

Rotary Joint | BN 835050



Radio frequency characteristics

Interface type /	cable pigtails with F-m (75 Ω)	
material / surface finish	connectors: copper alloy / nickel 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 1 GHz 1.45 @ 1 GHz to 2 GHz 1.55 @ 2 GHz to 3 GHz	
VSWR variation over rotation, max.	0.2	
Insertion loss, max.	1.3 @ DC to 1 GHz 1.8 @ 1 GHz to 2 GHz 2.2 @ 2 GHz to 3 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	835050-0E Issue F
Technical information	"Rotary Joints – Glossary", Technical Document TD-00021, Spinner GmbH