

# FCON series

## 2-12 fibers rugged field ferrule connector-patchcord

### Description:

The OPTOKON FCON field fiber optic connectors are designed for military field cables. The neutral bayonet locking structure enables quick and arbitrary connection of the head and the seat, the head and the head, and the seat and the seat. It has multi-core one-time connection and can be blindly inserted; it has small connection loss and high reliability; it is strong, waterproof, dustproof and resistant to harsh environment. It can be used in various field military optical fiber communication networks. Military computer system, Airborne or shipborne equipment, repairing systems, etc. The field light road is temporarily connected.

### Features:

- Ruggedized field design
- Ferrule technology
- Army optical communication network
- Communication vehicle transmission, long-distance space transmission, communication soldier portable transmission tool
- Television teleconference signal transmission for actual combat exercises
- Coal mines, oil wells, natural gas, etc.
- Geological exploration communication
- Broadcast television broadcast
- Emergency fiber optic communication
- Very stable connection
- Up to 12 fiber channels,
- Single mode and/or Multimode



FCON-2 cable plug connector

### Benefits:

- No adaptors necessary, Connected directly without adapter
- Excellent transmission parameters

### Application:

- Field communications
- Telecoms
- Surveillance
- Broadcast

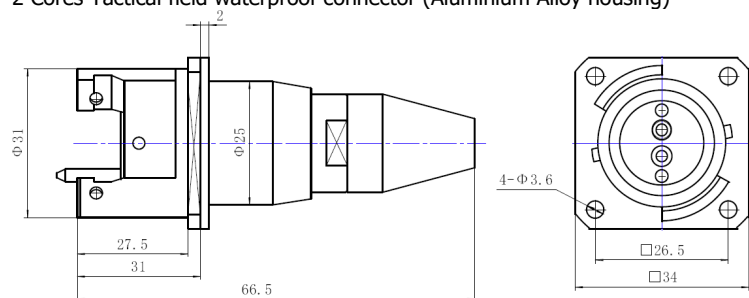
### Specifications:

Fiber Core	Cable OD	Weight	Tensile strength N		Crush strength N/100mm		Minimum Bending Radius MM		Temp
	mm	kg/km	Long Term	Short Term	Long Term	Short Term	Dynamic	Static	°C
2	5	24	600	1500	700	1500	20D	10D	-40 to +85
4	5	24	600	1500	700	1500	20D	10D	
6	6	31	600	1500	700	1500	20D	10D	
8	6	40	600	1500	70	1500	20D	10D	
12	5	24	600	1500	70	1500	20D	10D	

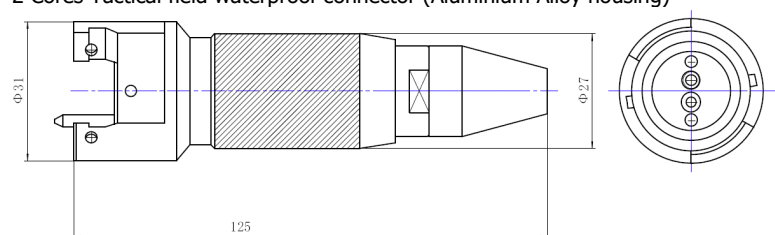
Insertion loss	SM	≤ 0.5 dB (typ. ≤ 0.25 dB)
	MM	≤ 0.5 dB (typ. ≤ 0.25 dB)
Return loss	SM	≥ 50 dB
Mechanical resistance	Plug	≤ 1000 N (trunk cable)
	Socket	≤ 100 N (conversion cable)
Protection level	IP67	
Optical cable	OPK-U-DSTTAC, 2-12 fibers in Tight Buffer 0.9 mm,	
Cable Diameter	4.0 – 6.0 mm	
Cable Jacket	TPU	
Tensile unit	kevlar	
Tensile strength	1100 N	
Operating temperature	-40°C to 85°C	



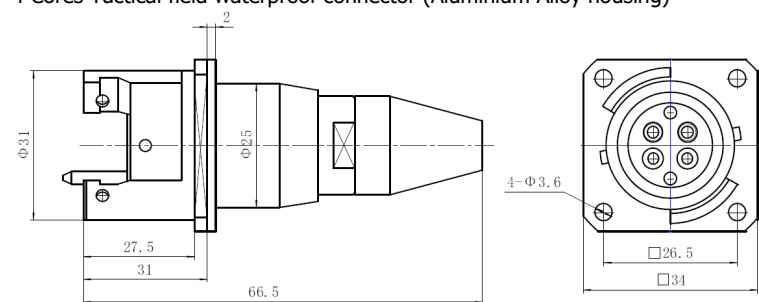
**FCON-2BF (bulkhead flange mount)**  
2 Cores Tactical field waterproof connector (Aluminium Alloy housing)



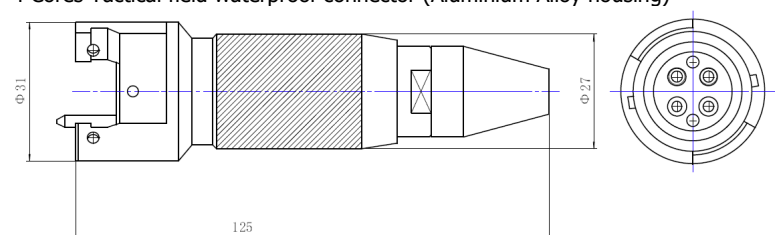
**FCON-2 (cable plug)**  
2 Cores Tactical field waterproof connector (Aluminium Alloy housing)



**FCON-4BF (bulkhead flange mount)**  
4 Cores Tactical field waterproof connector (Aluminium Alloy housing)

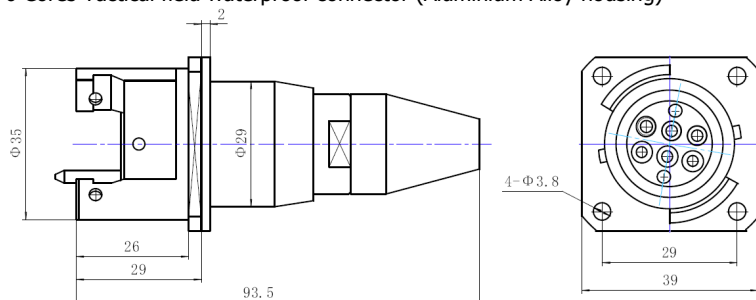


**FCON-4 (cable plug)**  
4 Cores Tactical field waterproof connector (Aluminium Alloy housing)



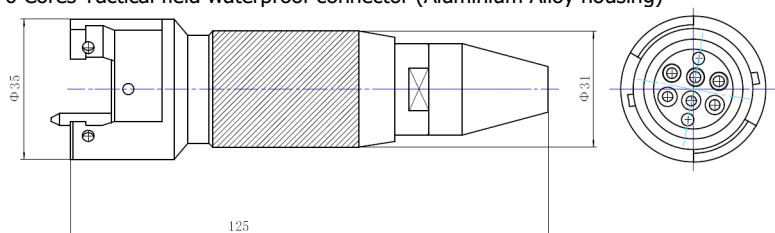
### FCON-6BF (bulkhead flange mount)

6 Cores Tactical field waterproof connector (Aluminium Alloy housing)



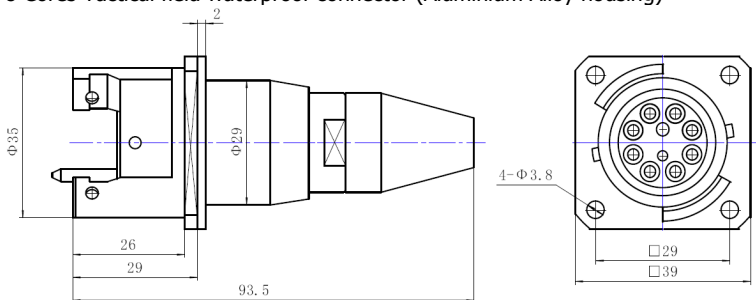
### FCON-6 (cable plug)

6 Cores Tactical field waterproof connector (Aluminium Alloy housing)



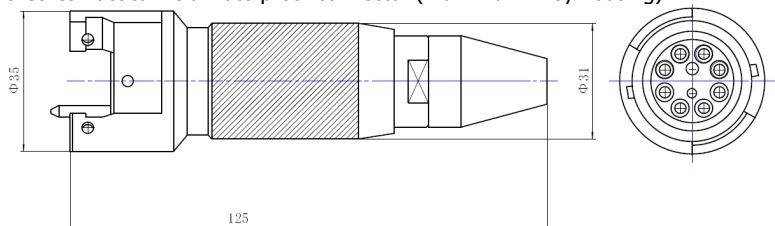
### FCON-8BF (bulkhead flange mount)

8 Cores Tactical field waterproof connector (Aluminium Alloy housing)



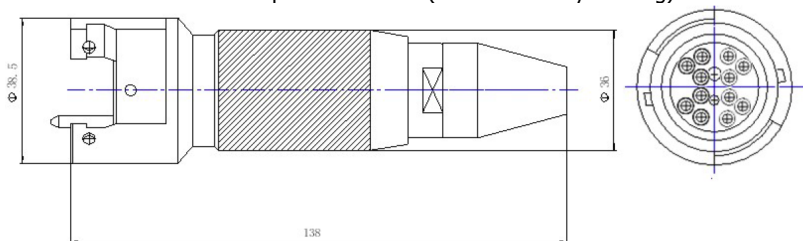
### FCON-8 (cable plug)

8 Cores Tactical field waterproof connector (Aluminium Alloy housing)



### FCON-12 (cable plug)

12 Cores Tactical field waterproof connector (Aluminium Alloy housing)



FCON-x – (NxAAA) <sup>1-</sup>		/ CCC FFF		- XX - (L2) - LLL	
<b>Connector type<sup>1</sup></b>  <b>FCON-x</b> Plug <b>FCON-xBF</b> Bulhead with flange <b>x = 2/4/6/8/12</b> Number of fibers		<b>CCC – Cable type</b> <b>LD2-12</b> mobile cable 2-12 fibers <b>D8</b> Duplex 2.8 x 5.5 mm <b>28</b> Cable Ø 2.8 mm  <b>FF – Fiber type</b> <b>OM1</b> MM 62.5/125 µm <b>OM2-5</b> MM 50/125 µm <b>S7A<sup>3</sup></b> SM 9/125 µm		<b>Cable length</b> <b>L, L2</b> Length (m)  <b>Cable type</b> <b>P</b> Pigtail <b>JC</b> jumper crossed <sup>2</sup> <b>JS</b> jumper straight	

Note: 1) Hybrid (conversion) cable – FCON to standard connectors (defined according to the CON\_13-01\_EN-ORD\_CODE)  
 2) FCON trunk cables: JC – standard, JS cable straight – on demand  
 Hybrid cable: FCON to single fiber connectors (FC, SC, ST, LC, ..): JS – standard  
 3) S7A - G.657A1 standard, other on request

