

## Geo-Beam™ EX

### Electrical and Optical Explosive Proof Connectors

Cinch Connectivity Solutions explosion proof series Geo-Beam™ EX has been designed in accordance to information defined within ATEX directive IECEx 60079 for use in Zone 1 and Zone 2 Hazardous Areas.

The Geo-Beam™ EX product range consists of an Inline Plug and Box Mount Bulkhead and is manufactured using Stainless Steel 316, making it able to withstand the most extreme environments. The product uses a Tri-Start Trapezoidal coupling method giving a reduce turn and an additional locking mechanism giving positive mating, and an audible click to ensure full engagement.

A standard ATEX approved metric cable gland can be used and will fit all of the Geo-Beam™ EX connector types, the cable glands used will allow termination to varied cable constructions.

The Geo-Beam™ EX electrical range will offer the greatest flexibility of connector configurations and broadest options for the customer. The range is primarily designed using an 8 way copper connector, focusing around a standard #16 MIL-C-39029 contact and offers a variable range of fiber optic configurations, using MIL-PRF-29504, physical contact and optical termini.



### Features

- Certified for equipment used in hazardous environments
- Required in offshore oil and gas applications
- Applicable to upstream/midstream/downstream
- ATEX is European only and regulatory to all EU countries
- IECEx is a worldwide standard (and is used in the US)
- Can be used in Zone 0 Hazardous Areas when utilized with appropriate hardware



### Applications

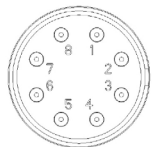
- Explosion proof and hazardous environments
- Oil, Gas and Offshore
- Petrochemical refineries
- Chemical Manufacturing
- Pharmaceutical Manufacturing

## GEO-BEAM™ EX - Electrical / Optical Connector

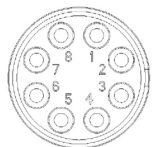
Power Max AMPS per Pin	13		
Power Max Voltage	600		
Power Max AMPS	64		
Insertion Loss (Optical)	Singlemode	-1.0dB (typical -0.5dB)*	
	Multimode	-0.7dB (typical -0.5dB)*	
Return Loss (Optical)	≥50dB singlemode		
Temperature Class	Gas: T4 (-30°C to +60°C)	Dust: T135°C	
Surface Temperature	60°C		
Standard Coding	II 2 G D	Ex db op pr IIC T4 Gb	Ex tb IIIC T80°C Db
Certification	ATEX Directive 2014/34/EU & IEC 60079		
	ATEX Code: CML16ATEX1398X		IECEX Code: CML16.0151X
IP Rating (when mated)	IP67		
Free Fall Resistance	1kg (7 Joules) at 1.2M (Steel Plate Base)		
Weight (approx)	Plug - 420g / Bulkhead - 580g (Additional weight with gland)		
Connector Shell Material / Color	Stainless Steel 316 (shotblast finish)		

\*performance is dependent on assembly & termination; figures relate to CCS terminated harnesses.

### Electrical

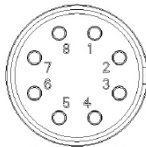


4530 - 8CH ELECTRICAL PINS (BULKHEAD)

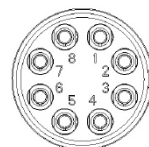


4531 - 8CH ELECTRICAL SOCKETS (PLUG)

### Optical Pin and Socket



4530 - 8CH OPTICAL PHYSICAL CONTACT PINS (BULKHEAD)



4531 - 8CH OPTICAL PHYSICAL CONTACT SOCKETS (PLUG)

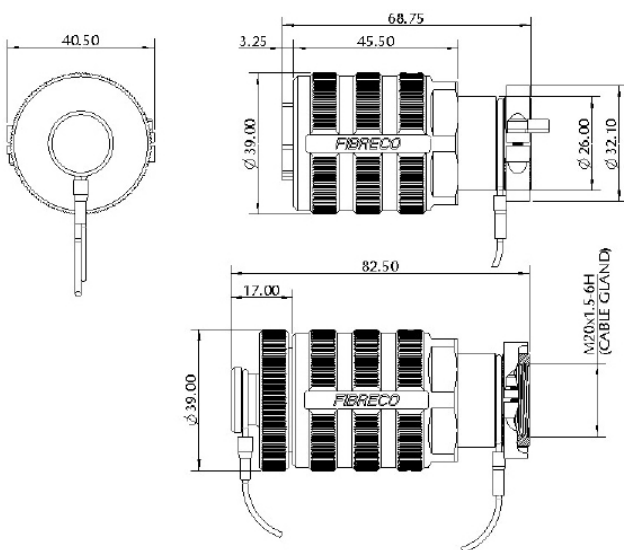
### Available Insert Options

- 8 #16 Pin or Socket Contacts (All Copper MIL-C-39029, All Fibre MIL-PRF-29504, Mixed Copper & Fibre)

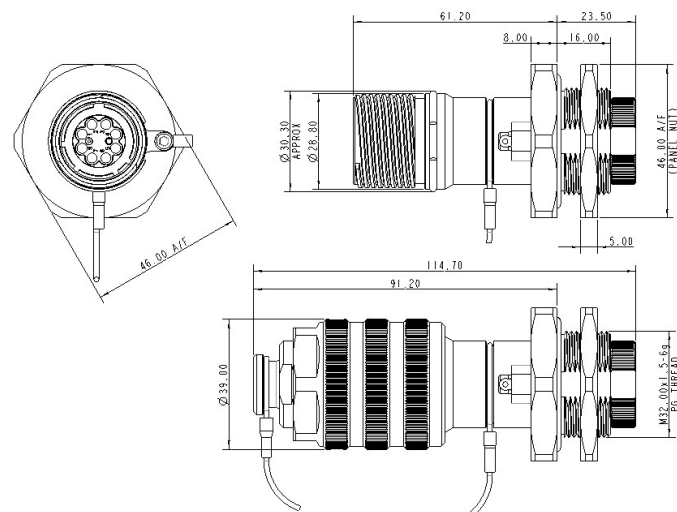
#### Other Available Options:

- 2, 4, 6 and 8 Expanded Beam Channels
- 2 Expanded Beam Channels with 2 #16 MIL-C-39029
- 2 Expanded Beam Channels with 2 #20 MIL-C-39029
- 4 Expanded Beam Channels with 2 #16 MIL-C-39029
- 2 Expanded Beam Channels with 2 #16 and 2 #20 MIL-C-39029

### Plug Connector



### Bulkhead Connector



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