



ODC™ Plug & Socket Cable Assemblies

The ODC connectors, together with the support optical cable, are becoming the standard interface specified in 3G, 4G and WiMax Base Station remote radios and Fiber-to-the-Antenna applications. The ODC cable assembly is based on the N Type RF Coax connector. The product, however, is not limited to the above applications. The ODC cable assemblies have passed tests like salt mist, vibration and shock and meet protection class IP68. They are well suited for Industrial and Aerospace and Defense applications.

ODC™ Plug & Socket Cable Assemblies

KEY FEATURES

- 2 and 4 Channel
- Multimode - 2 & 4 Ch;
Singlemode - 2 Ch
- Compact design with 2 x or 4
x 1.25mm ferrules
- Built-in socket available with
square or hexagonal flange
- Water proof, dust proof and
corrosion resistant
- Screw lock mechanism
- Scoop proof
- One hand, blind-mating
possible
- Attached protection cap
- EMI shielded
- Low-Smoke, Zero-Halogen
(LSZH)

APPLICATIONS

Base Stations
Industrial
Aerospace & Defense

TECHNICAL DOCUMENTS

Protection Class : IP 68
Salt mist : IEC 61300-2-26 : passed
Vibration : IEC 61300-2-1 : passed
Shock : IEC 61300-2-9 : passed

OPTICAL

Insertion loss according to IEC 61300-3-34
Multimode type : $\leq 0.25\text{dB}$ max. $\leq 0.70\text{dB}$
Singlemode type : $\leq 0.30\text{dB}$ max. $\leq 1.00\text{dB}$
Return Loss : Singlemode $\geq 45\text{dB}$

MECHANICAL

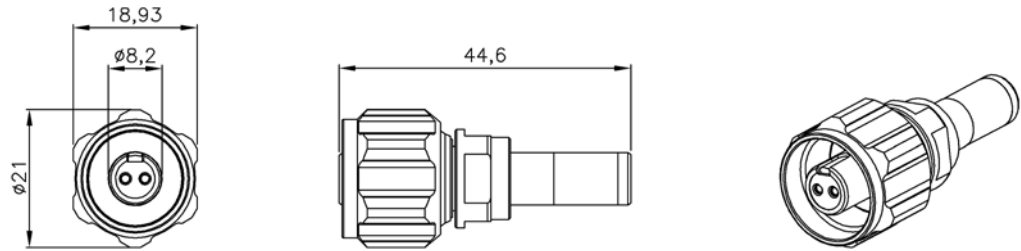
Technology : full ceramic ferrule and sleeve
Mechanically robust :

- ODC plug $\leq 800\text{ N}$ tensile load
- ODC socket $\leq 30\text{ N}$ tensile load

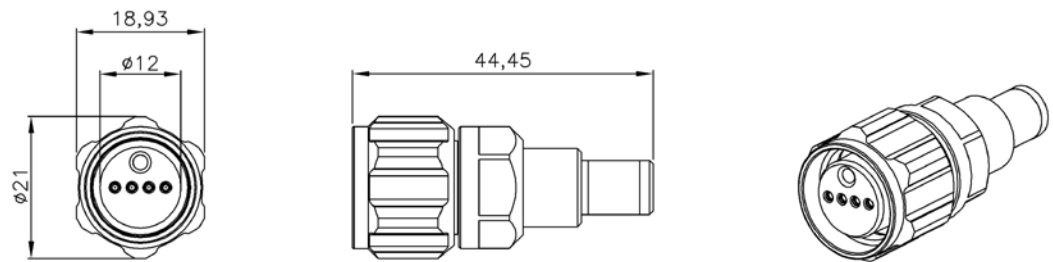
Installation torque force : - min. 1Nm - max. 2 Nm.
Operating temperature : -40°C up to +85°C
Mating durability : min. 100 cycles

INTERFACE DIMENSIONS

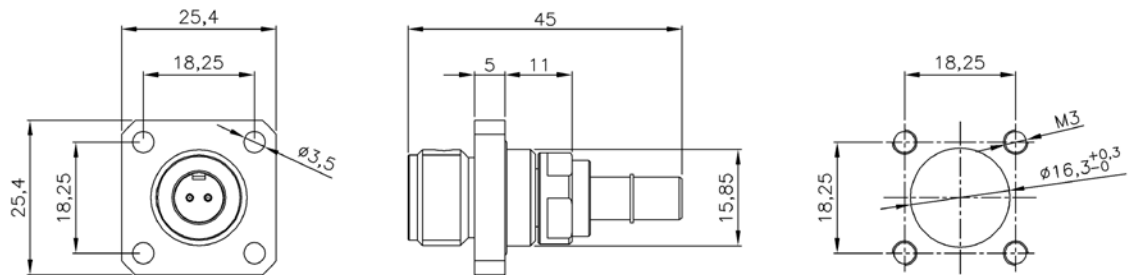
2 Fiber ODC Plug



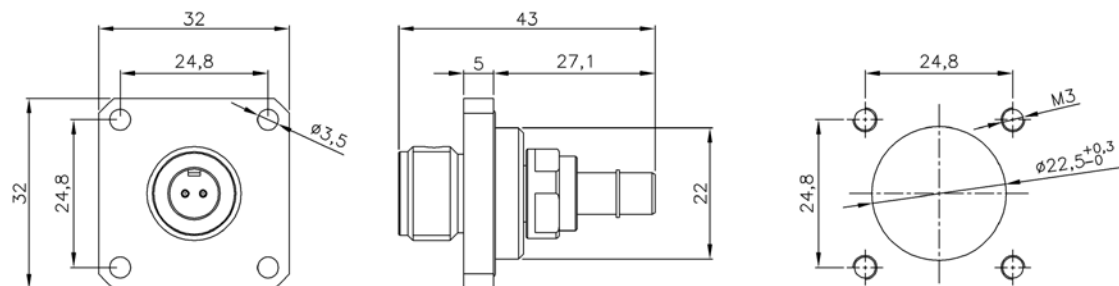
4 Fiber ODC Plug



2 Fiber Small Square ODC Socket

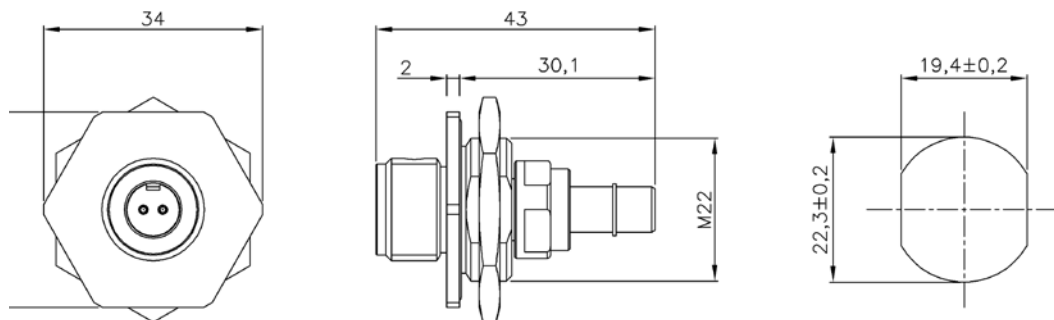


2 Fiber Large Square ODC Socket

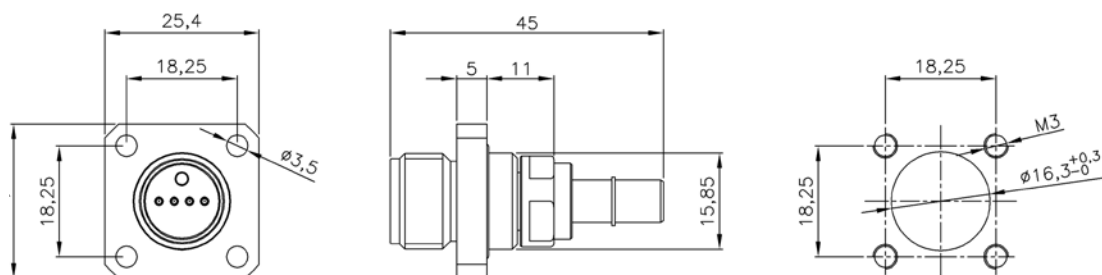


INTERFACE DIMENSIONS (cont.)

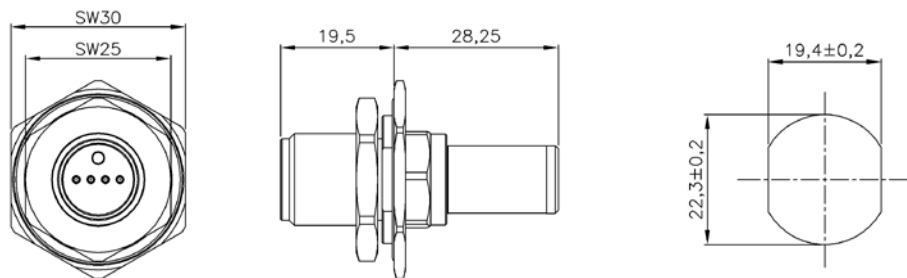
2 Fiber hexagonal ODC Socket



4 Fiber Small Square Socket

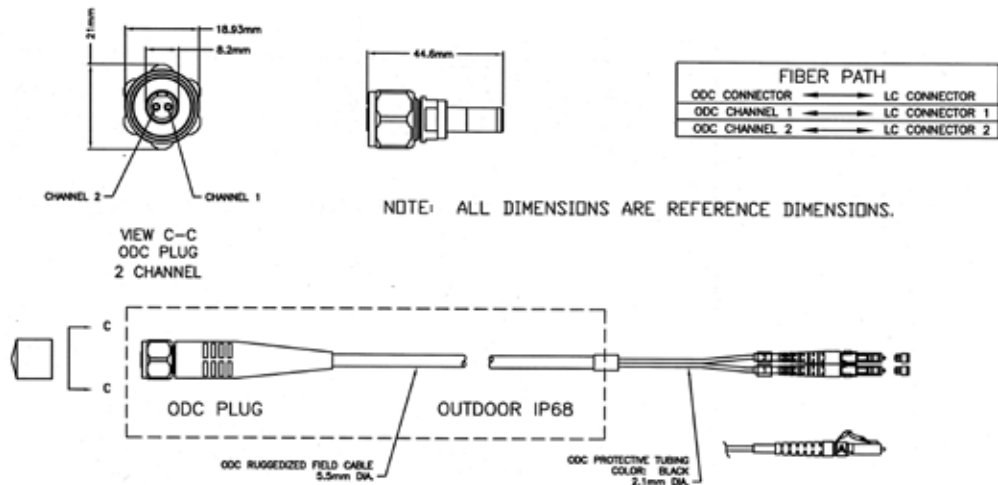


4 Fiber Hexagonal Socket

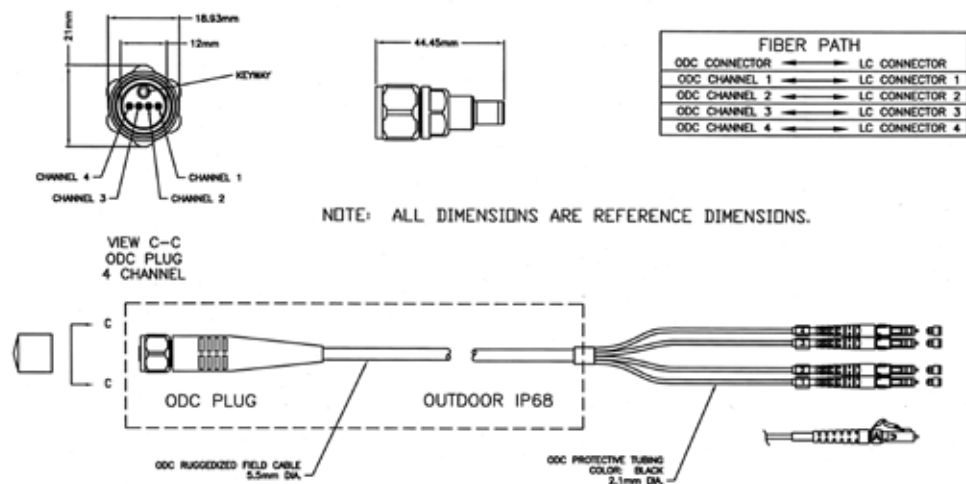


PRODUCT DIMENSIONS

2 Fiber Plug to LC Duplex Assembly



4 Fiber Plug to LC Duplex Assembly



CABLE ASSEMBLY PART NUMBERS

Base Part Number ¹	Description	Fiber Size	Available Sizes
1985834	2 Fiber Plug to LC Duplex Assembly	Singlemode	1 to 99 meters ²
1985835	2 Fiber Plug to LC Duplex Assembly	Multimode (50/125)	
1985836	2 Fiber Plug to LC Duplex Assembly	Multimode (62.5/125)	
1985837	4 Fiber Plug to LC Duplex Assembly	Multimode (50/125)	
1985838	4 Fiber Plug to LC Duplex Assembly	Multimode (62.5/125)	
1985844	2 Fiber Plug to LC Duplex Assembly	Singlemode	100 to 999 meters ³
1985845	2 Fiber Plug to LC Duplex Assembly	Multimode (50/125)	
1985846	2 Fiber Plug to LC Duplex Assembly	Multimode (62.5/125)	
1985847	4 Fiber Plug to LC Duplex Assembly	Multimode (50/125)	
1985848	4 Fiber Plug to LC Duplex Assembly	Multimode (65.5/125)	

¹For complete part numbers, obtain proper customer drawing.

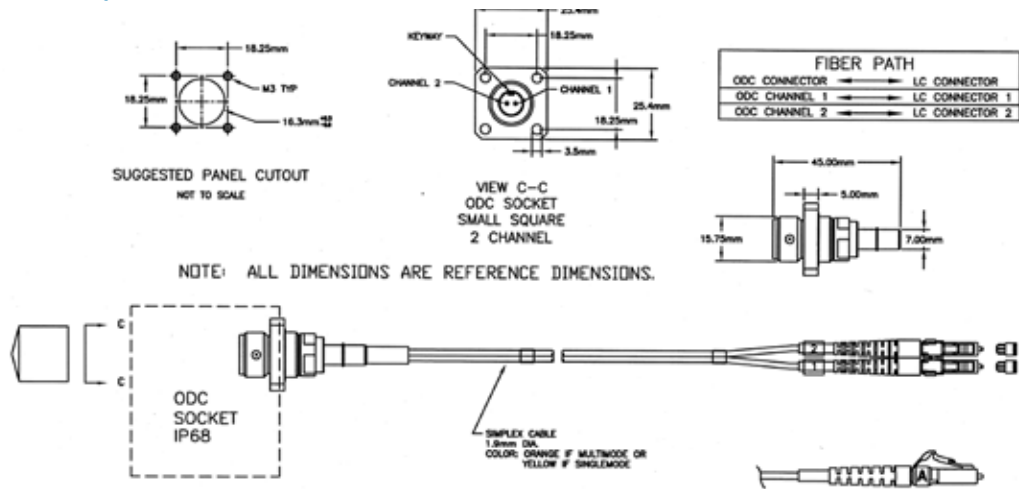
²The length is defined by the dash number (example : 8-1985834-2 is 82 meters long, 1-1985834-5 is 15 meters long)

³The length is defined by the dash number (example : 8-1985844-2 is 820 meters long, 1-1985844-5 is 150 meters long)

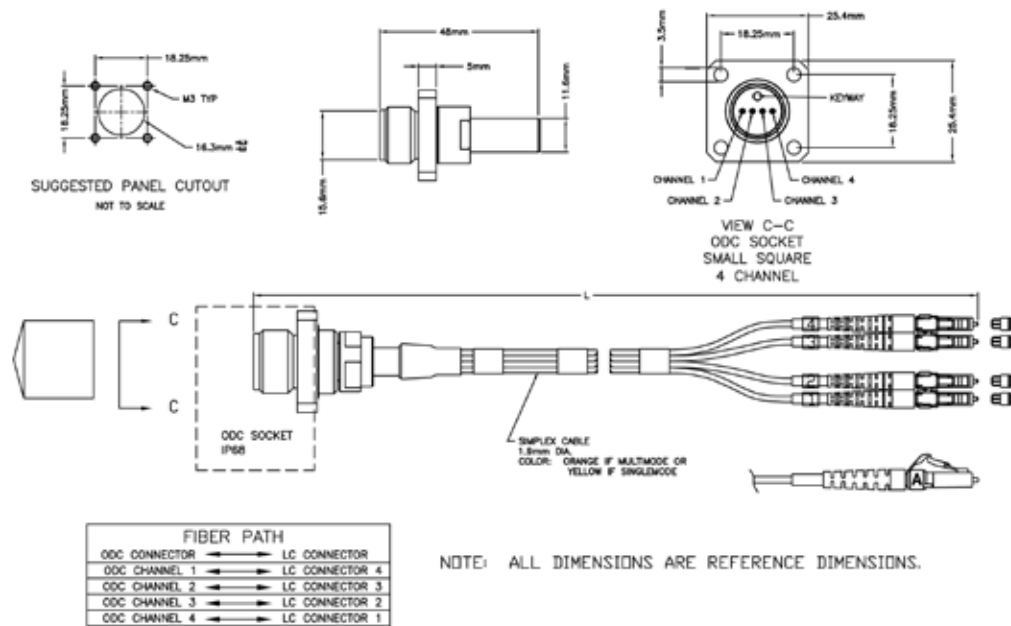
Note: Other dust caps (screw type) and connector types, in combination with ODC Plug (or socket), are available upon request.

PRODUCT DIMENSIONS (cont.)

2 Fiber Socket to LC Duplex Assembly



4 Fiber Socket to LC Duplex Assembly



CABLE ASSEMBLY PART NUMBERS

Base Part Number ¹	Description	Fiber Size	Available Sizes
1985839	2 Fiber Socket to LC Duplex Assembly	Singlemode	0.3 to 99 meters ²
1985840	2 Fiber Socket to LC Duplex Assembly	Multimode (50/125)	
1985841	2 Fiber Socket to LC Duplex Assembly	Multimode (62.5/125)	
1985842	4 Fiber Socket to LC Duplex Assembly	Multimode (50/125)	
1985843	4 Fiber Socket to LC Duplex Assembly	Multimode (62.5/125)	

¹For complete part numbers, obtain proper customer drawing.

²The length is defined by the dash number (example : 3-1985839-5 is 3.5 meters long, 1-1985839-6 is 1.6 meters long)

Note: Other dust caps (screw type) and connector types, in combination with ODC Plug (or socket), are available upon request.

FOR MORE INFORMATION

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Part numbers in this brochure are RoHS Compliant*, unless marked otherwise.

*as defined www.tycoelectronics.com/leadfree

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