

Rotary Joint || BN 636688



100 W DC-Power Transmission Channel Characteristics

Interface type DC-Input	2 single wires at stator side, AWG18	Cable length stationary part: 550mm $\pm$ 50mm
Interface type DC-Output	2 single wires at stator side, AWG18	Cable length rotating part: 550mm $\pm$ 50mm
Input Voltage	20.4 V to 28.8 V DC	Power Supply has to be a SELV type acc. to IEC60950-1 The current must be externally limited to 5 A
Output Voltage	24 V DC $\pm$ 3%	
Output Current, continuous	4.2 A	Over full temperature range
Output Voltage Ripple, max.	80 mV	
Efficiency, typ.	85%	@ full load
Applied standards	DIN EN 55022 DIN EN 61000-4-2 DIN EN 61000-4-3 DIN EN 61000-4-4 DIN EN 61000-4-6	Radio disturbance characteristics (B) ESD immunity RF immunity, radiated Transient / burst immunity RF immunity, conducted
Applicable EU Directive	EMC Directive 2004/108/EC	

Mechanical Data

Rotating speed, max.	300 rpm
Life, min.	200 x 10 ⁶ revolutions
MTBF	300 000 h
Torque (room / min. temperature), max.	0.5 Nm / 1.0 Nm @ start-up 0.4 Nm / 0.8 Nm @ rotation
Interface loads, max.	no loads allowed
Case material	aluminum alloy
Case surface finish	painted black (RAL 9005)
Weight, approx.	1 kg
Marking	adhesive label

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Environmental Conditions

Operation	
Ambient temperature range	-30 °C 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
IP protection level	IP54 per EN 60529 (all interfaces connected with appropriate gaskets)
Maintenance	Not required
Storage	
Ambient temperature range	-40 °C to +85 °C
Relative humidity, max.	95% (non-condensing)

Applicable documents

Drawing	636688-0E, Issue D
Circuit Diagram	636688-CD, Issue A
Technical information	"Rotary Joints – Glossary", Technical Document TD-00021, Spinner GmbH