



General Description

Coax rotary joint also could be called high frequency slip ring or connector, which is used for continuous rotation device to transmit hi-frequency signal between fix part and rotary part. This kind of rotary joint can be an element which installed on the cable or instrument as transmitting or breaking the line of electrical connections. The max frequency range reach up to 40GHz (or higher) analog signal and high speed digital signal.

Features:

1. Small size & light weight
2. Channels could be up to 18
3. Frequency range can reach to 40GHz or higher
4. Low attenuation loss and low wear
5. Can not be used in high work speed application
6. Longer life time & maintenance free

Option:

1. Channels
2. Electrical part combines with coax rotary joint
3. Support broadband signal and SDI signal
4. Cable length and size
5. 50Ω and 75Ω impedance are optional

Application:

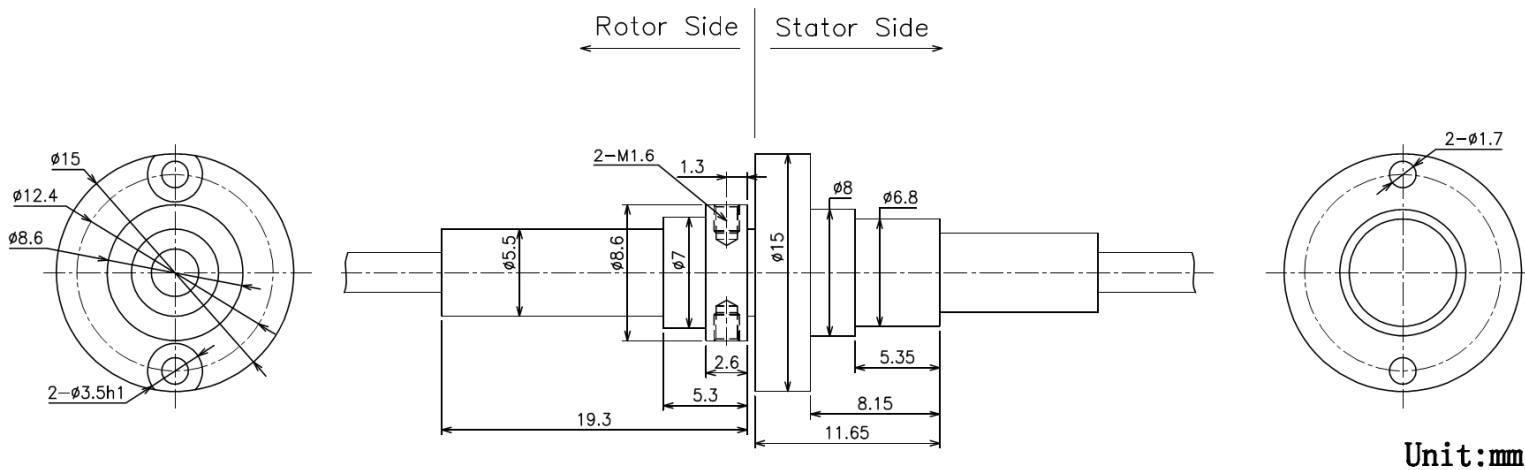
1. Radar & antenna
2. Satellite communication system
3. Analog high frequency electronic system
4. CCTV & video monitoring device
5. Military system equipment

CRJ-01

Specification:

Specification	
Channel	1 channel
Frequency Range	0-3GHz
Specific Impedance	50Ω
Average Loading Power	100W @ 2GHz 60W @ 3GHz
Insulation Resistance	≥1000MΩ @ 500V
Dielectric Strength	≥1000V @ 50Hz
Voltage Rating	380VAC/DC
Contact Materials	Gold to gold
Insertion Loss	< 1.5dB @ 3GHz
VSWR	≤1.45dB Max
VSWR-WOW	0.1dB Max
Phase WOW (Max)	1 degree
Pull Force	10N
Work Temperature	-20 C -+60 C
Work Humidity	60%RH or higher
Work Speed	60RPM Max
Housing Material	Brass/ Zinc plating
Lead Wire Size	RG316
Lead Wire Length	Standard 250mm
Protection	IP54

Drawing:



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If you have specific customized requirement, please feel free to consult us so that our sales engineer could recommend the most suitable product to you for you reference.

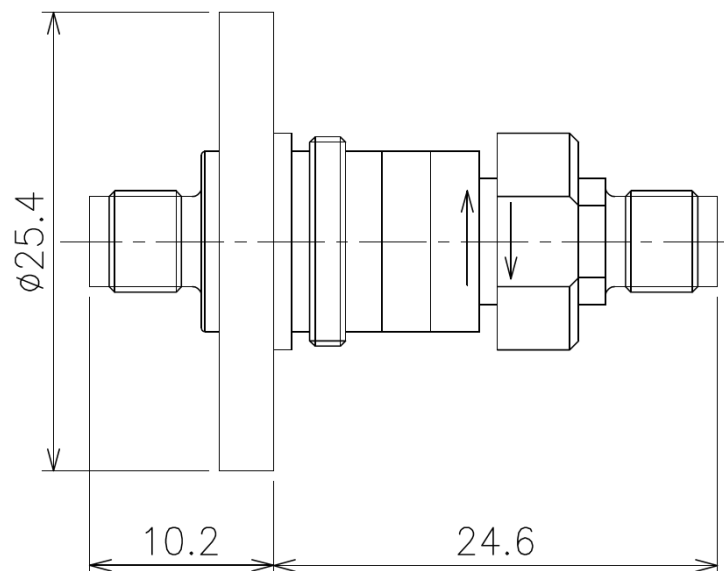
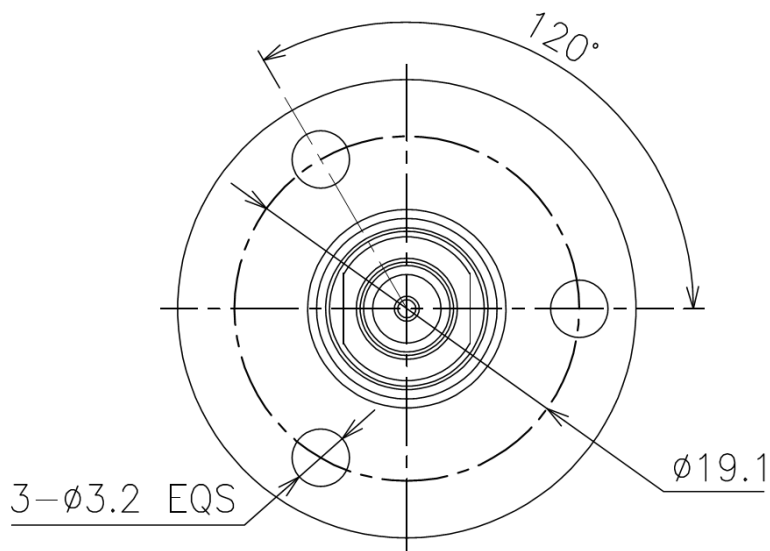
CRJ-02

Specification:

Specification	
Channel	1 channel
Frequency Range	0-18GHz
Specific Impedance	50Ω
Average Loading Power	200W @ 1GHz 500W @ 1GHz 100W @ 15GHz 40W @ 15GHz 30W @ 18GHz
Peak Power (Max)	3kW Max
Contact Materials	Precious metal
Insertion Loss(Max)	0.25dB @ 0-10GHz 0.30dB @ 10-18GHz
Insertion Loss WOW (Max)	0.05dB
VSWR (Max)	1.3dB @ 0-10GHz 1.4dB @ 10-18GHz
VSWR-WOW (Max)	0.05
Phase WOW (Max)	1 degree
Work Temperature	-40 C -+70 C
Work Humidity	95%RH or higher
Work Speed	500RPM Max
Starting Torque (Max)	0.05Nm @ room temperature
Housing Material	Copper alloy
Protection	IP40

Drawing:

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Unit:mm

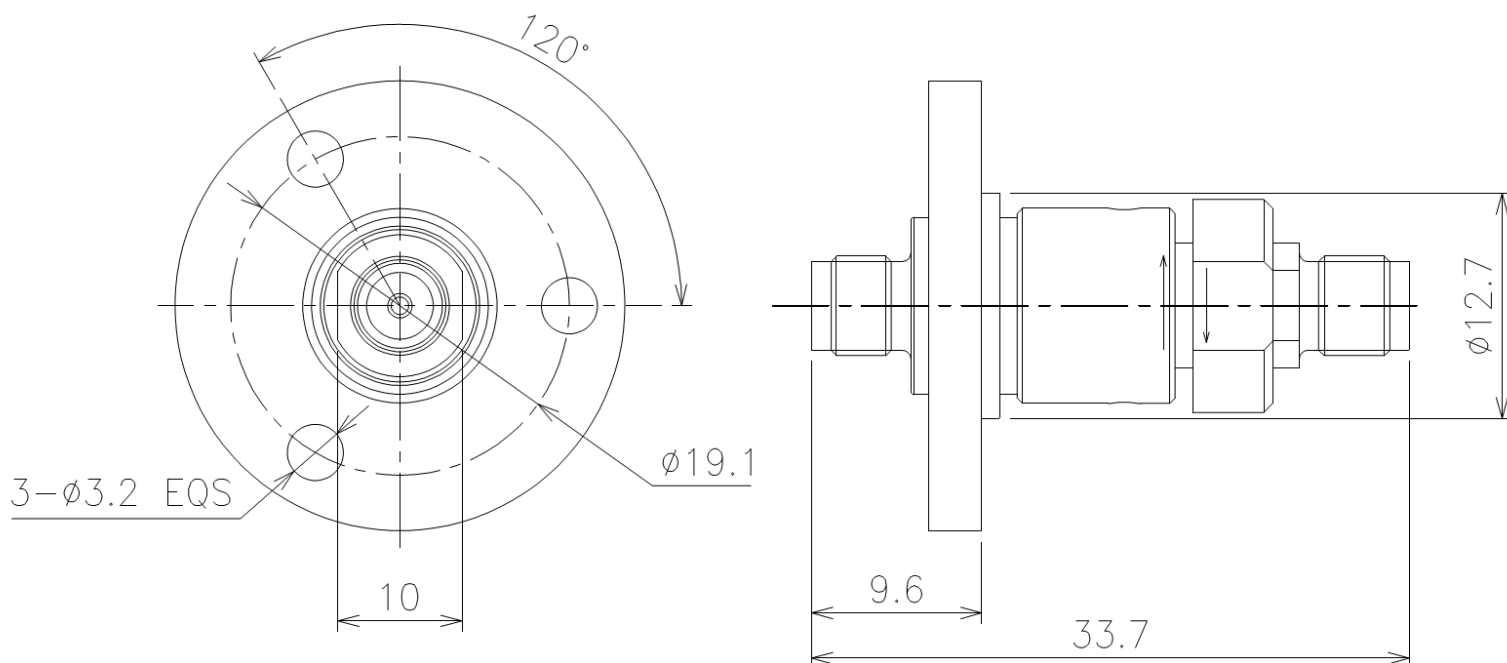
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CRJ-03

Specification:

Specification	
Channel	1 channel
Frequency Range	0-26.5GHz
Specific Impedance	50Ω
Average Loading Power	200W @ 1GHz 40W @ 15GHz 25W @ 26.5GHz
Peak Power (Max)	3kW Max
Contact Materials	Precious metal
Insertion Loss(Max)	0.30dB @ 0-10GHz 0.35dB @ 10-18GHz 0.70dB @ 18-26.5GHz
Insertion Loss WOW (Max)	0.1dB @ 0-18GHz 0.2dB @ 18-26.5GHz
VSWR (Max)	1.3dB @ 0-10GHz 1.4dB @ 10-18GHz 1.7dB @ 18-26.5GHz
VSWR-WOW (Max)	0.05dB @ 0-18GHz 0.10 dB @ 18-26.5GHz
Phase WOW (Max)	1 degree @ 0-10GHz 1.5 degree @ 10-18GHz 2.0 degree @ 18-26.5GHz
Work Temperature	-40 C ~+70 C
Work Humidity	95%RH or higher
Work Speed	200RPM Max
Starting Torque (Max)	0.05Nm @ room temperature
Housing Material	Copper alloy
Protection	IP40

Drawing:



Unit:mm

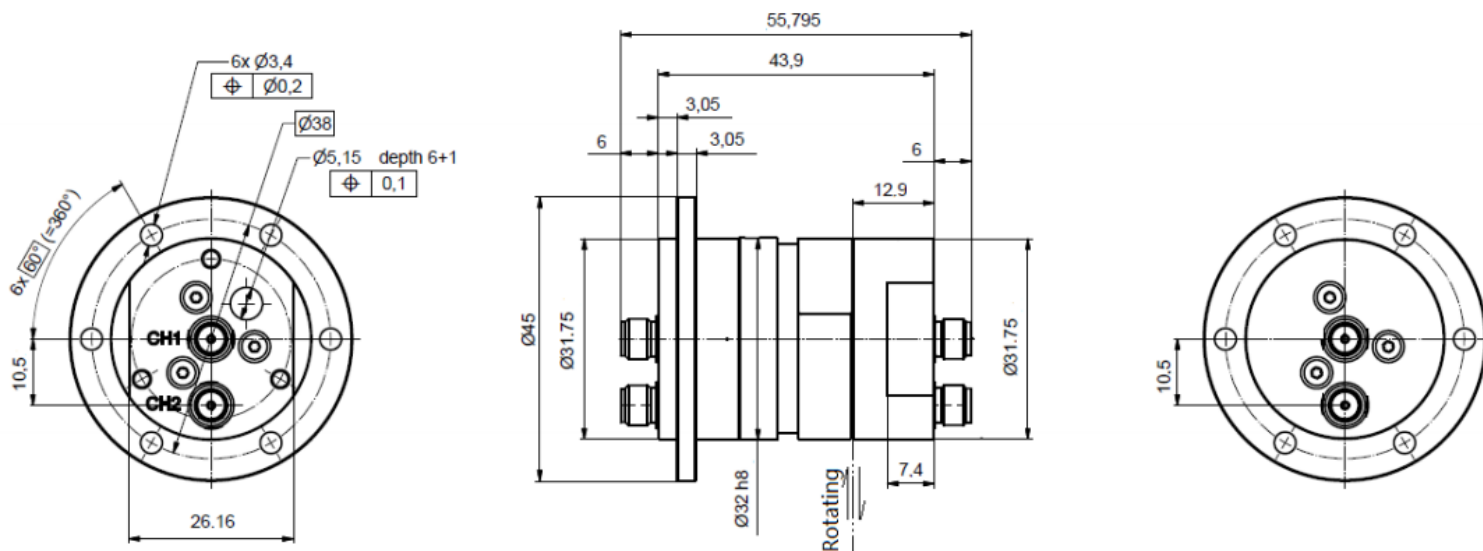
CRJ-04

Specification:

Specification		
Channel	1 channel	2 channel
Frequency Range	DC-5GHz	
Specific Impedance	50Ω(SMA Female)	
Average Loading Power	60W@5GHz	50W@5GHz
Peak Power (Max)	1500W	
Contact Materials	Beryllium Alloy	
Insertion Loss(Max)	0.25dB	0.45dB
Insertion Loss WOW (Max)	0.05dB	0.15dB
VSWR (Max)	1.2	1.5
VSWR-WOW (Max)	0.05	0.15
Phase WOW (Max)	0.5 degree	4.0 degree
Isolation	50dB min./60dB typical	
DC Power	0.5A*48VDC@full power	0.5A*24VDC@full power
Work Temperature	-40 C -+70 C	
Work Humidity	85%RH or higher	
Work Speed	600RPM Max	
Life Times	10 million rotations	
Starting Torque (Max)	5Ncm	
Housing Material	Aluminum Alloy	
Protection	IP60	

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Drawing:



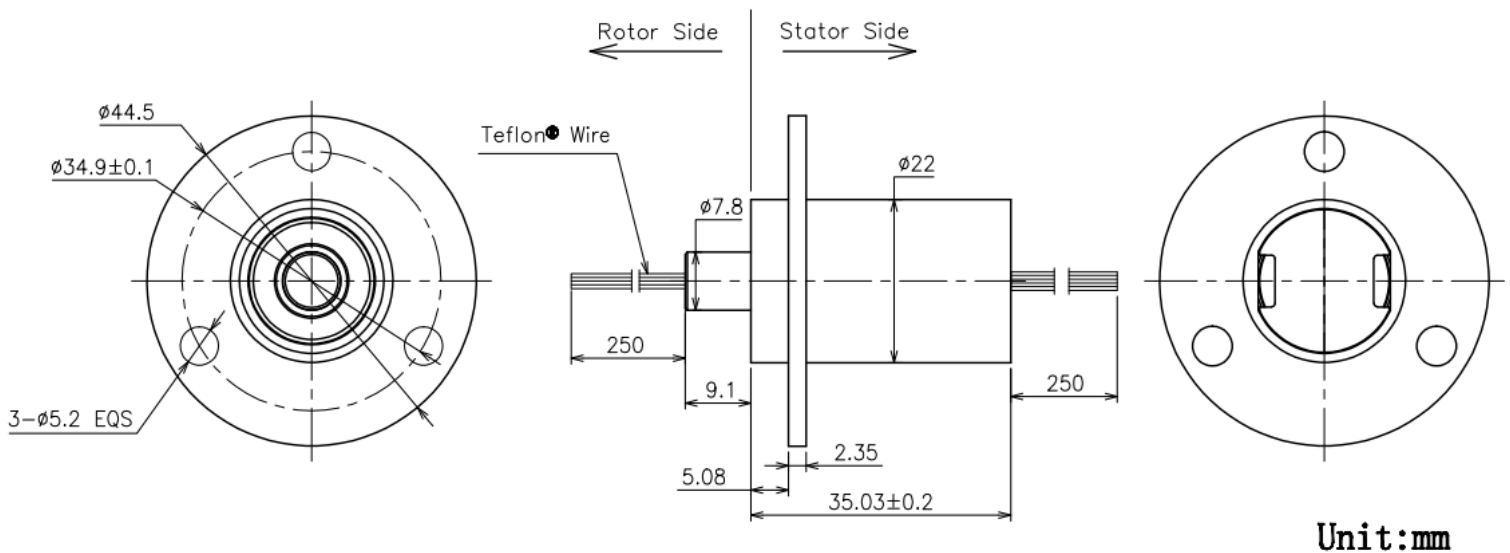
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CRJ-12AC-02S

Specification:

Specification	
Circuits & Current	10 circuits @ 2A, 2 channels coax cable
Work Speed	0-100RPM
Work Temperature	-20 C -+60 C
Work Humidity	60%RH or higher
Voltage Rating	240VAC/DC
Dielectric Strength	500VAC@50Hz between each circuit
Insulation Resistance	1000MΩ@500VDC
Electrical Noise	≤10mΩ
Contact Materials	Gold to gold
Lead Wire Size	AWG28 Teflon® UL
Lead Wire Length	Standard 250mm
Housing Materials	Engineering plastic
Protection	IP54 or higher

Drawing:



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CRJ022

Specification:

Specification	
Channels	1 coax channel or more
Work Speed	0-500RPM
Work Temperature	-20 C -+60 C
Work Humidity	60%RH or higher
Voltage Rating	380VAC/DC
Current Rating	2-15A or bigger
Dielectric Strength	≥1000VAC@50Hz between each circuit
Insulation Resistance	1000MΩ@500VDC
Electrical Noise	1mΩ Min
Contact Materials	Precious metal
Lead Wire Size	Teflon® UL
Lead Wire Length	Standard 300mm
Housing Materials	Aluminum alloy
Torque	≤9.25 gm (for reference)
Protection	IP54 or higher

Drawing:

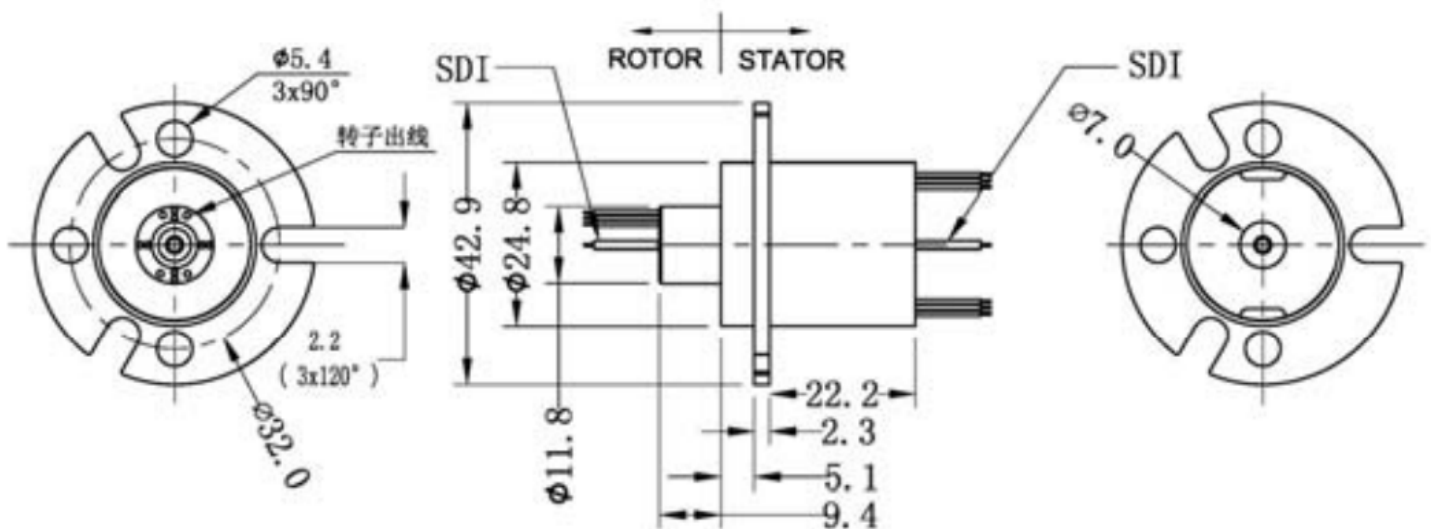
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CRJ-1202C1

Specification:

Specification	
Electrical Part	
Circuits & Current	12 circuits @ 2A
Rated Voltage	240VAC/DC
Insulation Resistance	≥1000MΩ @ 500VDC
Dielectric Strength	600V @ 50Hz
Electrical Noise	70mohm@6VDC,50mA
Working speed	300rpm max
Work Temperature	-40℃ -+80℃
Work Humidity	60%RH or higher
Contact Materials	Gold to gold
Housing Materials	Aluminum Alloy
IP Degree	IP54
Coax Part	
Channel	1 channel
Frequency Range	DC-2.3GHz
Specific Impedance	70Ω
Work Temperature	-40℃ -+80℃
Insertion Loss	0.65dB @ 1GHz
Return Loss	-18dB/1GHz Max
VSWR	≤1.3dB Max
VSWR-WOW	±0.05 Max
Working Speed	100rpm max
Work Temperature	-40℃ -+80℃
Work Humidity	60%RH or higher
Housing Material	Brass/ Zinc plating
Lead Wire Size	RG179U
Lead Wire Length	Standard 250mm
Connector	BNC/SMA

Drawing:



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