# DATA SHEET



## Rotary Joint || BN 835055



### **Radio frequency characteristics**

| Interface type /<br>material / surface finish | cable pigtails with F-m (75 $\Omega$ ) connectors: copper alloy / nickel plated |  |
|---|---|--|
| Interface orientation                         | style L   |  |
| Frequency range                               | DC to 3 GHz   |  |
| Peak power capability                         | -   |  |
| Average power capability                      | 18 W  |  |
| VSWR, max.                                    | 1.35 @ DC to 1 GHz<br>1.45 @ 1 GHz to 2 GHz<br>1.55 @ 2 GHz to 3 GHz            |  |
| VSWR variation over rotation, max.            | 0.2   |  |
| Insertion loss, max.                          | 1.3 @ DC to 1 GHz<br>1.8 @ 1 GHz to 2 GHz<br>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<br>2 A @ 48 VDC, RF avg. power 1 W           |  |

### Rotary Joint || BN 835055



### **Mechanical characteristics**

| Rotating speed,<br>max. / nominal         | 60 / 30 rpm  |
|---|--|
| Life, min.                                | 0.25 x 10 <sup>6</sup> revolutions                           |
| Torque (room / min.<br>temperature), max. | 0.05 Nm / 0.05 Nm @ start-up<br>0.05 Nm / 0.05 Nm @ rotation |
| Interface loads, max.                     | ±0 N in axial direction<br>±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               | 835055-0E Issue D   |
|-----------------------|---|
| Technical information | "Rotary Joints – Glossary", Technical Document TD-00021, Spinner GmbH |