



Product: GRRJF32 ☑

Universal OFC MLT: LSZH + GLASS YARNS + LSZH with 12 Tubes of Ø1.9mm 132f SM OS2 G.657.A2.

# **Product Description**

Universal (Indoor/Outdoor) dry core optical fiber Multi Loose Tube cable with Low Smoke Zero Halogen inner jacket, glass yarns as strength member and Low Smoke Zero Halogen outer jacket. Product feature: This cable has rodent protection by glass yarns. Existing out of 12 tubes with a diameter of 1.9mm with 132 fibers (11t x 12f) SM OS2 G.657.A2.

# **Technical Specifications**

#### **Product Overview**

Construction Type:	Multi Loose Tube			
Environmental Space:	Indoor/Outdoor			
Suitable Applications:	For outdoor and indoor use in structured (data) wiring systems such as industrial backbone, campus backbone, building backbone (riser) and/or horizontal cabling. For outdoor and indoor use in networks for industrial, telecom, cable TV and/or broadcast. Easy to install in ducts, tunnels and/or tubes.			

#### Construction

#### Fiber Cable Construction

Fiber Type	Fiber Grade acc. ITU-T	Fiber Count	nt Subunit Color			
OS2	G.657A2	132	TIA coding (Gxxxxxx.T): Blue, Orange, Green, Brown, Gray, White, Red, Black, Yellow, Violet, Pink			
Fiber Color Coding: TIA coding (Gxxxxxx.T): Blue, Orange, Green, Brown, Gray, White, Red, Black, Yellow, Violet, Pink, Aqua						
Central Stre	ngth Member:	GRP	GRP			
Cable Core	Water Tight:	Yes	'es			
Cable Core	Waterblocking:	Waterblocking Glass Yarns + Tape				
Bulk Cable Weight: 251 kg/km						

# **SubUnit Specifications**

Number of Active Subunits:	11
Number of Subunit Positions:	12
Fibers Per Subunit:	12
Subunit Diameter:	1.9 mm
Subunit Waterblocking:	Gel Filled

# **Jacket Specifications**

Number of Jackets:	Double Jacket
Type of Armor:	All Dielectric

#### **Inner Jacket**

Material:	LSZH - Low Smoke Zero Halogen (Flame Retardant)

### **Outer Jacket Specifications**

### **Outer Jacket**

	Material		Nominal Diameter	Ripcord
ľ	LSZH - Low Smoke Zero Halogen (Flame	e Retardant)	15.1 mm	Yes
Ī	Table Notes:	Standard co	olor: Orange. Available	e colors: (

#### **Optical Characteristics**

Max. Attenuation at 1310 nm:	0.40 dB/km
Max. Attenuation at 1550 nm:	0.30 dB/km
Max. Attenuation at 1625 nm:	0.30 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	302 mm	IEC 60794-3-10
Cable Min. Bend Radius Operation (Long Term)	IEC 60794-1-21-E11	226.5 mm	IEC 60794-3-10
Cable Max. Tensile Strength Installation (Short Term)	IEC 60794-1-21-E1	6000 N (1349 lbf)	IEC 60794-3-10
Cable Max. Tensile Strength Operation (Long Term)	IEC 60794-1-21-E1	2000 N (450 lbf)	IEC 60794-3-10
Cable Max. Crush Resistance Installation (Short Term)	IEC 60794-1-21-E3	15 kN/m	IEC 60794-3-10
Cable Max. Crush Resistance Operation (Long Term)	IEC 60794-1-21-E3	7.5 kN/m	IEC 60794-3-10
Cable Impact Resistance	IEC 60794-1-21-E4	10 J, 300 mm Radius, 3 Cycles	IEC 60794-3-10
Cable Torsion Resistance	IEC 60794-1-21-E7	180°, 2 m, 10 cycles	IEC 60794-3-10

# **Temperature Range**

Operating Temperature Range:	-30 °C to +70 °C
Installation Temperature Range:	-5 °C to +50 °C
Storage Temperature Range:	-30 °C to +70 °C

#### **Standards**

UL Rating/Flame Test:	Non-UL Rated	
Reaction to Fire - Bundle Flame Test:	IEC 60332-3-24	
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%	
REACH:	Compliant	
ISO/IEC Compliance:	IEC 60794, ISO/IEC 11801-1	
EU Directive 2011/65/EU (RoHS 2):	Compliant	
UV/ Sunlight Protection:	Yes	

# **History**

Update and Revision:	Revision Number: 0.78 Revision Date: 09-17-2024

# © 2024 Belden, Inc

#### All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in 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 "ASIS" 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 all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information 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. The 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.