MacArtney OptoLink connectors combine robustness and reliability with flexibility and ease of use. They provide low noise fibre optic connections for one to four optical fibre passes in a wide range of configurations for connector and penetrator types.

Thanks to spherical lens technology, MacArtney OptoLink connectors are easy to clean and reassemble in the field. OptoLink connectors are robust and reliable and are rated for depths of up to 6,000 metres. Their flexible cables also make the connectors easy to work with.

MacArtney OptoLink connectors are available in flange (FCR), bulkhead (BCR) and cable mount (CCP, CCR) configurations from stock in both Nickel Aluminium Bronze C63000 and stainless steel AISI 316 housings.

**Features and benefits**

- 6,000 metre standard depth rating
- 1-4 fibre passes
- Can combine single mode and multi mode
- Low attenuation
- Unlimited number of matings
- Excellent performance even when mated in harsh marine environments
- FCR and BCR rated to 600 bar back pressure in oil
- Stock and service from various MacArtney locations worldwide
- Available in Nickel Aluminium Bronze C63000 and stainless steel AISI 316 housings

**Applications**

- ROV, ROTV and AUV systems
- Fibre optic video and data multiplexers
- Cable ploughs
- Acoustic ranges
- Fibre optic riser fatigue systems
- General underwater fibre optic communications
- Renewable energy applications

**Options**

- Other shell materials available
- Certified pressure testing of assemblies or components
**Specifications**

**Material specifications**
- **Metal shell housing:** Nickel Aluminium Bronze C63000 or AISI 316
- **Fibre optic insert:** Expanded Beam
- **Dust cup:** Black POM
- **O-rings:** FPM 75
- **Full pressure dummy:** Nickel Aluminium Bronze C63000 or AISI 316

**Connector specifications**
- **Depth rating:** Mated: 6,000 m
- **Temperature rating:** Storage: -40°C/+70°C
  Operational: -20°C/+50°C
- **Mating cycles:** Optical: >1,000
- **Pigtails:** 1 m pigtail with ST connector is included on FCR and BCR connectors

**Optical specifications (single mode)**
- **Wavelength:** 1,310 to 1,650 nm
- **Attenuation:**
  - Max 2.5 dB,
  - Typical 1.0-1.5 dB (when mated)
- **Fibre types:** 9/125 μm
- **Connector back reflection:** 30 dB (typical) 28 dB (max)
- **Optical passes:** 1 to 4 passes

**Optical specifications (multi mode)**
- **Wavelength:** 850 to 1,300 nm
- **Attenuation:**
  - Max 2.5 dB,
  - Typical 1.5-2.0 dB (when mated)
- **Fibre types:** 50/125 or 62.5/125 μm
- **Optical passes:** 1 to 4 passes