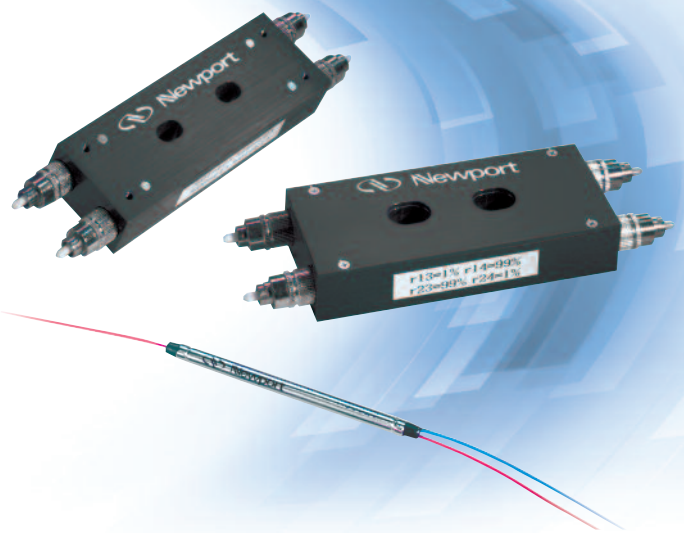
Polarization Maintaining Coupler



NOTAILED & PIGTAILED COMPONENTS

The polarization maintaining filter coupler can either split the light from an input PM fiber between 2 output PM fibers, or can combine light signals from 2 PM input fibers into a single PM output fiber. The device can be used to split high power linearly polarized light into multiple paths without perturbing the linear state of polarization (SOP). It can also be used as a power tap to monitor signal power in a PM fiber system without disturbing the linear SOP of the light propagating in the PM fiber. Applications include PM fiber interferometers, power sharing in polarization sensitive systems, and signal monitoring in PM fiber systems. The rugged stainless steel package is designed for high optical performance and stability. This compact device offers low excess insertion loss, low back reflection, and high extinction ratio. Split ratios from 1 to 50% are available.expertise of Newport equipment with in-house legacy analysis packages.

Features

- Compact size
- Low insertion loss
- Low back reflection
- Rugged design

Applications

- Power sharing PM systems
- Power monitoring in PM systems
- PM fiber interforometers
- R&D laboratories

Newport®

Polarization Maintaining Coupler

Specifications

Operating Center Wavelength	1550 nm, 1310 nm		1064 nm		
Operating Bandwidth	±40nm		±20nm		
Type	1 x 2	2 x 2	1x2	1x2	
Max. Excess Loss[1]	0.7 dB	1.0 dB	0.8 dB	1.2 dB	
Max. Uniformity	0.6 dB	0.8dB	0.6 dB	0.8 dB	
Max. Extinction Ratio[2]	20 dB	18dB	0.6 dB	18 dB	
Return Loss	50 dB		Split Ratio Tolerances:		
Split Ratio	1 - 50%			1 x 2	2 x 2
Optical Power Handling	300 mW min.		99/1:	± 0.2%	± 0.2%
Operating Temperature	-5 to 70°C		98/2:	± 0.4%	± 0.4%
Standard Temperature	40 to 85°C		95/5:	± 1%	± 1%
Fiber Type	PM fiber		90/10:	±2%	±2%
Dimensions	Pigtailed: Ø 5.5" x 35" mm NoTail: 3.5" (L) x 1.5" (W) x 5/8" (H)		50/50:	7.52%	10%

Notes: Value are referenced without connectors

1. Excess loss for NoTail™ version is < 0.1 dB higher than for the corresponding pigtailed version, excluding connectors.
2. Extinction ration can be higher for fast-axis blocked version
3. ± 8% for 1064 nm version

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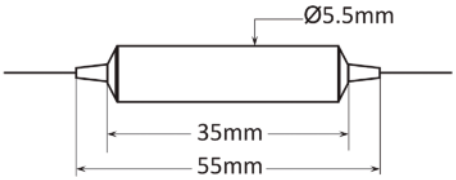

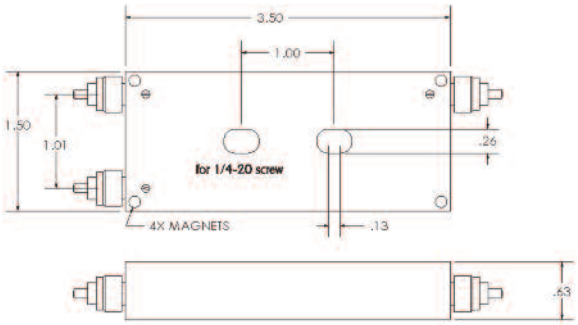

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