



## 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.

## 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

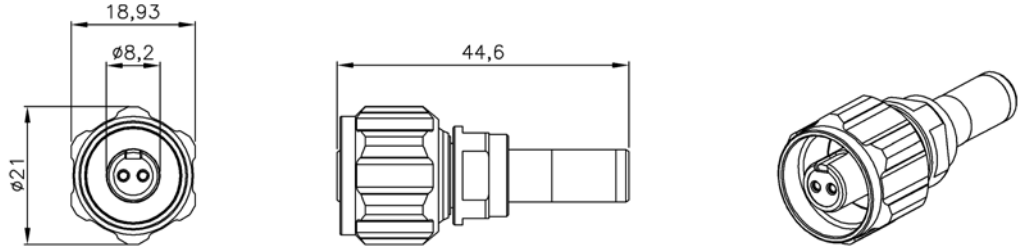
**Insertion loss according to IEC 61300-3-34**  
**Multimode type** :  $\leq 0.25\text{dB}$  max.  $\leq 0.70\text{dB}$   
**Singlemode type** :  $\leq 0.30\text{dB}$  max.  $\leq 1.00\text{dB}$   
**Return Loss** : Singlemode  $\geq 45\text{dB}$

## MECHANICAL

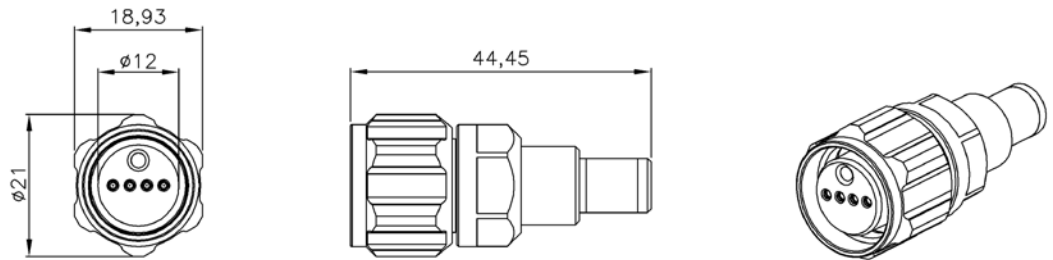
**Technology** : full ceramic ferrule and sleeve  
**Mechanically robust** :  
- ODC plug  $\leq 800$  N tensile load  
- ODC socket  $\leq 30$  N tensile load  
**Installation torque force** : - min. 1Nm - max. 2 Nm.  
**Operating temperature** : -40°C up to +85°C  
**Mating durability** : min. 100 cycles

**INTERFACE DIMENSIONS**

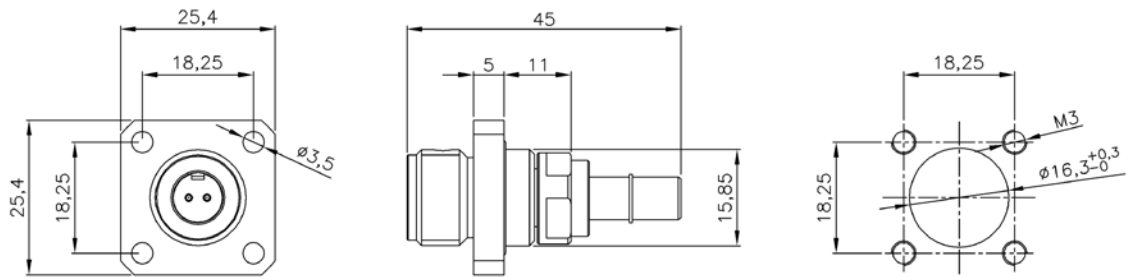
**2 Fiber ODC Plug**



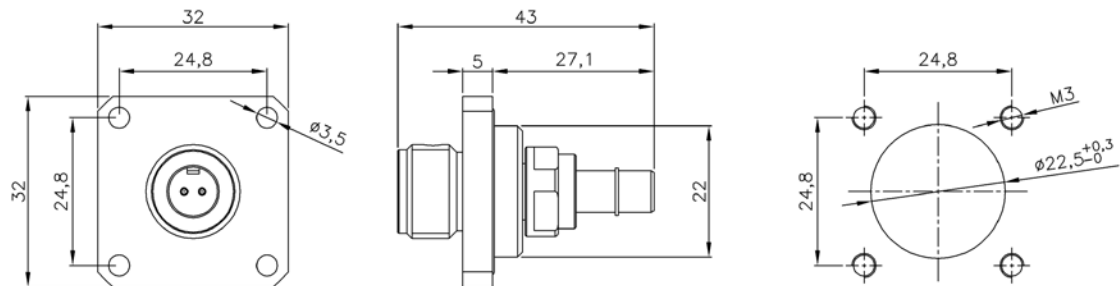
**4 Fiber ODC Plug**



**2 Fiber Small Square ODC Socket**

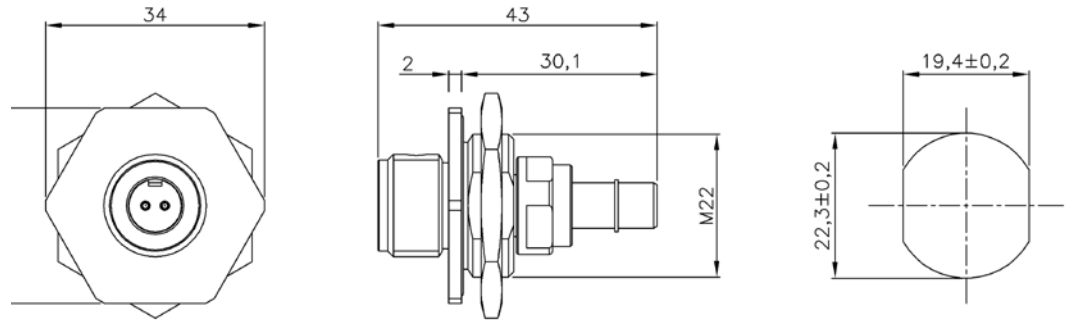


**2 Fiber Large Square ODC Socket**

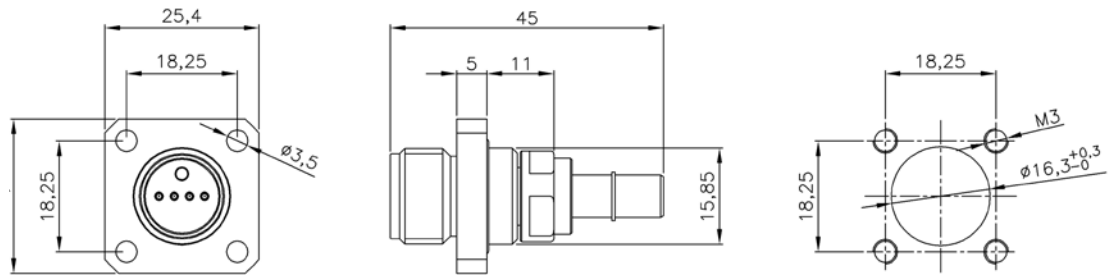


**INTERFACE DIMENSIONS (cont.)**

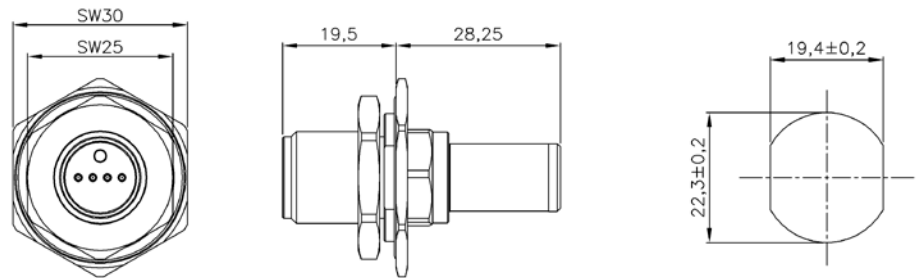
**2 Fiber hexagonal ODC Socket**



**4 Fiber Small Square Socket**

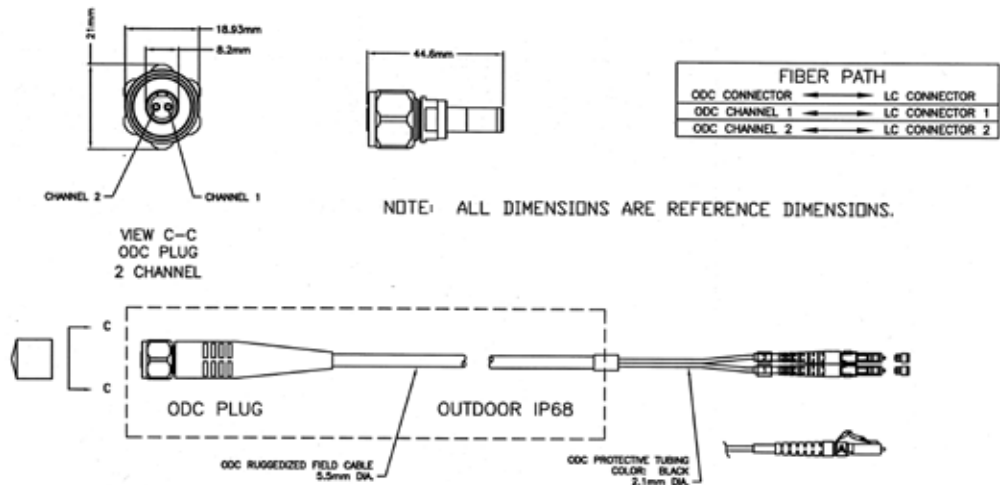


**4 Fiber Hexagonal Socket**

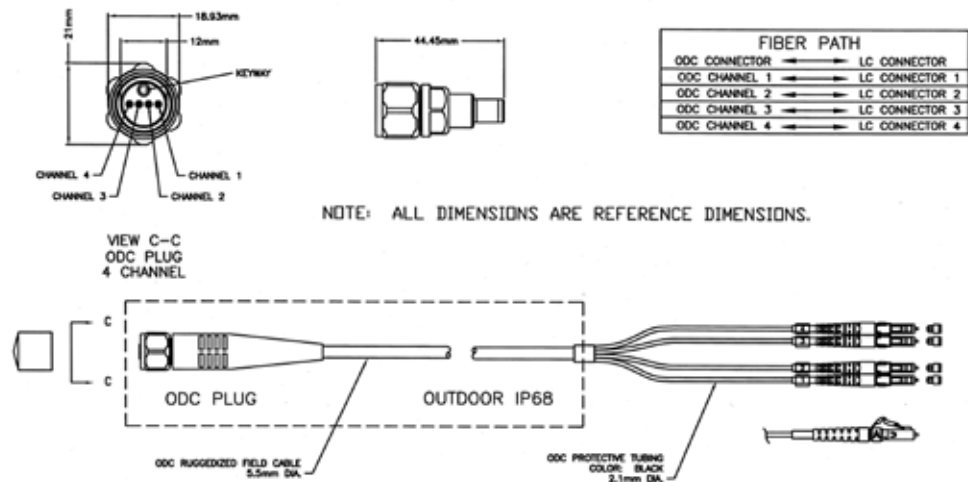


## PRODUCT DIMENSIONS

### 2 Fiber Plug to LC Duplex Assembly



### 4 Fiber Plug to LC Duplex Assembly



## CABLE ASSEMBLY PART NUMBERS

Base Part Number <sup>1</sup>	Description	Fiber Size	Available Sizes
1985834	2 Fiber Plug to LC Duplex Assembly	Singlemode	1 to 99 meters <sup>2</sup>
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)	100 to 999 meters <sup>3</sup>
1985844	2 Fiber Plug to LC Duplex Assembly	Singlemode	
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)	

<sup>1</sup>For complete part numbers, obtain proper customer drawing.

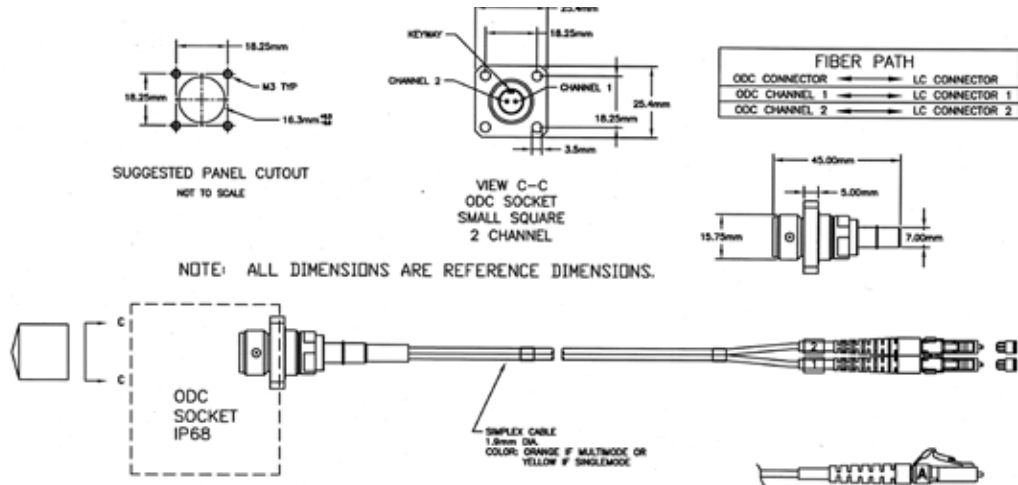
<sup>2</sup>The length is defined by the dash number (example : 8-1985834-2 is 82 meters long, 1-1985834-5 is 15 meters long)

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

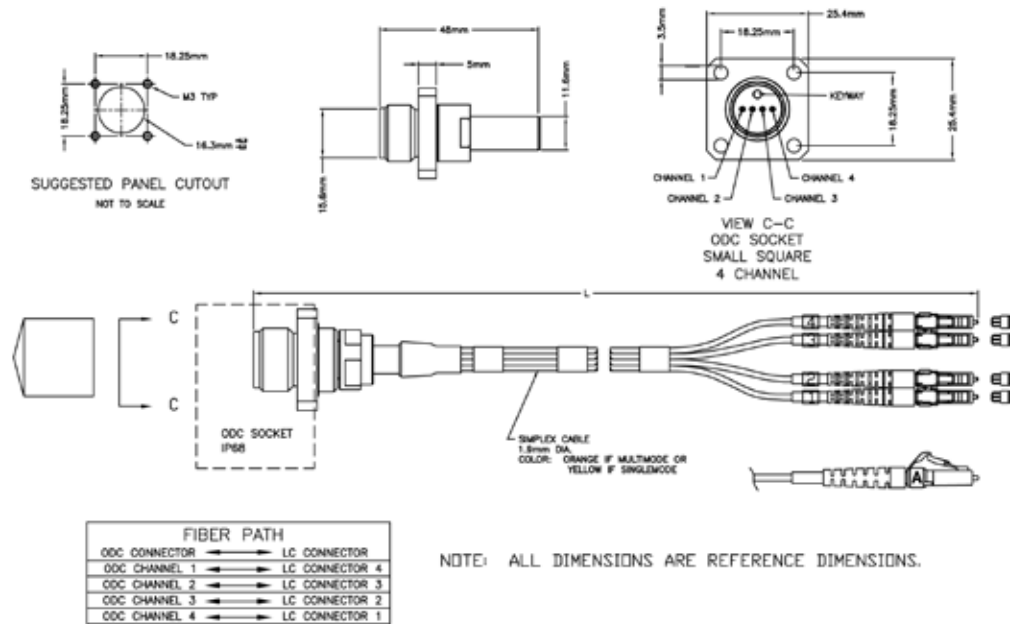
**Note:** Other dust caps (screw type) and connector types, in combination with ODC Plug (or socket), are available upon request.

**PRODUCT DIMENSIONS (cont.)**

**2 Fiber Socket to LC Duplex Assembly**



**4 Fiber Socket to LC Duplex Assembly**



**CABLE ASSEMBLY PART NUMBERS**

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

<sup>1</sup>For complete part numbers, obtain proper customer drawing.

<sup>2</sup>The 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

### **Stefan Borgas, EMEA Product Manager**

Phone: (46) 8 50 72 50 44 | E-mail: [sborgas@tycoelectronics.com](mailto:sborgas@tycoelectronics.com)

### **Yasuo Sasaki, ASIA Director of Fiber Optics**

Phone: (81) 44 844 8390 | E-mail: [sasaki.yasuo@tycoelectronics.com](mailto:sasaki.yasuo@tycoelectronics.com)

### **Brent Hatfield, Americas Product Manager**

Phone: 717-986-7037 | E-mail: [brent.hatfield@tycoelectronics.com](mailto:brent.hatfield@tycoelectronics.com)

## Technical Support

Internet:	<a href="http://www.tycoelectronics.com/help">www.tycoelectronics.com/help</a>
USA:	+1 (800) 522-6752
Canada:	+1 (905) 470-4425
Mexico & Central America:	+52(O) 55-1106-0814
South America:	+55 (O) 11-2103-6000
Germany:	+49 (O) 6251-133-1999
UK:	+44 (O) 8706-080208
France:	+33 (O) 1-3420-8686
Netherlands:	+31 (O) 73-6246-999
China:	+86 (O) 400-820-6015

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

\*as defined [www.tycoelectronics.com/leadfree](http://www.tycoelectronics.com/leadfree)

**Tyco Electronics Corporation**, Harrisburg, PA

**tycoelectronics.com**

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