

Multichannel Tactical Optical Connector



MAIN CHARACTERISTICS

This product offers a very robust (o.d. 51 mm), up to 8 channels and easy to mate optical connection that allows for rapid deployment of high speed transmission

links in adverse environments.

The specific design of the lenses guarantees a large beam diameter and a low loss connection insensitive to dust and dirt. Ergonomic keys allow for blind mating. The CTOL harnesses are easy to maintain on the field with the FTOS splice kit.

Technical description

- 2, 4 or 8 channel Plugs and Receptacles and Tactical Harnesses and Test caps for maintenance
- Hermaphroditic interface with rapid ramp coupling
- 2, 4 and 8 channel products are intermateable
- Large expanded beams with protective windows
- Stainless steel body with ergonomic rubber shell
- Typical Insertion Loss : 1.5 dB @ 1300 nm 50/125 fiber
- Durability : 10 000 mating/unmating cycles
- Operating Temperature : -40°C, +85°C
- Vibrations : 10 to 2000Hz, 10g, 1.5 mm/p, 3 directions
- Bumps : 4000 Bumps, 40g, 6ms, 6 directions
- Mechanical shock : 50g, ½ sinus, 3 shocks by direction, 3 axes
- Free drops : 26 drops 1.2m on plywood/concrete (plug)
- Water immersion : > 1m depth
- Salt spray : 500 hours
- Mud Resistance : MIL C 83526/13
- Low pressure : 85 mbars 48 hours
- Termination, Maintenance accessories and tool kits available

Features

The Amphenol CTOL Fibre Optic expanded beam connector is the 8 channels version of the CTOS connector.

The flat protective windows mounted on shock absorbers provide a connector interface easy to clean on the field to improve performance and protection.

Applications

- Army, Navy and Airforce optical networks
- EMI insensitive and light tactical transmission links
- Long distance
- Radar deployment systems

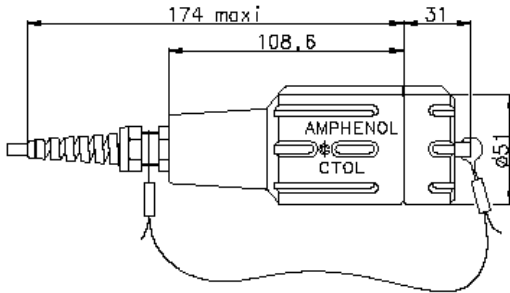
Amphenol

CTOL

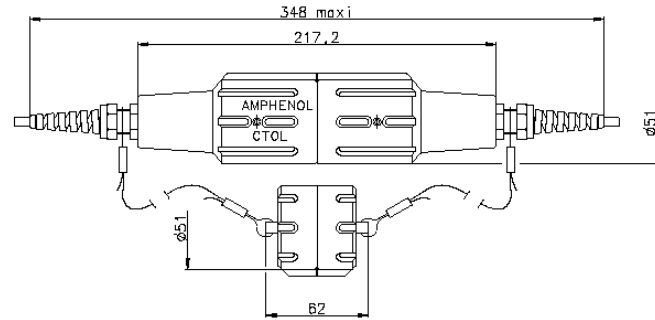
976 Series

Line Drawings (dimensions in mm)

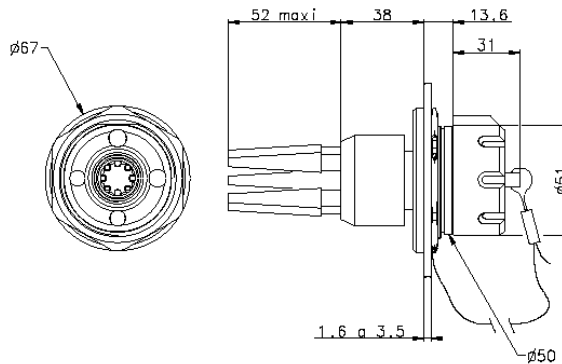
CTOL plug with protective cap



CTOL plug to plug



CTOL jam nut receptacle – rear mount



How to order :

CTOL - XXX - XX - X - XX - X - XX - XXX

CTOL : 976 series

- Plug for tactical cable : 06M
- Jam nut receptacle for pig-tails : 77P
- Jam nut receptacle for tactical cable : 77M

Straight backshell : 00

Number of channel
2 channels : 2 4 channels : 4 8 channels : 8

BPF : Cap for plug
BPE : Cap for Jam Nut Receptacle

All cables are tight jacket.
28 : O.D. patchcord 2.8 mm
55 : O.D. tactical 5.5 mm
75 : O.D. tactical 7.5 mm
Other cables possible.

Y : Wavelength 1300 nm
Z : Wavelength 840 – 1300 nm

01 : 50/125 μm
02 : 62.5/125 μm

