Belden

Product: TT-4BB-0049NEA

BELDEN RAILTUFF TT-4BB-0049NEA - BREAKOUT 4*50/125-OM4 EN45545-2 HL3

Product Description

BELDEN RAILTUFF TT-4BB-0049NEA - BREAKOUT 4*50/125-OM4 EN45545-2 HL3

Technical Specifications

Product Overview

Suitable Applications:	For onboard use in railway coaches or in between two coaches.

Fiber Specifications

Fiber Type:	OM4
Fiber Buffer Material:	LSZH - Low Smoke Zero Halogen (Flame Retardant)
Fiber Buffer Diameter:	0.9 mm
Fiber Count:	4
Fiber Color Coding:	TIA coding (Gxxxxxx.T): Blue

Cable Construction

Number of Active Subunits:	4
Fibers Per Subunit:	1
Subunit Waterblocking:	Waterblocking Glass Yarns + Tape
Subunit Diameter:	2.1 mm
Fiber SubUnit Strength Members:	Aramid Yarns

Outer Jacket Specifications

Jacket Material:	LSZH - Low Smoke Zero Halogen (Flame Retardant)
Nom. Diameter:	8.0 mm (0.31 in)
Outer Jacket Color:	Aqua

Optical Characteristics

Wavelength	850 nm	1300 nm
Max. Attenuation	3.2 dB/km	0.9 dB/km

Mechanical Characteristics

Mechanical Tests

Description	Tested Standard	Requirement/Value	According to Family Specification
Cable Min. Bend Radius Installation (Short Term)	IEC 60794-1-21-E6	10 x Cable Diam.	IEC 60794-2-20
Cable Min. Bend Radius Operation (Long Term)	IEC 60794-1-21-E11	20 x Cable Diam.	IEC 60794-2-20
Cable Max. Tensile Strength Installation (Short Term)	IEC 60794-1-21-E1	400 N (90 lbf)	
Cable Max. Crush Resistance Installation (Short Term)	IEC 60794-1-21-E3	5 kN/m	IEC 60794-2-20
Cable Max. Crush Resistance Operation (Long Term)	IEC 60794-1-21-E3	3 kN/m	IEC 60794-2-20

Bulk Cable Weight:	70 kg/km (47 lbs/1000ft)

Temperature Range

Installation Temperature Range:	-5 to +50 °C

Operating Temperature Range:	-40 to +85 °C
Storage Temperature Range:	-30 to +70 °C

Standards and Compliance

Environmental Suitability:	Indoor - Euroclass Eca
Flammability / Reaction to Fire:	IEC 60332-1 EN50305 (9.1.1) EN45545: HL1- HL3
CPR Compliance:	CPR Euroclass: Eca
European Halogen Free Standards:	IEC 60754-1 - Halogen Amount = Zero, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 10 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3, IEC 61034-2 - Smoke Density Min. Transmittance = 60%

Product Notes

Notes:	The cable sheath fulfils the requirements in EN 50264-1 type EM 104

History

Update and Revision:	Revision Number: 0.4 Revision Date: 04-11-2026