

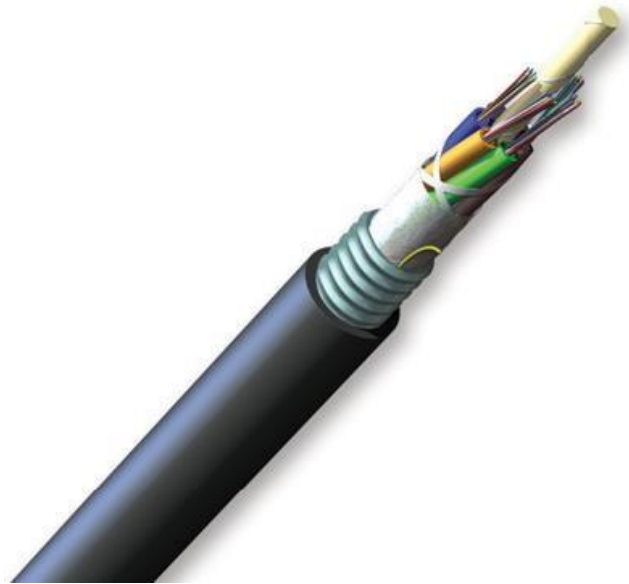


# Loose Tube, Gel-Filled, Single Jacket, Single-Armored Cable

48 F, Single-mode OS2

Spectrum Cable & Systems Gel-Filled, Single-Jacket, Single-Armored Cables are designed for campus backbones in direct-buried installations. The loose tube design provides stable and highly reliable transmission parameters for a variety of voice, data, video and imaging applications. These cables also provide high-fiber density within a given cable diameter while allowing flexibility to suit many system configurations.

The single armored construction provides additional crush and rodent protection with a high-strength ripcord under the armor for easy stripping. Gel-filled means the cables are fully water blocked using craft-friendly, water-swellable materials which make cable access simple and require no clean up. The flexible, craft-friendly buffer tubes are easy to route in closures, and the SZ-stranded, loose tube design isolates fibers from installation and environmental rigors while allowing easy midspan access. These cables have a medium density polyethylene jacket that is rugged, durable and easy to strip.



## Features and Benefits

### Gel-filled water blocking technology

Craft-friendly cable preparation

### Medium-density polyethylene jacket

Rugged, durable and easy to strip while providing superior protection against UV radiation, fungus, abrasion and other environmental factors

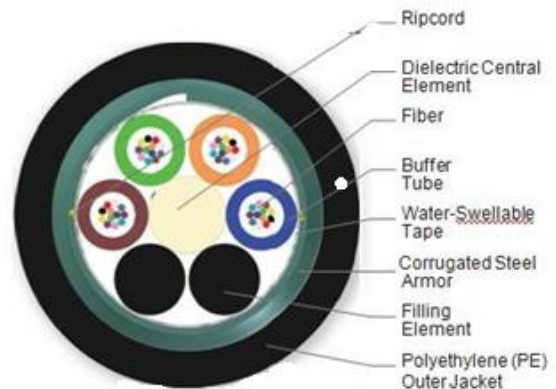
### Corrugated steel tape armor

Provides rodent resistance for direct-buried applications

## Standards

### Common Installations

Outdoor lashed aerial, duct and direct-buried; indoor when installed according





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## Specifications

General Specifications	
Environment	Outdoor
Application	Aerial, Direct Buried, Duct
Cable Type	Loose Tube
Product Type	Armored
Fiber Category	Single-mode (OS2)

Temperature Range	
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Installation	-30 °C to 70 °C (-22 °F to 158 °F)
Operation	-40 °C to 70 °C (-40 °F to 158 °F)

Cable Design	
Central Element	Dielectric
Fiber Count	48
Fiber Coloring	Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Violet, Rose, Aqua
Maximum Fibers per Tube	12
Number of Tube Positions	6
Number of Active Tubes	4
Buffer Tube Color Coding	Blue , Orange
Buffer Tube Diameter	2.5 mm (0.1 in)
Number of Filling Elements	2
Tape	Water-swellable
Number of Ripcords	2
Tensile Strength Elements and/or Armoring - Layer 1	Corrugated steel tape armor
Outer Jacket Material	Polyethylene (PE)
Outer Jacket Color	Black

Mechanical Characteristics Cable	
Max. Tensile Strengths, Short-Term	2700 N (600 lbf)
Max. Tensile Strengths, Long-Term	890 N (200 lbf)
Weight	129 kg/km
Nominal Outer Diameter	12.1 mm (0.48 in)



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## Chemical Characteristics

RoHS	Free of hazardous substances according to RoHS 2002/95/EG
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## Fiber Specifications

### Optical Characteristics (cabled)

Fiber Type	Single-mode
Fiber Core Diameter	8.2 $\mu$ m
Fiber Category	OS2 ( ITU G652D / G657-A1 / G657-A2 )
Fiber Code	E
Performance Option Code	00
Wavelengths	1310 nm / 1383 nm / 1550 nm
Maximum Attenuation	0.35 dB/km / 0.35 dB/km / 0.25 dB/km
Serial 1 Gigabit Ethernet	5000 m / - / -
Serial 10 Gigabit Ethernet	10000 m / - / 40000 m

## Ordering Information

Part Number	8401743-048
Product Description	Spectrum Cables & Systems UK Loose Tube, Gel-Filled, Single-Jacket, Single-Armored Cable, 48 F, Single-mode (OS2)

## Notes



**Spectrum Cables & Systems**

[www.spectrum-sys.uk](http://www.spectrum-sys.uk)

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