

FIBRE OPTIC CONNECTOR SERIES

MNI11 CONNECTOR



The MNI11 Connectors, featuring expanded beam technology, hermaphroditic connections, and rugged construction for field deployment, have been designed for harsh environment applications such as military tactical communications, avionics, offshore systems, outside broadcast, mining, and plants.

The expanded beam technology uses expanded and collimated beams to couple optical fibres without any contact. It could allow for optics to be used in areas that have been quite restrictive due to the presence of damage or contamination at the fibre end.

The hermaphroditic connector design enables fast deployment by daisy-chaining multiple cable segments.

FEATURES

- Advanced expanded beam technology
- Rugged field deployable fibre optic connector
- Hermaphroditic interconnection
- 1, 2 and 4 optical channels
- Singlemode (SM) or Multimode (MM)
- Custom configurations available
- Environmental sealing (IPX8)
- Very high resistance to vibration, shock, environmental effects, dust, and debris
- Easy clean, no special tools
- No adaptors necessary
- Cables assemblies with plugs and bulkheads

APPLICATIONS

- Military Communications
- Avionics, Marine
- Mining, Oil and Gas
- Rail, Transport
- Broadcast
- Telecommunications
- Medical
- Industrial

FIBRE OPTIC CONNECTOR SERIES

Specification

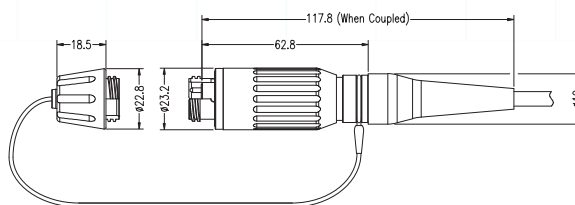
OPTICAL PERFORMANCE		
Insertion loss	Typical 0.8 - 1.8 dB @ 1310, 1550 nm	Singlemode
	Typical 0.5 - 1.0 dB @ 850, 1300 nm	Multimode
Return loss	> 32 dB	Singlemode only
MECHANICAL PERFORMANCE		
Durability	3,000 mating cycles	
Operating temperature	-40 °C to 85 °C	
Storage temperature	-55 °C to 85 °C	
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

MNI11 Plug connector

MNI11-PSD

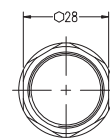
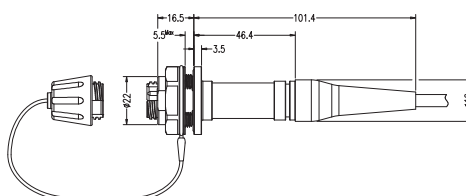
Standard Plug with Dust Cap



MNI11 Jam nut receptacle

MNI11-RJS

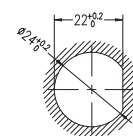
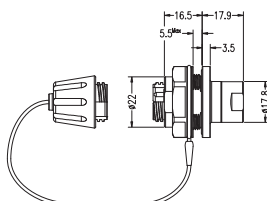
Receptacle, Jam Nut, Standard, Dust Cap



Flange Nut

MNI11-RJL

Receptacle, Jam Nut, Low Profile, Dust Cap



Panel Cut Out
D-Hole Mount Data

Note. Other configurations, materials and finishes available upon request



CONTACT: Call: +61 2 8553 0600 Email: sales@fibresystems.com.au www.fibresystems.com.au

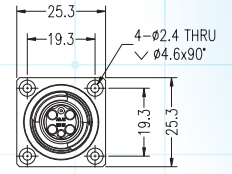
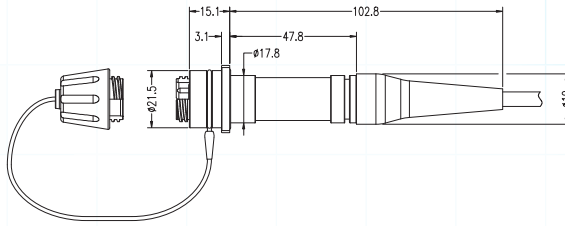
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FIBRE OPTIC CONNECTOR SERIES

MNI11 Square flange receptacle

MNI11-RQS

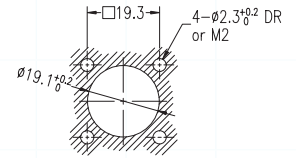
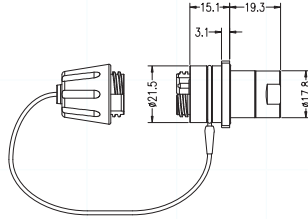
Receptacle, Square Flange, Standard, Dust Cap



Square Flange

MNI11-RQL

Receptacle, Square Flange, Low Profile, Dust Cap



Panel Cut Out
Square Flange Mount Data

MODELS

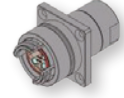
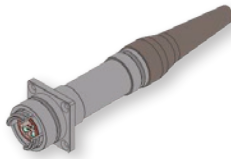
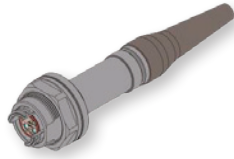
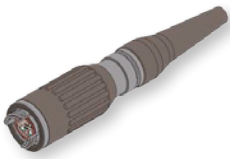
MNI11-PSD
Standard Plug

MNI11-RJS
Receptacle,
Jam Nut Standard

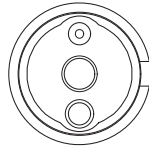
MNI11-RQS
Receptacle, Square
Flange Standard

MNI11-RJL
Receptacle,
Jam Nut Low Profile

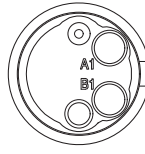
MNI11-RQL
Receptacle, Square
Flange Low Profile



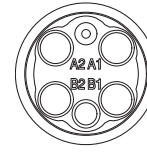
Insert arrangements



O1
1CH OPTICAL



O2
2CH OPTICAL



O4
4CH OPTICAL

MNI Connector series



MNI 15

MNI 13

MNI 11
Insert



MNI 15

MNI 13

MNI 11



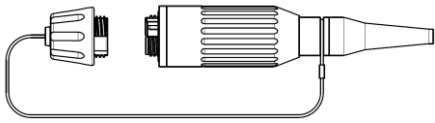
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FIBRE OPTIC CONNECTOR SERIES

Ordering Information

Connector only:



Connector A

- PSD : Plug with dust cap
- RJS : Receptacle, jam nut, standard, dust cap
- RJL : Receptacle, jam nut, low profile, dust cap
- RQS : Receptacle, square flange, standard, dust cap
- RQL : Receptacle, square flange, low profile, dust cap
- CXX : Customised connector

Channel count

- O1 : 1 CH OPTICAL
- O2 : 2 CH OPTICAL
- O4 : 4 CH OPTICAL

Cable diameter

- S09 : \varnothing 0.9 mm buffered fibre
– RJL, RQL
- S20 : \varnothing 2.0 mm jacketed cable
– RJS, RQS
- D55 : \varnothing 5.5 mm outdoor cable
– PSD, RJS, RQS
- DXX : Others

MNI11-PSD-B-O4-M1-D55_(C03)

Shell material & finish

- B : Aluminum alloy, black hard anodized
- X : Others

Fibre type

End A – Fibre type

- S1 : SM – 9 μ m core Singlemode fibre
- M1 : OM1 – 62.5 μ m core Multimode fibre
- M2 : OM2 – 50 μ m core Multimode fibre
- M3 : OM3 – 50 μ m core Multimode fibre

Note. Other configurations, materials and finishes available upon request



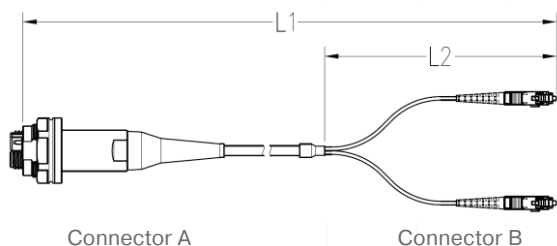
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FIBRE OPTIC CONNECTOR SERIES

Ordering Information

Cable assembly:



Connector A

- PSD : Plug with dust cap
- RJS : Receptacle, jam nut, standard, dust cap
- RJL : Receptacle, jam nut, low profile, dust cap
- RQS : Receptacle, square flange, standard, dust cap
- RQL : Receptacle, square flange, low profile, dust cap
- CXX : Customised connector

Channel count

- O1 : 1 CH OPTICAL
- O2 : 2 CH OPTICAL
- O4 : 4 CH OPTICAL

Cable diameter

- S09 : \varnothing 0.9 mm buffered fibre – RJL, RQL
- S20 : \varnothing 2.0 mm jacketed cable – RJS, RQS
- D55 : \varnothing 5.5 mm outdoor cable – PSD, RJS, RQS
- DXX : Others

Cable length

- L1/L2 : Total length (m)/distribution length (cm)
eg. 100 : Total 100 m
- 020/30B : Total 20 m/distribution 30 cm breakout cable
- 020/30D : Total 20 m/distribution 30 cm distribution cable

MNI11AS-RJS-B-O4-M1-S20-LC-020/30D_(C03)

Shell material and finish

- B : Aluminum alloy, black hard anodized
- X : Others

Fibre type

End A – Fibre type

- S1 : SM – 9 μ m core Singlemode fibre
- M1 : OM1 – 62.5 μ m core Multimode fibre
- M2 : OM2 – 50 μ m core Multimode fibre
- M3 : OM3 – 50 μ m core Multimode fibre

Connector B

- SA : Same as connector A
- SC : SC connector
- LC : LC connector
- ST : ST connector
- CX : Customised connector

Note. Other configurations, materials and finishes available upon request



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