Detailed Specifications & Technical Data



9841 Paired - Low Capacitance Computer Cable 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:

| Number of Pairs | | | 1 | | | | |
|----------------------------------|---------------------|----|---------------------------|---------------------------------|------------|----------------|--|
| Total Number of Conductor | s | | 2 | | | | |
| AWG | | | 24 | | | | |
| Stranding | | | 7x32 | | | | |
| Conductor Material | | | TC - Tinned Copper | | | | |
| INSULATION: | | | | | | | |
| Insulation Material | | | PE - Polyethylene | | | | |
| Lay Length : | | | | | | | |
| Lay Length (in.) Direction | | n | | Twists/ft (twist/ft) | | | |
| 2.5 | 2.5 Left Han | | nd Lay 4.8 | | | | |
| Twists/ft. | | | 4.8 | | | | |
| Pair Color Code Chart | | | White/Blue and Blue/White | | | | |
| OUTER SHIELD: | | | | | | | |
| Outer Shield Material Trade Name | | | Beldfoil® | | | | |
| Outer Shield Type | | | Tape/Braid | | | | |
| Outer Shield Material : | | | | | | | |
| Layer Number | Material Trade Name | | Туре | Material | | % Coverage (%) | |
| 1 | Beldfoil® | | Таре | Aluminum Foil-Polyester Tape | | 100 | |
| 2 | | | Braid | TC - Tin | ned Copper | 90 | |
| OUTER SHIELD DRAIN | WIRE : | | | | | | |
| Outer Shield Drain Wire AWG | | 24 | | | | | |

| 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 |
| | Page 1 of 3 |



9841 Paired - Low Capacitance Computer Cable for EIA RS-485 Applications

OUTER JACKET:

| Outer Jacket Material | PVC - Polyvinyl Chloride |
|---|---|
| OVERALL NOMINAL DIAMETER: | |
| Overall Nominal Diameter | .232 in. |
| MECHANICAL CHARACTERISTICS: | |
| Operating Temperature Range | -30°C To +80°C |
| UL Temperature Rating | 80°C |
| Bulk Cable Weight | 36 lbs/1000 ft. |
| Max. Recommended Pulling Tension | 72.3 lbs. |
| Min. Bend Radius (Install) | 2.5 in. |
| APPLICABLE SPECIFICATIONS AND AGENCY | COMPLIANCE: |
| APPLICABLE STANDARDS: | |
| NEC/(UL) Specification | CM |
| CEC/C(UL) Specification | CM |
| AWM Specification | UL Style 2919 (30 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 |
| PLENUM/NON-PLENUM: | |
| Plenum (Y/N) | N |
| Plenum Number | 82841, 89841 |
| ELECTRICAL CHARACTERISTICS: | |
| Nom. Characteristic Impedance | 120 Ohms |
| Nom. Capacitance Conductor to Conductor @ 1 KHz | 12.8 pF/ft |
| Nom. Cap. Cond. to Other Cond. & Shield @ 1 KHz | 23 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 | 3.4 Ohms/1000 ft |
| Nom. Attenuation (dB/100 ft) | 0.6 (@ 1 MHz) dB/100 ft. |
| Max. Operating Voltage - UL | 300 V RMS, 30 V RMS (UL AWM Style 2919) |
| Max. Recommended Current | 2.1 Amps per conductor @ 25°C |

PUT-UPS AND COLORS:

| Item | Description | Put-Up (ft.) | Ship Weight (lbs.) | Jacket Color | Notes |
|-------------|--------------------|--------------|--------------------|--------------|-------|
| 9841 060100 | 1 PR #24 PE SH PVC | 100 | 3.6 | CHROME | |



9841 Paired - Low Capacitance Computer Cable for EIA RS-485 Applications

| 9841 0601000 | 1 PR #24 PE SH PVC | 1000 | 40 | CHROME | С |
|--------------|--------------------|------|----|--------|---|
| 9841 060500 | 1 PR #24 PE SH PVC | 500 | 20 | 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 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.