

FIBER OPTIC CABLE

Product Specifications

40R-2X330476BRYO-XX/XPDE

Issue Date: 9/16/2021

Revision: 0

40R-Series Composite Cable With Paired Copper Conductors and Singlemode Tight Buffered Fibers in a jacketed Indoor/Outdoor Plenum Design

Scope

This document establishes the specification requirements for a composite cable consisting of varying copper pair counts along with (4) OS2 tight buffered fibers in two subcomponents; of 4, all under a plenum jacket.

Applications

Premise communication applications including in plenum spaces. UV stable jacket suitable for use outdoors.

Applicable Documents & Standards

- TIA/EIA FOTP Standards 455
- Color Coding of Fiber Optic Cables TIA/EIA-598
- Compliant with ANSI/TIA-568-C.3 standard

Construction Details (Pairs)

- Conductor: 16AWG or 14AWG stranded bare copper
- Insulation Material: Remguard plenum rated polymer
- Nominal Insulation Thickness: See table on page 2.
- Nominal Insulation Diameter: See table on page 2.
- Pair Color Code: Black & Red, Black & White, Black & Green, Black & Blue, Black & Yellow, Black & Brown.
- Inner Jacket Color: Gray

Electrical Details (Pairs)

Maximum Operating Voltage: 300 Volts, rms.

Nominal Mutual Capacitance: 35.0 pF/ft @ 1 kHz

Upper Limit Capacitance: 40.0 pF/ft @ 1kHz

Fiber Construction Details

- Tight Buffered Fiber
- Dimension: 900 μ m
- Color Code: Blue, Orange, Green, Brown
- Cable Strength: Water swellable aramid yarns are pulled in with tight-buffered fibers under the jacket.
- Inner Jacket Material: Remguard plenum polymer
- Inner Jacket Color: Blue and Orange
- Surface Print: REMFO 33-SERIES FIBER OPTIC CABLE XX(No. of Fibers)-SM OS2 BIF INDOOR/OUTDOOR REMEE PROD UCTS CORP. MM/YY (Month & Year of Mfg.) OFNP C (ETL)US MADE IN THE USA (Lot #) + Sequential Footage Marking

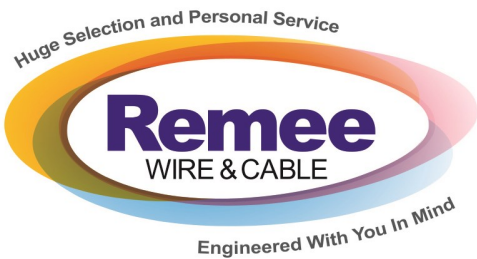
Overall Construction Details

- Construction Type: Copper cable and fiber cables cabled together and jacketed.
- Jacket Material: Remguard plenum rated polymer
- Overall Sheath Color: UV-Yellow
- Surface Print: ACTIVATE™ by REMEE 40R-SERIES FIBER OPTIC CABLE XX (No. of Fibers)-SM OS2 BIF (No. of Pairs) (AWG size) OUTDOOR MM/YY (Month & Year of Manufacture) MADE IN THE USA (Lot #) + Sequential Footage Marking

All warranty information can be viewed at WWW.REMEE.COM

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Nominal Cable Dimensions & Weights											
Remeë Products Part Number	Number of Conductors and AWG	D.C.R. Ω/Mft	Nom. Insul. Thick (in)	Nom. Dia. Over Insul. (in.)	Nom Dia. Over Jkt. (Copper, in.)	Number of Fibers Ea. Leg	Nom Dia. Over Jkt. (Fiber, in.)	Nominal Overall Dimensions in.	Nominal Overall Dimensions mm	Weight lb/1000ft	Weight Kg/km
40R-2X330476BRYO-16/6PDE	6P 16	4.39	0.010	0.078	0.375	4 (x2)	0.185 (x2)	0.645	17.018	186	277
40R-2X330476BRYO-14/6PDE	6P 14	2.76	0.012	0.097	0.545	4 (x2)	0.185 (x2)	0.755	19.177	256	380
40R-2X330476BRYO-12/6PDE	6P 12	1.74	0.015	0.124	0.630	4 (x2)	0.185 (x2)	0.855	21.717	348	517
40R-2X330476BRYO-16/4PDE	4P 16	4.39	0.010	0.072	0.347	4 (x2)	0.185 (x2)	0.620	15.74	160	236
40R-2X330476BRYO-14/4PDE	4P 14	2.76	0.012	0.091	0.437	4 (x2)	0.185 (x2)	0.710	18.03	196	290
40R-2X330476BRYO-12/4PDE	4P 12	1.74	0.015	0.114	0.530	4 (x2)	0.185 (x2)	0.800	20.32	263	389

**Cables printed in meters will have a "-MR" suffix on the part number.*

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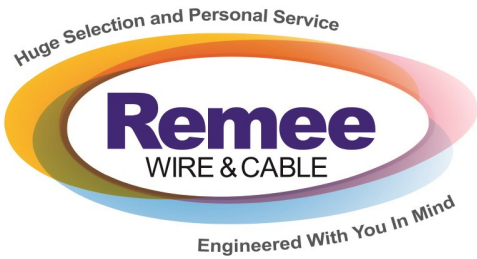
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76B- Fiber Characteristics

Fiber Type	SM*
Maximum Attenuation @ 1310/1550nm	0.40/0.30 dB/km **
Cladding Diameter	125.0 ± 0.7 μm
Maximum Core/Clad Concentricity Error	0.5 μm
Maximum Cladding Non-circularity	0.7 μm
Primary Coating Diameter	242 ± 7 μm
Cabled Cutoff Wavelength	<1260nm
Mode Field Diameter	9.0 ± 0.4μm @1310nm
	10.1 ± 0.5μm @1550nm
Temperature Dependence	≤ 0.05dB/km (-60°C to 85°C)
Zero Dispersion Slope	≤0.092ps/nm ² -km
Attenuation with Bending 1 Turn on a Mandrel Radius of 10mm@1550/1625nm	≤0.75/1.5dB
Attenuation with Bending 10 Turns on a Mandrel Radius of 15mm@1550/1625nm	≤0.25/1.0dB
Maximum PMD Link Design Value	0.06ps/√km
Group Refractive Index @ 1310/1550nm	1.4676/1.468
Proof Test	100 kpsi

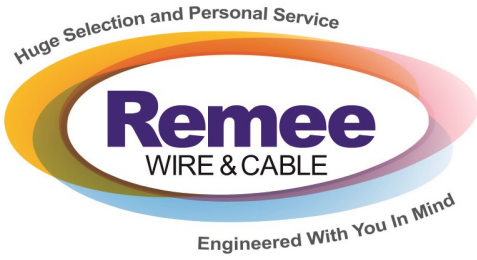
*According to ITU G.652d&G.657.A1

**Measured attenuation s on shipping wheels will not exceed the nominal values by 0.75dB/km

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Mechanical & Environmental Performance

- Maximum Tensile Load
Installation : 1405N / 315lbf
Long Term : 455N / 102lbf
- Minimum Bending Radius
Loaded : 20 x Diameter
Unloaded : 10 x Diameter
- Crush Resistance
100 N/cm
- Impact Resistance (min.)
25 Impacts
- Flexing $\pm 90^\circ$ (min.)
25 Cycles
- Temperature Rating
Operation : -20°C to +85°C
Installation : 0°C to +75°C
Storage : -40°C to +85°C

Warranty Information

All warranty information can be viewed at www.remee.com. This product is RoHS compliant and is directive 2002/95/EC. It is the sole responsibility of the user to have the most current specification. Specifications are subject to change without notice.

Preparation for Shipment

The cable shall be packaged to preclude the inducement of damage due to handling and transportation, and shall be in accordance with the best commercial practices available. Shipping containers shall be constructed as to eliminate any possible damage to the cables due to shipment.

Note: While Reme Products Corp. has made every reasonable effort to ensure the accuracy of the information in this document. Reme Products Corp. reserves the right to make any adjustments to the information contained herein at any time without notice. Reme Products Corp. expressly disclaims all implied warranties regarding the information contained herein, including but not limited to, any implied warranties of merchantability or fitness for particular purpose. The dimensions in this documents are for reference purposes only and are subject to change without notice.

Spec Approval (Custom Designs Only)

Your signature constitutes that you have read and agreed to this specification sheet and upon confirmation of your order. The Reme Wire & Cable warranty is an integral part of this specification. This item may be non-cancelable and non-returnable.

Signature: _____ Date: _____

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