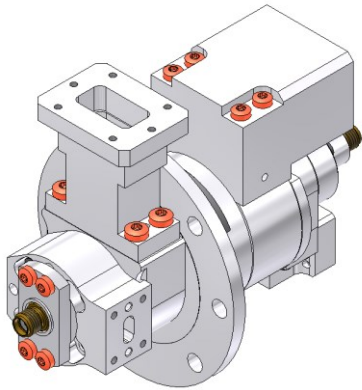


Rotary Joint || BN 635072



Radio frequency characteristics

Channel designation	Channel 1	Channel 2	Channel 3
Interface type / material / surface finish	SMA-f (50 Ω) / copper alloy / gold plated	R120 (WR75) special flange / aluminum alloy / chromated	BJ320 (WR28) special flange / aluminum alloy / chromated
Frequency range	DC to 2.0 GHz	13.75 to 14.5 GHz	29.0 to 31.0 GHz
Average power capability	1W	150W ^{RF1)}	150W ^{RF1)}
VSWR, max. / typ.	1.50 / 1.30	1.25 / 1.2	1.4 / 1.3
Insertion loss, max. / typ.	0.6 dB / 0.5 dB	0.3 dB / 0.2 dB	0.6 dB / 0.5 dB
Isolation, min.	50 dB		

^{RF1)} Conditions: - Operating altitude if not pressurized, max. 12.000 m
 - The waveguide flange of the rotary joint must not exceed the defined maximum ambient temperature.

Mechanical characteristics

Rotating speed, max. / nominal	60 rpm / 30 rpm
Rotating direction (view from the top)	both directions
Life, min.	5 x 10 ⁶ revolutions
Case material	aluminum alloy
Case surface finish	chromate conversion coat Painted ---
IP protection level	IP40
Weight, approx.	0.38 kg
Marking	adhesive label

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Environmental conditions

Operation	
Application	airborne, plane
Ambient temperature range	-40 to +71°C
Relative humidity, max.	95% (non-condensing)
Shock	30 g / 11 ms half sine, 3 shocks in each direction of 3 orthogonal axes Compliant to MIL-STD-810G
Vibration	20-50 Hz, PSD of 0.02 g ² /Hz falling to 0.001 g ² /Hz at 500 Hz in each of 3 orthogonal axes Duration: 15 min/axis Compliant to MIL-STD-810G
Salt fog	Standard exposure of 48h per MIL-STD-810G
Storage	
Ambient temperature range	-55 to +85°C
Relative humidity, max.	95% (non-condensing)

Applicable documents

Drawing	635072-0E, Issue B
Technical information	“Rotary Joints – Glossary”, Technical Document TD-00021, Spinner GmbH