

FALCON™ MINI SQUARE

MINI-SIZE EXPANDED BEAM BULKHEAD RECEPTACLE



The FALCON Mini Square is a mini-size expanded beam bulkhead receptacle, available in configurations with 1–4 channels and designed for heavy-duty applications.

This bulkhead receptacle features an extremely small installation footprint, enabling ODF integration in highly space-constrained installations. Its high-performance strain relief and boot provide the robustness required for demanding field deployments.

Compared with the Mini D-hole series, the FALCON Mini Square features a square profile with a simpler mounting pattern secured by four screws. The customer can choose whether the nuts are mounted on the inside or outside of the panel.

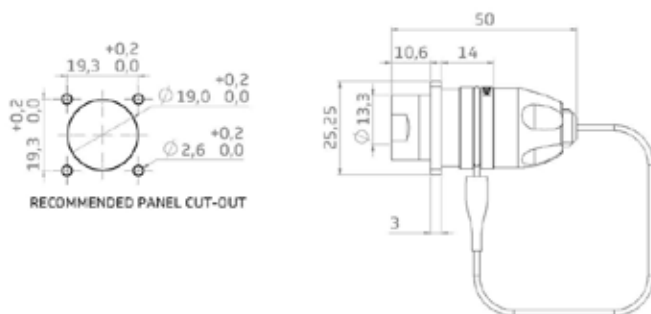
The connector is 5 mm lower than the Mini D-hole, giving it a smaller installation footprint and making it suitable for use on lower panels. The FALCON Mini Square is used in military command and control centers, containers, converters, and switches, and in integrated ODF enclosures across various types of defense vehicles, air-defense units, and other space-constrained applications.

FEATURES

- Up to 40 Gbit/s per channel
- Advanced expanded beam technology
- Highly compact connector design
- Hermaphroditic interconnection
- 1–4 fiber channels, single-mode, multi-mode or mixed mode
- No adapters needed
- Low-downtime field repair
- Easy cleaning, no special tools required

COMPATIBLE WITH

- FIBRECO - MINI 2
- QPC Q - MICRO
- TE PRO-BEAM - MINI
- TELECAST MX - MINI



STANDARD CONFIGURATIONS

FALCON™ Mini	1 to 4 channels
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OPTICAL

Type	Single-mode (SM), multi-mode (MM) or mixed mode
Bandwidth	Up to 40Gbit/s
Insertion loss (SM)	Typical: -0.8 dB (1,310 nm) Maximum: -1.2 dB (1,310 nm)
Insertion loss (MM)	Typical: -0.8 dB (1,300 nm) Maximum: -1.0 dB (1,300 nm)
Return loss (PDL)	> 35 dB at 1,310 nm or 1,550 nm Polarization dependent loss < 0.35 dB

MECHANICAL

Coupling type	Hermaphroditic
Compliance	ROHS & REACH
Material	Hard anodized aluminum (MIL-A-8625 TYPE III CLASS 2)
Optional material	Marine bronze, stainless steel or titanium
Color	Gray
Durability	3,000 mating cycles (MIL-DTL-83526)
Vibration	5-500 Hz, 0.75 mm amplitude at 10 g (IEC 68-2-6-Fc)
Mechanical shock	3 x 4,000 cycles at 390 m/s² (IEC 68-2-29-Eb)
Shock pulse	11 ms, half sine at 35 g, 3 axes (x, y, z) (IEC 68-2-29-Eb)
Recommended wall thickness	2-3 mm

ENVIRONMENTAL

Operating temperature	-57 °C to +85 °C, +100 °C optional
Ingress protection	IPX7
Air pressure	< 25 kPa -55 °C during 4h (IEC 68-2-13, test M)
Corrosion resistance	500h salt spray (IEC 68-2-11 ka)
Flammability	DOD-STD-1678, method 5010

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MORE INFORMATION