Fiber Optic Hybrid Units

H18 / H24 FORJ

Fiber optic rotary joints

Description

The H18 / H24 fiber optic rotary joints effectively combine a compact electrical slip ring with a fiber optic rotating joint. Both offer the flexibility of electrical, power and optical signal transfer through a single rotational joint. The H18 and H24 are low cost solutions for high data rate transmission to greater than 2.5 Gb / sec on the optical channel.

Features

- Combined compact electrical slip ring with fiber optic rotating joint
- · Flexibility of signal transfer through a single rotational joint
- Low cost solution for high data rate transmission
- · Standard 18 or 24 circuit model with 2 amp circuits
- Precision ball bearing for long life
- Speeds up to 250 rpm continuous
- · Compact size
- · Metal housing available
- Transfer analog and digital signals
- · Compatible with data bus protocols

Benefits

- Unique signal handling performance with minimal electrical circuit noise
- · Tight packaging to fit in the most demanding space constraints
- Low torque to minimize system torque budget
- Rapid delivery



Typical Applications

- CCTV and dome camera manufacturing
- Robotics
- Upgrading legacy equipment
- Digital communications and video

Fiber Optic Hybrid Units

Specifications		
	Singlemode H1817-950 / H2418-950	Multimode H1810-950 / H2417-950
Wavelengths	1310 and 1550 nm (consult factory for multi-wavelength applications)	850, 1310 and 1550 nm (consult factory for multi-wavelength applications)
Fiber Size	9 / 125 μm (consult factory for other sizes)	50 / 125 or 62.5 / 125 μm (consult factory for other sizes)
Insertion Loss	<3.5 dB (typical: <1.5 dB)	<2.5 dB (typical: <1.5 dB)
Return Loss	<-18 dB (standard). <-35 dB option available (consult factory for details)	<-18 dB
Rotation Variation	<1.5 dB (typical <0.5 dB)	<1.0 dB (typical <0.5 dB)
Maximum Speed	500 rpm (consult factory for higher speeds)	500 rpm (consult factory for higher speeds)
Terminations	Pigtailed cable and connectors	Pigtailed cable and connectors
Jacket Type	900 µm	900 µm

Electrical Circuits

Up to 18 x 2 amps circuits

Up to 4 x 6 amps circuits

Other combinations of the above available on request Passes rated 240 V (28 AWG - silver plated) Continuous current rating based on number of current carrying conductors: 2 A for 1 - 3 conductors

2 A for 1 - 3 conductors 1 A for 4 - 6 conductors 0.5 A for 7 - 18 conductors - H18 0.5 A for 7 - 24 conductors - H24

Rated Voltage

210 VDC / 240 VAC

Insulation Resistance

200 MΩ at 500 VAC

Electrical Cables

Color coded, silver plated ETFE or PTFE insulated lead wires

Temperature

-20° to +60° C

Mounting Options

Flanged as standard Other configurations available on request

Bearings

Precision ball bearings fitted throughout

