

ALTOS® Loose Tube Steel Armour Outdoor Cable LT 2.3 12x12 E9 SMF-28e+® ITU G652.D, HDPE

CORNING

Part Number: 144ERC-T3122P20

Corning stranded loose tube cables with smooth steel tape armoring is designed for outdoor use for campus, city and intercity backbones in duct and direct burial installations. The loose tube cable construction, by isolating the fibers from installations and environmental rigors, provides stable and highly reliable transmission parameters. The buffer tubes and fibers in each tube are color coded for quick and easy identification. The SZ-stranded construction further reduces installation and environmental influences on the transmission parameters and allows mid-span access. These cables are designed for installation in conduits, ducts, and for direct burial.

Features and Benefits

Waterblocking technology

OSP (outdoor) applications

Corrugated steel armouring

Rodent, mechanical protection and direct buried applications

UV- and microbe-resistant

Can be installed in ducts or conduits

Dry cable core by means of water swellable elements

Allows efficient and craft-friendly cable preparation in outdoor applications

Fibres/buffer tubes colour coded to Telcordia-Bellcore

Easy identification of the individual tubes and fibres

SZ-stranded, loose tube design

Isolates fibres from installation and environmental rigors and facilitates mid-span access

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Specifications

General Specifications

Cable type	Loose tube
Environment	Outdoor
Product type	Corrugated steel armour
Fibre category	Single-mode (OS2)
Coding according to EN 60794-1-1 (DIN VDE 0888-100-1)	A-DQ(ZN)(SR)2Y
Application	Direct Buried, Duct
Cable geometry	Round

Standards

Fibre Standards	TIA/EIA-492CAAB, IEC 60793-2-50 Type B1.3, ITU-T G.652.D, ISO/IEC 11801 Ed.2.2
RoHS	Free of hazardous substances according to RoHS 2011/65/EU
Waterblocking	IEC 60794-1-2 F5

Environmental Conditions

Temperature range, installation	-5 °C to 50 °C
Temperature range, operation	-30 °C to 70 °C
Temperature range, storage	-40 °C to 70 °C

Cable Design

Cable marking	Metre - Handset - Sine - CORNING - Year -ALTOS (R) A-DQ(ZN)(SR)2Y 12X12 E9 LT 2.3
Central element	Dielectric with Polyethylene coating
Fibre count	144
Number of ripcords	2
Outer jacket colour	Black
Outer jacket material	High Density Polyethylene (HDPE)

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Cable Design

Outer jacket nominal thickness	1.5 mm
Tensile strength elements and/or armouring - Layer 1	Corrugated steel tape armour
Buffer tube colour	Blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise
Buffer tube diameter	2.25 mm
Central element diameter	6.9 mm
Number of active tubes	12
Number of tube positions	12
Tape	Water-swellable
Fibre colouring	Blue, orange, green, brown, grey, white, red, black, yellow, violet, pink, turquoise
Fibres per tube	12
Colour Code Standards	Telcordia

Mechanical Specifications

Crush resistance	3000 N/10 cm
Max. tensile strength for installation	2700 N
Min. bend radius installation	320 mm
Min. bend radius operation	240 mm
Nominal outer diameter	16 mm

Optical Characteristics

Fibre code	E
Performance option code	22
Fibre category	OS2
Fibre Type	Single-mode (OS2) / 250 µm
Fibre name	Single-mode (OS2)
Maximum Attenuation	0.36 dB/km / 0.36 dB/km / 0.22 dB/km
Wavelengths	1310 nm / 1383 nm / 1550 nm

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Optical Characteristics

Fibre compliance	ITU-T G.652.D
Fibre core diameter	8.2 µm
Cladding diameter	125 µm
Coating diameter	242 µm
Dispersion @ 1550 nm	≤ 18 [ps/(nm*km)]
Dispersion @ 1625 nm	≤ 22 [ps/(nm*km)]
Cable cutoff wavelength	1260 nm
Mode-Field Diameter at 1310 nm	9.2 µm
Mode-Field Diameter at 1550 nm	10.4 µm
PMD Link Design Value	≤ 0.06 ps/(nm*km)
PMD (Polarization Mode Dispersion) maximum individual fibre	≤ 0.1 ps/(nm*km)

Dimensions

Cable Weight	232 kg/km
Max. cable length per reel/drum	6000 m



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