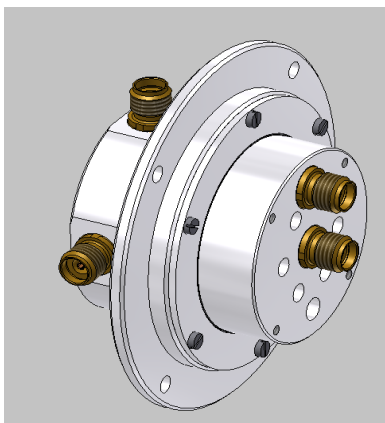


Rotary Joint || BN 153130C0002



### Radio frequency characteristics

Channel designation	Inner channel (CH2)	Outer channel (CH1)
Interface type / material / surface finish	2.92mm-f (50 Ω) / copper alloy / gold plated	2.92mm-f (50 Ω) / copper alloy / gold plated
Interface orientation	style L	style L
Frequency range	29.1 to 31 GHz	19.4 to 21.2 GHz
Peak power capability	-	-
Average power capability	10 W	1 W
VSWR, max.	1.5	1.5
VSWR variation over rotation, max.	0.2 @ 29.1 GHz to 29.5 GHz 0.1 @ 29.5 GHz to 31.0 GHz	0.1
Insertion loss, max.	0.8 dB	0.8 dB
Insertion loss variation over rotation, max.	0.2 dB @ 29.1 GHz to 29.5 GHz 0.1 dB @ 29.5 GHz to 31.0 GHz	0.1 dB
Phase variation over rotation, max.	-	-
Isolation, min.	50 dB	
DC carrying capability	-	-

## Rotary Joint || BN 153130C0002

**Mechanical characteristics**

Rotating speed, max. / nominal	150 / 100 rpm
Life, min.	20 x 10 <sup>6</sup> revolutions
Torque (room / min. temperature), max.	0.4 Nm @ 60°C / 0.45 Nm @ 20°C / 3.0 Nm @ -30°C (start-up) 0.4 Nm @ 60°C / 0.45 Nm @ 20°C / 2.0 Nm @ -30°C (rotation)
Interface loads, max.	±3 N in axial direction ±3 N in radial direction
Case material	aluminum alloy
Case surface finish	chromate conversion coat per MIL-DTL-5541 type 1 or type 2
IP protection level	IP65
Weight, approx.	0.18 kg
Marking	adhesive label

**Environmental conditions**

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

**Applicable Documents**

Drawing	153130C0001-0E Issue A
Technical information	"Rotary Joints – Glossary", Technical Document TD-00021, Spinner GmbH

**Further Remarks**

Vibration: per MIL-STD-810G or DO-160G

Shock: per MIL-STD-810G or DO-160G