

# Wind Turbine Slip Ring

## WP7129

For NEG Micon NM72 / 82 Wind Turbines

### Description

Wind turbines require reliable transmission of power and data signals from the nacelle to the control system for the rotary blades. Moog's slip rings provide the performance and quality needed in demanding environments. Costly downtime is eliminated by using fiber brushes and robust mechanical components in the slip ring design.

### Fiber Brush Technology

Over 30 years ago, Moog developed and patented the fiber brush technology for high reliability slip rings. The patented approach has led to hundreds of different slip ring designs for challenging applications which include satellite solar array drive power transfer, helicopter rotor blade de-icing, radar pedestals, industrial packaging equipment and now wind turbines—just to name a few. The unique feature of the fiber brush technology is its ability to perform in environmental and operational extremes. In addition, the fiber brush has the capability to handle high power while at the same time transferring data signals. And all this performance while maintenance free for over 100 million revolutions.



### Direct Slip Ring Replacement

Moog now offers a direct replacement pitch control slip ring for the \*NEG Micon NM72 / 82 wind turbines. Moog's unit mounts directly to the gearbox with a through passage for the hydraulic lines and wiring. The rotor provides a junction box for lead connection and a harness on the stationary side to allow mounting of a lock out or junction box in the nacelle. Each unit is fully assembled and sealed for protection from fluids and dust.

### Features

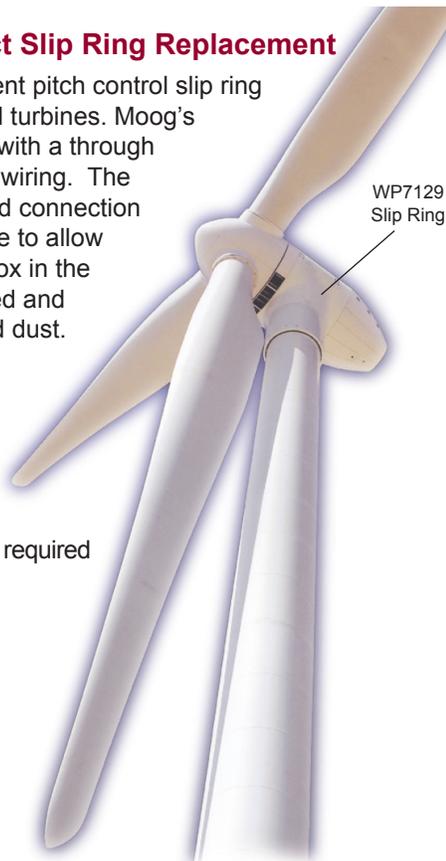
- Maintenance free
- Sealed to fluid contamination
- Minimal wear debris
- No assembly of frame and brushes required
- High reliability
- No periodic inspections required

\*NEG Micon wind turbines are part of Vesta ([www.vestas.com](http://www.vestas.com)), one of the world's leading suppliers of wind turbines



### Advantages

- No maintenance required
- Direct attachment to the gearbox
- Sealed for environmental protection
- Rotor junction box for simplified wiring
- Long wire harness on stationary side for wiring options



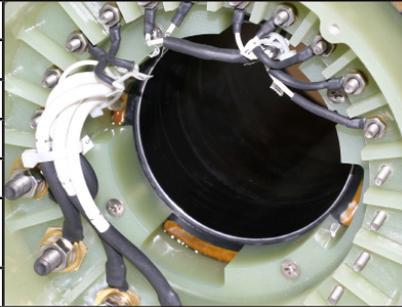
# MOOG

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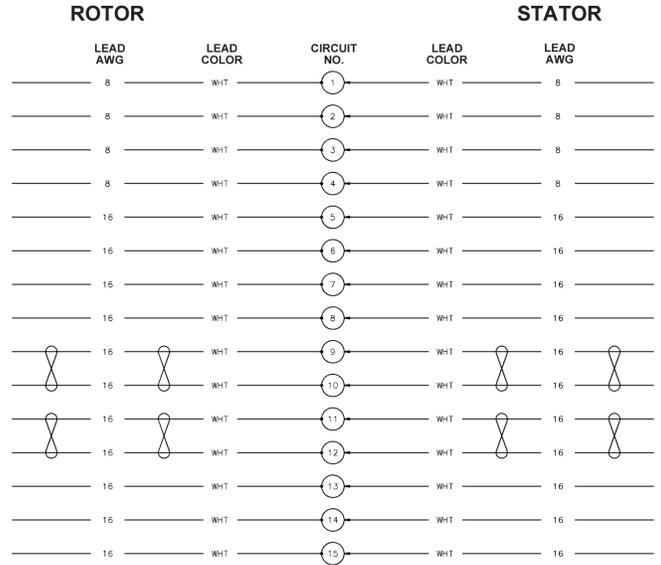
## WP7129 Specifications

Weight	25 pounds (11.4 kilograms)
Brush Material	Silver alloy
Ring Material	Silver plate
Brush Life	> 100 million revolutions
Ring Life	> 100 million revolutions
Lubrication	No lubrication required
Cleaning / Maintenance Interval	No maintenance required
Power Circuit Rating	30 amps up to 600 volts
Operating Temperature	-40°C to +80°C
Sealing	IP 54 to prevent fluid contamination

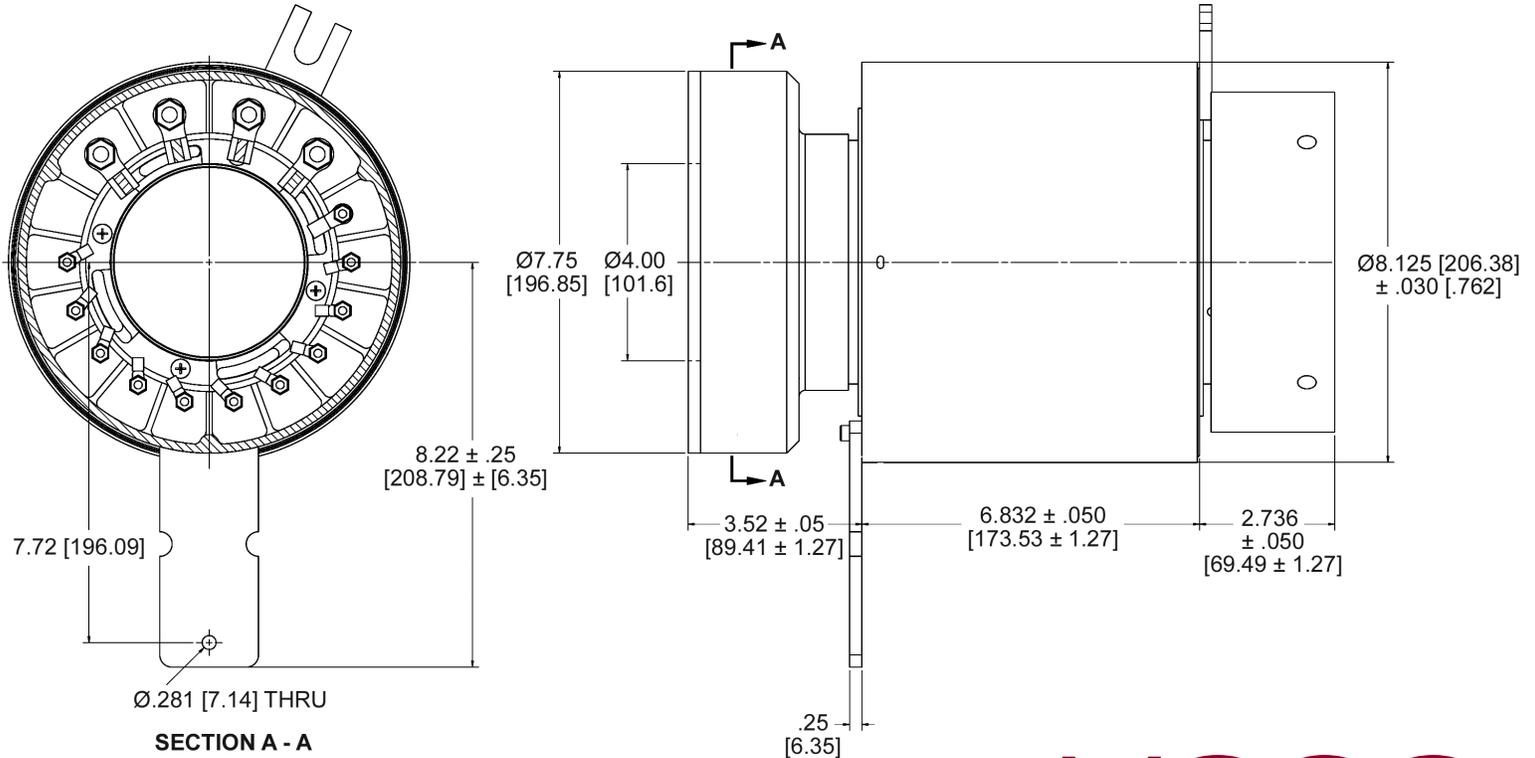
Circuits 1 – 4	8 AWG wire
Circuits 5 – 8	16 AWG wire
Circuits 9 – 10	16 AWG TP
Circuits 11 – 12	16 AWG TP
Circuits 13 – 15	16 AWG wire
Stator lead harness 10 feet long (304.8 centimeters)	
Rotor wires to junction box	



## WP7129 Wiring Diagram



## WP7129 Dimensions



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