



## Special Fiber Coupler (RC Coupler, Bend Insensitive Fiber etc.)



### Overview:

Besides normal fiber coupler, LightComm also manufactures couplers with special fiber according to customer's requirement. The RC fiber, with 80 $\mu$ m diameter cladding, could be used to build the small and lightweight couplers. And the bend insensitive fiber has very low bend loss compared with the standard fiber. These special fiber couplers could be used in many areas such as fiber sensor and fiber gyro.

Another kind of special fiber coupler has the operating temperature range from -70 to + 200 $^{\circ}$ C. This coupler was built of the special fiber with high temperature material coating.

### Features:

- \* Mini size
- \* Low bend loss
- \* Low excess loss
- \* High stability and reliability

### Applications:

- \* Optical gyro
- \* Optical sensor
- \* Measuring instruments

**Specification:**

Parameter	Type	RC Fiber	Bend Insensitive Fiber	High-Temperature Resistant Fiber
	Operating wavelength(nm)		1310 or 1550	1310 or 1550
MFD(μm)		5~7	5~6	8~9
NA		0.15~0.2	0.18~0.22	0.18~0.24
Cladding diameter(μm)		80±2	125±1	125±1
Buffer diameter(μm)		170±5%	245±5%	245±5%
Bend character(dB)		< 0.05 (@φ15mm,50 circle)	< 0.05 (@φ15mm,50 circle)	< 0.05 (@φ15mm,50 circle)
Operating temperature(°C)		-40~+85		-70~+200

We can make special fiber couplers upon customer request:

1. Type: SSC, PIC, WBC and so on.
2. Configuration: from 1x2, 2x2 to 1x3, 1x3, 1x4, 4x4.

**Ordering Information:**

XXX-X-XXX-XXXX-XX/XX-X-X-XX/XXX-XX\*XX

