



Fiberdyne Labs offers a family of harsh environment tactical fiber optic assemblies based on the TFOCA-II® connector. Our assemblies are fully customizable to meet your deployment requirements.

The hermaphroditic TFOCA-II® connector series was designed specifically for use in harsh environments. In fact, the U.S. Army has standardized on the 4-channel TFOCA-II® connector as the next generation fiber optic connector for military tactical deployable network applications.

Cable assemblies are available with a variety of user specified deployable spool options. Spooling options can be customized to include a hub divider which allows a single spool to contain two independent TFOCA-II® cable assemblies. This feature is ideal for situations where it is desirable to deploy a reel with a primary and backup tactical cable.

Contact your Fiberdyne sales representative to discuss your TFOCA-II® tactical cable requirements.

## **Applications:**

- Broadcast Industry
- Satellite Ground Station
- Industrial Harsh Environment
- Emergency Fiber Restoration Service
- Tactical Harsh Environment
- Mobile Communications
- Oil/Gas /Geological Industries

# TFOCA-II® TACTICAL CABLE ASSEMBLIES



## Features/Benefits:

- TFOCA-II® assemblies can be delivered preloaded on tactical reels to meet your deployment needs.
- The TFOCA-II® fiber optic connectors include sealed free floating termini. This termini design allows TFOCA-II® connectors to seal against high humidity and moisture conditions. The floating termini allows for movement of the mated termini, yielding low insertion loss minimal back reflection.
- Single mode and multimode termini are available.
- Solid Core Alignment Sleeves utilized in TFOCA-II® connectors provide more robust termini mating and alignment than conventional split-core sleeves.
- TFOCA-II connectors are available in any of four keying configurations; 1,2,3 and universal. These keying options enable segregation of mated plug/receptacles or plug/plug pairs.
- Mating jam nut and flange mount style receptacles are available with pre-terminated fiber to meet your cabling and equipment interface requirements.

## Connector Specifications:

Description	Specification
Insertion loss (multimode)	0.30dB - Typical, 0.75dB - Max
Insertion loss (single mode)	0.40dB - Typical, 0.75dB - Max
Back reflection (single mode)	-50dB - Typical
Operating temperature	-46° C to + 71° C
Storage temperature	-55° C to + 85° C
Mating durability	2,000 cycles per EIA/TIA-455-21
Cable retention	400 pounds per EIA/TIA-455-6

Looking for the latest networking technologies? Contact us today:

**Fiberdyne Labs, Inc.**  
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**Frankfort, New York 13340**  
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# TFOCA-II® TACTICAL CABLE ASSEMBLIES



## Ordering Guide:

Part Number: F R-X X X X X X- X X X X  
1 2 3 4 5 6 7 8 - 9 10 11 12

1 <sup>st</sup> , 2 <sup>nd</sup>	Ruggedized Fiber Optic Assembly	Digit 1=F Digit 2=R Denotes: Fiberdyne Ruggedized
3 <sup>rd</sup> Digit	Class	0= TFOCA-II 4 Channel Plug 1= TFOCA-II 12 Channel Plug
4 <sup>th</sup> Digit	Fiber Type	MIL Tactical Cable 0=Singlemode 1= Bend Insensitive Singlemode 2=Multimode 62.5 3=Multimode 50/125 4=Multimode 50/125 10Gig X=Customer Specified
5 <sup>th</sup> Digit	Tactical Reel	0= None 1= Standard 380 (1000 ft max) 2= Standard 380 Split Hub (Two Cable Assemblies/ Reel. 500ft Max Fiber length per cable.) X= Customer Specified
6 <sup>th</sup> Digit	Connector 1 Keying	0 = Key Position= Universal 1 = Key Position = 1 2 = Key Position = 2 3 = Key Position = 3
7 <sup>th</sup> Digit	Connector 2 Keying	0 = Key Position= Universal 1 = Key Position = 1 2 = Key Position = 2 3 = Key Position = 3 X = Customer Specified Connector
8 <sup>th</sup> Digit	Fiber Count	4 = Four Fiber
9 <sup>th</sup> , 10 <sup>th</sup> , 11 <sup>th</sup> , 12 <sup>th</sup> Digit	Cable Length	XXXX = Enter Length in Feet

## Accessories:

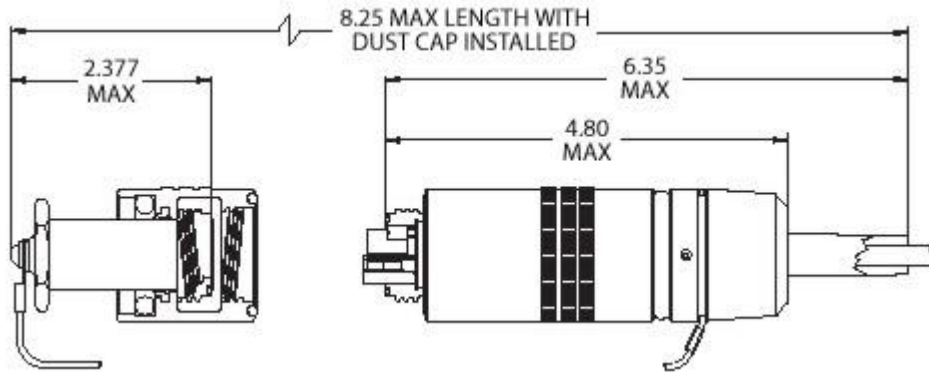
- TFOCA-II 4 Ch Jam Nut Receptacle
- TFOCA-II 4 Ch Flange Receptacle
- TFOCA-II 4 Ch Flange Receptacle w/Strain Relief

# TFOCA-II® TACTICAL CABLE ASSEMBLIES



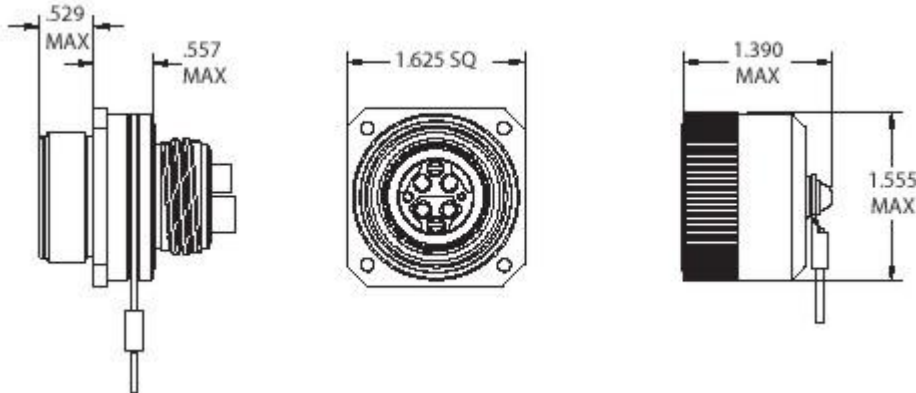
## Dimensions:

### TFOCA-II® 4-Channel Plug



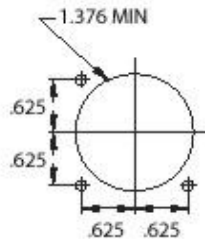
All dimensions in inches.

### TFOCA-II® 4-Channel Flange Mount Receptacle



All dimensions in inches.

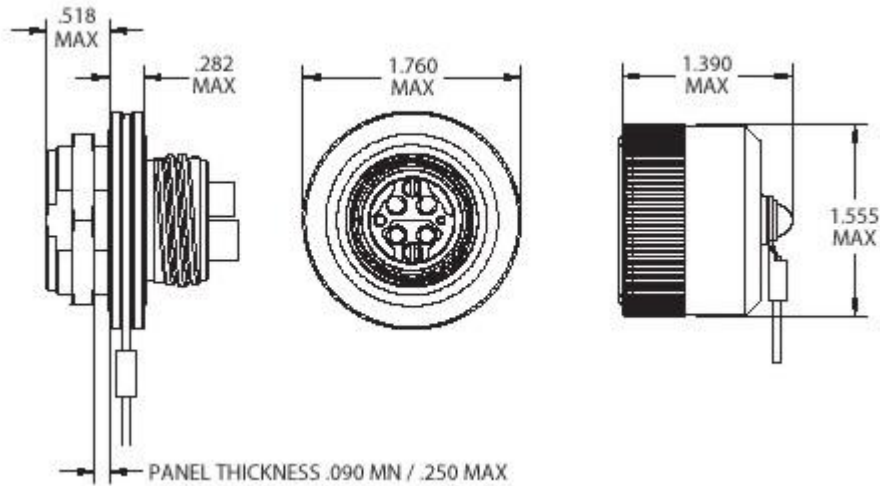
### TFOCA-II® 4-Channel Flange Mount Receptacle Panel Cut-out



All dimensions in inches. Not to scale.

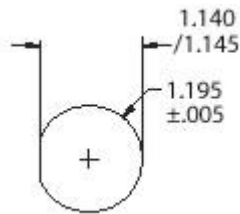


## TFOCA-II® 4-Channel Jam Nut Receptacle



All dimensions in inches.

## TFOCA-II® 4-Channel Jam Nut Receptacle Panel Cut-out



All dimensions in inches. Not to scale.

## Standard 380 Tactical Reel Option

