

Rotary Joint || BN 835058



Radio frequency characteristics

Interface type / material / surface finish	cable pigtails with SMA-m (50 Ω) connectors: copper alloy / gold plated
Interface orientation	style U
Frequency range	DC to 3 GHz
Peak power capability	-
Average power capability	18 W
VSWR, max.	1.35 @ DC to 3 GHz
VSWR variation over rotation, max.	0.2
Insertion loss, max.	1.3 dB @ DC to 1.0 GHz / 1.9 dB @ 1.0 to 2.0 GHz 2.1 dB @ 2.0 to 2.5 GHz / 2.3 dB @ 2.5 to 3.0 GHz
Insertion loss variation over rotation, max.	0.2 dB
Phase variation over rotation, max.	-
DC carrying capability	0.5 A @ 48 VDC, full RF avg. power 2 A @ 48 VDC, RF avg. power 1 W

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Mechanical characteristics

Rotating speed, max. / nominal	60 / 30 rpm
Life, min.	0.25 x 10 ⁶ revolutions
Torque (room / min. temperature), max.	0.05 Nm / 0.05 Nm @ start-up 0.05 Nm / 0.05 Nm @ rotation
Interface loads, max.	±0 N in axial direction ±0.1 N in radial direction
Case material	copper alloy
Case surface finish	partly plated by silver, nickel, tin
IP protection level	IP40
Weight, approx.	0.04 kg
Marking	stamping

Environmental conditions

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

Applicable Documents

Drawing	835058-0E Issue A
Technical information	"Rotary Joints – Glossary", Technical Document TD-00021, Spinner GmbH