Rosenberger

Built to Perform in the Most Extreme Conditions

EBM Expanded Beam Multifiber

INTERCONNECT

Expanded Beam Multifiber (EBM®)

The Expanded Beam Multifiber (EBM®) connectors were developed to meet the demands of the most challenging environments, providing reliable fiber optic connectivity where traditional solutions often fail. Designed for harsh conditions such as extreme temperatures, vibrations, and contamination, EBM® ensures dependable performance and durability. With a focus on reliability and ease of use, this innovative solution addresses the growing need for robust, high-quality data transmission in environments where failure is not an option.

Benefits

- Guaranteed connection: Stable, no-loss connection from the first use
- Ease of use: Plug-and-play for quick setup, no training needed
- Low maintenance: Simple cleaning without special tools
- Space-efficient: High-density, lightweight design saves space
- Durable: Withstands harsh conditions and repeated use
- Certified quality: Trusted supplier ensures top-quality, industry-compliant solutions

Features

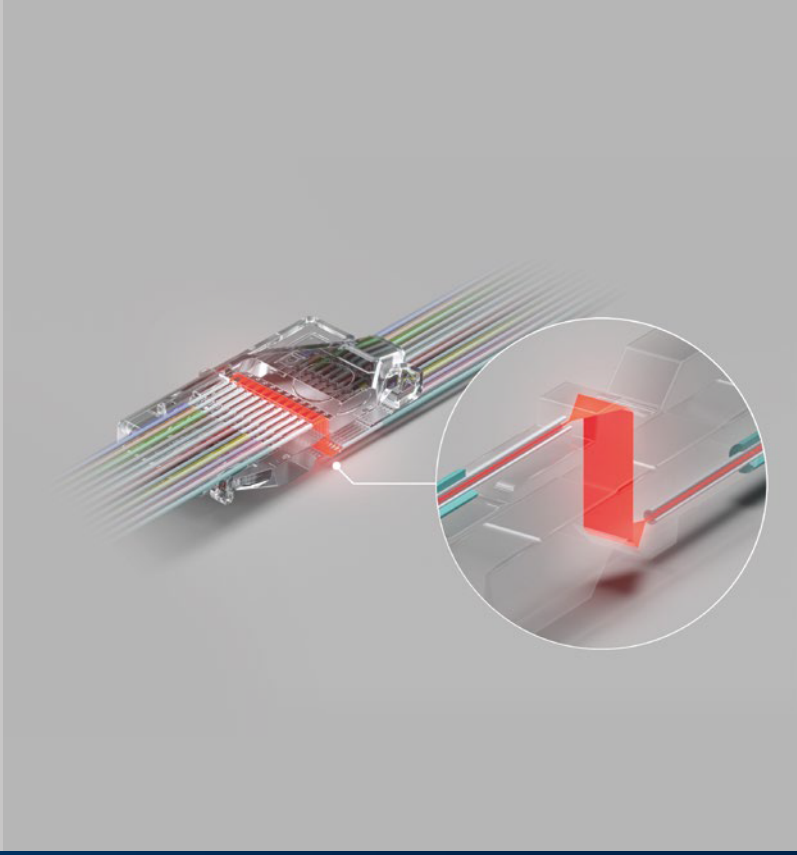
- Low sensitivity to dirt: Multiple matings possible with minimal cleaning effort
- High density: Equipped with a ferrule supporting 12 single-mode or multimode fibers
- Dust resistant: Stable performance even after repeated mating cycles
- Cost-effective: Low total cost of ownership with forward-looking technology

Performance

	Typical	Max.
Insertion Loss Singlemode	< 0,35 dB	< 0,70 dB
Insertion Loss Multimode	< 0,15 dB	< 0,30 dB
Return Loss Singlemode	> 60 dB	> 55 dB
Return Loss Multimode	> 45 dB	> 35 dB

The Expanded Beam Multifiber (EBM®) connector uses advanced technology to ensure reliable, multi-fiber performance. By avoiding physical contact between fiber end faces, it eliminates cleaning needs and reduces damage risk. A collimation lens broadens the light path, minimizing particle impact and correcting misalignments, making it ideal for both multimode and single-mode applications.

EBM® connectors are durable and deliver high-quality data transmission in harsh environments.



Pioneering Performance in Harsh Environments

S-RMC Connector

- Integrated Expanded Beam technology into industrial connector
- Based on Rosenberger proven RMC housing screw mechanism for harsh-environment
- Min. IP 68
- Mating cycles: 5.000
- Vibration, mechanical shock, corrosion resistance qualified according to IEC 61300
- Temperature proof -40°C to +85°C

MIL13 Connector

- Integration Expanded Beam technology into 38999 Size #13 Housing
- Standard screw mechanism for harsh-environment
- Min. IP 68
- Mating cycles: 5.000
- Vibration, mechanical shock, corrosion resistance qualified according to IEC 61300
- Temperature proof -40°C to +85°C

Website

For more information refer to our website:
www.rosenberger.com/ebm

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