

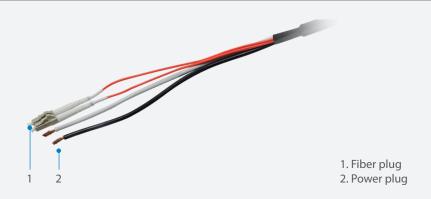
# Hybrid Fiber Cable, 12/18 AWG



## H/W Version: 1

LevelOne Composite Copper/Fiber cables incorporate high bandwidth optical fibers with insulated stranded copper TFFN or THWN conductors. A wide variety of design options are available including; conductors ranging from 12 AWG to 18 AWG. A key application of these cables is to extend the distance that powered devices can be installed from the power source

in Power over Ethernet (PoE) installations. Proper conductor size selection can increase this distance to several thousand feet. The powered device could be an IP camera, a wireless access point, or other building automation device located in an area where an electrical outlet is not readily available.



## **Related Prodoucts**



**PFE-1001T**PoE Extender over Hybrid Fiber, Transmitter, 65W



**PFE-1101T**PoE Extender over Hybrid Fiber, Transmitter, 120

## **Fiber/Power Distance / PoE Output Table**



Mdoel No	Hybrid Cable	Conductor Gauge	450M	700M	1KM	2KM
PFE-1001T	PFC-0112	12 AWG	50W	45W	40W	20W
PFE-1001T	PFC-0118	18 AWG	40W	20W	10W	-
PFE-1101T	PFC-0112	12 AWG	60W	55W	50W	28W
PFE-1101T	PFC-0118	18 AWG	50W	28W	18W	-

### **Technical Specifications**

#### PFC-0012

#### **CONSTRUCTION CHARACTERISTICS**

Fiber optic type: OM1 62.5/125 Type of cable: Tight buffer Outer sheath: Fire-retardant PVC

Sheath colour: Black

Conductor material: Bare copper

Number of conductors: 2

Connector type: LC Duplex & M8

#### **DIMENSIONAL CHARACTERISTICS**

Tube diameter: 2mm
Number of optical fibres: 2
Nominal outer diameter: 0.37in
Nominal outer diameter: 9.4mm
Approximate weight: 93lb/kft
Approximate weight: 138kg/km
Conductor cross-section (AWG): 12

#### **ELECTRICAL CHARACTERISTICS**

Max. DC resistance of the conductor at 20°C: 1.65Ohm/kft Max. DC resistance of the conductor at 20°C: 5.41Ohm/km

#### TRANSMISSION CHARACTERISTICS

Optical performance: CB (62.5/125 Standard, OM1) Attenuation, max. 850 nm (cabled): 3.5dB/km Attenuation, max. 1300 nm (cabled): 1.0dB/km

#### **MECHANICAL CHARACTERISTICS**

Maximum installation tension: 300lb Maximum installation tension: 1335.0N Max. Load. Long Term (lbs): 90.0lb Max. Load. Long Term: 400.0N

Impacts per TIA/EIA FOTP-25: 2 at 5.88 N-m Crush resistance per TIA/EIA FOTP-41: 220N/cm Cable flexibility per TIA/EIA FOTP-104: 500 cycles

#### **USAGE CHARACTERISTICS**

Minimum Bending Radius - Install: 5.6in Operating temperature, range: -40 .. 85°C

Ambient installation temperature, range: -10 .. 70°C

Storage temperature, range: -40 .. 85°C Field of application: Indoor, Outdoor

#### PFC-0018

## **CONSTRUCTION CHARACTERISTICS**

Fiber optic type: OM1 62.5/125 Type of cable: Tight buffer Outer sheath: Fire-retardant PVC

Sheath colour: Black

Conductor material: Bare copper Number of conductors: 2

Connector type: LC Duplex & M8

DIMENSIONAL CHARACTERISTICS

Tube diameter: 2mm
Number of optical fibres: 2
Nominal outer diameter: 0.32in
Nominal outer diameter: 8.1mm
Approximate weight: 49lb/kft
Approximate weight: 72kg/km
Conductor cross-section (AWG): 18

#### **ELECTRICAL CHARACTERISTICS**

Max. DC resistance of the conductor at 20°C: 6.66Ohm/kft Max. DC resistance of the conductor at 20°C: 21.9Ohm/km

#### TRANSMISSION CHARACTERISTICS

Optical performance: CB (62.5/125 Standard, OM1) Attenuation, max. 850 nm (cabled): 3.5dB/km Attenuation, max. 1300 nm (cabled): 1.0dB/km

#### **MECHANICAL CHARACTERISTICS**

Maximum installation tension: 150lb Maximum installation tension: 668.0N Max. Load. Long Term (lbs): 45.0lb Max. Load. Long Term: 200.0N

Impacts per TIA/EIA FOTP-25: 2 at 5.88 N-m Crush resistance per TIA/EIA FOTP-41: 220N/cm Cable flexibility per TIA/EIA FOTP-104: 500 cycles

# **USAGE CHARACTERISTICS**

Minimum Bend Radius - Install: 12.2cm Operating temperature, range: -40 .. 85°C

Ambient installation temperature, range: -10 .. 70°C

Storage temperature, range: -40 .. 85°C Field of application: Indoor, Outdoor

Order Information PFC-0112 / PFC-0118: Hybrid Fiber Cable, 12/18 AWG

Package Contents PFC-0112 / PFC-0118