

Rotary Joint || BN 153166



Radio frequency characteristics

Channel designation	Channel 1	Channel 2
Interface type / material / surface finish	SMA (50 Ω) / copper alloy / gold plated	SMA (50 Ω) / copper alloy / gold plated
Interface orientation	style U	style U
Frequency range	DC to 4.5 GHz	DC to 4.5 GHz
Peak power rating	1 kW	1 kW
Average power rating	100 W @ DC to 2 GHz 60 W @ 2 to 4.5 GHz	10 W
VSWR, max.	1.35	1.75
VSWR variation over rotation, max.	0.05	0.2
Insertion loss, max.	0.4 dB	0.6 dB
Insertion loss variation over rotation, max.	0.05 dB	0.25 dB
Phase variation over rotation, max.	0.5 deg.	4 deg.
Isolation, min.	50 dB	
DC carrying capability	0.5 A, 48 VDC @ full RF avg. power 2 A, 48 VDC @ RF avg. power 5 W	0.5 A, 24 VDC @ full RF avg. power

SPINNER GmbH
 This document is proprietary to us.
 All rights reserved. Any use, transfer, or reproduction of this document
 or the know-how contained therein requires our express consent.

Template TD-00015N

Rotary Joint || BN 153166

Mechanical characteristics

Rotating speed, max. / nominal	60 rpm / 30 rpm
Life, min.	5 x 10 ⁶ revolutions
Torque (room temperature), max.	0.05 Nm @ start-up 0.05 Nm @ rotation
Interface loads, max.	± 5 N in axial direction ± 5 N in radial direction
Case material	aluminum alloy
Case surface finish	chromate conversion coat painted none
Weight, approx.	0.13 kg
Marking	adhesive label

Environmental conditions

Operation	
Ambient temperature range	-40 to +71°C
Relative humidity, max.	95% (non-condensing)
Storage	
Ambient temperature range	-55 to +85°C
Relative humidity, max.	95% (non-condensing)

Applicable documents

Drawing	153166-0E, Issue B
Technical information	“Rotary Joints – Glossary”, technical document TD-00021, Spinner GmbH
Application note	“Rotary Joints – Installation Guidelines”, technical document TD-00057, Spinner GmbH

SPINNER GmbH
 This document is proprietary to us.
 All rights reserved. Any use, transfer, or reproduction of this document
 or the know-how contained therein requires our express consent.

Template TD-00015N