Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



8641 Multi-Conductor - Single-Pair Cable

For more Information please call

1-800-Belden1



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 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
I	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 (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CM

Page 1 of 3 09-04-2012

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



8641 Multi-Conductor - Single-Pair Cable

	CEC/C(UL) Specification:	CM
	AWM Specification:	UL Style 2092 (300 V 60°C)
	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
Fla	ime Test	
	UL Flame Test:	UL1685 UL Loading
Ple	enum/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:

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
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

Page 2 of 3 09-04-2012

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



8641 Multi-Conductor - Single-Pair Cable

8641 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

© 2012 Belden, Inc All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the 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.