

Geo-Beam™ EX

Expanded Beam 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 Expanded Beam Connector is designed using a standard Fibreco insert. The insert allows up to 8 expanded beam channels, or a hybrid option, enabling a combination of power, electrical and optical connectivity in an all in one solution.



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

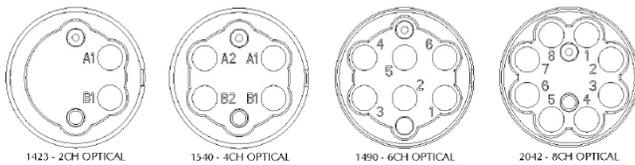
- Explosive and hazardous environments
- Chemical Manufacturing
- Oil, Gas and Offshore
- Pharmaceutical Manufacturing
- Petrochemical refineries

GEO-BEAM™ EX - Expanded Beam Connector

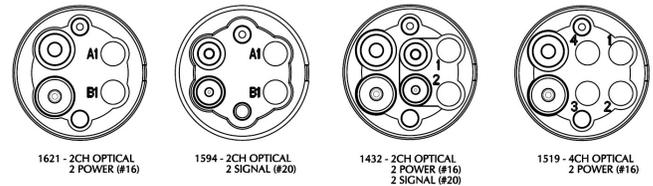
Insertion Loss	Singlemode	-2.5dB (typical -1.5dB)*		
	Multimode	-2.0dB (typical -1.0dB)*		
Return Loss	≥35dB (typical 40dB) singlemode			
Temperature Class	Gas: T4 (-30°C to +60°C)	Dust: T135°C		
Surface Temperature	60°C			
Standard Coding	II 2 G D	Ex db op pr IIC T4 Gb	Ex tb IIIC T80°C Db	
Certification	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.

Optical Inserts



Hybrid Inserts



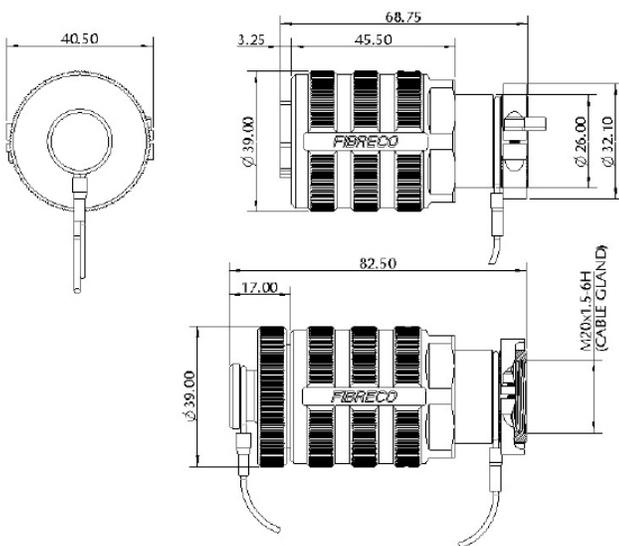
Available Insert Options

- 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

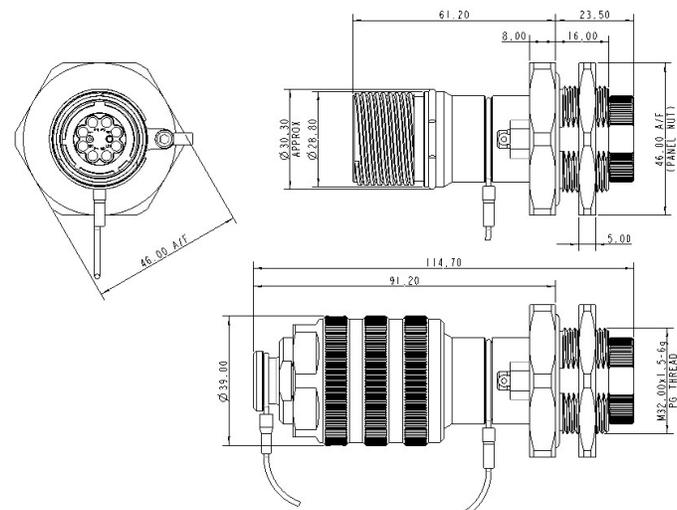
Other Available Options:

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

Plug Connector



Bulkhead Connector



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