

# **HMA-J Series connector**

## **Description:**

The OPTOKON HMA-J connector series, a medium size "Expanded Beam" connector is designed for connection of the nodes of tactical network by the help of cables with optical fibers. The used expanded beam technology preservers all advantages of signals transmission through the optical lines in field harsh environmental conditions. Additionally to military optical networks the HMA-I is suited for a vast array of applications, like heavy industry connections, petrochemical application, broadcasting temporary optical lines. The innovative designs ensure its ability for deployment in the toughest environments where high performance and total reliability are critical. Benefiting from expanded beam technology the precision optical alignment system creates immunity from water, mud, dust oil and other contaminants. The HMA-J Hermaphroditic coupling eliminates the need for adaptors and male and female mating halves. Hermaphroditic housings allow for rapid deployment, creating low loss Singlemode and Multimode daisy chained links in a variety of planforms ranging from simplex fiber to a four fibers. The OPTOKON HMA-I is ideally suited for environmental extremities where low maintenance and quick repairability is necessary.



#### **Features:**

- Advanced expanded beam technology
- MIL-DTL-83526 compatible, Rugged connector design
- Hermaphroditic interconnection
- 2/4 fiber channels Single mode or Multimode

#### **Specifications:**

-P	
Insertion Loss	Typical 0.8-1.8 dB @ 1310, 1550 nm Single mode Typical 0.5-1.0 dB @ 850, 1300 nm Multimode
Return Loss	>32 dB Single mode only
Durability	3000 matings minimum
Operating temperature	-40 to +85 °C
Storage temperature	-55 to +85 °C
Water immersion	Up to 15 m depth duration
Vibration sinusoidal	10-500 Hz, 3 directions, 0.75 mm amplitude @ 10 g acceleration
Free fall resistance	500 falls from 1.2 m height
Shock	11 ms, 3 axis, 50 g

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All tests compliant to EN 186000-1 specifications

#### **Planforms**



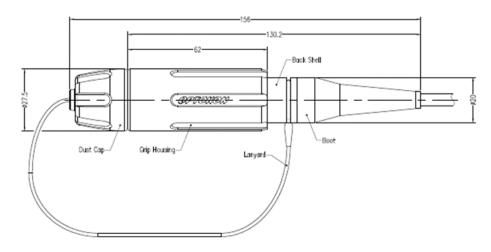




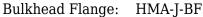
2 fibers

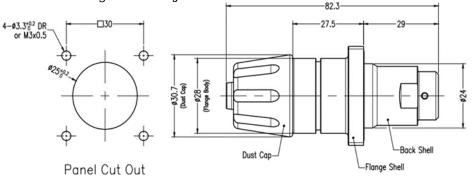
4 fibers

Plug Connector: HMA-J



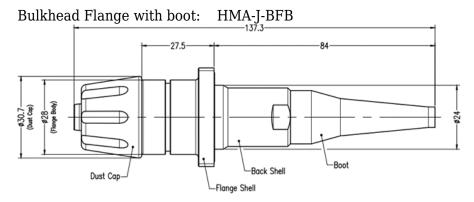
Suitable cable: Tactical cable Ø 5.5 mm





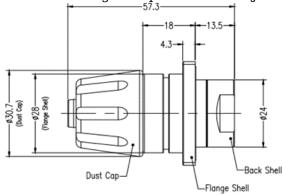
Suitable cable: Tactical cable  $\emptyset$  5.5 mm Jacketed cable Ø 2.0 mm



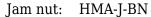


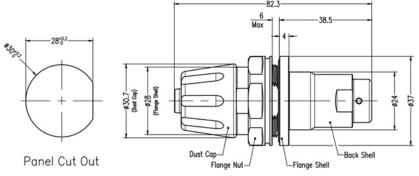
Suitable cable: Tactical cable  $\emptyset$  5.5 mm Jacketed cable  $\emptyset$  2.0 mm

Bulkhead Flange low profile: HMA-J-BFL

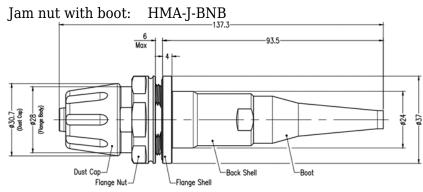


Suitable cable: Buffered fiber  $\emptyset$  0.9 mm





Suitable cable: Tactical cable  $\varnothing$  5.5 mm Jacketed cable  $\varnothing$  2.0 mm



Suitable cable: Tactical cable  $\varnothing$  5.5 mm Jacketed cable  $\varnothing$  2.0 mm



## **Application:**

- Broadcast
- Harsh environmental communications
- Industrial
- Petrochemical

#### **Benefits:**

Best optical performance available No adaptors necessary Inexpensive, low downtime field repair Easy clean, no special tools

### **Materials:**

Black anodized high grade lightweight alloy Neoprene BR568 Grip ring

## **Ordering code:**

