

OPHC-02

OPTOKON hybrid connector-adapter (fiber optic + copper wires)

Description:

The OPTOKON OPHC-xx series connector-adapter introduces hybrid rugged design fiber optic – copper wires connector. The OPHC includes the LC duplex adapter and electrical contacts in rugged housing, which allows interconnection of hybrid cables: two optical fibers terminated with LC connectors and up to three copper wires.

Typical hybrid cable configuration – two optical fibers and two copper wires can serve for transmission of high speed data signal and simultaneous power supplying of connected device from one central communication node.

Refer to the OPHC universal housing with flange design the connector-adapter might be used as panel mount for termination of outdoor cable and connection of external unit to the indoor communication system and pass through in-line adapter for interconnection of two hybrid cable lengths. IP67 protection rating and rugged design allows using of OPHC-04 in harsh environmental field conditions.

Typical configuration¹:	OPHC-02-DLCS-3C	2x FO (duplex LC adaptor) + 3x Cu wires
Note: 1) on request	OPHC-04-DLCS	4x FO (2x duplex LC adaptor)

Practical application:



Hybrid cable 2x FO terminated LC connectors + 2 Cu wires prepared for connection into OPHC



Hybrid cable connected into OPHC



Interconnection indoor and outdoor cables



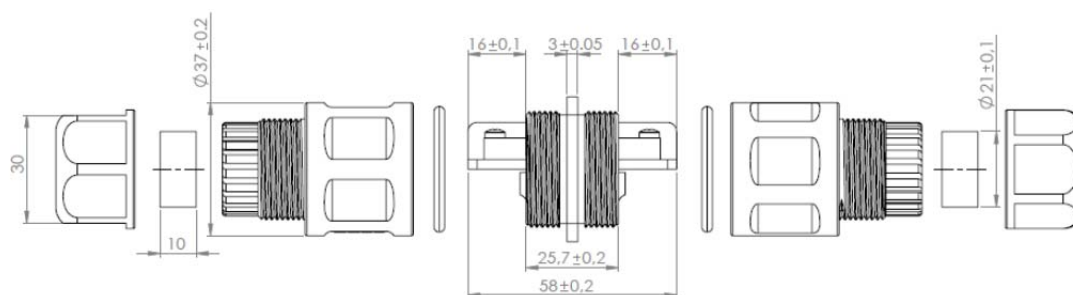
Interconnection two outdoor hybrid cables

Technical specifications:

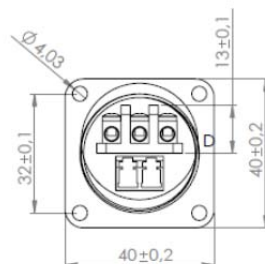
FO interface – LC connector design: number of fibers - 2			
Insertion loss (IL) (IEC 61300-3-4)	MM	SM Ultra PC	SM Angle PC
	0.25 dB typ	0.25 dB typ	0.50 dB typ
Return loss (RL) (IEC 61300-3-6)	>30 dB	>50 dB	>60 dB
Durability	min 1000 cycles		
Assembly procedure	glue and polish		
Connection	physical contact		
Lock mechanism	snap-on		
Standards	ISO/IEC 11801, TIA 568A, IEC 61754-20, EN 50377-7		
Ferrule material	full ceramic zirconia		
Connector material	thermoplastic		
Adapter material	polymer composite, zirconia sleeve		
Contact parameters: number of contacts - 3			
Contact material	Nickel-Plated-Brass		
Contact Resistance	1 mΩ max		
Insulation Structure	1000 MΩ at 1000 V DC		
Current Rating	25 A		
Voltage Rating	250 V AC		
Durability Voltage	1500 V AC @ 60 s		
General parameters			
IP Rating:	IP67		
Operating temperature	-40°C to +85°C		
Strain relief ²	300 N		
Dimensions ³	115 x 40 x 40 mm		
Weight	0.11 kg		

Note: 2) depends on cable type
3) covered from both sides

Dimensional view:



Side view



Front view