

DATASHEET

2-12F Armored Waterproof Fiber Pigtail

Suit for Optical Connections in Harsh environment



OMC INDUSTRY CO.LIMITED

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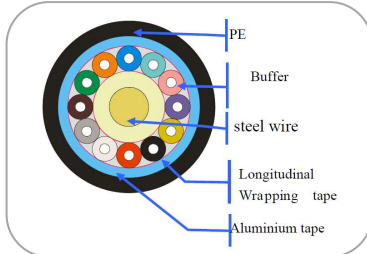


2-12F Armored Waterproof Fiber Pigtail

Description

Fiber optic waterproof pigtails can be used in harsh environment. It is mainly used in outdoor connection of the optical transmitter. Waterproof fiber pigtail is designed with a stainless steel strengthened waterproof unit and armored outdoor PE jacketed cables.

Products Materials



Cable Structure

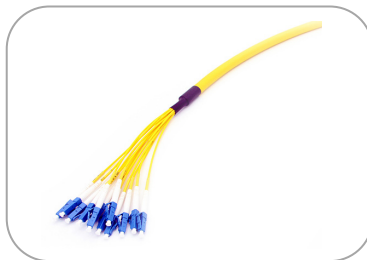
G652D, G657A1, G657A2/B2, G657B3, OM1, OM2, OM3, OM4, OM5 Fibers
Military Ruggedized Cable



Ferrule

High quality SM Ceramic ferrule, Good concentricity < 0.5μm
High quality MM Ceramic ferrule, Good concentricity < 4.0μm

Connector Type



LC: TIA/EIA, FOCIS10, GR-326 EIA/TIA-604-10, IEC61754-20 and JIS C5973.



SC: TIA/EIA, FOCIS3, GR-326, NTT-SC IEC61754-4 and JIS C5973..

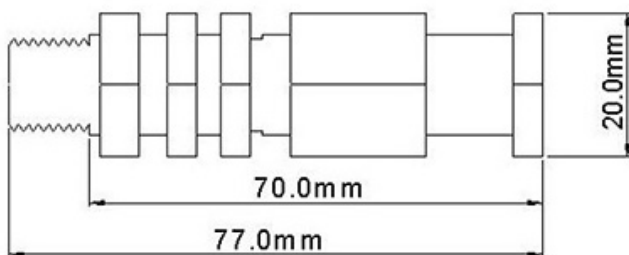


FC
EIA /TIA-604-04, FOCIS4, NTT-FC, GR-326. IEC61754-13 and JIS C5973



ST: TIA/EIA, FOCIS2, GR-326. IEC61754-2 and JIS C5973 Etc.

Waterproof Connector



铜质防水接头

Copper waterproof connectors



铝质防水接头

Aluminum waterproof connectors

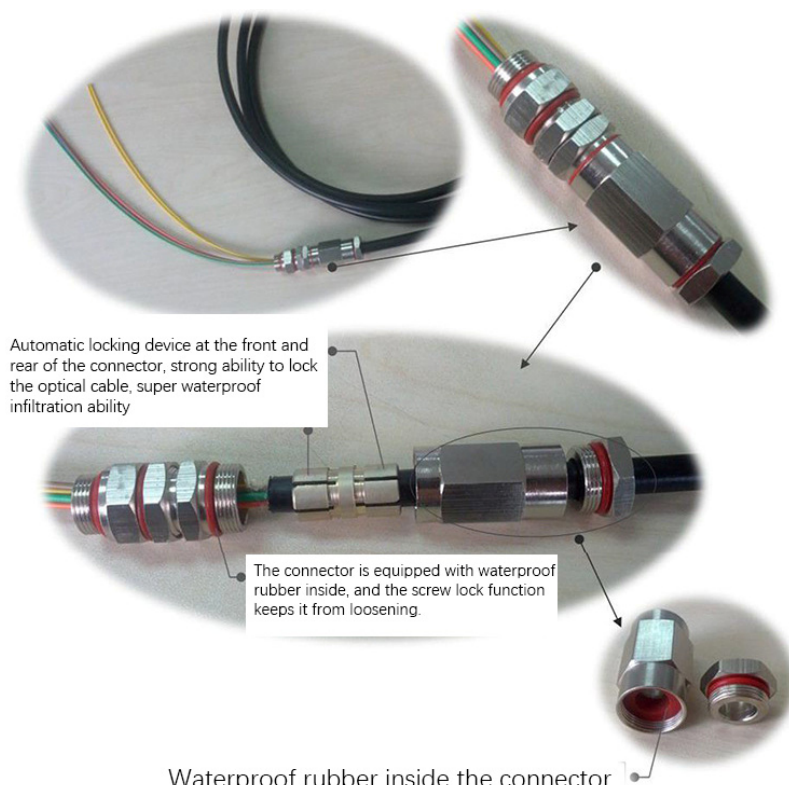


Features

- High quality zirconia ferrules.
- Good repeatability and interchange.
- Flame-retardant, rugged and durable jacket.
- 100% optically tested for insertion loss to ensure high quality

Standard Compliance

- TIA 604 (FOCIS)
- TIA/EIA 492AAAE
- IEC 61754
- IEC 60793-2-10
- IEC61300-3-35
- YD/T1272.1-2003
- RoHS, ISO9001 Compliant



Optical Specifications-Standard quality

Insertion loss	$\leq 0.25\text{dB}$ Mean (Standard)	Interchangeability	$\leq 0.2\text{dB}$
Return loss	SM UPC $\geq 50\text{dB}$ SM APC $\geq 60\text{dB}$ MM PC $\geq 35\text{dB}$	Vibration	$\leq 0.2\text{dB}$
Polarity	A(Tx) to B(Rx)	Maximum pulling force	660N(<12 cores) 1320N(>12 cores)

Optical Specifications-IEC Grade B quality

Insertion loss	$\leq 0.12\text{dB}$ mean, $\leq 0.25\text{dB}$ max. for >97% of sample	Interchangeability	$\leq 0.2\text{dB}$
Return loss	SM UPC $\geq 50\text{dB}$ SM APC $\geq 60\text{dB}$ MM PC $\geq 35\text{dB}$	Vibration	$\leq 0.2\text{dB}$
Polarity	A(Tx) to B(Rx)	Maximum pulling force	660N(<12 cores) 1320N(>12 cores)

Geometric Specification(if Customer requested)

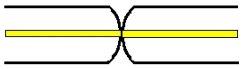
Items		Parameter	
Polishing		PC	APC
ROC	SC/FC/ST	10 ~ 25	5 ~ 12
	LC/MU	7~ 25	5 ~ 12
Apex Offset		≤ 50	
Fiber Spherical Height		± 100	
Angle		± 0.5	8 ± 0.5



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Polishing Method

UPC(Ultra-Polished connector)



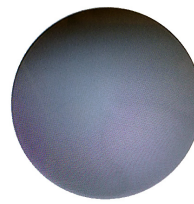
APC(8 Angled Polished connector)



Polishing End-face



SM UPC



SM APC



MM PC

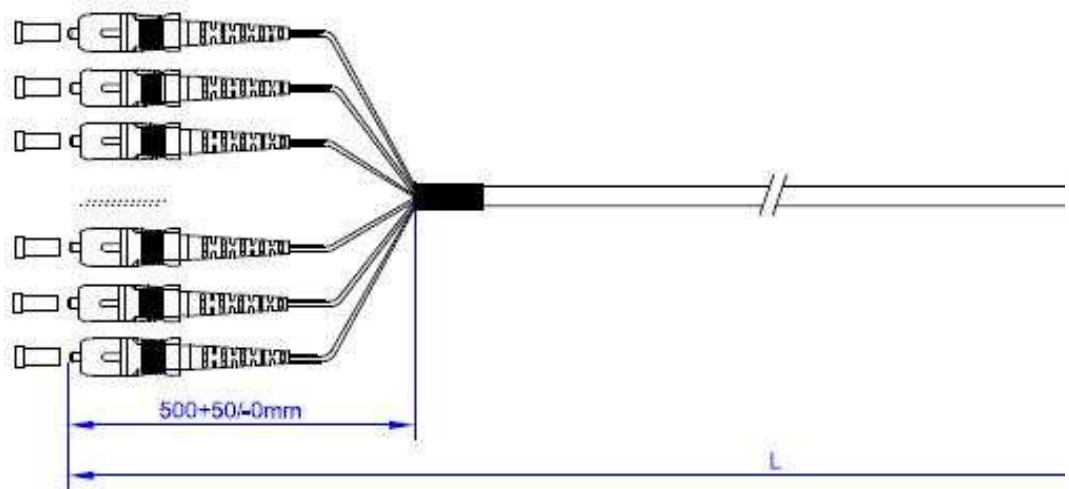
End-face Quality (SM)

Zone	Range (μm)	Scratches	Defects	Reference
A: Core	0 to 25	None	None	IEC 61300-3-35:2015
B: Cladding	25 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	

End-face Quality (MM)

Zone	Range (μm)	Scratches	Defects	Reference
A: Core	0 to 65	None	None	IEC 61300-3-35:2015
B: Cladding	65 to 115	None	None	
C: Adhesive	115 to 135	None	None	
D: Contact	135 to 250	None	None	
E: Rest of ferrule		None	None	

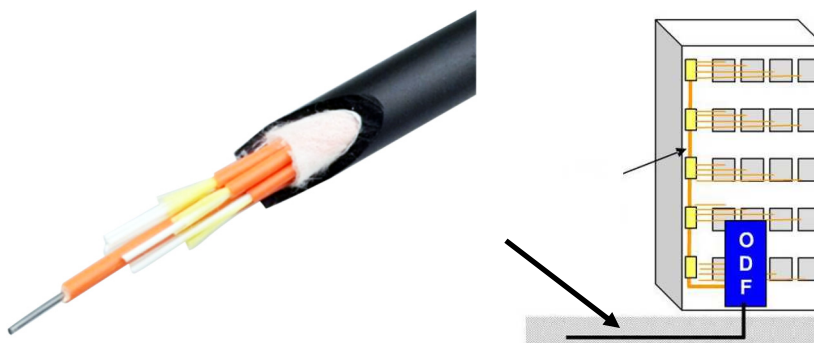
Length Tolerance



Overall Length(L)(m)	length of tolerance(cm)
$0 < L < 1$	+5/-0
$1 < L < 10$	+10/-0
$10 < L < 40$	+15/-0
$40 < L$	$+0.5\% \times L / -0$

Application

The ideal cable for vertical wiring under ground, Especially suitable for the application of dispersion spectrometer in shaft



Packaging

This easily taken and well-protected fiber optical cable package has been labelled and marked by OMC as default .Standard carton size : 34*22*15 cm; 44*34*24 cm ; 54*39*34 cm . Which carton to be used depends on goods Qty . Packing can be customized.



1,PE Wrapped



2, Paper Carton



3,fumig-free Pallet

- OME service** {
1. Cable color, printing word, material of cable jacket, connector's color
 2. OEM Label, Identify ring, cable's label, box, shipping marks
 3. Different quality Level.

Order Instruction

Products	-	Fiber Count	-	Fiber Mode	-	Connector	-	Length
F-Waterproof pigtail		1- 1 core		1 - G6572D		A- LC UPC		1-1m
		2 -2 cores		2 - G657A1		B- SC UPC		
		4-4 cores		3- G657A2/B2		C- FC UPC		
		6-cores		4 - G657B3		D- ST UPC		
		8-cores		5-OM1		E- LC APC		
		T-12cores		6-OM2		F- SC APC		
				7-OM3		G- FC APC		
				8-OM4		H- ST APC		
				9-OM5		I -E2000 UPC		
						J- E2000 APC		