trade Name Tune Outer Shield Metarial	(9/)
Outer Shield Trade Name         Type         Outer Shield Material         Cov           Beldfoil®         Tape         Aluminum Foil-Polyester Tape         100	verage (%)
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 Compliance (Ov	verall)
Applicable Standards & Environmental Programs	
NEC/(UL) Specification:	СМ
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/vvvv):	01/01/2004

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	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
Fla	me Test	
	UL Flame Test:	UL1685 UL Loading
Ple	num/Non-Plenum	
	Plenum (Y/N):	No
	Plenum Number:	88641, 82641

### **Electrical Characteristics (Overall)**

Nom. Characteristic Impedance:

Impedance (Ohm) 80

Nom. Inductance:

Inductance (µH/m) 0.72182

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/m)

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:

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
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

C = CRATE REEL PUT-UP.

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

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product.
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