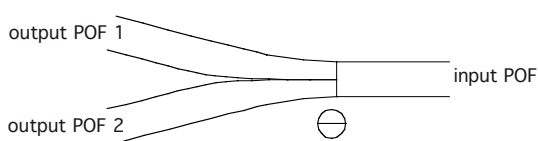


Low cross talk 1x2 POF splitter for 1 mm polymer fiber

Description:

Assembled from two branches of partially polished standard POF (1mm POF, NA = 0.5) this low cross talk optical power splitter component splits up the light of the input POF to two equal portions (50:50 symmetry) in the output branches. The polished POF parts are coated with a plastic metal combination in order to increase the cross talk attenuation between the two output branches. The splitter's low cross talk is useful in sensor applications and data transmission systems that use one fiber only for bidirectional, full duplex operation.

The low cross talk splitter has a 2.2mm diameter input ferrule and two bare fiber output branches (see figure below).



With 2.2mm short jacket tubes on the bare fiber output POF the access to standard 2.2 POF cables is feasible (left photo below). Metal alignment ferrules to connect the output splitter ports to standard 2.2mm POF cable by crimping (middle photo below) and the lock nut adapter to connect and open up 2.2mm POF cables (right photo below) come with each splitter.



Technical Data 50:50 symmetry splitter:

type	splitting ratio (%) typical	excess loss (dB)			cross talk (dB) typical*
		min.	typ.	max.	
Low cross talk splitter	50 : 50 ($\pm 10\%$)	0.9	1.4	2.5	50

*The cross talk figure depends critically on the end face quality of the connected POF cable.

Customer specific modifications are feasible:

- unsymmetric couplers comprising an unsymmetry up to 75:25 splitting ratio,
- length extension of the output fiber up to 120mm.

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