

TFOCA-III® 6 & 24-Ch Specifications

TFOCA-III®

The TFOCA-III® series of 6 & 24-channel fiber optic connectors are ideal for environmentally harsh conditions.

The TFOCA-III® design utilizes the latest technology in fiber optic connectivity by incorporating industry standard physical contact ceramic ferrules and alignment sleeves.

Features & Benefits

- ♦ Hermaphroditic design for versatility
- ♦ Removable insert cap
- ♦ 6 & 24-channel connector designs
- ♦ Improved cable retention strength
- ♦ Zinc alloy plating
- ♦ Commercial ceramic ferrule technology
- ♦ Solid core alignment sleeves
- ♦ Hermaphroditic dust cap
- ♦ Optional key positions
- ♦ Field repairable using existing parts
- ♦ Available in stainless steel and brass



Parameter	Typical	Maximum
Insertion Loss (multimode) Per Mated Pair/Connection	0.30dB	0.75dB
Insertion Loss (single mode) Per Mated Pair/Connection	0.40dB	0.75dB
Back Reflection/Return Loss (SM-UPC polish)	-50dB	-40dB

Specification	Measurement/Detail
Operating Temperature	-46°C to +71°C
Shock	EIA/TIA-455-14, Condition A
Vibration (operational)	MIL-STD-1344, Method 2500.1
Cable Retention	400 pounds minimum per EIA/TIA-455-6, 1hr (applies to plug and strain relief receptacles); 800 pounds typical
Twist	1,000 cycles per EIA/TIA-455-36
Cable Seal Flexing	100 cycles per EIA/TIA-455-1
Mating Durability	2,000 cycles per EIA/TIA-455-21
Crush Resistance	450 pounds minimum per EIA/TIA-455-26
EMI Shielding Effectiveness (receptacle only)	>60dB per IEEE-299, 15KHz to 10GHz

TFOCA-III® 6-Ch Ordering (Plug)

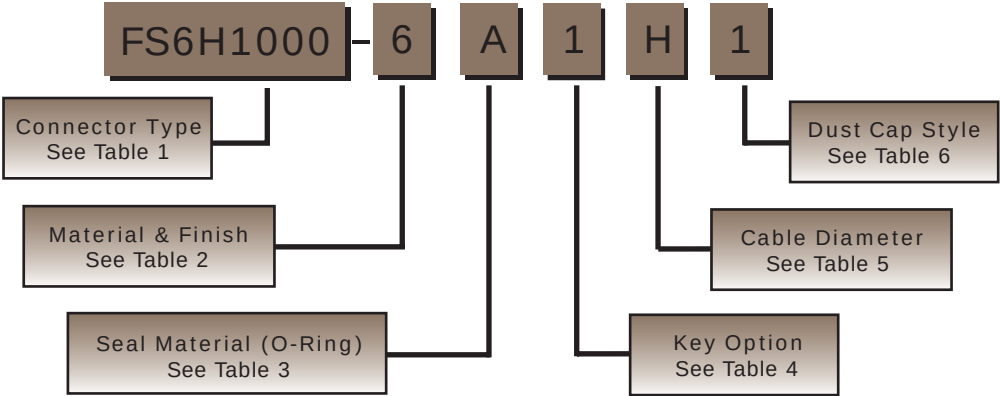


Table 1	
Connector Type	Part Number
TFOCA-III® Plug	FS6H1000

Table 2	
Material & Finish	Dash Number
6061-T6 Al ALY Zn-ALLOY Color OD	6

Table 3	
Seal Material (O-Ring)	Dash Number
Nitrile	A

Table 4	
Key Option	Dash Number
Key 1	1
Key 2	2
Key 3	3
Key U	4

Table 5	
Cable Diameter inch (mm)	Dash Number
0.150-0.190 (3.81-4.83)	P
0.190-0.239 (4.83-6.07)	H
0.240-0.279 (6.10-7.09)	F
0.270-0.290 (6.86-7.37)	N
0.280-0.315 (7.11-8.00)	A
0.316-0.346 (8.03-8.79)	B
0.347-0.379 (8.81-9.63)	G
0.380-0.423 (9.65-10.74)	C
0.424-0.465 (10.77-11.81)	D

Table 6	
Dust Cap Style	Dash Number
Hermaphroditic, 6-Ch	1



STANDARD KEY
(Option 1)



KEY OPTION 2

Example Part Number - FS6H1000-6A1H1

FS6H1000 - TFOCA-III® Plug
6 - 6061-T6 Al ALY Zn-ALLOY Color OD
A - Nitrile
1 - Key 1
H - 0.190-0.239 (4.83-6.07)
1 - Dust Cap Assy, Hermaphroditic



KEY OPTION 3



UNIVERSAL KEY
(Option 4)

Additional configurations available. Contact factory representative for details.

TFOCA-III® 6-Ch Ordering (Receptacles)

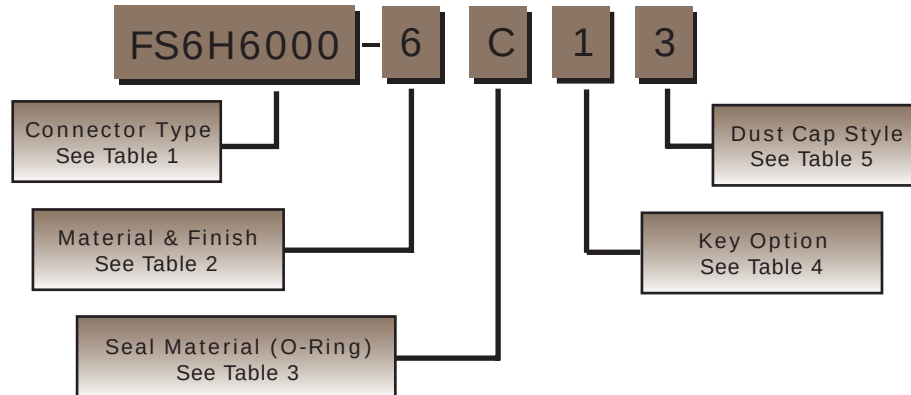


Table 1	
Connector Type	Part Number
TFOCA-III® Flange Mount Receptacle, External Mount	FS6H6000
TFOCA-III® Jam Nut Receptacle, External Mount	FS6H8000

Table 2	
Material & Finish	Dash Number
6061-T6 Al ALY Zn-ALLOY Color OD	6

Table 3	
Seal Material (O-Ring)	Dash Number
Nitrile and Fluorosilicone	C

Table 4	
Key Option	Dash Number
Key 1	1
Key 2	2
Key 3	3
Key U	4

Table 5	
Dust Cap Style	Dash Number
Female, 6-Ch	3



STANDARD KEY
(Option 1)



KEY OPTION 2

Example Part Number - FS6H6000-6C13

FS6H6000 - TFOCA-III® External Flange Mount Receptacle

6 - 6061-T6 Al ALY Zn-ALLOY Color OD

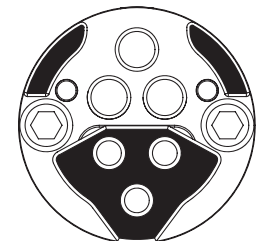
C - Nitrile and Fluorosilicone

1 - Key 1

3 - Dust Cap Assy, Female



KEY OPTION 3

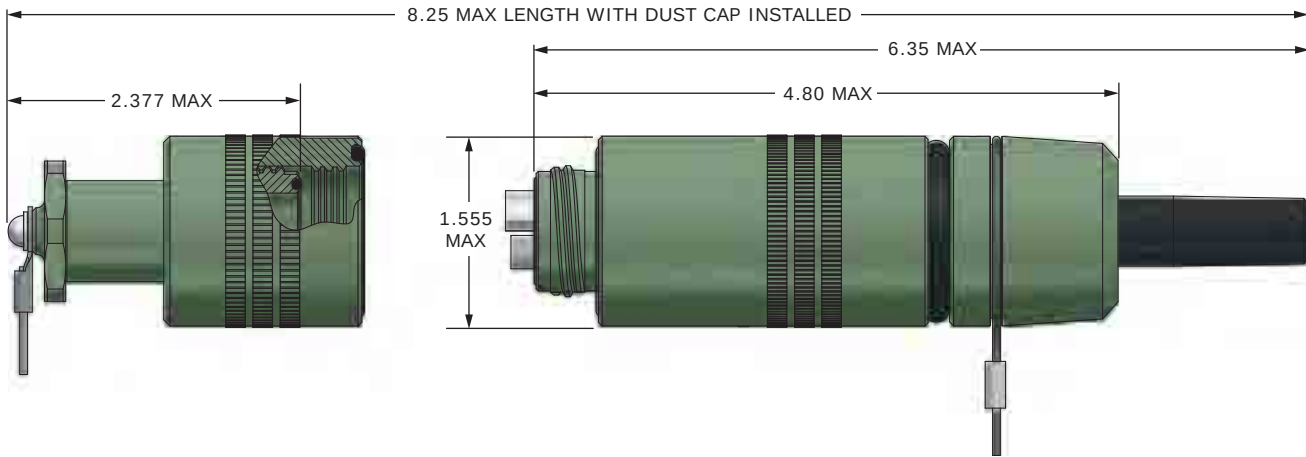


UNIVERSAL KEY
(Option 4)

Additional configurations available. Contact factory representative for details.

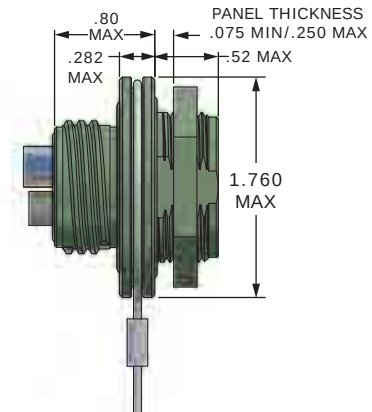
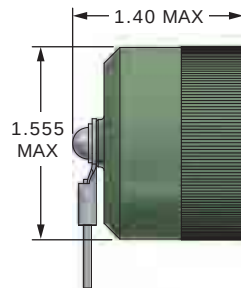
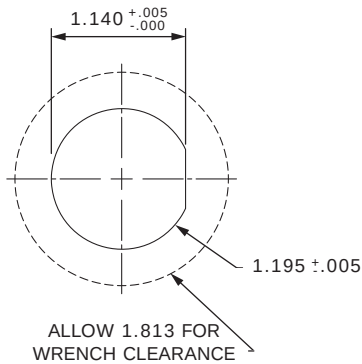
TFOCA-III® 6-Ch Plug & Receptacles

FS6H1000 TFOCA-III® Plug

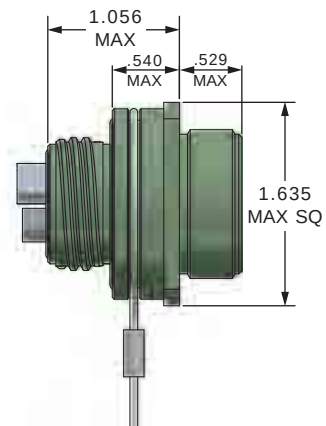
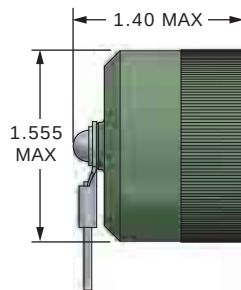
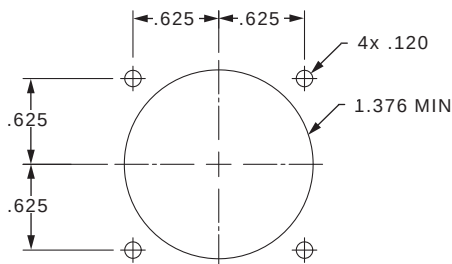


FS6H8000 TFOCA-III® Jam Nut Receptacle (External Mount)

Panel Cut-Out



FS6H6000 TFOCA-III® Flange Mount Receptacle (External Mount)



Dimensions are for reference only. Dimensions are in inches. Other configurations are available.

TFOCA-III® 24-Ch Ordering (Plug)

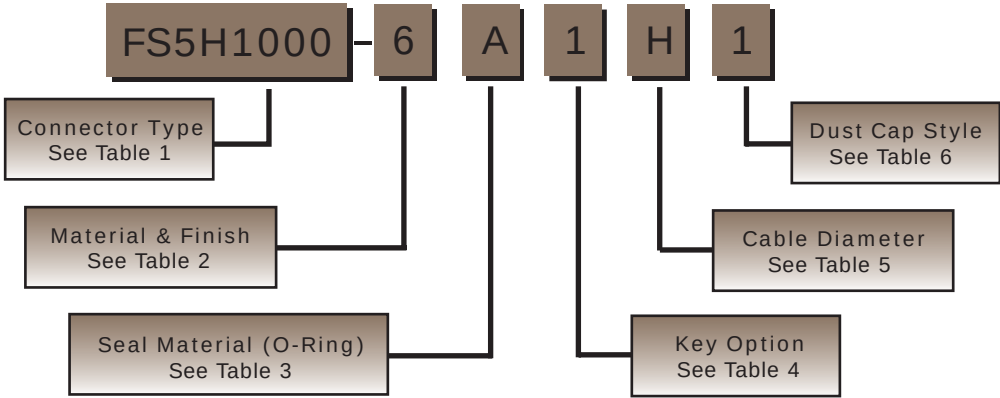


Table 1	
Connector Type	Part Number
TFOCA-III® Plug	FS5H1000

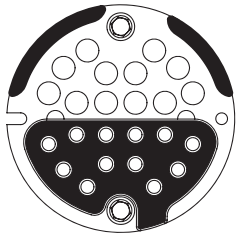
Table 2	
Material & Finish	Dash Number
6061-T6 Al ALY Zn-ALLOY Color OD	6

Table 3	
Seal Material (O-Ring)	Dash Number
Nitrile	A

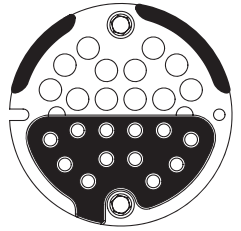
Table 4	
Key Option	Dash Number
Key 1	1
Key 2	2
Key 3	3
Key U	4

Table 5	
Cable Diameter inch (mm)	Dash Number
.240-.279 (6.1-7.1)	F
.280-.315 (7.1-8.0)	A
.316-.346 (8.0-8.8)	B
.347-.379 (8.8-9.6)	G
.380-.423 (9.7-10.7)	C
.424-.465 (10.8-11.8)	D
.466-.515 (11.8-13.0)	E
.516-.555 (13.1-14.1)	R
.600-.635 (15.2-16.1)	K
.635-.665 (16.1-16.9)	H
.669-.701 (17.0-17.8)	N
.705-.736 (17.9-18.7)	P
.750-.775 (19.0-19.8)	J
.776-.805 (19.7-20.4)	M

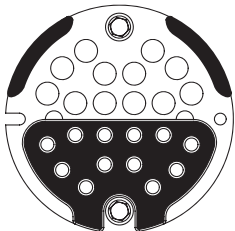
Table 6	
Dust Cap Style	Dash Number
Hermaphroditic, 24-Ch	1



KEY OPTION 2



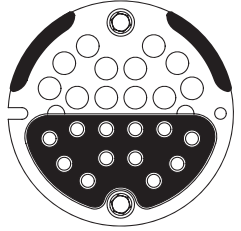
KEY OPTION 3



STANDARD KEY
(Option 1)

Additional configurations available. Contact factory representative for details.

Example Part Number - FS5H1000-6A1H1
FS5H1000 - TFOCA-III® Plug
6 - 6061-T6 Al ALY Zn-ALLOY Color OD
A - Nitrile
1 - Key 1
H - .635-.665 (16.1-16.9)
1 - Dust Cap Assy, Hermaphroditic



UNIVERSAL KEY
(Option 4)

TFOCA-III® 24-Ch Ordering (Receptacles)

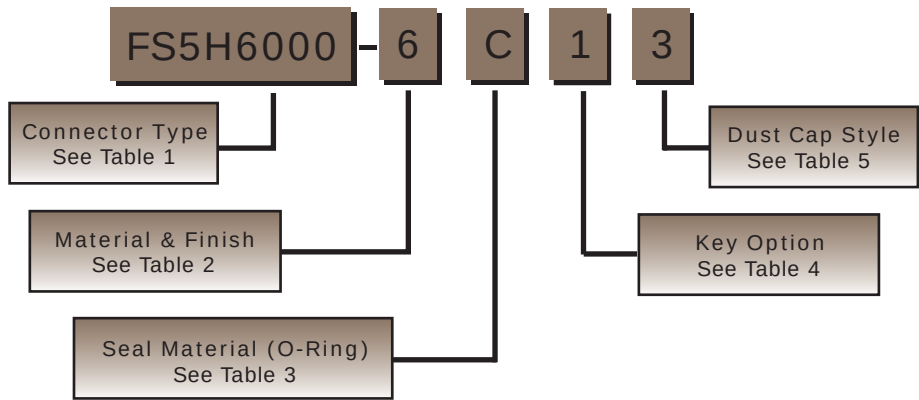


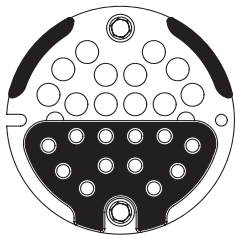
Table 1	
Connector Type	Part Number
TFOCA-III® Flange Mount Receptacle, External Mount	FS5H6000
TFOCA-III® Jam Nut Receptacle, External Mount	FS5H8000
TFOCA-III® Jam Nut Receptacle, Internal Mount	FS5H8080

Table 2	
Material & Finish	Dash Number
6061-T6 Al ALY Zn-ALLOY Color OD	6

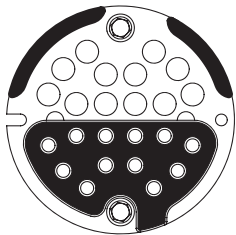
Table 3	
Seal Material (O-Ring)	Dash Number
Nitrile and Fluorosilicone	C

Table 4	
Key Option	Dash Number
Key 1	1
Key 2	2
Key 3	3
Key U	4

Table 5	
Dust Cap Style	Dash Number
Female, 24-Ch	3



STANDARD KEY
(Option 1)



KEY OPTION 2

Example Part Number - FS5H6000-6C13

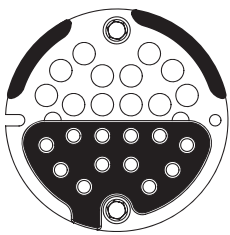
FS5H6000 - TFOCA-III® External Flange Mount Receptacle

6 - 6061-T6 Al ALY Zn-ALLOY Color OD

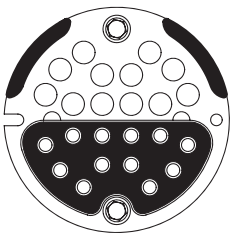
C - Nitrile and Fluorosilicone

1 - Key 1

3 - Dust Cap Assy, Female



KEY OPTION 3



UNIVERSAL KEY
(Option 4)

Additional configurations available. Contact factory representative for details.

TFOCA-III® 24-Ch Ordering (SRR Receptacles*)

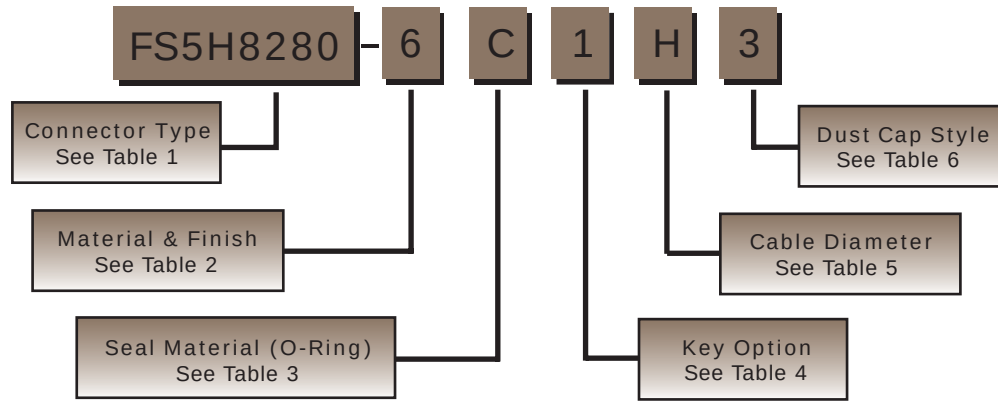


Table 1	
Connector Type	Part Number
TFOCA-III® Flange Mount Strain Relief Receptacle, External Mount	FS5H6200
TFOCA-III® Jam Nut Strain Relief Receptacle, Internal Mount	FS5H8280

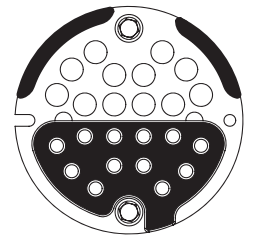
Table 2	
Material & Finish	Dash Number
6061-T6 Al ALY Zn-ALLOY Color OD	6

Table 3	
Seal Material (O-Ring)	Dash Number
Nitrile and Fluorosilicone	C

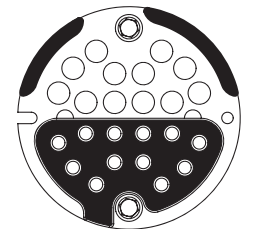
Table 4	
Key Option	Dash Number
Key 1	1
Key 2	2
Key 3	3
Key U	4

Table 5	
Cable Diameter inch (mm)	Dash Number
.240-.279 (6.1-7.1)	F
.280-.315 (7.1-8.0)	A
.316-.346 (8.0-8.8)	B
.347-.379 (8.8-9.6)	G
.380-.423 (9.7-10.7)	C
.424-.465 (10.8-11.8)	D
.466-.515 (11.8-13.0)	E
.516-.555 (13.1-14.1)	R
.600-.635 (15.2-16.1)	K
.635-.665 (16.1-16.9)	H
.669-.701 (17.0-17.8)	N
.705-.736 (17.9-18.7)	P
.750-.775 (19.0-19.8)	J
.776-.805 (19.7-20.4)	M

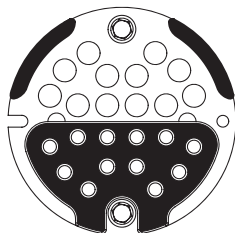
Table 6	
Dust Cap Style	Dash Number
Female, 24-Ch	3



KEY OPTION 2



KEY OPTION 3

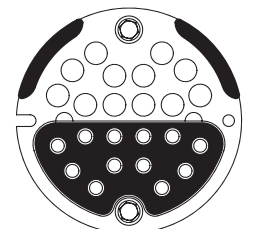


STANDARD KEY
(Option 1)

Example Part Number - FS5H8280-6C1H3

FS5H8280 - TFOCA-III® Jam Nut Strain Relief Receptacle
 6 - 6061-T6 Al ALY Zn-ALLOY Color OD
 C - Nitrile and Fluorosilicone
 1 - Key 1
 H - .635-.665 (16.1-16.9)
 3 - Dust Cap Assy, Female

* Receptacle w/ Integrated Strain Relief

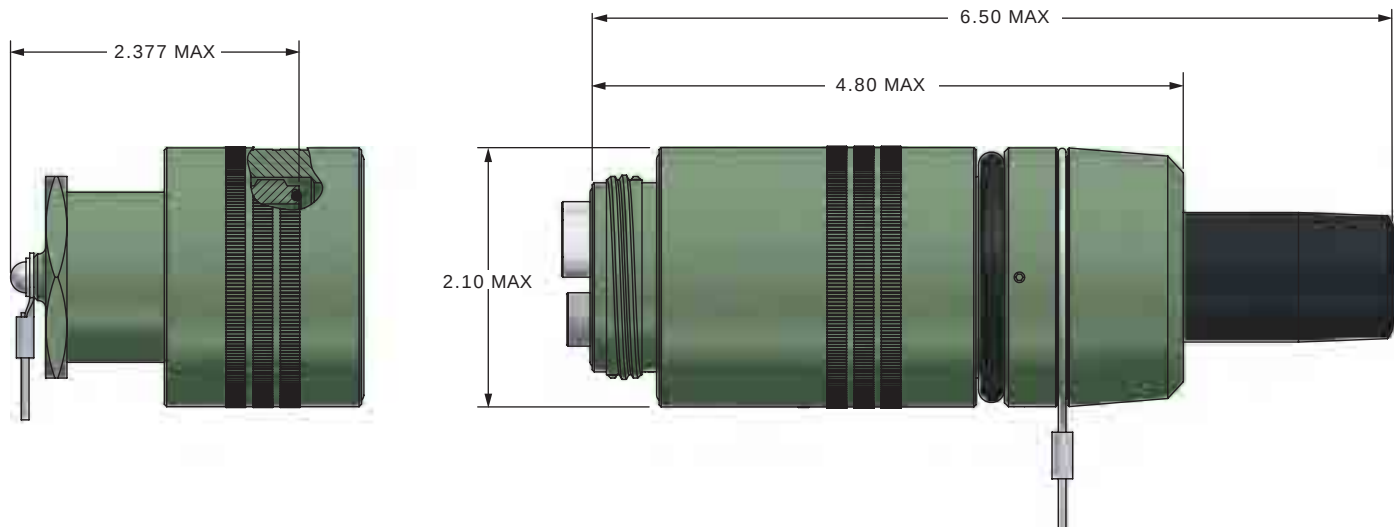


UNIVERSAL KEY
(Option 4)

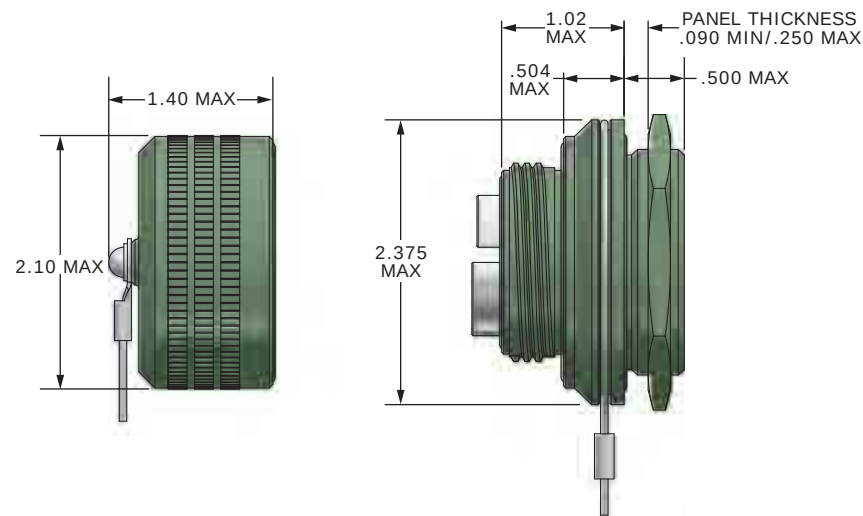
Additional configurations available. Contact factory representative for details.

TFOCA-III® 24-Ch Plug & Jam Nut Receptacle

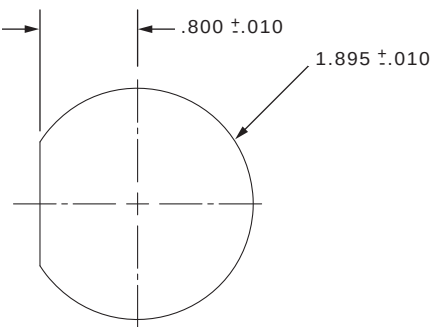
**FS5H1000
TFOCA-III® Plug**



**FS5H8000
TFOCA-III® Jam Nut Receptacle
(External Mount)**



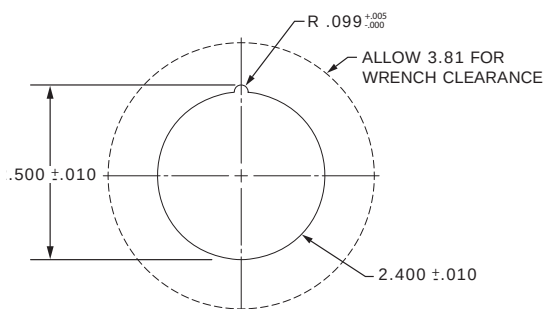
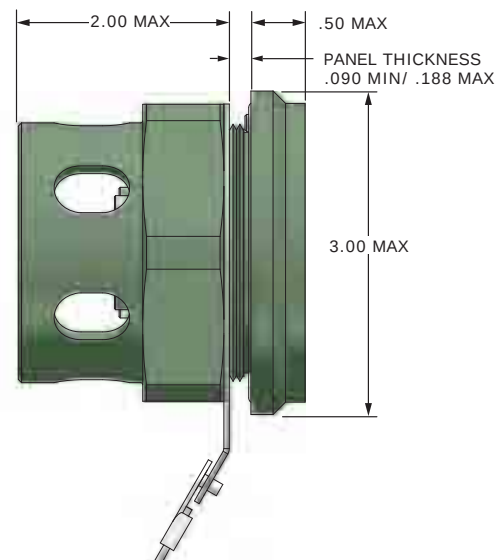
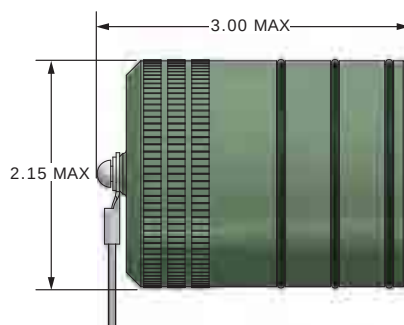
Panel Cut-Out



Dimensions are for reference only. Dimensions are in inches.

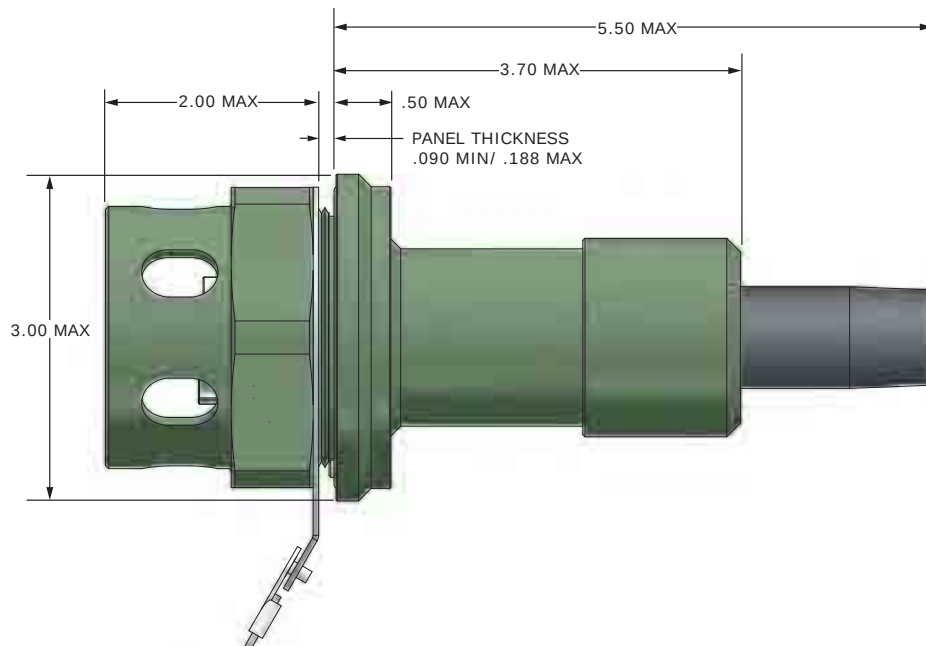
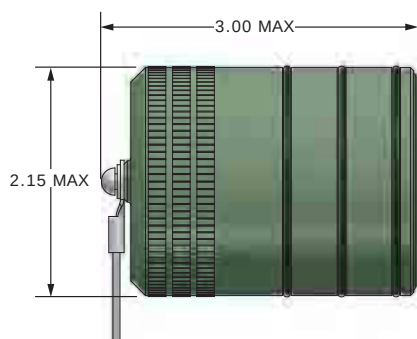
TFOCA-III® 24-Ch Jam Nut Receptacles

FS5H8080 TFOCA-III® Jam Nut Receptacle with Alignment Shroud (Internal Mount)



Panel Cut-Out
(Dimensions are the
same for FS5H8080 &
FS5H8280)

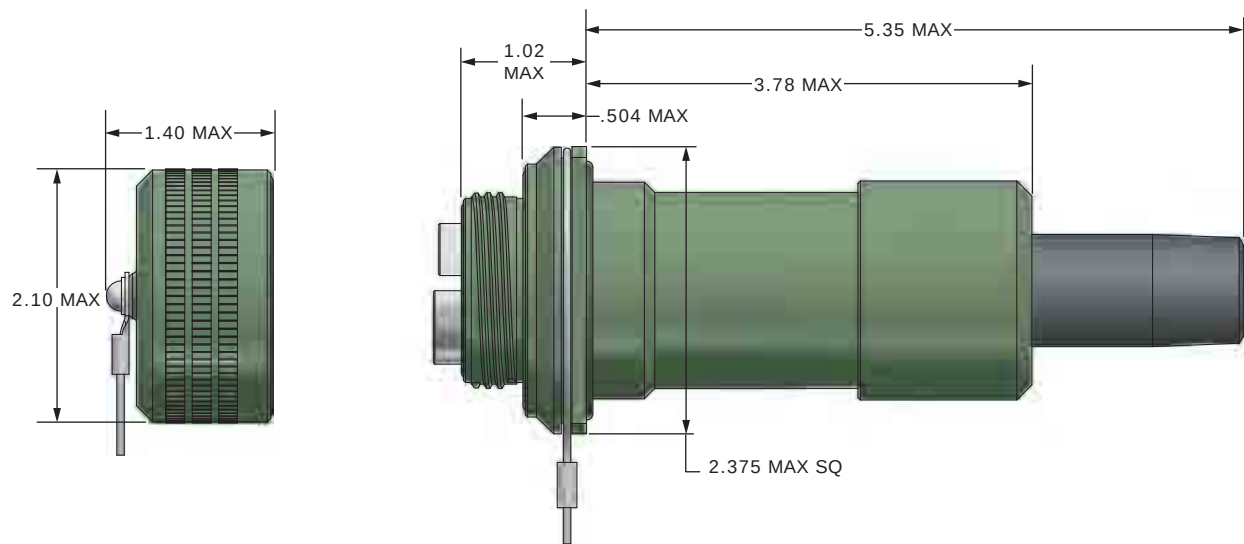
FS5H8280 TFOCA-III® Jam Nut Strain Relief Receptacle (SRR) with Alignment Shroud Jam Nut (Internal Mount)



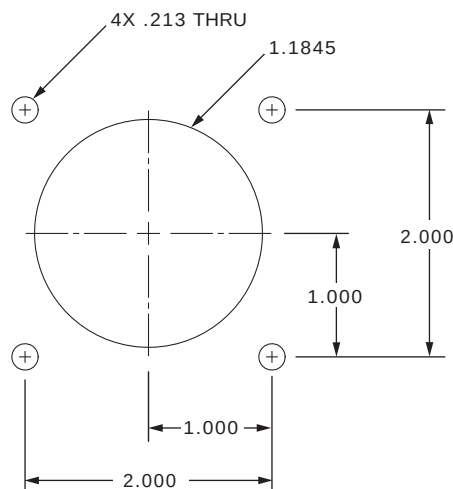
Dimensions are for reference only. Dimensions are in inches.

TFOCA-III® 24-Ch Flange Receptacles

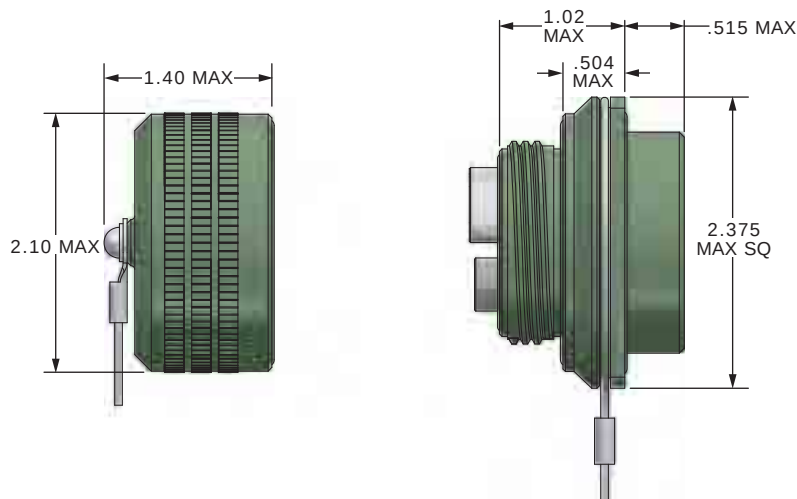
FS5H6200
TFOCA-III® Flange Mount Strain Relief Receptacle (SRR)
(External Mount)



Panel Cut-Out
(Dimensions are the same
for FS5H6200 & FS5H6000)

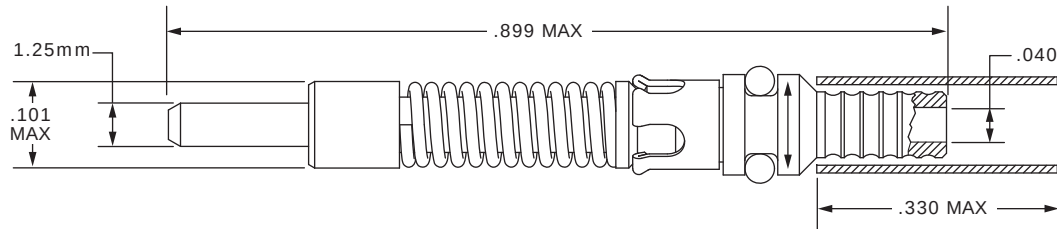


FS5H6000
TFOCA-III® Flange Mount Receptacle
(External Mount)



Dimensions are for reference only. Dimensions are in inches.

FSAF Termini (For TFOCA-III® Connectors)



The AFSI FSAF termini utilize 1.25mm ferrule technology to increase fiber density while maintaining the superior optical characteristics of physical contact termini. AFSI engineered the FSAF termini for use as pin or socket configurations using field proven robust components.

Parameter	Typical	Maximum
Insertion Loss (multimode) Per Mated Pair/Connection	0.30dB	0.75dB
Insertion Loss (single mode) Per Mated Pair/Connection	0.40dB	0.75dB
Back Reflection/Return Loss (SM-UPC polish)	-50dB	-40dB

Specification	Measurement/Detail
Operating Temperature	-46°C to +71°C
Storage Temperature	-55°C to +85°C
Mud	5 minute immersion, clean with water (per MIL-PRF-83526 requirements)
Water Immersion	EIA/TIA-455-40, Water, 1m, 48hr
Vibration (operational)	EIA/TIA-455-11
Shock	EIA/TIA-455-14, Condition A
Mating Durability	2,000 cycles per EIA/TIA-455-21

Dimensions are for reference only. Dimensions are in inches. Except where indicated.