CORNIX

PRODUCT FAMILY DATASHEET

CNX-DS-F49-000 · REV 1.0 · 06 OCTOBER 2026

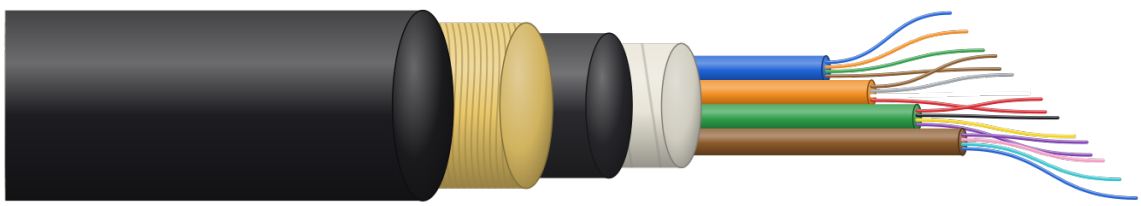
FIBER OPTIC CABLE

OS2 Single-Mode ADSS Aerial Fiber Cable

SINGLE-MODE · G.652.D · ALL-DIELECTRIC SELF-SUPPORTING · 100 m SPAN

FAMILY **F49 • 4 PART NUMBERS**

SHOWN: CX-FB-OS2-12-OD-ADSS



12	0.36 / 0.22 dB/km	11.6 ± 0.5 mm	4000 N
FIBER COUNT	ATTENUATION @ 1310 / 1550 NM	CABLE OUTER DIAMETER	RATED TENSILE LOAD

OVERVIEW

All-dielectric self-supporting (ADSS) single-mode cable developed for aerial installation on existing pole lines without a separate messenger wire. The non-metallic construction is designed for routes near power infrastructure where applicable.

- All-dielectric — no metallic elements
- Self-supporting aerial installation on existing poles
- Double HDPE sheath with aramid yarn strength layer
- Designed for 100 m spans
- ITU-T G.652.D single-mode fiber

APPLICATIONS

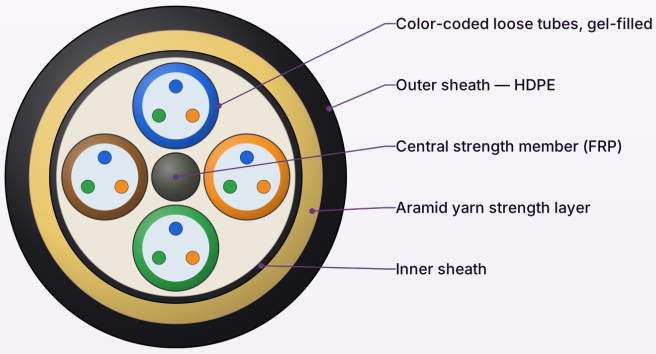
- Aerial routes on existing pole lines
- Utility and access-network deployments
- Short-span (100 m) self-supporting installation

STANDARDS & COMPLIANCE

ITU-T G.652.D · IEC 60794 · IEEE P1222 · RoHS compliant

Common Specifications

Values shared by all 4 part numbers in this family · variant-specific values on the following page



CROSS-SECTION (ILLUSTRATIVE, NOT TO SCALE) — SHOWN FOR CX-FB-OS2-12-OD-ADSS

GENERAL

Design span	**100 m**

CONSTRUCTION

Construction	**Multi-loose-tube (PBT), FRP central member, longitudinal aramid yarn**
Sheath	**Inner HDPE + outer HDPE, black**

OPTICAL CHARACTERISTICS

Fiber type	**Single-mode 9/125 µm, ITU-T G. 652.D (OS2)**
Max. attenuation @ 1310 / 1550 nm	**0.36 / 0.22 dB/km**

MECHANICAL

Min. bend radius — static / dynamic	**10 × OD / 20 × OD**
Crush resistance	**2500 N/100 mm**

ENVIRONMENTAL

Operating / installation / storage temperature	**-40 °C to +70 °C**

Ordering Information

4 part numbers · individual datasheets available for every part number

Part number	Description	Fiber count	Design span	Sheath	Installation
CX-FB-OS2-12-OD-ADSS	OS2 Single-Mode ADSS Aerial Fiber Cable, 12F, span 100 m	12	100 m	Double HDPE, black	Aerial, self-supporting
CX-FB-OS2-24-OD-ADSS	OS2 Single-Mode ADSS Aerial Fiber Cable, 24F, span 100 m	24	100 m	Double HDPE, black	Aerial, self-supporting
CX-FB-OS2-48-OD-ADSS	OS2 Single-Mode ADSS Aerial Fiber Cable, 48F, span 100 m	48	100 m	Double HDPE, black	Aerial, self-supporting
CX-FB-OS2-96-OD-ADSS	OS2 Single-Mode ADSS Aerial Fiber Cable, 96F, span 100 m	96	100 m	Double HDPE, black	Aerial, self-supporting

Variant-Specific Specifications

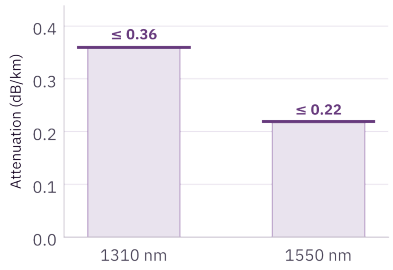
Values that differ between part numbers

Part number	Cable outer diameter	Cable weight (approx.)	Rated tensile load
CX-FB-OS2-12-OD-ADSS	11.6 ± 0.5 mm	112 kg/km	4000 N
CX-FB-OS2-24-OD-ADSS	11.6 ± 0.5 mm	112 kg/km	4000 N
CX-FB-OS2-48-OD-ADSS	12.4 ± 0.5 mm	130 kg/km	4000 N
CX-FB-OS2-96-OD-ADSS	14.8 ± 0.5 mm	184 kg/km	—

Performance

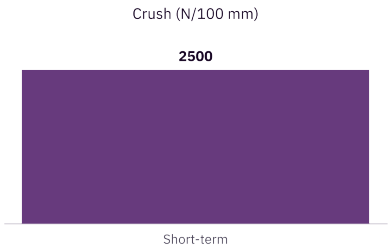
Shown for CX-FB-OS2-12-OD-ADSS

ATTENUATION PERFORMANCE



Maximum cabled attenuation per operating window.

MECHANICAL PERFORMANCE



TEMPERATURE RANGE



FACTORY TEST REPORT — SUPPLIED WITH EVERY DRUM

OTDR TESTED 100%

Test item	Requirement	Method
attenuation @ 1310 / 1550 nm	0.36 / 0.22 dB/km	OTDR, per fiber
Cable length	As ordered, verified	OTDR
Sheath, marking, appearance	No defects	Visual

Every drum is tested fiber-by-fiber before shipment and supplied with its OTDR test report and drum label (type, length, drum no., batch).

Request a quote or technical support

Datasheets, test reports and samples available on request

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