

49826



48F SM G-657A2 Multitube LSZH Dielectric Fiber-Optic Cable, Dca s2, d2, a1

DESCRIPTION

Riser cable for indoor installation in buildings, suitable for vertical and horizontal runs. Its design, featuring flexible sub-tubes with 2 fibers per tube, provides high segregation, facilitates tool-free stripping, and reduces excess fiber during installation. The jacket, reinforced with embedded elements, and the talc-impregnated sub-conduits improve glide and protect the fibers until they reach the junction boxes, minimizing the risk of damage. Complies with ICT-2 requirements, featuring green/red fibers per sub-conduit.



APPLICATIONS

- Riser cable for interconnecting buildings.
- Designed to meet the stringent requirements of ICT-2.
- Connections between panels and voice and data points.
- Short-distance distribution to terminals.

OPENETICS
/ ADALTRA

Updated on: March 25, 2026

This document is confidential and the property of ADALTRA. ADALTRA holds the copyright, and the document may not be copied or modified in any way, in whole or in part, without ADALTRA's written permission. The specifications set forth in this document are not binding and are subject to change without notice.

ADVANTAGES

- Compact, lightweight, highly flexible, sturdy, and durable.
- Talc-impregnated sub-channels that improve glide and protect the fibers.
- Fully dielectric.
- Suitable for vertical and horizontal installations.
- Direct connection.
- Savings on installation costs.
- Halogen-free, low smoke emission, and non-flame-propagating.
- Resistant to ultraviolet (UV) radiation.
- Compatible with the full range of fiber-optic components.

REGULATIONS

Mechanical and thermal tests in accordance with:

IEC 60793-1-2
IEC 60794-1-2
IEC 60332-1-2
IEC 60754-1-2

Fire test in accordance with:

UNE-EN 50266 (IEC 60332/1-2)
UNE-EN 50267 (IEC 60754-1-2)
CPR Euroclass
Fire reaction: Dca s2, d2, a1

DIMENSIONS

Number of fibers:	48
Fibers per module:	2
Outer diameter $\pm$ 0.5:	10.5 mm
Weight/km	85 kg

APPLICATION / CONSTRUCTION

Fiber type:	Fiber Riser - 2/4 G-657A2
Fibers:	24 sub-channels * 2 fibers. Total: 48 fibers
Application:	Connecting Devices Indoors
Settings:	Bare fiber LSZH-Rated Coating Aramid yarns
Outer cover:	LSZH, yellow
Reaction to fire:	Dca s2, d2, a1
Temperature range:	Storage and transportation: -20 to +60 °C
	Installation: -10 to +50 °C
	How it works: -20 to +60 °C

MECHANICAL SPECIFICATIONS

Traction load:	600 N
Compressive strength / 10 cm	500 N
Minimum radius of curvature:	Dynamic: 20 D Static: 10 D
Torsion:	1 m $\pm$ 180°

FIBER MARKING

Fiber colors:	Green, red
Tube colors:	Green, red, blue, white, gray, purple, brown, orange, yellow, pink, aqua, light green, green, red, blue, white, gray, purple, brown, orange, yellow, pink, aqua, light green.

OPTICAL SPECIFICATIONS

Standard:	G-657A2
Attenuation:	@1310 nm: $\leq$ 0.40 dB/km @1550 nm: $\leq$ 0.30 dB/km
Zero-dispersion wavelength:	1300–1324 nm
Zero-dispersion earring:	$\leq$ 0.092 ps/nm ² ·km
Loss due to a macrobend (A2):	(10 turns; Ø 30 mm) @1550 nm: $\leq$ 0.03 dB
	(10 turns; Ø 30 mm) @1625 nm: $\leq$ 0.10 dB
	(1 turn; Ø 20 mm) @1550 nm: $\leq$ 0.10 dB
	(1 turn; Ø 20 mm) @1625 nm: $\leq$ 0.20 dB
	(1 turn; Ø 15 mm) @1550 nm: $\leq$ 0.50 dB
	(1 turn; Ø 15 mm) @1625 nm: $\leq$ 1.00 dB
Modal field diameter:	8.6 $\pm$ 0.4 μ m @ 1310 nm, 9.6 $\pm$ 0.5 μ m @ 1550 nm

GEOMETRIC SPECIFICATIONS

Cladding diameter:	$125 \pm 0.7 \mu\text{m}$
Non-circularity of the lining:	$\leq 1.0 \%$
Core/lining concentricity error:	$\leq 0.5 \mu\text{m}$
Coating diameter (clear):	$245 \pm 5 \mu\text{m}$
Non-circular coating:	$\leq 6\%$
Coating/Lining Concentricity Error:	$\leq 12 \mu\text{m}$
Stress test:	$\geq 0.69 \text{ GPa}$

TEST RUN

Essay	Terms and Conditions	Acceptance Criteria
IEC 60794-1-2 E1 Traction Load	Tensile strength: 600 N Sample length: $\geq 50 \text{ m}$, 10 min	$\Delta\alpha \leq 0.1 \text{ dB}$, no damage
Crush / Compression IEC 60794-1-2 E3	Compression: 500 N/10 cm Duration: 1 min, number of tests: 3	Reversible $\Delta\alpha$, no damage
Impact resistance IEC 60794-1-2 E4	Impact energy: 1 Nm R = 10 mm, test number: 3	Reversible $\Delta\alpha$, no damage
Torsion IEC 60794-1-2 E7	Sample length: 1 m, $\pm 180^\circ$, 5 cycles	$\Delta\alpha \leq 0.1 \text{ dB}$, no damage
Curvature IEC 60794-1-2 E11	R=10D, 4 rounds, 3 cycles	$\Delta\alpha \leq 0.1 \text{ dB}$, no damage
Temperature Cycle IEC 60794-1-2 F1	-20°C to $+60^\circ\text{C}$ $t_1=180 \text{ min}$, 2 cycles	$\Delta \leq 0.2 \text{ dB/km}$

COMMERCIAL INFORMATION

REFERENCE	DESCRIPTION	USE	CPR	COVER	Ø FIBER	NUMBER OF FIBERS	PACKAGING
49826	SM dielectric fiber-optic cable, multi-tube (2 fibers x 24 tubes), 900 μm , G657A2	interior	Dca	LSZH	9/125 μm	48 fibers tight	500 m