## Rotary Joint | BN 635015



## Radio frequency characteristics

Channel designation	Channel 1
Interface type / material / surface finish	UBR 100 (IEC 154) with one side threaded holes M4 / aluminum alloy / chromated
Interface orientation	style L
Frequency range	8.5 to 10 GHz
Peak power rating	25 kW <sup>RF1)</sup>
Average power rating	1 kW
VSWR, max. / typ	1.15 / 1.1
VSWR variation with rotation, max. / typ.	0.05 / 0.01
Insertion loss, max. / typ.	0.2 dB / 0.1 dB
Insertion loss variation with rotation, max. / typ.	0.05 dB / 0.01 dB
Transmission phase variation with rotation, max. / typ.	2 deg. / 0.5 deg.

RF1) Conditions: Operating altitude if not pressurized, max. sea level



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## **Mechanical characteristics**

Differential operating pressure, max. / nominal	0.2 MPa (2 bar) / 0.1 MPa (1 bar)
Leakage rate, max.	10 cm³/minute @ nominal differential pressure
Rotating speed, max. / nominal	150 rpm / 100 rpm
Lifetime, min.	20 x 10 <sup>6</sup> revolutions
Torque (room / min. temperature), max.	0.7 N m / - @ start-up 0.8 N m / - @ rotation
Interface loads, max.	±10 N in axial direction ±10 N in radial direction
Case material	aluminum alloy
Case surface coating	chromate conversion coat per MIL-DTL-5541 type 1 or type 2
IP protection level	IP65
Weight, approx.	0.35 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	Document-No.: 635015-0E, latest revision
Technical information	"Rotary Joints – Glossary", technical document TD-00021, Spinner GmbH
Application note	"Rotary Joints – Installation Guidelines", technical document TD-00057, Spinner GmbH