

Technical Data Sheet

GelKore Loose Tube Optical Cables

NESC Heavy Conditions

Max. Span 152 m (500 ft.)

Standard buffer tube with 2-288f

Steel Messenger Self Supporting Fig-8 Sheath
Single Jacket / Dielectric Core

Application

Self supporting outdoor fiber optic cable in a figure 8 configuration for aerial installation on telecom poles. Designed for maximum typical span lengths of 152 m (500 ft.) under NESC heavy loading conditions.

Benefits

- Fiber Count up to 288f
- Suitable for all types of light aerial applications except power lines
- Low installation costs
- Excellent handling characteristics
- Utilizes traditional aerial cable hardware
- Suitable for short and medium spans

Fiber types

- G.651 multi-mode fiber
- G.652 single-mode fiber
- G.655 NZDS fiber for DWDM applications

Full range of protections

- Water blocked

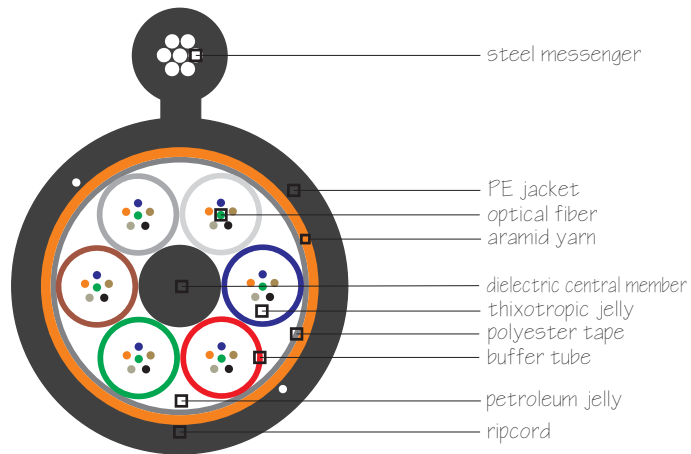
Full range of applications

- Outdoor
- Aerial

Optional protections

- HDPE jacket
- Single jacket / single armor
- Dual jacket / single armor

Cable cut-away



Typical parameters

Number of fibers	Up to 288	
Diameter	minor axes	11.6 mm (0.46 in)
	major axes	11.5 mm (0.45 in) to 21.5 mm(0.85)
Cable weight	316 kg/km (212 lbs/kft) to 522 kg/km (351 lbs/kft)	
Max. bend radius	20 x cable O.D.	
Max. working tension	13360 N (3000 lbf)	
Operating temperature range	-40 °C / 70 °C (-40 °F / 158 °F)	



Qualifications & approvals

REA PE-90
Bellcore Standards
ITU Standards
TIA/EIA Standards

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1st ISSUE

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Cable Properties	Diameter	Weight
002 - 060f	Jacket core diameter 11.5 mm (0.45 in) Jacket messenger diameter 11.6 mm (0.46 in)	316 kg/km (212 lbs/kft)
061 - 072f	Jacket core diameter 12.2 mm (0.48 in) Jacket messenger diameter 11.6 mm (0.46 in)	330 kg/km (222 lbs/kft)
073 - 096f	Jacket core diameter 14.1 mm (0.56 in) Jacket messenger diameter 11.6 mm (0.46 in)	364 kg/km (245 lbs/kft)
097 - 120f	Jacket core diameter 16.1 mm (0.63 in) Jacket messenger diameter 11.6 mm (0.46 in)	405 kg/km (272 lbs/kft)
121 - 192f	Jacket core diameter 17.6 mm (0.69 in) Jacket messenger diameter 11.6 mm (0.46 in)	420 kg/km (282 lbs/kft)
193 - 216f	Jacket core diameter 18.4 mm (0.72 in) Jacket messenger diameter 11.6 mm (0.46 in)	441 kg/km (296 lbs/kft)
217 - 240f	Jacket core diameter 19.5 mm (0.77 in) Jacket messenger diameter 11.6 mm (0.46 in)	467 kg/km (314 lbs/kft)
241 - 288f	Jacket core diameter 21.5 mm (0.85 in) Jacket messenger diameter 11.6 mm (0.46 in)	522 kg/km (351 lbs/kft)

Mechanical Performance	Test Procedure	Specification
Low & high temperature cable	EIA/TIA-455-37A FOTP-37	20 x cable O.D. @ -30 °C and 60 °C
Impact resistance	EIA/TIA-455-25A FOTP-25	25 impact cycles
Compressive strength	EIA/TIA-455-41A FOTP-41	220 N/cm (124 lbs/in.)
Cable twist	EIA/TIA-455-85 FOTP-85	2 meter length ± 180°
Cable cyclic flexing	EIA/TIA-455-104 FOTP-104	20 x cable O.D. 25 cycles
Max. bend radius	EIA/TIA-455-37A FOTP-37	20 x cable O.D. 10 x cable O.D.
Max. tensile load	EIA/TIA-455-33 FOTP-33	13360 N (3000 lbf)

Environmental Performance	Test Procedure	Specification
Temperature	EIA/TIA-455-3A FOTP-3	Operation -40 to +70 °C (-40 to +158 °F) Installation -20 to +70 °C (-04 to +158 °F) Storage/Shipping -40 to +75 °C (-40 to +168 °F)
Cable aging	EIA/TIA-455-37 FOTP-37	168 hours @ 85 °C
Cable Freezing	EIA/TIA-455-98 FOTP-98	Frozen in ice
Water penetration	EIA/TIA-455-82B FOTP-82	1 meter for 24 hours
Compound drip temperature	EIA/TIA-455-81B FOTP-81	75 °C
Color coding permanence	Telcordia GR-20	Colors stable after aging



Specifications are subject to change without notice. The data given is subject to normal manufacturing tolerances.
4SProducts Loose Tube Optical Cables are tested in accordance with the requirements of Bellcore GR-20.
Performance specifications are measured per EIA Fiber Optic Test Procedures.

