



The M83526/20 compliant AFSI TACBeam® rugged fiber optic connector

About the TACBeam® Connector

Amphenol Fiber Systems International (AFSI) offers a MIL-PRF-83526/20A & /21A compliant expanded beam rugged fiber optic connector for military and industrial applications. Expanded beam technology expands and collimates the optical signal through the connector interface path, resulting in a diameter many times that of the original beam. The optical beam is then refocused into the core of the receiving fiber. The larger beam diameter improves insertion loss performance in the presence of dust and debris. Also, because the lenses do not physically contact, there is no wear on the termini, allowing the connector to be mated and demated thousands of times without affecting optical performance.

The AFSI TACBeam® is hermaphroditic, which facilitates the concatenation of multiple cable assemblies to support varying distance requirements. The connector is available in both single mode and multimode versions, can be configured to support one to four fiber optic channels using a common insert and has been designed to accept a wide variety of cables to suit any application.

Features & Benefits

- Supports both multimode and single mode fiber
- Expanded beam technology is less susceptible to dust and debris
- Monolithic insert design facilitates cleaning
- Hermaphroditic design enables daisy-chaining of cable assemblies to support varying distances
- Non-contacting interface allows thousands of mating cycles

Applications

- Tactical Military Ground Systems
- Oil & Gas Seismic Systems
- Broadcast Systems
- Rail & Mass Transit



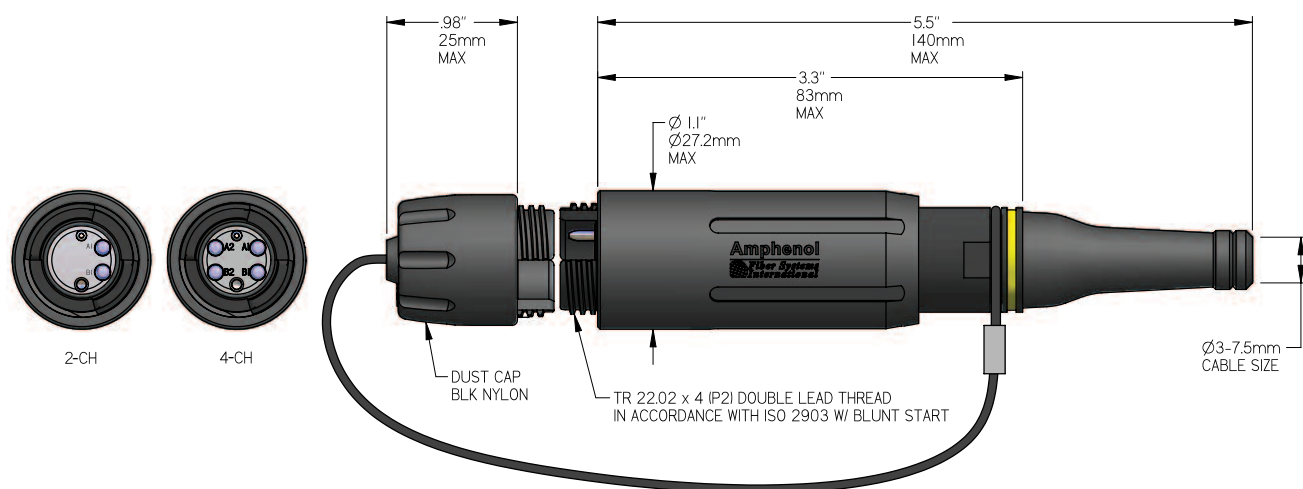
AFSI TACBeam® receptacle



Specifications

Specification	Measurement/Detail
Insertion Loss, Typical	0.7 dB, multimode, @ 850 nm or 1300nm 0.7 dB, single mode, @ 1310nm or 1550nm
Return Loss	≥-34.0 dB unmated @ 1310nm or 1550nm
Mating Durability	3,000 cycles
Operating Temperature	-46°C to 71°C
Storage Temperature	-57°C to 85°C
Cyclic Temperature	-55°C/85°C
Humidity	95% RH
Immersion	15m, water (plug & receptacle)
Shock	EIA/TIA 455-14, test condition A
Impact	EIA/TIA 455-2, method C, service class: severe
Vibration	EIA/TIA 455-11, sinusoidal condition III (at 10g), random condition VI (letter C) for 1.5 hours
Weight	Plug approx. 300g, receptacle approx. 100g

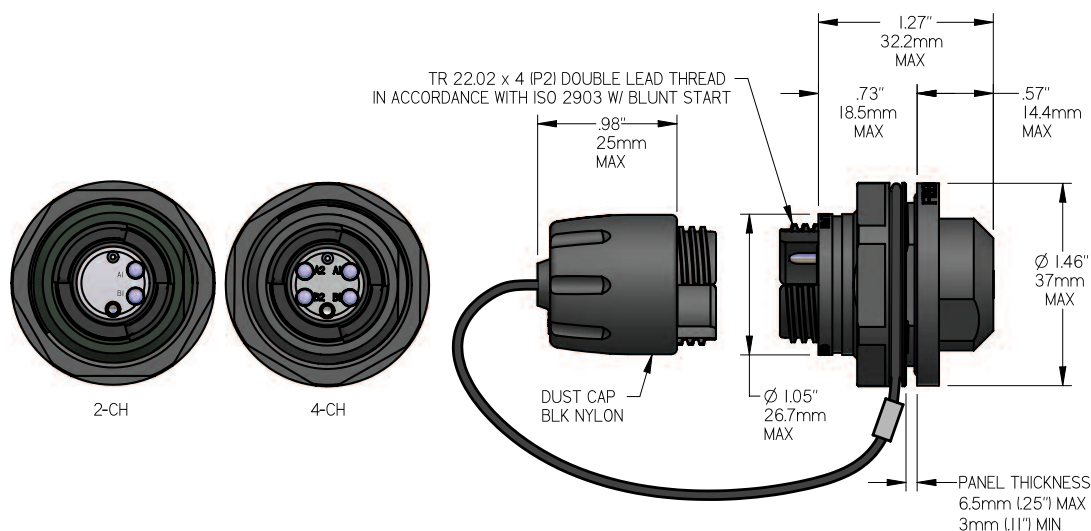
EB4H1000 Plug Assembly



EB4H1000 Plug Ordering Nomenclature

MATERIAL	# CHANNELS	WAVELENGTH	CABLE
3 - BLACK ALUMINUM	2 - 2 CH	1 - 850/1300 nm	3 - 3-4.5mm
A - MARINE BRONZE	4 - 4 CH	2 - 1310 nm	5 - 4.5-6mm
B - 360 BRASS		3 - 1550 nm	7 - 6-7.5mm
C - 303 STAINLESS		4 - 1310/1550 nm	
F - 316 STAINLESS			

EB4H8000 Receptacle Assembly

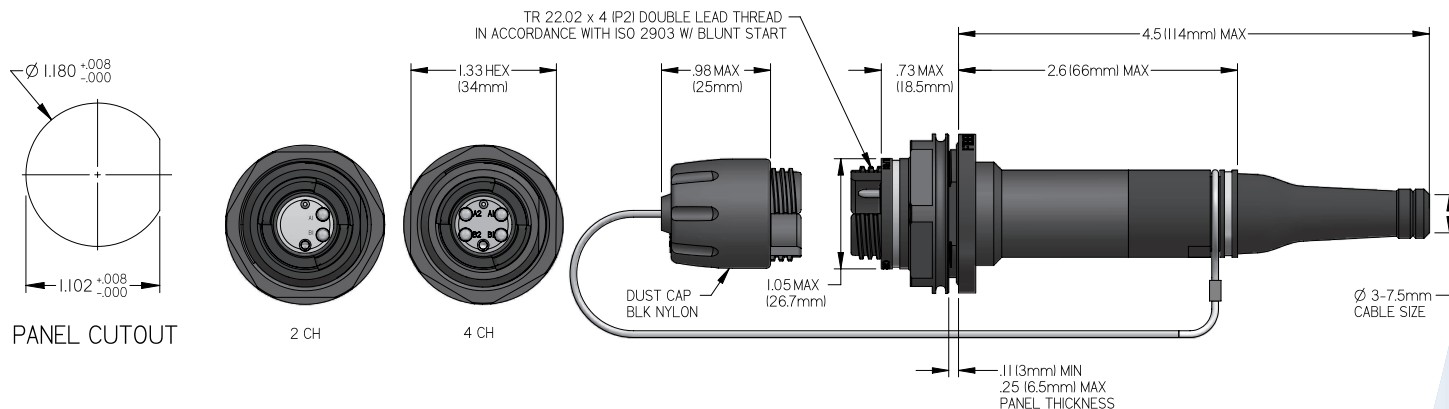


EB4H8000 Ordering Nomenclature

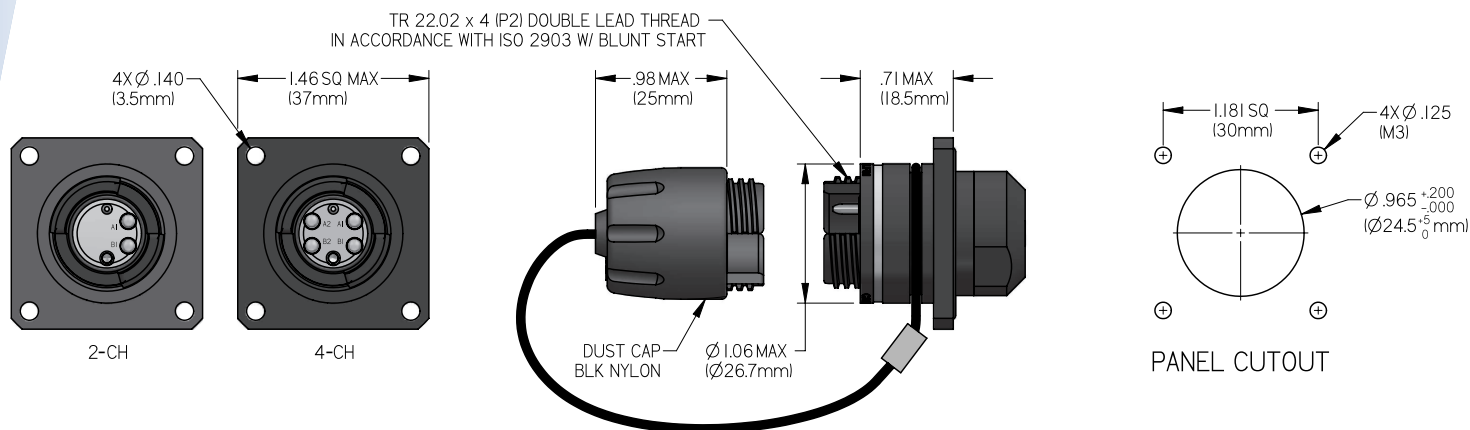
EB4H8000- - - -
EB4H8280- - - -

MATERIAL	# CHANNELS	WAVELENGTH	CABLE
8 - OD ALUMINUM	2 - 2 CH	1 - 850/1300 nm	3 - 3-4.5mm
3 - BLACK ALUMINUM	4 - 4 CH	2 - 1310 nm	5 - 4.5-6mm
A - MARINE BRONZE		3 - 1550 nm	7 - 6-7.5mm
B - 360 BRASS		4 - 1310/1550 nm	
C - 303 STAINLESS			
F - 316 STAINLESS			

EB4H8280 Strain Relief Receptacle



EB4H6000 Flange Mount Strain Relief Receptacle



EB4H6000 Ordering Nomenclature

<u>MATERIAL</u>	<u># CHANNELS</u>	<u>WAVELENGTH</u>	<u>CABLE</u>
8 - OD ALUMINUM	2 - 2 CH	1 - 850/1300 nm	3 - 3-4.5mm
3 - BLACK ALUMINUM	4 - 4 CH	2 - 1310 nm	5 - 4.5-6mm
A - MARINE BRONZE		3 - 1550 nm	7 - 6-7.5mm
B - 360 BRASS		4 - 1310/1550 nm	
C - 303 STAINLESS			
F - 316 STAINLESS			

EB4H6200 Flange Mount Strain Relief Receptacle

