

M12 Fiber Optic Connector System

1 General

Characterized by its outstanding optical and mechanical properties, the M12 fiber optic connector system is excellent suited for industrial environments.

An integrated, protruding spring loaded connector sleeve protects the sensitive fiber end faces during installation.

2.5mm ferrules are available for polymer optical fiber and multimode fibers.

Protection class IP67 guarantees highest reliable connections.

Use breakout fiber optic cables with an outer diameter of 7.0mm up to 8.5mm for termination.

The subcables should be designed as tight buffered or semi-tight buffered fibers without gel filling and with metal free strain relief elements.

For hybrid applications, demanding additional electrical power transmission, appropriate contacts are available.

2 Application

Due to its good optical and mechanical properties, the M12 fiber optic connector system is suitable for many applications:

- optical networks
- industrial electronics
- power electronics

3 Features

- M12 connector system
- protection class IP67
- 50/125µm GI-fiber contacts
- 200/230µm PCF contacts
- 1/2.2mm POF contacts
- 50V / 4A el. contacts (AWG20)
- Shock-proof according DIN EN 61300-2-9 and 60512-6-3
- Vibration-resistant according DIN EN 61300-2-1 and 60512-6-4
- corrosion resistance according IEC 61753
- halogen free
- material listing according UL V0
- connector endface acc. DIN / IEC 61754-27
- RoHS compliant



Pic. 1 M12 connector with POF contacts and GI-fiber contacts



Pic. 2 M12 connector with 50/125µm and electrical contacts

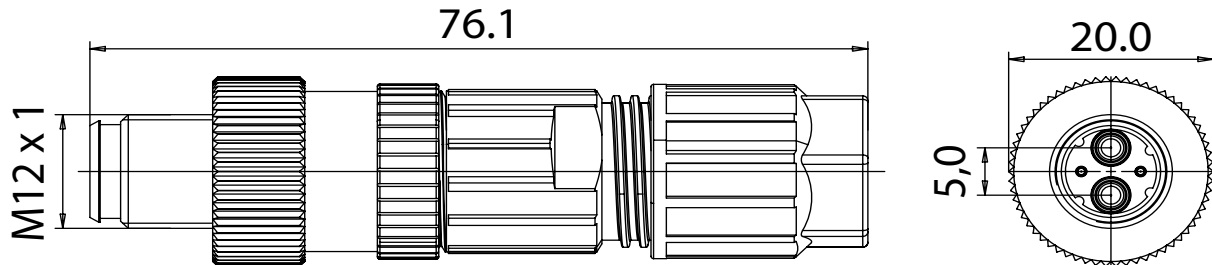
4 Ordering Information

Description	Order number
M12 System connector pre-assembled with GOF 50/125µm GI Pin inserts	9322S022S3001
M12 System connector pre-assembled with PCF 200/230µm Pin inserts	9322S022S2001
M12 System connector pre-assembled with POF 1/2.2mm Pin inserts	9322S022S1001

Cable connector and coupling are shipped with dust caps

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5 Drawing _____



6 Technical data _____

Characteristics	Parameter	Value
Insertion loss	1mm POF 200/230µ PCF 50/125µ GI	max. 1.5dB max. 1.5dB max. 0.75dB
Return loss	1mm POF 200/230µ PCF 50/125µ GI	n.a. n.a. min. 20dB
Rated current el.-contact	DC	max. 4A
Rated voltage	DC	max. 250V
Protection class		IP67
Mating cycles		min. 100
Connector weight	with optical contacts	38g
Temperature range		-40 .. +85°C

CAUTION!
 The individual components are only offered after training by our specialist staff.
 The assembly of system components (transceiver, connectors and couplings)
 has to be made with manual/hand force!!!

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