

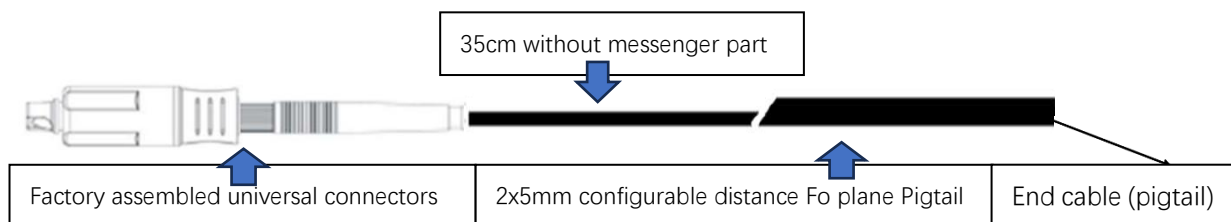
## Fiber optic waterproof pigtail

Model No: MCR-OPFC SCAPC2025-CO

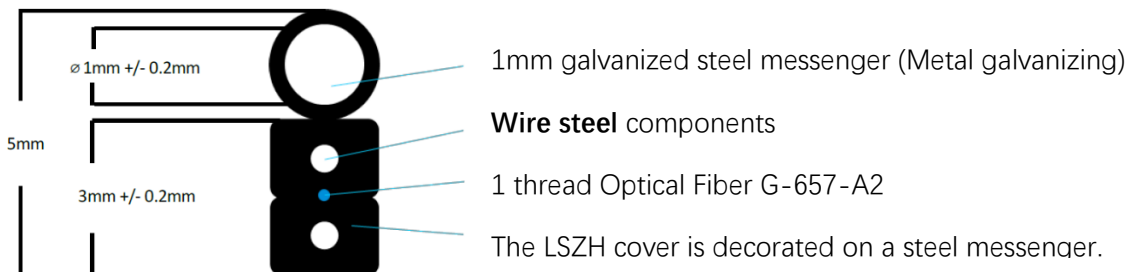
### Description:

This document aims to provide technical specifications for a flat DROP fiber optic cable with 1 2x5mm fiber optic cable, lined LSZH, steel messenger, and factory pre-installed connector (HFOC), compatible with MCR approved Opti Tap type connectors for sharing with all suppliers wishing to participate in MCR network FTTH implementation, with an unbalanced cascading solution.

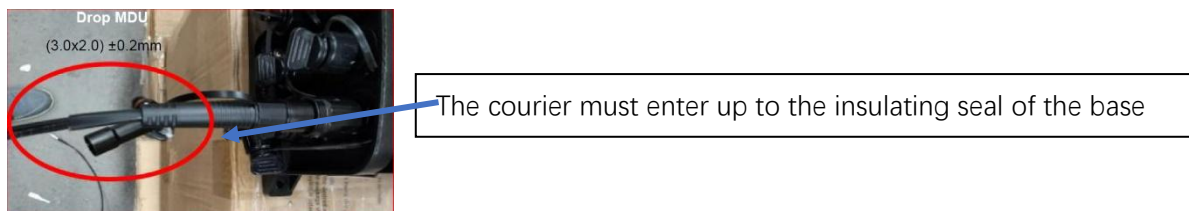
### Main body diagram:



### Cross section of fiber optic cable:



### Details of wiring connections:



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## Physical Characteristics of Fiber Optic Cable:

Model No: MCR-OPFC SCAPC2025-CO		
Element	Description	
<b>Optical Fiber</b>	Color	Blue
	Diametric	250/900 $\mu$ m
	Norma	G-657 A2
<b>Messenger state</b>	Material	Galvanized steel 1 wire
	Diametric	1mm $\pm$ 0.2mm
<b>Auxiliary support component</b>	Protection steel diameter	0.5 max
<b>Jack</b>	Material	<b>LSZH</b>
	Color	Black
	Diametric Exterior	5*2mm $\pm$ 0.2mm
<b>pre-assembled connectors</b>	Connector	SC/APC (8°)
	Insertion loss	0.15 dB Typical $\leq$ 0.30 dB max
	Typical Reflection	-65dB
	traction force (N)	647N
<b>Protection</b>	Grade	<b>IP68</b>
<b>Min Curvature Radio</b>	Long term	10D
<b>Min Curvature Radio</b>	short-term	20D
<b>physical strength</b>	Tension load	300-440N
	Crushing resistance	1000N/10cm
	Operating Temperature	-40°C +60°C
	Maximum span	300 m
	Minimum curvature	Radius 7.5mm
<b>Allowable tail fiber length</b>	50M/100M/150M/250M/300M or other customized lengths	

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## The characteristics of Optical:

Element	Description	
Optical Fiber Type	G.657-A2	
Attenuation coefficient	1310nm	≤0.35 dB/Km
	1383nm(after hydrogen aging)	≤0.32 dB/km
	1490nm	≤0.24 dB/km
	1550nm	≤0.21 dB/Km
	1625nm	≤0.23 dB/km
Dispersion	1285nm-1340nm	-3.0ps/(nm·km)-3.0ps/(nm·km)
	1550nm	18ps/(nm·km)
	1625nm	22ps/(nm·km)
PMD	Max. for reel	0.20ps/km <sup>1/2</sup>
	Max. link design	0.10ps/km <sup>1/2</sup>
Zero-Dispersion slope	0.092ps/(nm <sup>2</sup> ·km)	
Zero-Dispersion Wavelength	1300nm-1324nm	
Modal field diameter	8.8±0.4/μm	

## Production Line Display(clean room):

