

FRJ1-18000-32

Single Channel, DC~18GHz, 32.8mm

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|-------------------------------|------------------------------|
| Features: | Applications: |
| * Low VSWR | * High Speed Digital Signal |
| * Low VSWR Flatness | Transmission |
| * Low Insertion Loss Flatness | * Analog Signal Transmission |

Electrical (Rotary Joint)

Frequency:	DC~18GHz
VSWR:	1.4 max.
VSWR Flatness:	0.05 max.
Insertion Loss:	0.3dB max.
Insertion Loss Flatness:	0.05 dB max.
Phase Flatness:	1° max.
Average Power:	500W max. @1GHz
	200W max. @6GHz
	100W max. @12GHz
	30W max. @18GHz
Peak Power:	3000W max.
IP Grade:	IP40 acc. EN 60529

Mechanical (Rotary Joint)

Connectors:	SMA female
Rotating Speed:	250RPM max.
Starting Torque:	0.5N.cm max.
Connector Axial Load:	±0.1N max.
Rotating Torque:	0.5 N.cm max.
Connector Radial Load:	±0.1N max.
Operation Life:	10M Cycles
Dielectric:	PTFE

Environmental

Temperature (Rotary Joint):	-55~+85°C
Temperature (Slip Ring):	-30~+80°C

Color Code of Lead Wire

Ring	1	2	3	4	5	6	7	8	9	10	11	12
Color	BLK	BRN	RED	ORG	YEL	GRN	BLU	PUR	GRY	WHT	PINK	LGT BLU

Ring	13	14	15	16	17	18	19	20	21	22	23	24
Color	WHT/BLK	WHT/BRN	WHT/RED	WHT/ORG	WHT/YEL	WHT/GRN	WHT/BLU	WHT/PUR	WHT/GRY	BLK/RED	BLK/BRN	Transparent

Remark: "1" : the first wire from rotor side , FRJ1-18000-32-12S wire color sequence: BLK/BRN/RED/ORG/YEL/GRN, 24 color wires asone group , if more than 24 wires, repeat as sequence , use number tube to tell group 1#, 2#....

Electrical (Slip Ring)

Voltage:	0~240V
Impedance of Dielectric:	300MΩ min.
Lead Wire:	AWG#26 Silver plated Teflon
Dielectric Resistance:	300V AC @50Hz, 60s
Electrical Noise:	0.01Ω max.
IP Grade:	IP51

Mechanical (Slip Ring)

Operation Life:	10M Cycles
Rotating Speed:	250RPM max.
Contact Material:	Gold
Housing:	Aluminum alloy
Torque:	0.01N.m @6 Channels + 0.05N.m

How To Order

FRJ1-18000-32-X-Y

X: Power Circuits

For example:

0610 - 6 circuits@10A

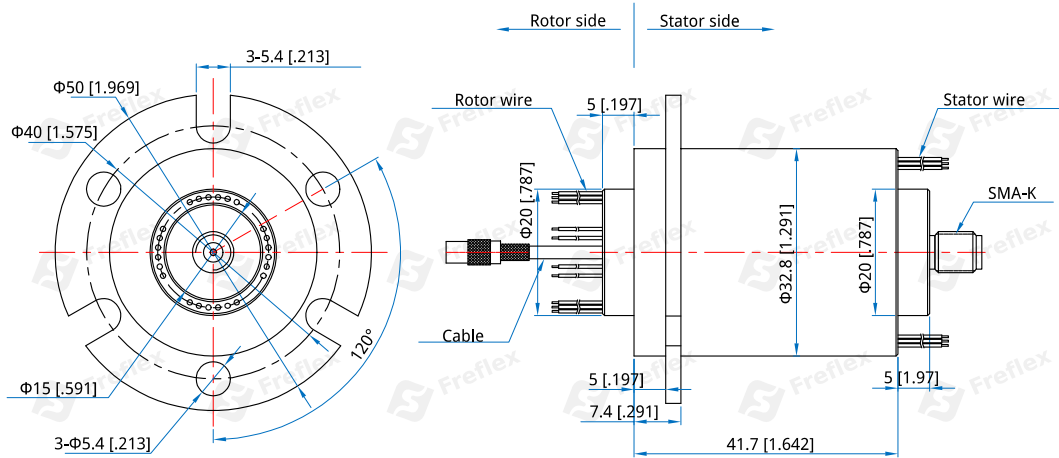
Y: Signal Circuits

For example:

06S - 6 circuits signal@2A

Customization is available upon request.

Outline Drawings



Unit: mm [in] Tolerance: $\pm 0.2\text{mm}$ [$\pm 0.008\text{in}$]

Standard Part Number List

Part Number	RF Channel	Frequency (GHz)	Circuits no. (10A)	Circuits no. (2A)	Length L(mm/in)
FRJ1-18000-32-12S	1	DC-18	0	12	41.7 [1.642]
FRJ1-18000-32-24S	1	DC-18	0	24	41.7 [1.642]