

technical information

Panduit™ Opti-Core™ Gel-Filled All-Dielectric Stranded Tube Outside Plant (OSP) Cable offers gel-filled water-blocking technology, UV resistance, and high-density to provide standards compliance and flexibility for outdoor use. Opti-Core™ All-Dielectric OSP Cable, features a non-metallic construction that eliminates the need to ground or bond. This cable is available with singlemode fibre (meets OS2 ITU-T G.652.D and G.657.A1) and fibre counts from 48 to 144 fibres as a “stranded loose tube” design. All Opti-Core™ Fibre Optic Cable is RoHS compliant.



application

This cable can be used in outdoor data communication connections such as LAN and WAN backbones. With its MDPE sheathing this cable is ideal for outdoor use and is typically installed in ducts.

standards

IEC 60794-3 IEC 60794-3-10 IEC 60974-3-12	ISO 11801 EN 50173-1 EN 187 000
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construction

Central strength member	2.5mm FRP rod
Loose tube	2.3mm gel-filled loose tube with 12 fibres each
Water-blocking	The core is water blocked using swellable tape and yarn
Wrapping	Swellable tape
Outer sheath	1.5mm black MDPE, IEC 60811, IEC 60708

fibre colour code

Fibre colour code	1 Red	4 Yellow	7 Brown	10 Black
	2 Green	5 White	8 Violet	11 Orange
	3 Blue	6 Gray	9 Turquoise	12 Pink

# Opti-Core™ Gel-Filled All Dielectric Stranded Tube Outside Plant Cable - EMEA

## mechanical properties

Tensile strength (installation)	1800 N
Tensile strength (short-term)	1200 N
Compressive strength (crush)	3000 N
Impact	20 Nm
Torsion	5 cycles $\pm$ 1 turn
Kink	The cables do not form a kink when a loop is drawn together to a diameter 12 times the cable nominal diameter
Temperature range	Storage, Installation and Operation: -40°C to +70°C The cables will operate without any attenuation interval -30°C to +60°C The cables will operate with a maximum attenuation variation of 0.1dB/km in the temperature interval -40°C to +70°C
Water penetration	No water on free end

## physical properties

Fibre Count	Cable Diameter (mm)	Long-Term Bend Radius (mm)	Installation Bend Radius (mm)	Cable Weight (kg/km)
48	10.5	210	105	90
72	10.5	210	105	90
96	12.0	240	120	115
144	15.0	300	150	180

# Opti-Core™ Gel-Filled All Dielectric Stranded Tube Outside Plant Cable - EMEA

## ordering information

Example: FPTN948 Fibre, Gel-Filled All Dielectric Stranded Tube Outside Plant Cable, OS2, 48-Fibre

Character	1	2	3	4	5	6	7
Example	F	P	T	N	9	4	8

<b>1 and 2 – Fibre Product, Region</b> FP = Fibre Cable, EMEA, OS2	<b>4 – Flame Rating</b> N = Non rated	<b>6 and 7 – Fibre Count</b> 48 = 48-Fibre 72 = 72-Fibre 96 = 96-Fibre 144 = 144-Fibre
<b>3 – Cable Construction</b> T = Outside plant, gel-filled, all dielectric, unarmored stranded tube	<b>5 – Fibre Type</b> 9 = OS2 9/125µm (ITU G.657.A1)	

### WORLDWIDE SUBSIDIARIES AND SALES OFFICES

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For a copy of Panduit product warranties, log on to [www.panduit.com/warranty](http://www.panduit.com/warranty)



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