TFOCA-II®GoldRush®



Amphenol Fiber Systems International (AFSI) manufactures a complete line of next generation fiber optic connectors designed to meet the needs of harsh environment applications.

Amphenol Fiber Systems International (AFSI) has designed the next generation "longwall communications" deployable fiber optic connector. By responding to specific customer needs and leveraging the family of AFSI TFOCA-II® connectors, the GoldRush series of fiber optic connectors was born. These innovative interconnect solutions have become an enabling technology for "digital mining." AFSI's GoldRush connectors address specific mining requirements for the future of intelligent mining. GoldRush connectors are the only Mining Safety and Health Administration (MSHA) certified fiber optic connectors for use in underground mines under Title 30 CFR, Part 18. The heart of the GoldRush family of deployable fiber optic connectors is the TFOCA-II® termini, featuring "sealed" free floating termini. This revolutionary design enables GoldRush connectors to seal against high humidity and moisture conditions while allowing full axial and orbital movement of the mated termini, providing the lowest possible insertion loss.

Features & Benefits:

- Hermaphroditic Design for Versatility Enables the GoldRush plug to be daisy-chained or unreeled from either end of a reel
- Brass Construction Eliminates thermite concerns. Also available in stainless steel (for corrosive environments) and aluminum
- 4-Channel Connector Design Provides system flexibility
- Optional Key Positions Four key positions (1, 2, 3 and universal) available, enabling segregation of mated plug/ receptacles or plug/plug, through mechanical interface
- Improved Cable Retention Strength Designed to meet 400lb. pull strength while protecting fibers from stress

- Solid Core Alignment Sleeves More robust than split alignment sleeves
- Removable End Cap Allows for easy field repair and cleaning
- Commercial Ceramic Ferrule Technology Enables GoldRush connectors to provision multi-mode and single mode interconnect with a variety of polishes including SPC and UPC
- Field Repairable Using Existing Parts Additional connector components (other than termini) are not required to perform field repair

GoldRush®

Applications:

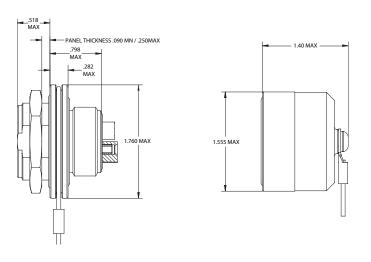
- Mining
- Oil, Gas and Geo-science industries
- Industrial

GoldRush Specifications:

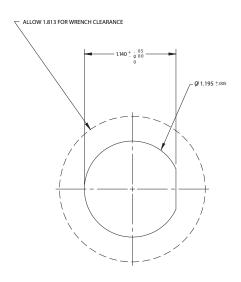
| Specification | Measurement/Detail | |
|--------------------------|--|--|
| Operating Temperature | -46° C to + 71° C | |
| Storage Temperature | -52° C to + 85° C | |
| Mud | 5 minute immersion, clean with water | |
| Water Pressure | 1 meter for 24 hours | |
| Ice Crush/Freezing Water | Immersed & frozen in water for 7 hours | |
| Humidity Immersion | TIA/EIA-455-5, 5 cycles | |
| Vibration (Operational) | TIA/EIA-455-11 | |
| Shock | EIA/TIA-455-14, Condition A | |
| Cable Seal Flexing | 100 cycles per TIA/EIA-455-1 | |
| Twist | 1,000 cycles per EIA/TIA-455-36 | |
| Cable Retention | 400 pounds minimum per EIA/TIA-455-6 | |
| Impact | EIA/TIA-455-2 | |
| Crush Resistance | 450 pounds minimum per EIA/TIA-455-26 | |



FS4H5001 GoldRush 4-Channel Brass "D" Mount Jam Nut Receptacle (Not MSHA Certified):



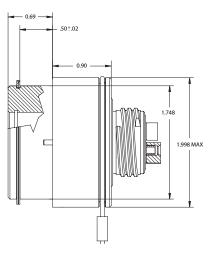
FS4H5001 GoldRush 4-Channel Brass "D" Mount Jam Nut Receptacle Cutout:

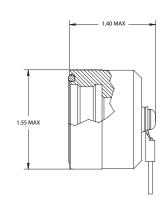


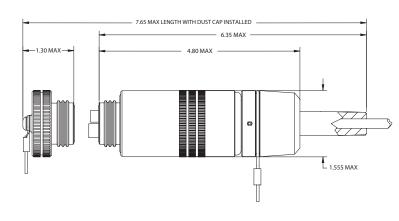
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FS4H5002 GoldRush 4-Channel Brass Packing Gland Receptacle (MSHA Cert. No. 18-NXA050001-0):

FS4H5000 GoldRush 4-Channel Brass Hermaphroditic Plug (MSHA Cert. No. 18-NXA050001-0):







GoldRush Part Numbers:

| P | rod | uct | Nun | nber: | |
|---|------|-----|-----|--------|--|
| | ı ou | ucc | Nul | iibci. | |

Product Name:

FS4H5000-Y-Z FS4H5001-Z FS4H5002-Z

GoldRush 4-Channel Brass Hermaphroditic Plug (MSHA Cert. No. 18-NXA050001-0) GoldRush 4-Channel Brass "D" Mount Jam Nut Receptacle (Not MSHA Certified) GoldRush 4-Channel Brass Packing Gland Receptacle (MSHA Cert. No. 18-NXA050001-0)

| Y=H Cable Diameter Range .190239 | Z=1 Key Option 1, Grey |
|----------------------------------|------------------------|
| Y=F Cable Diameter Range .240279 | Z=2 Key Option 2, Blue |
| Y=A Cable Diameter Range .280315 | Z=3 Key Option 3, Red |
| Y=B Cable Diameter Range .316346 | Z=U Key "U", Green |
| Y=G Cable Diameter Range .347379 | |
| Y=C Cable Diameter Range .380423 | |
| Y=D Cable Diameter Range .424465 | |

MTFP1X00Y

TFOCA-II® Terminus

| <u>Product Numb</u> er | <u>X=Ferrule Type</u> | <u>Y=Crimp</u> |
|------------------------|-----------------------|-----------------|
| MTFP1000 | 0=Multimode | Blank=W/O Crimp |
| MTFP1000C | 0=Multimode | C=With Crimp |
| MTFP1100 | 1=Single mode | Blank=W/O Crimp |
| MTFP1100C | 1=Single mode | C=With Crimp |
| | | |

MTFP1150 MTFP1175 MTFP0000

TFOCA-II[®] Alignment Sleeve, Multimode TFOCA-II[®] Alignment Sleeve, Single mode TFOCA-II[®] Dummy Terminus

Drawings are not to scale. Measurements are in inches.

GoldRush

How to Order:

For more information on how to order or to obtain a price quote on any of our TFOCA-II® EX products, please call us at 800-472-4225. For international calls please dial 214-547-2400 or e-mail us at info@fibersystems.com.



About Amphenol Fiber Systems International:

Amphenol Fiber Systems International (AFSI) designs, manufactures, markets and supports reliable and innovative fiber optic interconnect solutions that withstand the harsh environments of military, oil & gas, mining and broadcast applications. After more than two decades in business, AFSI continues to uphold its position as a global leader in fiber optic interconnect components and systems such as termini, M28876, MIL-ST, TFOCA and the TFOCA-II® connector, which AFSI developed and patented.

AFSI has delivered millions of fiber optic connectors in more than 34 countries. Whenever there is a need for superior, cost-effective fiber optic systems and products that will stand up to demanding operating environments, you can rely on AFSI for engineering know-how, top-quality products and expert technical support.

Visit **www.amphenol-fsi.com** for more information.