

## 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 / Single Armor**

### 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
- Rodent resistant

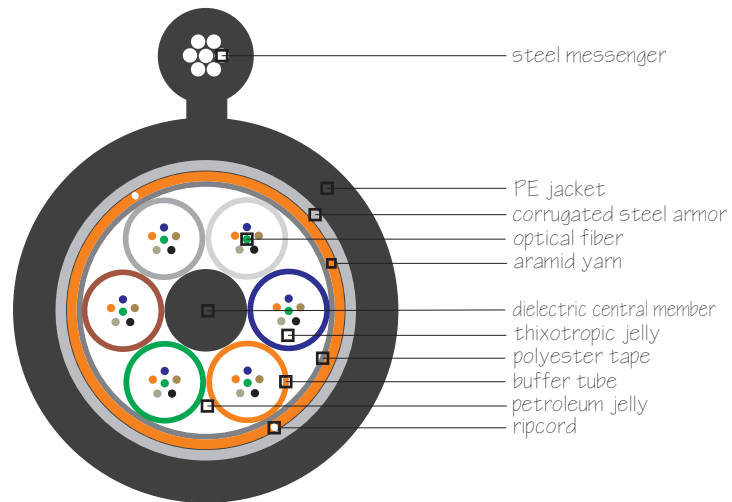
### Full range of applications

- Outdoor
- Aerial

### Optional protections

- HDPE jacket
- All dielectric
- 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	13.4 mm (0.53 in) to 23.5 mm(0.93)
Cable weight	370 kg/km (249 lbs/kft) to 620 kg/km (417 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)	

Specifications are subject to change without prior notice. 4SProducts cables are designed and tested per IEC specifications.



### Qualifications & approvals

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

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1st ISSUE

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**Single Jacket / Single Armor**

Cable Properties	Diameter	Weight
002 - 060f	Jacket core diameter 13.4 mm (0.53 in) Jacket messenger diameter 11.6 mm (0.46 in)	370 kg/km (249 lbs/kft)
061 - 072f	Jacket core diameter 14.2 mm (0.56 in) Jacket messenger diameter 11.6 mm (0.46 in)	390 kg/km (262 lbs/kft)
073 - 096f	Jacket core diameter 16.1 mm (0.63 in) Jacket messenger diameter 11.6 mm (0.46 in)	431 kg/km (290 lbs/kft)
097 - 120f	Jacket core diameter 18.1 mm (0.71 in) Jacket messenger diameter 11.6 mm (0.46 in)	480 kg/km (323 lbs/kft)
121 - 192f	Jacket core diameter 19.6 mm (0.77 in) Jacket messenger diameter 11.6 mm (0.46 in)	499 kg/km (335 lbs/kft)
193 - 216f	Jacket core diameter 20.4 mm (0.80 in) Jacket messenger diameter 11.6 mm (0.46 in)	523 kg/km (351 lbs/kft)
217 - 240f	Jacket core diameter 21.5 mm (0.85 in) Jacket messenger diameter 11.6 mm (0.46 in)	556 kg/km (374 lbs/kft)
241 - 288f	Jacket core diameter 23.5 mm (0.93 in) Jacket messenger diameter 11.6 mm (0.46 in)	620 kg/km (417 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.

