

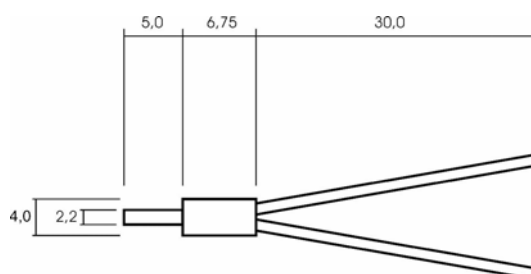
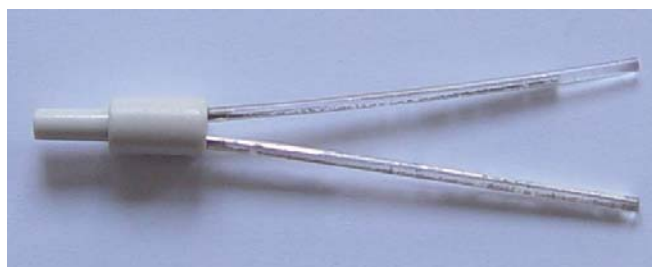
1mm POF Splitter / Coupler

General Description

This specialized component splits the light of one incoming input fibre into two output fibres in a 50:50 ratio with very little insertion loss and cross talk. The splitter consists of two 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



Splitter Type	Typical Splitting Ratio	Insertion Loss			Typical Cross Talk
		<i>min</i>	<i>typ</i>	<i>max</i>	
Standard Splitter	50:50 % (± 20%)	0.6 dB	1.3 dB	2.7 dB	22 dB
Low Cross Talk Splitter	50:50 % (± 20%)	0.8 dB	1.2 dB	1.5 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.

Additionally, three 1:2 splitters can be combined into a cascading 1:4 splitter, which has an average insertion loss of about 6dB. It 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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