

NTFA09 Datasheet 01

3 in 1 Precon Harden Field Assembly Reinforced Optical Connector

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Brief Overview

This kind of 3 in 1 Precon Harden Field Assembly Reinforced Optical Connector design and producing from NEATEL company, it has compatible for OptiTap, Slim and FastConenct all in one with connector body, apply to outer cable diameter: 3.0mm and 5.0mm round cable, 2.0*5.3mm and 2.0*3mm pre-connectorized on drop cable. Please welcome for contacting us for more RFQ.

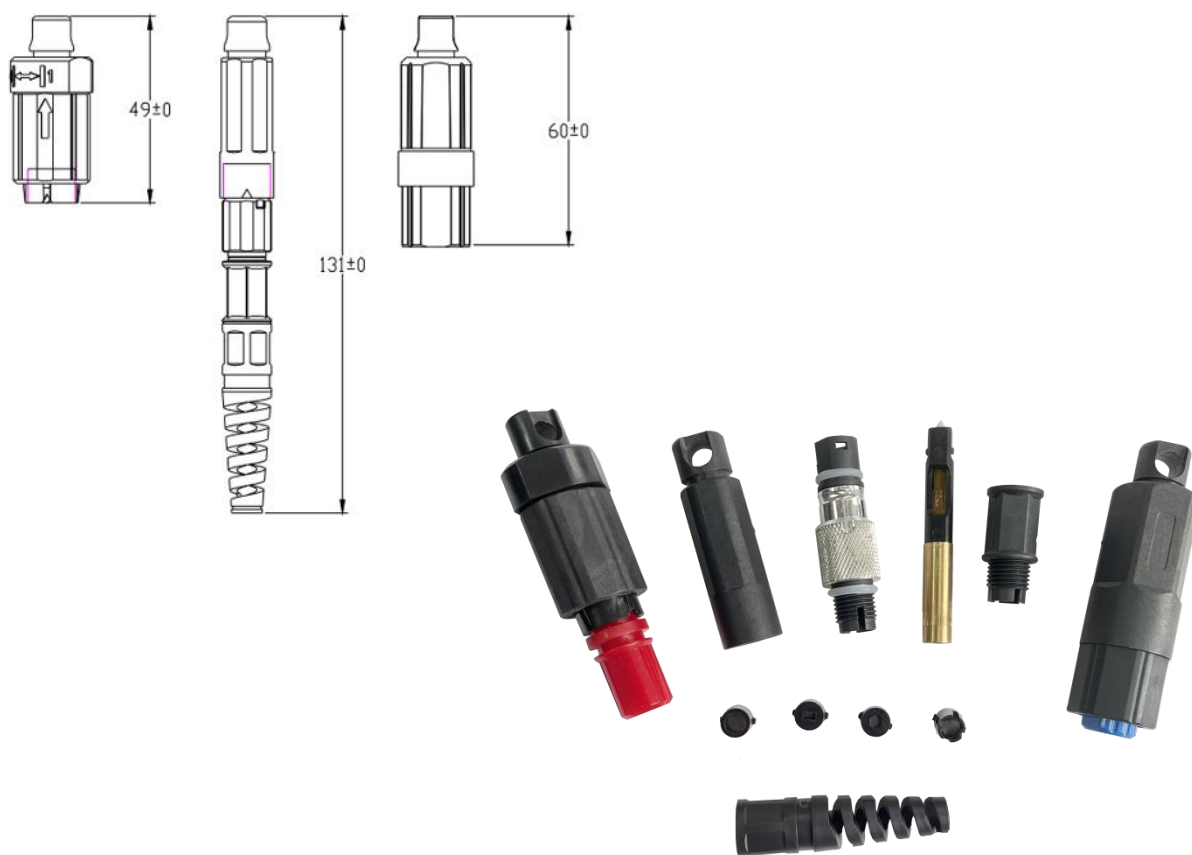
Application

- 1) FTTH;
- 2) Outdoor FTTX Solution;
- 3) Harsh Environment.

Features

- 1) Waterproof level: P67;
- 2) Compatible with Slim connector;
- 3) Fully compatible with the connector systems of Furukawa slim connector;
- 4) Field installation, easily mounted on the field optical connector, no required for any specific tools or devices;
- 5) Low insert loss and high return loss;
- 6) High mechanical strength performance;
- 7) PEI material, Acid and alkali resistance, Ultraviolet resistance;
- 8) Outdoor use, 20-year service life;
- 9) Apply to Field Assembly Optical Connector type: Slim/APC、 Slim/PC.

Connector Scheme



Technical Parameter

Table 1 is as follows

Items	Methods	Standard				Samples Chosen
Visual Inspection	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
Geometric Size	CCD projector detection	According to the drawings				General inspection level I, AQL 0.65
End Face Geometry Index	3D detector detection	Polish Type	Curvature Radius (mm)	Vertex Shift Amount (μ m)	Concavity and Convexity (nm)	General inspection level I, AQL 0.65
		PC Type (Φ 2.5mm)	10~25	\leq 50	-100~+50	General inspection level I, AQL 0.65
		PC Type (Φ 1.25mm)	7~25	\leq 50	-100~+50	
		APC Type (Φ 2.5mm)	5~12	\leq 50	-100~+50	
		APC Type (Φ 1.25mm)	5~1	\leq 50	-100~+50	
Insertion Loss	Loss detector standard line detection method	PC: Average Value: \leq 0.25dB, Maximum Value: \leq 0.4dB APC: Average Value: \leq 0.25 dB, Maximum Value: \leq 0.4 dB				General inspection level I, AQL 0.65
Return Loss	Loss detector standard line detection method	PC: \geq 45 dB, APC: \geq 50 dB				General inspection level I, AQL 0.65
Average Assembly Time	Normal skilled operator	\leq 2.5Mins				General inspection level II, AQL 0.65
One Assembly Success Rate	Normal skilled operator	\geq 98%				At least 98 per assembly
Repeated Assembly	Normal skilled operator	\geq 5 Times				Special inspection level S-I level, AQL 0.65

Table 2 is as follows

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 \pm 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.