

PM Patch Cables Datasheet

HIGH PERFORMANCE POLARIZATION MAINTAINING FIBERS



Overview

Polarization Maintaining (PM) Cables can transmit polarized light signals while ensuring that the direction of linear polarization remains unchanged, thereby improving the coherence signal-to-noise ratio and enabling high-precision measurements of physical quantities. It is commonly used in applications such as fiber optic gyroscopes, fiber optic communications, fiber optic sensors, fiber optic hydrophones, and fiber optic interferometers. Additionally, with advancements in technology and market demand, the applications of polarization-maintaining fiber jumpers are continuously expanding. For example, in fields such as aerospace, autonomous driving, industrial manufacturing, and communications, the market demand for polarization-maintaining fiber is expected to continue growing.

Applications

- High performance transmission laser pigtails
- Polarization-based modulators
- High data rate communications systems
- Polarization-sensitive components
- Raman amplifiers
- Fiber optic sensors, gyroscopes and instrumentation

Specifications

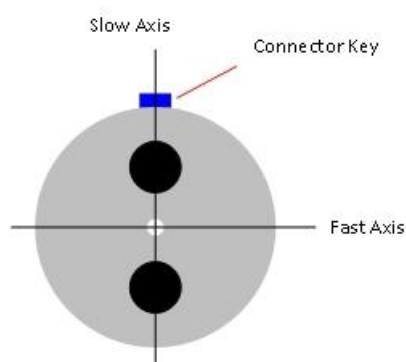
Parameters	Description
Fiber Type	Corning PM15-U25D Corning BIPM15-U25D-H
Test Wavelength	1310 nm 1550 nm
Insertion Loss	≤ 0.3 dB
Return Loss	UPC ≥ 50 dB APC ≥ 55 dB
Extinction Ratio	$\geq 20(\pm 5^\circ)$ dB $\geq 23(\pm 3^\circ)$ dB
Connector Type	FC/SC/LC
Operating Temperature	$-10 \sim +70$ °C
Storage Temperature	$-40 \sim +85$ °C

Dimensions Diagram (unit: mm)

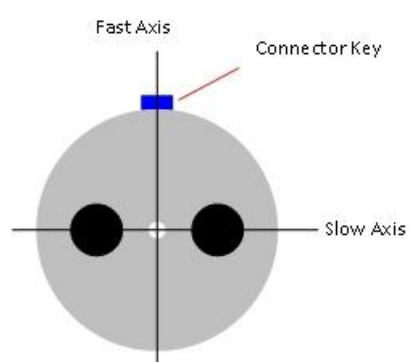


- **Note:** Connector must have protective dust cap.

Key alignment



Typel: Key to Slow Axis



Typell: Key to Fast Axis