# Detailed Specifications & Technical Data



# 9843 Paired - Low Capacitance Computer Cables for EIA RS-485 Applications



### **Description:**

24 AWG stranded (7x32) TC conductors, polyethylene insulation, twisted pairs, overall Beldfoil® (100% coverage) + TC braid shield (90% coverage), 24 AWG stranded TC drain wire, PVC jacket

## PHYSICAL CHARACTERISTICS:

### CONDUCTOR:

2

Number of Pairs		3					
Total Number of Conductors		6					
AWG		24					
Stranding	7x32	7x32					
Conductor Material		TC - Tinned (	TC - Tinned Copper				
INSULATION:							
Insulation Material	PE - Polyethy	PE - Polyethylene					
Lay Length :							
Lay Length (in.) Direction		rection	n		Twists/ft (twist/ft)		
1.0	Le	ft Hand Lay	Lay 12				
Twists/ft.		12					
Pair Color Code Chart :							
Number Color		Number		Color		•	
1	White/Blue &		3		White	hite/Green & Green/White	
2	& Orange/White						
OUTER SHIELD:							
Outer Shield Material Trade	Name	Beldfoil®					
Outer Shield Type		Tape/Braid					
Outer Shield Material :							
Layer Number	Material Trade Nan	не Туре		Material		% Coverage (%)	
1	Beldfoil®	Tape	Tape Ali		n Foil-Polyester	100	

Braid

Tape

TC - Tinned Copper

90



9843 Paired - Low Capacitance Computer Cables for EIA RS-485 Applications

OUTER SHIELD DRAIN WIRE :					
Outer Shield Drain Wire AWG	24				
Outer Shield Drain Wire Stranding	7x32				
Outer Shield Drain Wire Conductor Material	TC - Tinned Copper				
OUTER JACKET:					
Outer Jacket Material	PVC - Polyvinyl Chloride				
OVERALL NOMINAL DIAMETER:					
Overall Nominal Diameter	.360 in.				
MECHANICAL CHARACTERISTICS:					
Operating Temperature Range	-30°C To +80°C				
UL Temperature Rating	80°C (UL AWM Style 2919)				
Bulk Cable Weight	73 lbs/1000 ft.				
Max. Recommended Pulling Tension	105.5 lbs.				
Min. Bend Radius (Install)	3.75 in.				
APPLICABLE SPECIFICATIONS AND AGENCY	COMPLIANCE:				
APPLICABLE STANDARDS:					
NEC/(UL) Specification	СМ				
CEC/C(UL) Specification	СМ				
AWM Specification	UL Style 2919 (300 V 80°C)				
EU CE Mark (Y/N)	Yes				
EU RoHS Compliant (Y/N)	Yes				
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004				
FLAME TEST:					
UL Flame Test	UL1685 UL Loading				
PLENUM/NON-PLENUM:					
Plenum (Y/N)	Ν				
ELECTRICAL CHARACTERISTICS:					
Nom. Characteristic Impedance	120 Ohms				
Nom. Capacitance Conductor to Conductor @ 1 KHz	23 pF/ft				
Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz	12.8 pF/ft				
Nominal Velocity of Propagation	66 %				
Nominal Delay	1.6 ns/ft				
Nom. Conductor DC Resistance @ 20 Deg. C	24 Ohms/1000 ft				
Nominal Outer Shield DC Resistance @ 20 Deg. C	2.3 Ohms/1000 ft				
Nom. Attenuation (dB/100 ft)	0.6 (@ 1 MHz) dB/100 ft.				
Max. Operating Voltage - UL	300 V RMS (UL AWM Style 2919)				
Max. Recommended Current	1.54 Amps per conductor @ 25°C Page 2 of 3				



# 9843 Paired - Low Capacitance Computer Cables for EIA RS-485 Applications

### **PUT-UPS AND COLORS:**

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
9843 060100	3 PR #24 PE SH PVC	100	6.2	CHROME	
9843 0601000	3 PR #24 PE SH PVC	1000	67	CHROME	С
9843 060500	3 PR #24 PE SH PVC	500	34.5	CHROME	С

C = CRATE REEL PUT-UP.

Revision Number: 1 Revision Date: 07-21-2005

© Copyright 2006 Belden, Inc

All Rights Reserved.

Although Belden ("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 products are subject to better's standard terms and contains of safe. Belden believes this product to be in compliance with the following environmental regulations: California Proposition 65 Consent Judgment For Wire & amp; Cable Mfgs. (San Francisco Superior Court Nos. 312962 And 320342); EU RoHS (Directive 2002/95/EC, 27-Jan-2003); Material manufactured prior to the compliance date may still be in stock at Belden facilities and in our Distributor's inventory. EU ELV (Directive 2000/53/EC, 18-Sept-2000); EU WEEE (Directive 2002/96/EC, 27-Jan-2003); And EU BFR (Directive 2003/11/EC, 6-Feb-2003). 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 the 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.