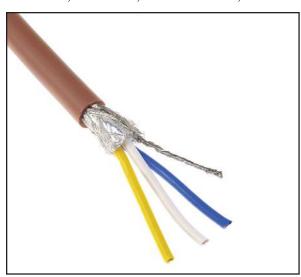
3M[™] Round Conductor Round Cable for CC-Link

20 AWG, Stranded, PE Insulation, Shielded, Drain Wire, PVC Jacket

79100 Series



- Designed for factory automation applications
- Conforms to CC-Link Ver 1.10
- Recommended for use with 3M[™] Power Clamp Connectors 35505-6000-BOM GF
- 0.50 mm² [20 AWG] conductor wire permits IDC termination
- · Drain wire allows easy grounding of shield
- RoHS Compliant. See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of www.3Mconnector.com for compliance information. (RIAE1 & C1 apply)

Date Modified:July 22, 2010

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Physical

Jacket Material: Oil Resistant Polyvinyl Chloride (PVC) 0.85 mm nominal thickness

Color: Brown

Insulator Material: PE (Foamed Polyethylene)

Color: Yellow, White, Blue

Marking: 3M[™] Cable 79100-110SBH 0.5 mm² x 3 for CC-Link Ver. 1.10

3M™ Cable E42769-K **%** AWM Style 20276 I A 80C 30V VW-1 FT1

Conductors:

Primary: 0.50 mm² [20 AWG] x 3,7 strands x 0.32 mm, Stranded Copper

Drain Wire: 24 x 0.18 mm, Tinned Copper

Shield:

Foil: Aluminum-polyester laminate tape

Braid: Tinned Copper Braid

Mating Connectors: Power Clamp, 35505-6000-BOM GF, TS-2273

Power Clamp, 35805-6000-BOM GF, 35805-6000-BPM GF, TS-2285

Electrical

Voltage Rating: UL: 30 V AWM: 30 V **Insulation Resistance:** >1 x $10^{10} \Omega / 10$ ft [3 m] Withstand Voltage: 1,500 V_{AC} for one minute

Unbalanced Tested Balanced Tested Balanced-Specification

Characteristic Impedance: 90.83 Ω 114.2 Ω@1MHz 110±15Ω @1MHz 111.4 Ω@5MHz 110±6Ω @5MHz

> Capacitance: 47.3nF/km(14.4pF/ft)@1MHz 38.6nF/km(11.8pF/ft)@1kHz <60nF/km (18.3pF/ft)@1kHz

Inductance: 0.12 uH/ft (0.39uH/m) 0.16 uH/ft (0.54uH/m) **Propagation Delay:** 1.31 ns/ft (4.30ns/m) 1.31 ns/ft (4.30ns/m)

Velocity of Propagation: 77.47% 77.59%

Note: Unbalanced is measured between ground signal - ground conductors. Balanced is measured between conductors within a pair.

Environmental

Temperature Rating: 80°C Max

Flammability Rating: VW-1 (UL) FT1 (CSA)

UL File No. E42769-K

79100 Series

Product Dimensions 2.36±0.15 [0.093] Insulated conductors Blue Braided shield 7.60 [.300] Ref. Foil Tape White Yellow Jacket Filler Drain wire mm [Inch] **Ordering Information** 79100 - 110SBH Note: Available in standard 200 meter rolls, please specify length when ordering. Contact 3M for availability of additional conductor counts and/or custom roll lengths. TS-2321-C Sheet 2 of 2

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