

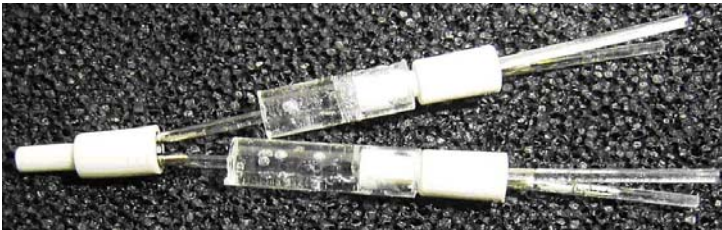
1mm POF 1:4 Splitter / Coupler

General Description

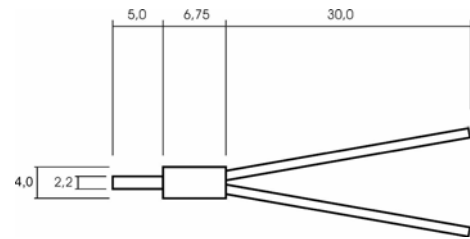
This specialized component splits the light of one incoming input fibre into four output fibres in a symmetric ratio with very little insertion loss and cross talk. The splitter is build up from three conventional 1:2 splitters and consists of partially polished standard polymeric fibres (1mm POF, NA = 0,5).

Fields of Application

- ▶ Optical Networks
- ▶ Industrial Electronics
- ▶ Photoelectric Barriers
- ▶ WDM Systems
- ▶ Power Electronics
- ▶ Small Area Networks



1mm POF 1:4 Splitter / Coupler



conventional 1:2 splitter

Splitter Type	Typical Splitting Ratio	Insertion Loss			Typical Cross Talk
		min	typ	max	
Standard Splitter	25:25:25:25 % (± 20%)	2.1 dB	3.8 dB	6.2 dB	> 22 dB
Low Cross Talk Splitter	25:25:25:25 % (± 20%)	2.2 dB	3.1 dB	4.4 dB	> 50 dB

Special Applications

For special applications, a thin metal layer can be placed in between the polished parts of the fibres to increase the cross talk between both output branches. These low cross talk splitters can be utilized in sensor applications and data transmission systems that use one fibre for bi-directional, full duplex operation.

The 1mm POF 1:4 Splitter / Coupler has been demonstrated, that cascading splitters can be effectively used for multi-channel wavelength division multiplexing applications.

- ▶ Operating Temperature -40 to + 85 °C
- ▶ Storage Temperature -55 to + 90 °C

Price information available on request

For more information about our products and services please visit us online: <http://www.harzoptics.de>

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