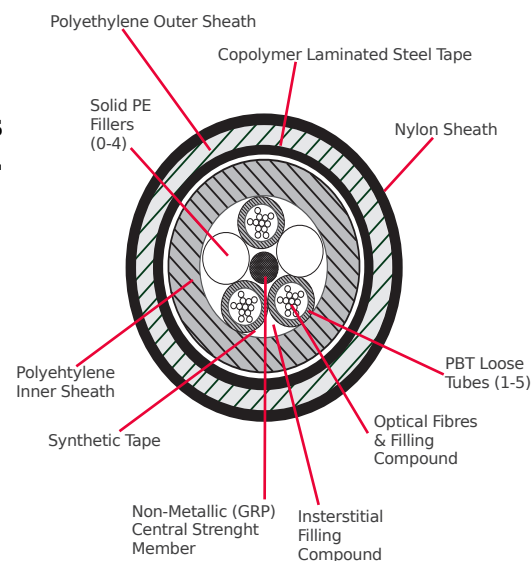


# Outdoor Loose Tube Armored Optical Cable

**This is a multi-jacket optical cable in PE and Nylon, its armor cable providing extra protection and durability. A robust and reliable solution when encountering rodents, moisture, and other harsh conditions.**

Cable containing up to 60 optical fibres in water blocked loose tubes (Maximum 12 fibres per tube) and solid polyethylene fillers, total of 5 elements laid-up around a glass reinforced plastic (GRP) central strength member, water blocked interstices, taped, polyethylene inner sheathed, corrugated steel tape armored, polyethylene overall sheathed and nylon jacketed.



## SPECIFICATIONS

### Reference information

#### Commercial Standards:

ISO/IEC 11801 - 2nd Edition, Type OM1, OM2, OM3, OM4 & OS2; AS/ACIF S008; AS/NZS 3080

### Technical

#### Transmission characteristics:

Max. Bending Radius-Full load: 450mm  
 Max. Tensile Strength-Short Term: 2500N  
 Max. Crush Resistance-Short Term: 6000 N/10cm  
 Operating Temperature: -10°C - +70°C

#### Construction details:

Number of Elements: 5  
 Fiber/Tube Identification: Color Coded  
 Central Strength Member: Glass Reinforced Plastic (GRP)  
 Fiber Protection (Tubes): Polybutylene Terephthalate (PBT)  
 Fillers: As Required  
 Water Blocking: Thixotropic Gel (Tubes)  
 Petroleum Jelly (Interstices)  
 Core Wrapping: Polyethylene Terephthalate Tape  
 Inner Sheath: Polyethylene  
 Armouring: Copolymer Laminated Steel Tape  
 Sheath: Polyethylene (UV Stabilised)  
 Jacket: Nylon (UV Stabilised)

### Physical characteristics

#### OM1:

Core Diameter:  $62.5 \pm 3.0 \mu\text{m}$   
 Cladding Diameter:  $125 \pm 1.0 \mu\text{m}$

#### OM2:

Core Diameter:  $50 \pm 3.0 \mu\text{m}$   
 Cladding Diameter:  $125 \pm 1.0 \mu\text{m}$

#### OM3:

Core Diameter:  $50 \pm 2.5 \mu\text{m}$   
 Cladding Diameter:  $125 \pm 1.0 \mu\text{m}$

#### OM4:

Core Diameter:  $50 \pm 2.5 \mu\text{m}$   
 Cladding Diameter:  $125 \pm 1.0 \mu\text{m}$

#### OS2:

Mode Field Diameter @ 1310 nm:  $9.2 \pm 0.4 \mu\text{m}$   
 Cladding Diameter:  $125 \pm 1.0 \mu\text{m}$

### Dimensions & mass

#### OM1, OM2, OM3, OM4 & OS2:

Overall Cable Diameter (Nominal): 15.1mm  
 Mass (Nominal): 220 kg/km

### Electrical/Optical characteristics

#### OM1:

Max. Attenuation;  
 At 350 nm: 3.5 dB/km  
 At 1300 nm: 1.0 dB/km  
 Min. Bandwidth;  
 At 850 nm: 200MHz  
 At 1300 nm: 500MHz

#### OM2:

Max. Attenuation;  
 At 350 nm: 3.2 dB/km  
 At 1300 nm: 0.9 dB/km  
 Min. Bandwidth;  
 At 850 nm: 550MHz  
 At 1300 nm: 600MHz

#### OM3:

At 350 nm: 3.2 dB/km  
 At 1300 nm: 0.9 dB/km  
 Min. Modal Bandwidth;  
 At 850 nm: 2000MHz  
 At 1300 nm: 500MHz

#### OM4:

At 350 nm: 3.0 dB/km  
 At 1300 nm: 0.9 dB/km  
 Min. Modal Bandwidth;  
 At 850 nm: 4700MHz  
 At 1300 nm: 500MHz

#### OS2:

Max. Attenuation;  
 At 1310 nm: 0.36 dB/km  
 At 1550 nm: 0.22 dB/km  
 Max. Average Attenuation;  
 At 1310 nm: 0.35 dB/km  
 At 1550 nm: 0.21 dB/km  
 Attenuation Discontinuity:  
 Both Windows < 0.10dB  
 Numerical Aperture: 0.14

# Outdoor Loose Tube Armored Optical Cable >

## ORDERING INFORMATION

Order No.	SAP No.	Description
AFOAH004OM1	Consult Molex	4 Core, Outdoor Loose Tube Armored, 62.5/125µm, OM1 Type Fibre Cable
AFOAH006OM1	Consult Molex	6 Core, Outdoor Loose Tube Armored, 62.5/125µm, OM1 Type Fibre Cable
AFOAH008OM1	Consult Molex	8 Core, Outdoor Loose Tube Armored, 62.5/125µm, OM1 Type Fibre Cable
AFOAH012OM1	Consult Molex	12 Core, Outdoor Loose Tube Armored, 62.5/125µm, OM1 Type Fibre Cable
AFOAH024OM1	Consult Molex	24 Core, Outdoor Loose Tube Armored, 62.5/125µm, OM1 Type Fibre Cable
AFOAH004OM2	Consult Molex	4 Core, Outdoor Loose Tube Armored, 62.5/125µm, OM2 Type Fibre Cable
AFOAH006OM2	Consult Molex	6 Core, Outdoor Loose Tube Armored, 62.5/125µm, OM2 Type Fibre Cable
AFOAH008OM2	Consult Molex	8 Core, Outdoor Loose Tube Armored, 50/125µm, OM2 Type Fibre Cable
AFOAH012OM2	Consult Molex	12 Core, Outdoor Loose Tube Armored, 50/125µm, OM2 Type Fibre Cable
AFOAH024OM2	Consult Molex	24 Core, Outdoor Loose Tube Armored, 50/125µm, OM2 Type Fibre Cable
AFOAH004OM3	Consult Molex	4 Core, Outdoor Loose Tube Armored, 50/125µm, OM3 Type Fibre Cable
AFOAH006OM3	Consult Molex	6 Core, Outdoor Loose Tube Armored, 50/125µm, OM3 Type Fibre Cable
AFOAH008OM3	Consult Molex	8 Core, Outdoor Loose Tube Armored, 50/125µm, OM3 Type Fibre Cable
AFOAH012OM3	Consult Molex	12 Core, Outdoor Loose Tube Armored, 50/125µm, OM3 Type Fibre Cable
AFOAH024OM3	Consult Molex	24 Core, Outdoor Loose Tube Armored, 50/125µm, OM3 Type Fibre Cable
AFOAH004OM4	Consult Molex	4 Core, Outdoor Loose Tube Armored, 50/125µm, OM4 Type Fibre Cable
AFOAH006OM4	Consult Molex	6 Core, Outdoor Loose Tube Armored, 50/125µm, OM4 Type Fibre Cable
AFOAH008OM4	Consult Molex	8 Core, Outdoor Loose Tube Armored, 50/125µm, OM4 Type Fibre Cable
AFOAH012OM4	Consult Molex	12 Core, Outdoor Loose Tube Armored, 50/125µm, OM4 Type Fibre Cable
AFOAH024OM4	Consult Molex	24 Core, Outdoor Loose Tube Armored, 50/125µm, OM4 Type Fibre Cable
AFOAH004OS2	Consult Molex	4 Core, Outdoor Loose Tube Armored, 9/125µm, OS1 Type Fibre Cable
AFOAH006OS2	Consult Molex	6 Core, Outdoor Loose Tube Armored, 9/125µm, OS1 Type Fibre Cable
AFOAH008OS2	Consult Molex	8 Core, Outdoor Loose Tube Armored, 9/125µm, OS1 Type Fibre Cable
AFOAH012OS2	Consult Molex	12 Core, Outdoor Loose Tube Armored, 9/125µm, OS1 Type Fibre Cable
AFOAH024OS2	Consult Molex	24 Core, Outdoor Loose Tube Armored, 9/125µm, OS1 Type Fibre Cable

[www.molex.com/products/fiber/cables](http://www.molex.com/products/fiber/cables)