

Technical Data Sheet

GelKore Loose Tube Optical Cables

Standard buffer tube with 2-288f

Single Jacket / Single Armor

Application

Outdoor fiber optic cable designed for direct burial, duct and/or lashed aerial installations.

Benefits

- Fiber Count up to 288f
- Suitable for aerial, duct and direct buried applications
- MDPE jacket for low friction installation
- Corrugated steel armor for added mechanical protection
- Lightweight with reduced diameter
- Excellent handling characteristics
- Low installation costs

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
- Rodent resistant

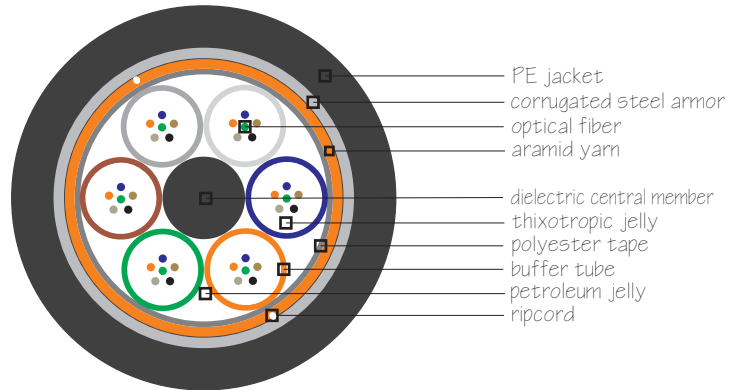
Full range of applications

- Aerial
- Duct
- Direct buried

Optional protections

- HDPE jacket
- All dielectric
- Dual jacket / single armor
- Dual jacket / dual armor
- Triple jacket / dual armor

Cable cut-away



Typical parameters

Number of fibers	Up to 288
Diameter	14.0 mm (0.55 in) to 22.9 mm (0.90 in)
Cable weight	180 kg/km (121 lbs/kft) to 413 kg/km (278 lbs/kft)
Max. bend radius	20 x cable O.D.
Max. working tension	2700 N (600 lbf)
Operating temperature range	-40 °C / 70 °C (-40 °F / 158 °F)

Above figures are nominal values; actual production dimensions and weights may deviate slightly from the indicated figures above



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 - 036f	14.0 mm (0.55 in)	180 kg/km (121 lbs/kft)
037 - 060f	14.0 mm (0.55 in)	180 kg/km (121 lbs/kft)
061 - 072f	14.2 mm (0.56 in)	184 kg/km (124 lbs/kft)
073 - 096f	16.0 mm (0.63 in)	226 kg/km (152 lbs/kft)
097 - 120f	17.9 mm (0.71 in)	275 kg/km (185 lbs/kft)
121 - 192f	19.0 mm (0.75 in)	288 kg/km (194 lbs/kft)
193 - 216f	19.8 mm (0.78 in)	315 kg/km (212 lbs/kft)
217 - 240f	20.8 mm (0.82 in)	345 kg/km (232 lbs/kft)
241 - 288f	22.9 mm (0.90 in)	413 kg/km (278 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	440 N/cm (248 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	Installation Service 20 x cable O.D. 10 x cable O.D.
Max. tensile load	EIA/TIA-455-33 FOTP-33	Installation Service 2700 N (600 lbf) 890 N (200 lbf)
Gopher resistance		index rating <3

Environmental Performance	Test Procedure	Specification
Temperature	EIA/TIA-455-3A FOTP-3	Operation -40 to +70 °C (-40 to +158 °F) Installation -30 to +60 °C (-22 to +140 °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.

