CORNIX

PRODUCT DATASHEET

CNX-DS-F06-009 · REV 1.0 · 06 OCTOBER 2026

FIBER OPTIC CABLE · OS2 SINGLE-MODE OUTDOOR FIBER CABLE

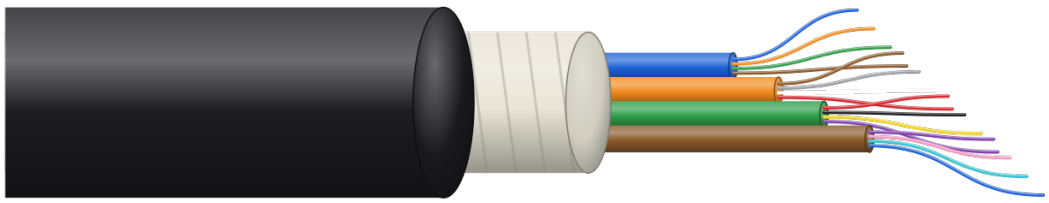
OS2 Single-Mode Outdoor Duct Fiber Cable (GYFTY), 12F, PE

SINGLE-MODE · G.652.D · LOOSE TUBE · DUCT & ARMORED

PART NO. **CX-FB-OS2-12-OD-PE**

Also marked on products / QR labels as: CX-FC-SM-OSP-12-PE

PRODUCT ILLUSTRATION



12	0.36 / 0.22 dB/km	11.0 ± 0.5 mm	1500 N / 600 N
FIBER COUNT	ATTENUATION @ 1310 / 1550 NM	CABLE OUTER DIAMETER	TENSILE LOAD SHORT / LONG TERM

OVERVIEW

Loose-tube single-mode cable developed for outside-plant routes between buildings, campus backbones and access networks. Non-armored PE versions are designed for duct installation; steel-tape armored versions add mechanical and rodent protection for direct-buried and demanding routes where applicable.

- ITU-T G.652.D single-mode fiber in gel-filled loose tubes
- Corrugated steel tape armor for crush and rodent protection (ARM)
- HDPE / PE outer sheath for outdoor duct and direct-buried routes
- Factory meter marking every 1 m
- OTDR test report supplied with every drum

APPLICATIONS

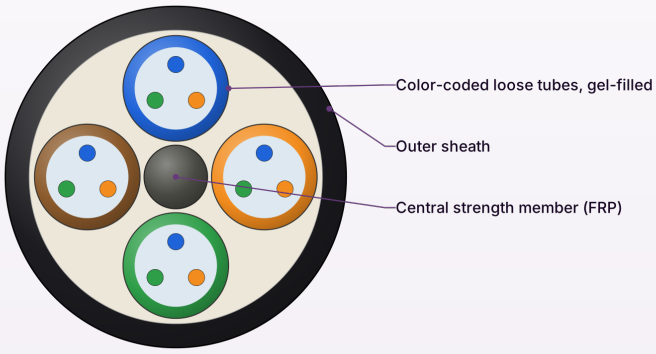
- Campus and inter-building backbones
- Duct and conduit installation
- Armored versions for direct-buried and rodent-exposed routes

STANDARDS & COMPLIANCE

ITU-T G.652.D · IEC 60793 · IEC 60794 · RoHS compliant

Technical Specifications

OS2 Single-Mode Outdoor Duct Fiber Cable (GYFTY), 12F, PE · CX-FB-OS2-12-OD-PE



CROSS-SECTION (ILLUSTRATIVE, NOT TO SCALE)

GENERAL

Fiber count	**12**

CONSTRUCTION

Cable type	**GYFTY — stranded loose tube, non-metallic**
Outer sheath material	**PE**
Construction	**Stranded multi-loose-tube, non-metallic (FRP central member)**
Tube filling	**Thixotropic water-blocking gel**
Jacket color	**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

Tensile load — short / long term	**1500 N / 600 N**
Crush resistance — short / long term	**1000 N / 300 N per 100 mm**
Min. bend radius — static / dynamic	**10 × OD / 20 × OD**

PHYSICAL

Cable outer diameter	**11.0 ± 0.5 mm**
Cable weight (approx.)	**105 kg/km**

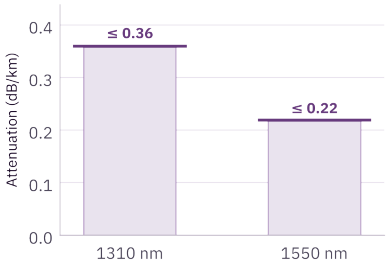
ENVIRONMENTAL

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

Performance, Quality & Ordering

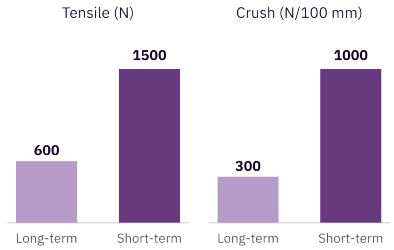
CX-FB-OS2-12-OD-PE

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).

ORDERING INFORMATION

CX	FB	OS2	12	OD	PE
CORNIX	Fiber cable	Single-mode G.652.D	12 fibers	Outdoor	PE sheath

Part number	Description
CX-FB-OS2-96-OD-ARM	OS2 Single-Mode Outdoor Armored Fiber Cable, 96F (stranded loose tube, GYTS type)
CX-FB-OS2-04-OD-PE	OS2 Single-Mode Outdoor Duct Fiber Cable (GYFTY), 4F, PE
CX-FB-OS2-06-OD-PE	OS2 Single-Mode Outdoor Duct Fiber Cable (GYFTY), 6F, PE
CX-FB-OS2-12-OD-PE	**OS2 Single-Mode Outdoor Duct Fiber Cable (GYFTY), 12F, PE**
CX-FB-OS2-24-OD-PE	OS2 Single-Mode Outdoor Duct Fiber Cable (GYFTY), 24F, PE
CX-FB-OS2-48-OD-PE	OS2 Single-Mode Outdoor Duct Fiber Cable (GYFTY), 48F, PE
CX-FB-OS2-96-OD-PE	OS2 Single-Mode Outdoor Duct Fiber Cable (GYFTY), 96F, PE

13 part numbers in this family — full list in the family datasheet.

Request a quote or technical support

Datasheets, test reports and samples available on request

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