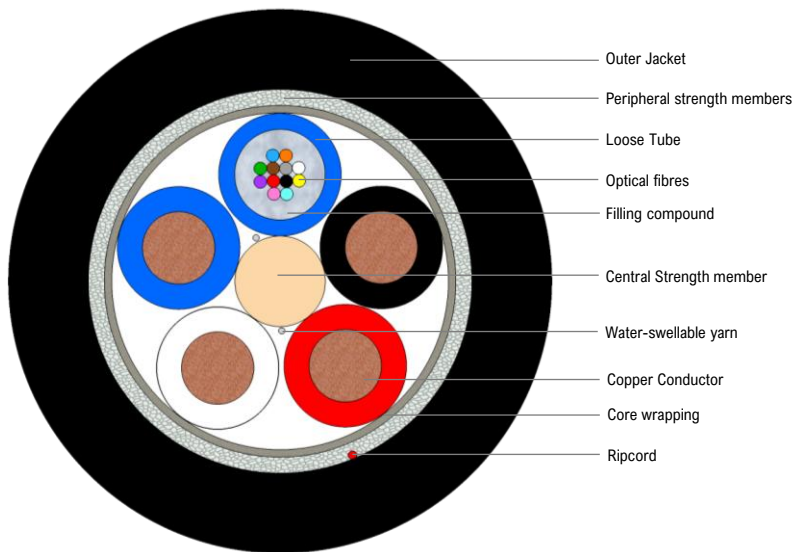


# Outdoor Hybrid Copper-Fiber Multitube Cable 12F+4x1.5 (HC)

Hybrid copper/fiber cable allows to power devices (cameras, sensors, etc.) and at the same time data transmission via optical fibers in one cable.



Fiber count	12
Fiber Type	G.652.D, G.657.A1, G.657.A2, G.655, G.656, OM1, OM2, OM2+, OM3, OM4, OM5
Fiber color	Blue, Orange, Green, Brown, Grey, White, Red, Black, Yellow, Violet, Pink, Aqua
Tube	Gel-Filled PBT buffer tube
Tube color	Blue
Tube filling compound	Low-viscosity filling gel
Copper conductor	Bare copper wire 1,5 mm <sup>2</sup> , HDPE insulation
Copper conductor color	Black, Red, White, Blue
Central strength member	FRP rod
Core wrapping	Water-swellable tape
Peripheral strength members	Water-swellable glass yarns
Ripcord	1x under outer jacket
Outer jacket	UV resistant black HDPE
Jacket thickness	1.5 mm

Cable outer diameter	10.2	[mm]
Tube count	1	
Copper conductor count	4	
Testing voltage	2	[kV]
Resistance (20°C)	12.1	[Ohm/km at 20°C]
Max. Tensile Loading (Short Term)	2700	[N] EN 60794-1-21-E1
Max. Tensile Loading (Long Term)	1000	[N] EN 60794-1-21-E1
Max. compressive loading	2000	[N/10cm] EN 60794-1-21-E3
Max. Impact loading	10	[Nm] EN 60794-1-21-E4
Min. bend radius (Long Term)	15	[OD] EN 60794-1-21-E11
Min. bend radius (Short Term)	20	[OD] EN 60794-1-21-E11
Operating temperature range	-40 to +70	[°C] EN 60794-1-22-F1
Storage temperature range	-40 to +70	[°C] EN 60794-1-22-F1
Installation temperature range	-15 to +50	[°C] EN 60794-1-22-F1
Water tightness	No water detected on free end	EN 60794-1-22-F5
Cable Weight (calc.)	141	[kg/km]
Class of fire reaction	F <sub>ca</sub>	EN 13501-6

Cable Code (Ordering Code)	OPK-O-HCLTS-12(5x2.3)LTGEP+4x1.5mm <sup>2</sup> -xx-BK	xx – fiber type (see Cable code datasheet)
Print legend	Manufacturer - year of manufacture - cable type - fiber count / type - batch number - length marking [m]	
Delivery length	2100 m ±5% on plywood reel or solid wooden non-returnable drum	