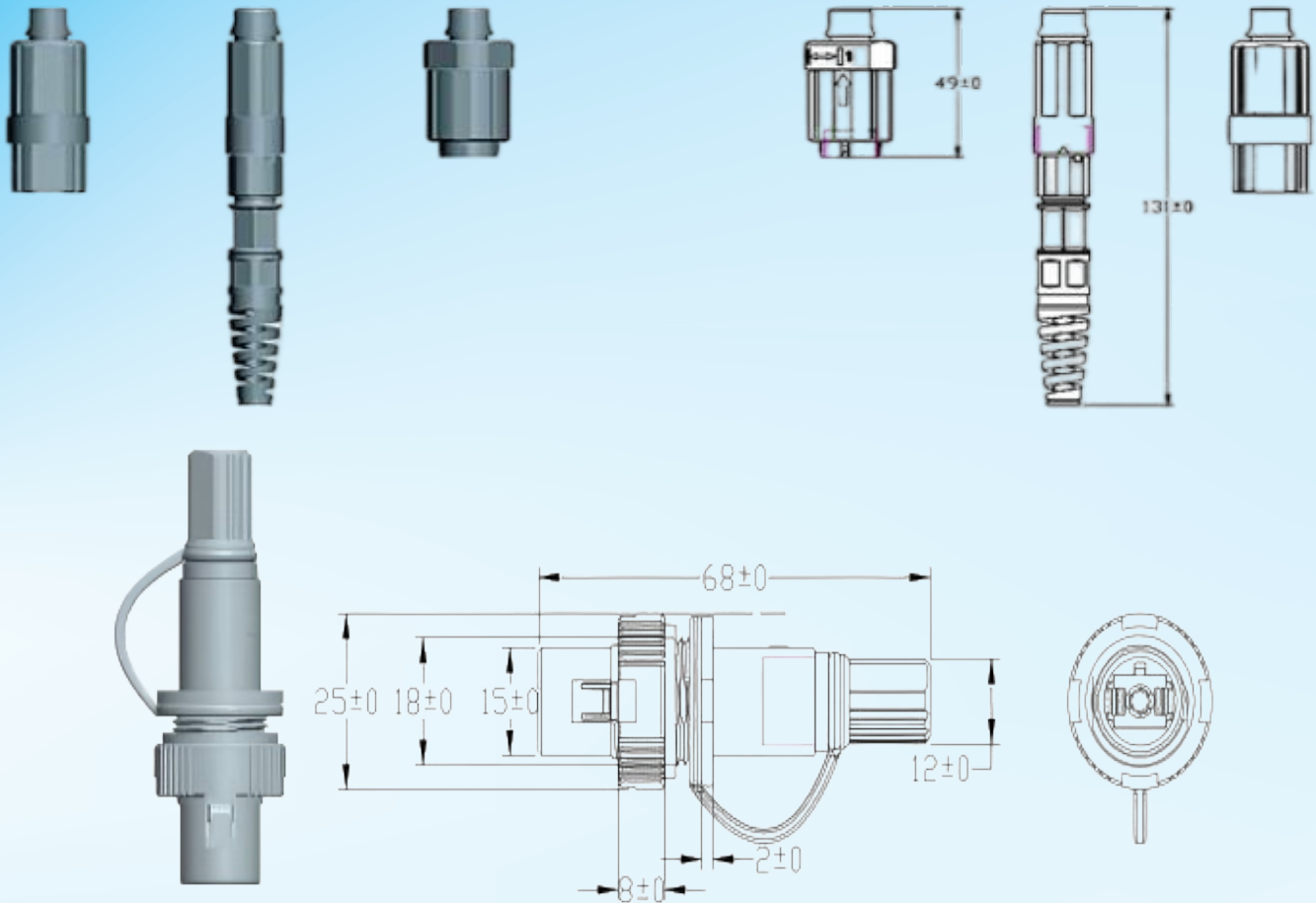


## FTTH cable with OPT-HW-SLIM waterproof connectors



### Features:

- ◆ Waterproof level : IP67
- ◆ Compatible with Slim connector
- ◆ Fully compatible with the connector systems of Furukawa slim connector
- ◆ Field installation, easily mounted on the field mount optical connector, don't need any specific tools or devices;
- ◆ Low insert loss and high return loss;
- ◆ High mechanical strength performance;
- ◆ PEI material, Acid and alkali resistance, Ultraviolet resistance;
- ◆ Outdoor use, 20-year service life
- ◆ Apply to Field Assembly Optical Connector type: Slim/APC, Slim/PC
- ◆ Apply to outer cable diameter: 3.0mm, 5.0mm, 2.0\*5.3mm, 2.0\*3mm Covered wire Cable

## Applications:

- ◆ FTTH;
- ◆ Outdoor Areas;
- ◆ Harsh Environme.

## Table 1 Datasheet as following:

Items	Methods	Standard				Samples Chosen
<b>Visual Inspection</b>	1. Visual inspection 2. 200 times magnifying lass	1, the surface can not appear obvious scratches, corners, deformation and other defects, product specifications and models and actual compliance. 2. See Table 2.				General inspection level I,AQL 0.65
<b>Geometric Size</b>	CCD projector detection	According to the drawings				General inspection level I,AQL 0.65
<b>End Face Geometry Index</b>	3D detector detection	<b>Part No.</b>	<b>Curvature Radius (mm)</b>	<b>Vertex Shift Amount (μm)</b>	<b>Concavity and Convexity (nm)</b>	General inspection level I,AQL 0.65
		PC Type (Φ2.5mm)	10~25	≤50	-100~+50	General inspection level I,AQL 0.65
		PC Type (Φ1.25mm)	7~25	≤50	-100~+50	
		APC Type (Φ2.5mm)	5~12	≤50	-100~+50	
		APC Type (Φ1.25mm)	5~1	≤50	-100~+50	
<b>Insertion Loss</b>	Loss detector standard line detection method	PC: Average Value: ≤0.25dB, Maximum Value: ≤0.4dB APC: Average Value: ≤ 0.25 dB, Maximum Value: ≤ 0.4 dB				General inspection level II,AQL 0.65
<b>Return Loss</b>	Loss detector standard line detection method	PC: ≥ 45 dB, APC: ≥ 50 dB.				General inspection level II,AQL 0.65
<b>Average Assembly Time</b>	Normal skilled operator	≤2.5Mins				General inspection level II,AQL 0.65
<b>One Assembly Success Rate</b>	Normal skilled operator	≥98%				At least 98 per assembly

**Table 2 Datasheet as following:**

Inspection Item	Inspection Requirements	Judgments Standard
Insertion Loss	Loss detector standard line detection method	PC: average value: $\leq 0.3\text{dB}$ , maximum value: $\leq 0.5\text{dB}$ , APC: average value: $\leq 0.25\text{ dB}$ , maximum value: $\leq 0.4\text{ dB}$ .
Return Loss	Loss detector standard line detection method	PC: $\geq 45\text{ dB}$ , APC: $\geq 50\text{ dB}$ .
Average Assembly Time	Normal skilled operator	$\leq 2.5\text{Mins}$
One Assembly Success rate	Normal skilled operator	$\geq 95\%$
Repeatability	Insert 10 times	Insertion loss change: $\leq 0.2\text{dB}$ , return loss change: $\leq 4\text{dB}$ . No mechanical damage, such as deformation, cracks, Chi and other phenomena
High Temperature	+85°C, 96hrs	Insertion loss change: $\leq 0.3\text{dB}$ , return loss change: $\leq 4\text{dB}$ . No mechanical damage, such as deformation, cracks, Chi and other phenomena
Damp Heat	+75°C, 95%, 96hrs	Insertion loss change: $\leq 0.3\text{dB}$ , return loss change: $\leq 4\text{dB}$ . No mechanical damage, such as deformation, cracks, Chi and other phenomena
Soaking Water	25±2°C, 168hrs, tap water	Insertion loss change: $\leq 0.3\text{dB}$ , return loss change: $\leq 4\text{dB}$ . No mechanical damage, such as deformation, cracks, Chi and other phenomena
Repeated Assembly	Assembly Times: 5 Times	Insertion loss change: $\leq 0.3\text{dB}$ , return loss change: $\leq 4\text{dB}$ . No mechanical damage, no obvious scratches on the surface of the pin.
Vibration (Sine)	Frequency: 10-50Hz Sweep: 45 times per minute Amplitude: 0.75mm single amplitude Time: three directions, each 2hrs	Insertion loss change: $\leq 0.3\text{dB}$ , return loss change: $\leq 4\text{dB}$ . No mechanical damage, no obvious scratches on the surface of the pin.
Fall Test	Height: 1.5m No. of times: 8 times	Insertion loss change: $\leq 0.3\text{dB}$ , return loss change: $\leq 4\text{dB}$ . No mechanical damage, such as deformation, cracks, Chi and other phenomena
Mechanical Durability	Plug and Pull>10 Times	Insertion loss change: $\leq 0.3\text{dB}$ , return loss change: $\leq 4\text{dB}$ . No mechanical damage, such as deformation, cracks, Chi and other phenomena.
Tensile	Cable Type: 20N, online measurement; Cable Type: 30N, not measured online, the time is 2 minutes.	Insertion loss change: $\leq 0.3\text{dB}$ , return loss change: $\leq 4\text{dB}$ . No mechanical damage, such as deformation, cracks, Chi and other phenomena.
Torsion (optical cable type)	Load: 15N Rate: 10 times / min No. of times: 100 times	Insertion loss change: $\leq 0.3\text{dB}$ , return loss change: $\leq 4\text{dB}$ . No mechanical damage, such as deformation, cracks, Chi and other phenomena.