



CEB CPE EXPANDED BEAM



Company History and new Targets

CPE ITALIA SPA is a global designer, manufacturer and distributor of electrical and optical interconnect solutions, integrated systems and SMT and THT electronic boards.

Founded in 1978, just celebrated 45 years of growth and successes as multinational group with global footprint and operations in key developing and target markets.

Group Organization accounts 250 employees spread over Italy, China, Romania, India, Brazil, Mexico and USA.

Holding is located in Milan with all indirect and management functions.

Central logistics hub for components and high-tech interconnection systems production for naval applications complement the location.





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CEB11 CONNECTOR



RoHS
COMPLIANT

- Advanced expanded beam technology
- Rugged field deployable fiber optic connector
- Hermaphroditic interconnection
- 2 to 4 Optical Channels for Single or Multi-mode
- Custom configuration available
- Environmental sealing (IP68)
- Very high resistance to vibration, shock, environmental effects, dust, and debris

Description

The CEB11 Connectors, featuring expanded beam technology, hermaphroditic connection, rugged construction for field deployment have been designed for harsh environment applications such as tactical communications, avionics, offshore systems, outside broadcast, mining and plant.

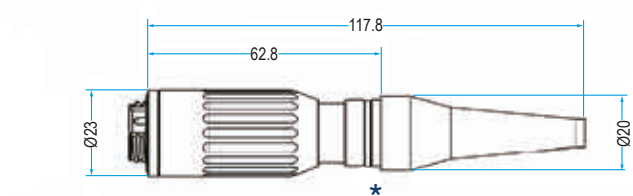
The expanded beam technology uses expanded and collimated beams to couple optical fibers without any contact. It could allow for optics to be used in areas that have been quite restrictive due to presence of damage or contamination at the fiber end. Hermaphroditic connector design enables fast deployment by daisy-chaining multiple cable segments.

Specifications

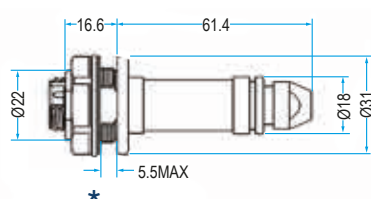
Optical Performance		
Insertion Loss	Typical 0.8 -1.8 dB@ 1310, 1550 nm Typical 0.5 - 1.0 dB @ 850, 1300 nm	Single mode Multi mode
Return Loss	>32 dB	Single mode only
Mechanical performance		
Durability	3,000 mating cycles	
Operating Temperature	-40 °C to 85 °C	
Storage Temperature	-55 °C to 85 °C	
Water Immersion	Up to 15 m	
Free Fall	500 falls @ 1.2 m	
Vibration	10 - 500 Hz, 3 axis, 0.75 mm, 10 g	
Shock	11 ms, 3 axis, 50 g	

Dimensions

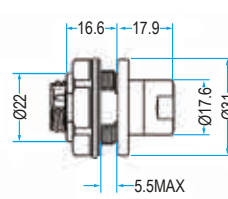
CEB11 Plug



CEB11 Receptacle - Jam Nut



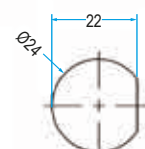
Standard Receptacle



Low profile Receptacle

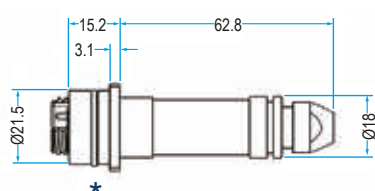


Flange Nut

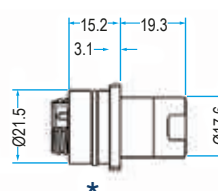


Panel Cut-Out

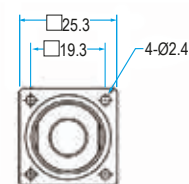
CEB11 Receptacle - Square Flange



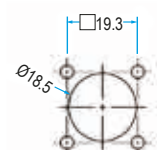
Standard Receptacle



Low profile Receptacle

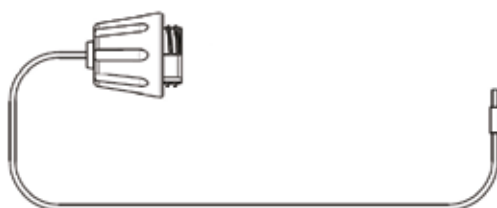


Square Flange



Panel Cut-Out

* Cap and lanyard provided for all versions



Note. Other configurations, materials and finishes available upon request

Modelings



Standard Plug

Receptacle
Jam nut / Standard



Receptacle
Jam nut / Low profile

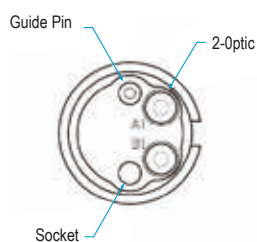


Receptacle
Square Flange/Standard

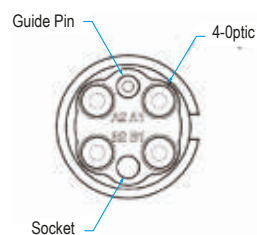


Receptacle
Square Flange/Low profile

Insert Arrangement



Optical channel 2 position



Optical channel 4 position

CEB Connector Series



CEB15 Insert



CEB13 Insert



CEB11 Insert



Note. Other configurations, materials and finishes available upon request

Order Information

(Order Example)

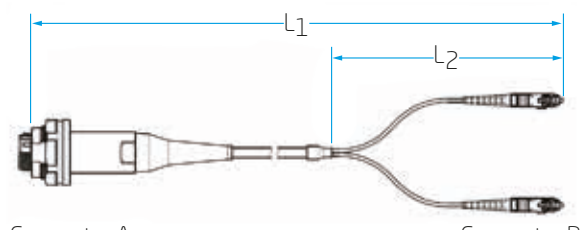
Connector only	CEB11	- PSD - B - 04 - M1 - D55_(C03)
Cable assembly	CEB11AS	- RJS - B - 04 - MI - S20 - LC - 020/30D_(C03)
		<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div>

Connector A 1	PSD RJS RJL RQS RQL CXX	Plug with Dust cap Receptacle, Jam nut, Standard, Dust cap Receptacle, Jam nut, Low profile, Dust cap Receptacle, Square Flange, Standard, Dust cap Receptacle, Square Flange, Low profile, Dust cap Customized connector type
Material & Finish 2	B X	Aluminum alloy, Black hard anodizing Others
Arrangement 3	02 04 0X	Optical 2 channel Optical 4 channel Others
Fiber 4	S1 M1 M2 M3	SM - 9 µm core Single mode fiber OM1 - 62.5 µm core Multi mode fiber OM2 - 50 µm core Multi mode fiber OM3 - 50 µm core Multi mode fiber
Cable Option 5	S09 S20 055 DXX	Ø 0.9 mm Buffered fiber - RJL, RQL Ø 2.0 mm Jacketed cable - RJS, RQS Ø 5.5 mm Outdoor cable - PSD, RJS, RQS Others
Connector B 6	SA SC LC ST CX	Same as Connector A SC type connector LC type connector ST type connector Customized connector type
Cable Length 7	L1/L2 (For example) 100 020/30 020/30D	Total Length(m)/ Distribution Length (cm) Total 100 m Total 20 m / Distribution 30 cm Breakout cable type Total 20 m / Distribution 30 cm Distribution cable type

Note. Other configurations, materials and finishes available upon request



Connector only



Connector A

Connector B

Cable assembly

CEB13 CONNECTOR



RoHS
COMPLIANT

- Advanced expanded beam technology
- Rugged field deployable fiber optic connector
- Hermaphroditic interconnection
- 2 to 4 Optical Channels for Single or Multi-mode
- Custom configuration available
- Environmental sealing (IP68)
- Very high resistance to vibration, shock, environmental effects, dust, and debris

Description

The CEB13 Connectors, featuring expanded beam technology, hermaphroditic connection, rugged construction for field deployment have been designed for harsh environment applications such as tactical communications, avionics, offshore systems, outside broadcast, mining and plant.

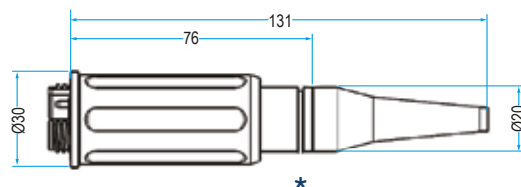
The expanded beam technology uses expanded and collimated beams to couple optical fibers without any contact. It could allow for optics to be used in areas that have been quite restrictive due to presence of damage or contamination at the fiber end. Hermaphroditic connector design enables fast deployment by daisy-chaining multiple cable segments.

Specifications

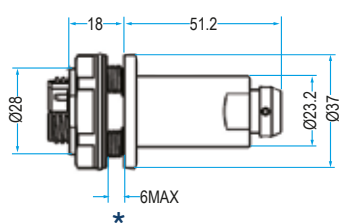
Optical Performance		
Insertion Loss	Typical 0.8 -1.8 dB@ 1310, 1550 nm Typical 0.5 -1.0 dB@ 850, 1300 nm	Single mode Multi mode
Return Loss	>32 dB	Single mode only
Mechanical performance		
Durability	3,000 mating cycles	
Operating Temperature	-40 °C to 85 °C	
Storage Temperature	-55 °C to 85 °C	
Water Immersion	Up to 15 m	
Free Fall	500 falls @ 1.2 m	
Vibration	10 - 500 Hz, 3 axis, 0.75 mm, 10 g	
Shock	11 ms, 3 axis, 50 g	

Dimensions

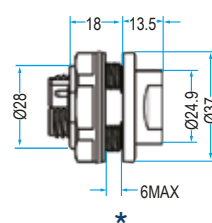
CEB13 Plug



CEB13 Receptacle - Jam Nut



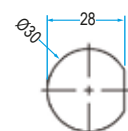
Standard Receptacle



Low profile Receptacle

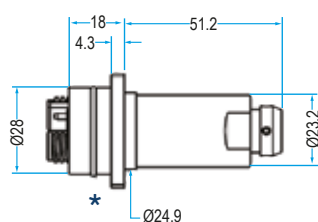


Flange Nut

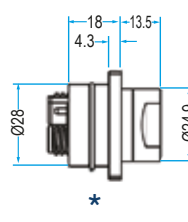


Panel Cut-Out

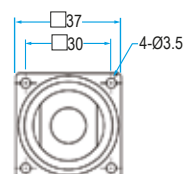
CEB13 Receptacle - Square Flange



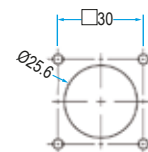
Standard Receptacle



Low profile Receptacle

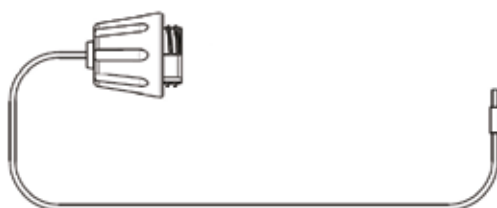


Square Flange



Panel Cut-Out

***Cap and lanyard provided for all versions**



Note. Other configurations, materials and finishes available upon request

Modelings



Standard Plug

Receptacle
Jam nut / Standard



Receptacle
Jam nut / Low profile

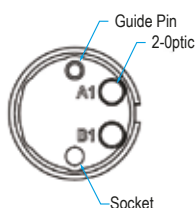


Receptacle
Square Flange/Standard

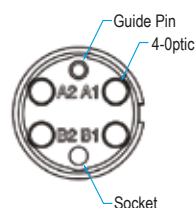


Receptacle
Square Flange/Low profile

Insert Arrangement



Optical channel 2 position



Optical channel 4 position

CEB Connector Series



CEB15 Insert



CEB13 Insert



CEB11 Insert



Note. Other configurations, materials and finishes available upon request

Order Information

(Order Example)

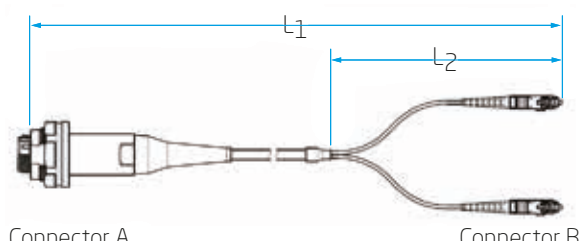
Connector only	CEB13	- PSD - B - 04 - M1 - D55_(C03)
Cable assembly	CEB13AS	- RJS - B - 04 - M1 - S20 - LC - 020_(C03)
		<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div>

Connector A 1	PSD RJS RJL RQS RQL CXX	Plug with Dust cap Receptacle, Jam nut, Standard, Dust cap Receptacle, Jam nut, Low profile, Dust cap Receptacle, Square Flange, Standard, Dust cap Receptacle, Square Flange, Low profile, Dust cap Customized connector type
Material & Finish 2	B P X	Aluminum alloy, Black hard anodizing Stainless steel, Passivated Others
Arrangement 3	02 04 0X	Optical 2 channel Optical 4 channel Others
Fiber 4	S1 M1 M2 M3	SM - 9 μ m core Single mode fiber OM1 - 62.5 μ m core Multi mode fiber OM2 - 50 μ m core Multi mode fiber OM3 - 50 μ m core Multi mode fiber
Cable Option 5	S09 S20 055 DXX	\varnothing 0.9 mm Buffered fiber - RJL, RQL \varnothing 2.0 mm Jacketed cable - RJS, RQS \varnothing 5.5 mm Outdoor cable - PSD, RJS, RQS Others
Connector B 6	SA SC LC ST CX	Same as Connector A SC type connector LC type connector ST type connector Customized connector type
Cable Length 7	L1/L2 (For example) 100 020/30	Total Length(m)/ Distribution Length (cm) Total 100m Total 20m / Distribution 30cm

Note. Other configurations, materials and finishes available upon request



Connector only



Connector A

Connector B

Cable assembly

CEB15 CONNECTOR



RoHS
COMPLIANT

- Advanced expanded beam technology
- Rugged field deployable fiber optic connector
- Hermaphroditic interconnection
- 2 to 6 Optical Channels for Single or Multi-mode
- Optical/ Electric hybrid configurable
- Custom configuration available
- Environmental sealing (IP68)
- Very high resistance to vibration, shock, environmental effects, dust, and debris

Description

The CEB15 Connectors, featuring expanded beam technology, hermaphroditic connection, rugged construction for field deployment and hybrid configurability, have been designed for harsh environment applications such as tactical communications, avionics, offshore systems, outside broadcast, mining and plant.

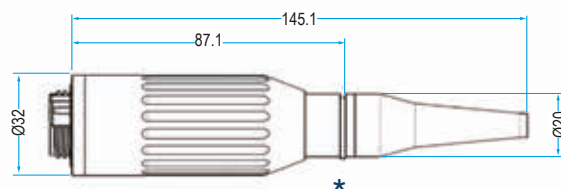
The expanded beam technology uses expanded and collimated beams to couple optical fibers without any contact. It could allow for optics to be used in areas that have been quite restrictive due to presence of damage or contamination at the fiber end. Hermaphroditic connector design enables fast deployment by daisy-chaining multiple cable segments. CEB15 connectors also enable transfer of electrical signal or power using hybrid insert configuration.

Specifications

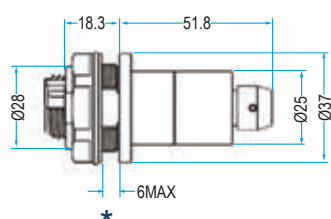
Optical Performance		
Insertion Loss	Typical 0.8 -1.8 dB@1310, 1 550 nm Typical 0.5 -1.0 dB@ 850, 1300 nm	Single mode Multi mode
Return Loss	>32 dB	Single mode only
Mechanical performance		
Durability	3,000 mating cycles	
Operating Temperature	-40 °C to 85 °C	
Storage Temperature	-55 °C to 85 °C	
Water Immersion	Up to 15 m	
Free Fall	500 falls @ 1.2 m	
Vibration	10 - 500 Hz, 3 axis, 0.75 mm, 10 g	
Shock	11 ms, 3 axis, 50 g	

Dimensions

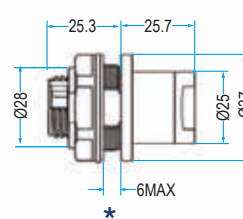
CEB15 Plug



CEB15 Receptacle - Jam Nut



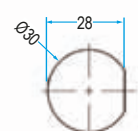
Standard Receptacle



Low profile Receptacle

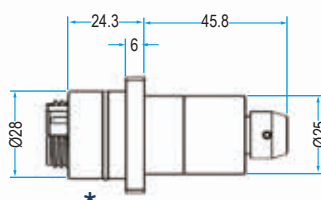


Flange Nut

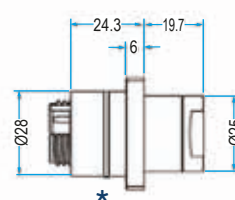


Panel Cut-Out

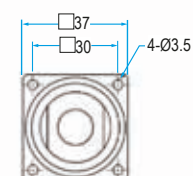
CEB15 Receptacle - Square Flange



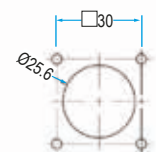
Standard Receptacle



Low profile Receptacle

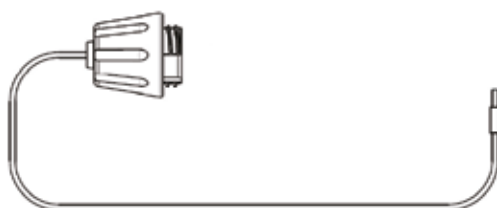


Square Flange



Panel Cut-Out

***Cap and lanyard provided for all versions**

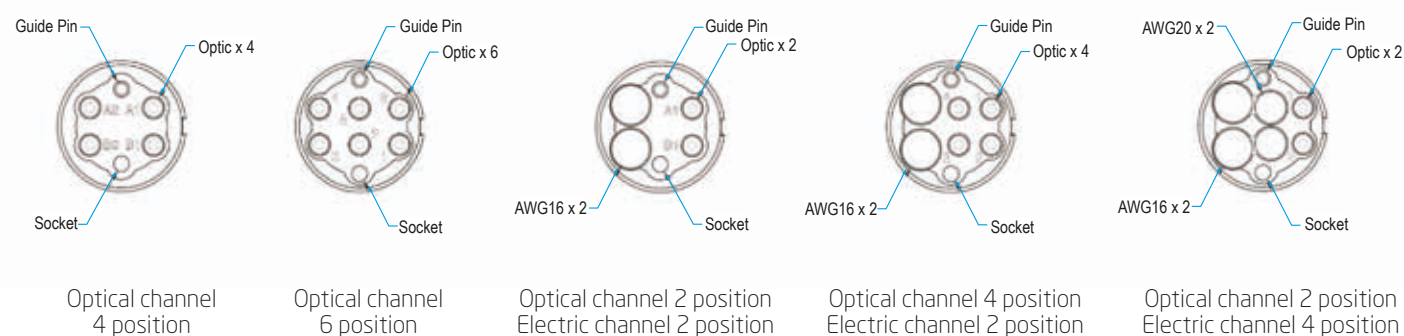


Note. Other configurations, materials and finishes available upon request

Modelings



Insert Arrangement



CEB Connector Series



CEB15 Insert



CEB13 Insert



CEB11 Insert



Note. Other configurations, materials and finishes available upon request

Order Information

(Order Example)

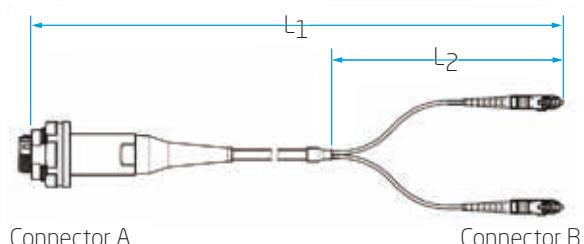
Connector only	CEB15	- PSD - B - 04 - M1 - D55_(C04)
Cable assembly	CEB15AS	- RJS - B - 04 - M1 - S20 - LC - 020_(C04)
		<div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div>

Connector A 1	PSD RJS RJL RQS RQL CXX	Plug with Dust cap Receptacle, Jam nut, Standard, Dust cap Receptacle, Jam nut, Low profile, Dust cap Receptacle, Square Flange, Standard, Dust cap Receptacle, Square Flange, Low profile, Dust cap Customized connector type
Material & Finish 2	B P X	Aluminum alloy, Black hard anodizing Stainless steel, Passivated Others
Arrangement 3	02 04 06 H2 H4 0X	Optical 2 channel Optical 4 channel Optical 6 channel Optical 2 channel, AWG 16 2 channel Optical 4 channel, AWG 16 2 channel Others
Fiber 4	S1 M1 M2 M3	SM - 9 µm core Single mode fiber OM1 - 62.5 µm core Multi mode fiber OM2 - 50 µm core Multi mode fiber OM3 - 50 µm core Multi mode fiber
Cable Option 5	S09 S20 D55 DXX	Ø 0.9 mm Buffered fiber - RJL, RQL Ø 2.0 mm Jacketed cable - RJS, RQS Ø 5.5 mm Outdoor cable -PSD, RJS, RQS Others
Connector B 6	SA SC LC ST CX	Same as Connector A SC type connector LC type connector ST type connector Customized connector type
Cable Length 7	L1/L2 (For example) 100 020/30	Total Length(m)/ Distribution Length (cm) Total 100m Total 20m / Distribution 30cm

Note. Other configurations, materials and finishes available upon request



Connector only



Connector A

Connector B

Cable assembly



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■ **CPE India Pvt Ltd.**

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