

Optical Rotary Joint

DE-G001

Datasheet



Overview

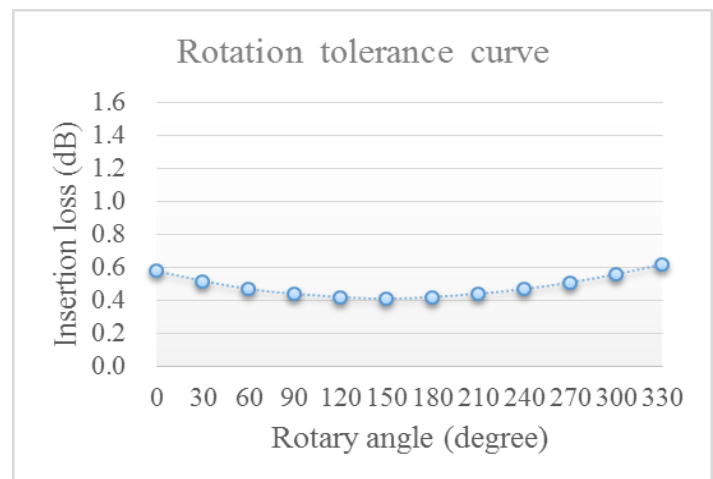
Optohub optical rotary joints are rotary joints based the micro-optics technology. Optohub optical rotary joints are a stable performance based collimator technology and YAG welding technology.

Features

- + Low insertion loss : 1.5dB or less
- + Insertion loss variation : 0.5dB or less
- + High durability for the contact less collimator coupling
- + High reliability for YAG welding technology
- + Oil free

Applications

- + Optical instrumentation turntable
- + Fiber winding drum



Performance

(1) Absolute Maximum Ratings

| Parameters | Min. | Typ. | Max. | Unit | Note |
|-----------------------|------|------|------|------|----------------|
| Maximum input power | | | +23 | dBm | |
| Operating temperature | 0 | | 65 | C | Non-condensing |
| Operating humidity | 5 | | 90 | %RH | Non-condensing |
| Storage temperature | -40 | | 85 | C | Non-condensing |

(2) Optical specification

| Parameters | DE-G001-A | DE-G001-B | Unit | Note |
|--------------------------|--|-----------|------|-------------------|
| Wavelength | 1310+/-50 | 1550+/-50 | nm | |
| Insertion loss | +/-30nm : 1.5 or less +/-50nm : 2 or less | | dB | |
| Insertion loss variation | 0.5 or less | | dB | |
| Return loss | 50dB or more | | dB | Without connector |

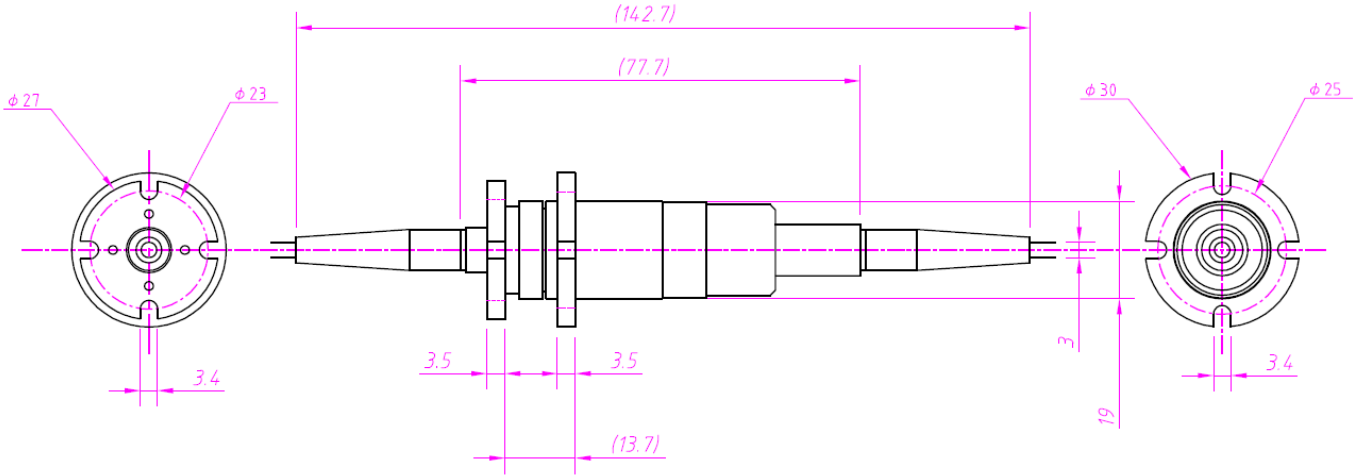
(3) Mechanical specification

| Parameters | Min. | Typ. | Max. | Unit | Note |
|-----------------------------|------|------|-------|------|------|
| Rotational speed | | | 2,000 | rpm | |
| Optical fiber pull strength | | | 10 | N | |

(4) Optical fiber specification

| Parameters | Min. | Typ. | Max. | Unit | Note |
|-----------------------------|------------------------------|------|------|------|------|
| Optical fiber | SMF | | | | |
| Optical fiber code diameter | | 3 | | N | |
| Optical fiber length | 950 | | 1050 | mm | |
| Optical connector | SC connector FC connector | | | | |
| Optical connector polishing | SPC APC | | | | |

Drawings



Unit:mm

Ordering information

DE-G001-x-x

- Optical connector and polishing
 - A: SC/SPC
 - B: FC/SPC
 - C: SC/APC
 - D: FC/APC
- Wavelength
 - A: 1310nm
 - B: 1550nm