

## Fiber Optic Movable Connectors

### Product Description

Fiber optic movable connectors, also known as fiber optic patch cords, precisely butt the two ends of the fiber with extremely low insertion loss. Fiber optic cable can be provided with simplex, duplex, micro duplex, and connectors can be provided with SC/ FC/ LC/ ST/ MU/ MT-RJ/ E2000 etc.



### Features

- High stability and reliability
- Low insertion loss, high return loss.
- Excellent finish grinding standard.
- End-face geometry compliance
- Various configurations or connection methods

### Applications

- Telecom.com
- Cable TV
- Active or passive device terminals
- Industrial, medical and military
- Gigabit Ethernet

### Optical Indicators

| Test Items          | FC、SC、ST、LC、MU            |                      | MT-RJ                    |                           |
|---------------------|---------------------------|----------------------|--------------------------|---------------------------|
|                     | Standard Grade<br>B Grade | Superior<br>A Grade  | MM                       | SM                        |
| Insertion loss (dB) | ≤0.3<br>(type: 0.15)      | ≤0.2<br>(type: 0.10) | < 0.5<br>(repeatability) | < 0.55<br>(repeatability) |
| Return loss (dB)    | PC≥40<br>APC≥50           | PC≥45<br>APC≥55      | > 25                     | > 35                      |



### Environmental and mechanical properties

| Test Project                     | Test conditions                                  | Maximum change in insertion loss<br>Max. $\Delta$ I. L. |
|----------------------------------|--|---|
| High Temperature                 | +85oC, 168h                                      | 0.2dB   |
| Temperature cycling              | -40 oC ~ +75oC, 21cycles, 168h                   | 0.2dB   |
| Humidity and heat (steady state) | 75oC, 95%R.H. 168h                               | 0.2dB   |
| Humid heat cycle                 | -10 oC ~ +65oC, 95%~100%R.H. 14 cycle, 168h      | 0.2dB   |
| Vibration                        | 10 Hz ~ 55Hz, 1.5mm(p-p)                         | 0.1dB   |
| Bend                             | 0.6 ~ 0.9kgf, -90° ~ +90° 100 cycles             | 0.1dB   |
| Turning                          | 1.5 ~ 2.5kgf, 10 times/min, $\pm$ 180°, 200times | 0.1dB   |
| Tensile                          | 70 ~ 90N, 10min                                  | 0.1dB   |
| Falling                          | 1.5m, 8 times                                    | 0.2dB   |
| Repeatability                    | 10 times   | 0.2dB   |
| Interchangeability               | Randomly   | 0.2dB   |
| Durability                       | >500 times                                       | 0.2dB   |
| Locking mechanism strength       | 68.6N, 10min                                     | 0.1dB   |

Note: See Telcordia GR-326-CORE or IEC standard

#### MT-RJ:

| Test Project                     | Test conditions                              | Maximum change in insertion loss<br>Max. $\Delta$ I. L. |
|----------------------------------|--|---|
| High Temperature                 | +60°C, 96h                                   | 0.2 dB  |
| Low temperature                  | -10°C, 96h                                   | 0.2 dB  |
| Temperature cycling              | -10 °C ~ +60°C, 12 cycles, 96h               | 0.2 dB  |
| Humidity and heat (steady state) | 40°C, 95%R.H, 96h                            | 0.2 dB  |
| Vibration                        | 10 Hz ~ 55Hz, 1.5mm(p-p)                     | 0.2 dB  |
| Bend                             | 0.6kgf, -90° ~ +90° 100 cycles               | 0.2 dB  |
| Turning                          | 1.5kgf, 10 times /min, $\pm$ 180°, 200 times | 0.2 dB  |
| Tensile                          | 70N, 10min                                   | 0.2 dB  |
| Falling                          | 1.5m, 8 times                                | 0.2 dB  |
| Repeatability                    | 10 times                                     | 0.2 dB  |
| Durability                       | >500 times                                   | 0.2 dB  |



### Model naming

|                            |   |   |   |        |   |        |   |    |   |   |
|----------------------------|---|---|---|--------|---|--------|---|----|---|---|
| Series Model               | ZL  | A | - | FC/APC | - | FC/APC | - | SM | - | 0 |
| Product Grade              | A =Standard Grade<br>B=Superior   |   |   |        |   |        |   |    |   |   |
| One End Connector          | FC/PC<br>FC/APC<br>SC/PC<br>SC/APC<br>LC/PC<br>LC/APC<br>ST/PC<br>XX/XXX: Customer Specified  |   |   |        |   |        |   |    |   |   |
| Connector on the other end | FC/PC<br>FC/APC<br>SC/PC<br>SC/APC<br>LC/PC<br>LC/APC<br>ST/PC<br>XX/XXX: Customer Specified  |   |   |        |   |        |   |    |   |   |
| Fiber Type                 | SM--Single-mode<br>MM--Multimode 62.5/125<br>M2--50/125 OM2<br>M3--50/125 OM3<br>XX--Other custom fiber optics  |   |   |        |   |        |   |    |   |   |
| Fiber optic cable type     | 0 --Bare Fiber<br>1 =Φ0.9Cladding fiber<br>2 =Single core Φ2.0<br>3 =Single core Φ3.0<br>4 =Dual Core Parallel Φ2.0<br>5 =Φ3.0 Contains Φ0.6*2<br>6 =Dual Core Parallel Φ3.0<br>X =Please specify |   |   |        |   |        |   |    |   |   |

