# **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	<b>Conductor Material</b>
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 Material	Coverage (%)
Beldfoil®	Tape	Aluminum Foil-Polyester 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:**



# **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 (Overall)

## **Applicable Standards & Environmental Programs**

NEC/(UL) Specification: CM

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CEC/C(UL) Specification:	CM
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:

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:

2.2 Amps per conductor @ 25°C

## **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8641 060U1000	305 MT	6.350 KG	CHROME		1 #24 FS PR PE PVC
8641 060U500	152 MT	3.402 KG	CHROME		1 #24 FS PR PE PVC
8641 060100	30 MT	0.907 KG	CHROME		1 #24 FS PR PE PVC
8641 0601000	305 MT	6.350 KG	CHROME	С	1 #24 FS PR PE PVC

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### 8641 Multi-Conductor - Single-Pair Cable

8	3641 0602000	610 MT	12.701 KG	CHROME	С	1 #24 FS PR PE PVC
8	3641 060500	152 MT	3.175 KG	CHROME		1 #24 FS PR PE PVC
8	3641 0605000	1,524 MT	29.484 KG	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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