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Polarization-Maintaining Fiber Collimator 780nm (Working Distance 300mm)



• Product Description

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It is composed of polarization-maintaining fiber pigtail and focusing lens with precise positioning and packaging, which can transform the outgoing light of fiber transmission into parallel beam (Gaussian beam), or focus and couple the parallel light from the outside into the fiber. It can be used alone to achieve the specified size spot at the required position; it can also be used in pairs, adding filters, isolators and other optical components between a pair of probes to achieve the purpose of customer use. In the interferometric fiber sensor based on optical coherence detection, the use of polarization-maintaining fiber can ensure that the linear polarization direction remains unchanged, improve the coherent signal-to-noise ratio, and achieve high-precision measurement of physical quantities.

• Part Number

NIR-CLM-780-0.75-1.3-FA



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Parameters

General Parameters

When making a polarization-maintaining device connector, the cat's eye connection axis direction is perpendicular to the keyway direction, also known as slow axis alignment, and vice versa is fast axis alignment. As shown in the figure:



Metal pipe Tail sleeve Fiber

Parameters										
PM6	30 Polari	zation-	Mainta	aining Fik	oer Colli	mator (F	ixed Worki	ng Dis	tance)	
Working wavelen gth	Bandwi dth	Worki ng distan ce	Beam waist spot	Beam divergen ce angle	Packagi ng diamet er	Connect or	Output loss (excluding connector)	Retu rn loss	Mode field core diameter	
635nm	\pm 20nm	100m m	0.39m m	2.6mrad	3.4mm	FC/APC	≪0.5dB	≥ <mark>55dB</mark>		
635nm	\pm 20nm	300m m	0.85m m	1.0mrad	3.4mm	FC/APC	≪0.5dB	≥ 55dB	$4.5\pm$ 0.5um	
635nm	\pm 20nm	1000m m	1.32m m	0.7mrad	4.0mm	FC/APC	≪0.5dB	≥ 55dB		
PM780 Polarization-Maintaining Fiber Collimator (Fixed Working Distance)										
Working wavelen gth	Bandwi dth	Worki ng distan ce	Beam waist spot	Beam divergen ce angle	Packagi ng diamet er	Connect or	Output loss (excluding connector)	Retu rn loss	Mode field core diameter	
780nm	\pm 20nm	100m m	0.41m m	2.4mrad	3.4mm	FC/APC	≪0.5dB	≥ 55dB	5.2± 1.0um	



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780nm	\pm 20nm	300m m	0.75m m	1.3mrad	3.4mm	FC/APC	≪0.5dB		≥ 55dB		
780nm	\pm 20nm	1000m m	1.55m m	0.7mrad	4.0mm	FC/APC	≪0.5dB		≥ 55dB		
PM980 Polarization-Maintaining Fiber Collimator (Fixed Working Distance)											
Working wavelen gth	Bandwi dth	Worki ng distan ce	Beam waist spot	Beam divergen ce angle	Packagi ng diamet er	Connect or	Output loss (excluding connector)		Retu rn loss	Mode field core diameter	
980nm	\pm 20nm	100m m	0.50m m	2.5mrad	3.4mm	FC/APC	≪0.35dB		≥ 55dB		
980nm	\pm 20nm	300m m	0.96m m	1.3mrad	3.4mm	FC/APC	≪0.35dB		≥ 55dB	6.6± 0.5um	
980nm	\pm 20nm	1000m m	1.48m m	0.87mra d	4.0mm	FC/APC	≪0.35dB		≥ 55dB		
1064nm	\pm 20nm	100m m	0.51m m	2.7mrad	3.4mm	FC/APC	≪0.35dB		≥ 55dB		
1064nm	\pm 20nm	300m m	0.90m m	1.5mrad	3.4mm	FC/APC	≪0.35dB		≥ 55dB		
1064nm	\pm 20nm	500m m	1.43m m	0.95mra d	4.0mm	FC/APC	≪0.35dB		≥ 55dB		
PM1300nm Polarization-Maintaining Fiber Collimator (Fixed/Adjustable Working Distance)											
Working wavelen gth	Bandwi dth	Worki ng distan ce	Beam waist spot	Beam divergen ce angle	Packagi ng diamet er	Connect or	Outp ut loss	Mati ng loss	Retu rn loss	Mode field core diameter	
1310nm	\pm 20nm	100m m	0.4m m	4.2mrad	3.4mm	FC/APC	≪ 0.35d B	≪ 0.7d B	≥ 55dB		
1310nm	\pm 20nm	300m m	0.8m m	2.1mrad	3.4mm	FC/APC	≪ 0.35d B	≤ 0.9d B	≥ 55dB	9.3 \pm 0.5um	
1310nm	\pm 20nm	1000m m	1.2m m	1.4mrad	4.0mm	FC/APC	≪ 0.35d B	≤ 1.1d B	≥ 55dB		
PM1550nm Polarization-Maintaining Fiber Collimator (Fixed/Adjustable Working Distance)											



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Working wavelen gth	Bandwi dth	Worki ng distan ce	Beam waist spot	Beam divergen ce angle	Packagi ng diamet er	Connect or	Outp ut loss	Mati ng loss	Retu rn loss	Mode field core diameter
1550nm	\pm 20nm	100m m	0.45m m	4.4mrad	3.4mm	FC/APC	≤ 0.5d B	≤ 0.7d B	≥ 55dB	
1550nm	\pm 20nm	300m m	0.86m m	2.3mrad	3.4mm	FC/APC	≤ 0.5d B	≪ 0.9d B	≥ 55dB	10.1 ± 0.5 um
1550nm	\pm 20nm	500m m	1.3m m	1.5mrad	4.0mm	FC/APC	≤ 0.5B	≤ 1.1d B	≥ 55dB	

Beam waist spot diameter: Take the Gaussian beam at 1/e2, and select the theoretical calculated value of single-mode optical fiber of each wavelength Matching loss: - -Fiber collimator couples the free space beam between the two

Packaging material, packaging size and other fiber connector types can be customized

