# **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	
Total Number of Conductors:	2
Insulation	
Insulation Material:	
Insulation Material Wall Thickness (mm)	
PE - Polyethylene 0.432	
Outer Shield Outer Shield Material:	
Outer Shield Material. Outer Shield Trade Name Type Outer Shield Mate	erial Coverage (%)
Beldfoil® Tape Aluminum Foil-Poly	
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	n)
Overall Cable	
Overall Nominal Diameter:	4.267 mm
Pair Pair Color Code Chart:	
Number Color	
1 Black & Clear	
1 Black & Clear	
Black & Clear     Mechanical Characteristics (Overall)	
1 Black & Clear	-20°C To +80°C
Black & Clear     Mechanical Characteristics (Overall)	-20°C To +80°C 60°C (UL AWM Style 2092)
1 Black & Clear   Mechanical Characteristics (Overall)   Operating Temperature Range:	
1 Black & Clear   Mechanical Characteristics (Overall)   Operating Temperature Range:   UL Temperature Rating:	60°C (UL AWM Style 2092)

# 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	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 0602000	610 MT	12.701 KG	CHROME	С	1 #24 FS PR PE PVC
8641 060500	152 MT	3.175 KG	CHROME		1 #24 FS PR PE PVC
8641 0605000	1,524 MT	29.484 KG	CHROME		1 #24 FS PR PE PVC

Notes:

C = CRATE REEL PUT-UP.

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