Ratioplast
Electronics | OptoElectronics

Data Sheet **Fiber Optic Coupling Style M12**

M12 Fiber Optic Coupling for M12 System Connector

1 General

The M12 fiber optic coupling is especially suitable for M12 connectors acc. to DIN/IEC 61754-27.
The connection of the M12 plug contacts takes place via two integrated ceramic sleeves.
The coupling is designed for applications with polymer optical fiber (POF) cables according to IEC 60793-2-40, multimode fiber optic cables according to IEC 60793-2-10, as well as for applications with PCF cable according to IEC 60793-2-30.
The M12 fiber optic coupling is designed to carry Cu contacts of the M12 fiber optic system, making hybrid applications feasible.

Pic. 1 *M12 coupling*

2 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

3 Application

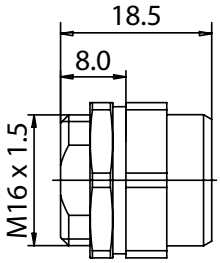
Due to its good optical and mechanical properties, the coupling for the M12 fiber optic system connector is suitable for many applications:

- optical networks
- industrial electronics
- power electronics

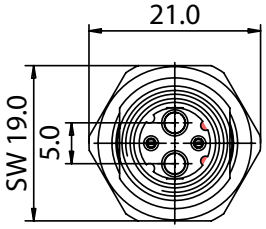
4 Ordering Information

Description	Order number
Coupling for M12 System Connctor	94KH0000C0000M120-01
Coupling for M12 System Connctor Uncrossed 1:1	94KH0000C0000M120-02

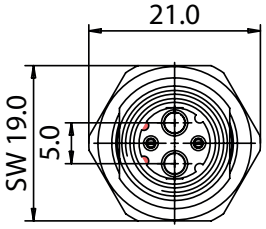
5 Drawing



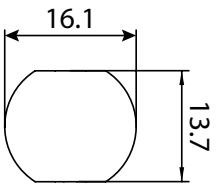
Regular PIN Assignment



PIN Assignment 1:1



Cut out area / Durchbruch



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M12 Fiber Optic Coupling for M12 System Connector

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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