

# ROTATING JOINTS

## WIND POWER SERIES

Reliable data and power transmission  
in wind energy applications



With the scale enlargement of wind power generation, modern wind turbines are placed in remote locations facing severe environmental conditions in a 24/7 operation. As the market leader for rotary devices, we understand that maintenance and monitoring are difficult and expensive. That is why you need an integrated long-life, no maintenance rotary union designed for highly reliable data and power transmission in this tough environment.

Our Wind Power products have standard design configurations that are very flexible, allowing Moog to quickly and effectively meet the unique requirements of today's turbine designs.



### SLIP RINGS

Slip rings are reliable rotary devices that provide either signals and power for the lower power requirements of electro-hydraulic systems or higher power circuits required for electric blade pitch actuation. Moog slip rings are maintenance-free due to our unique fiber brush technology and ensure highly reliable performance under all environmental conditions.



### FLUID ROTARY UNIONS (FRU)

Fluid rotary unions accomplish the hydraulic power transfer to and from hydraulic blade actuators. Our devices feature an innovative patented low-leak, long life design and are designed to be integrated with our slip ring or fiber optic system for a high performance electro-hydraulic rotary union.



### FIBER OPTIC SYSTEMS

Fiber optic systems consist of fiber optic rotary joints which provide the rotary connection and modems that allow multiple bi-directional data channels to be carried on a single fiber from the tower base to the hub.

They are an ideal replacement for electrical data systems in cases where unlimited bandwidth over long distances is required. They help to protect the entire system from lightning strikes and electromagnetic interference (EMI).

## FIBER BRUSH ADVANTAGES

- Maintenance free for over 100 million revolutions
- Minimal wear debris generation
- No lubrication required
- Wide operating temperature range
- Lower life cycle costs



## SLIP RINGS

### WP6807 SLIP RING



Signal Circuits	6 up to 24, 10 Amps each continuous
Power Circuits	All circuits can be paralleled for 240 Amps max.
Features	<ul style="list-style-type: none"> <li>• Can be integrated with fluid rotary union or used as stand-alone assembly</li> <li>• IP65</li> <li>• Terminal strip electrical interface in sealed enclosure</li> </ul>
Options	<ul style="list-style-type: none"> <li>• Alternate electrical interface</li> <li>• Alternate IP rating</li> <li>• 38.1 mm (1.5 in.) through bore</li> <li>• Custom mounting provisions</li> <li>• Integrated hydraulic fluid rotary union</li> </ul>

### WP6808 SLIP RING



Signal Circuits	18 up to 72, 10 Amps each continuous
Power Circuits	20, 50, 100, 200, 300 Amps RMS continuous @ 600V
Features	<ul style="list-style-type: none"> <li>• IP65 enclosure</li> <li>• Connectorization options on both rotor and stator</li> </ul>
Options	<ul style="list-style-type: none"> <li>• Alternate IP rating</li> <li>• Custom mounting provisions</li> <li>• Integrated FORJ or speed/position feedback device</li> </ul>

## FLUID ROTARY UNION (FRU)

### WP6923 FLUID ROTARY UNION



Hydraulic Channels -2	200 bar (2900 psi) or 345 bar (5000 psi) working pressure
Flow Rates	
20 l/min (5 US gal/min)	9.53 mm (0.375 in.) & 12.7 mm (0.5 in.)
50 l/min (13 US gal/min)	12.7 mm (0.5 in.) & 19.5 mm (0.75 in.)
100 l/min (26 US gal/min)	19.5 mm (0.75 in.) & 25.4 mm (1 in.)
150 l/min (39 US gal/min)	25.4 mm (1 in.) & 31.75 mm (1.25 in.)
Features	<ul style="list-style-type: none"> <li>• Low leak rate</li> <li>• Designed for intergration with WP6807</li> </ul>
Options	<ul style="list-style-type: none"> <li>• Separate housing drain, other port types, flow rates and working pressure</li> </ul>

### WP6924 INTEGRATED ROTARY SOLUTION



Electrical	See WP6807
Hydraulic	See WP6923
Features	<ul style="list-style-type: none"> <li>• Isolated electrical and hydraulic channels</li> <li>• Connectorization options or both hydraulic and electrical connections</li> </ul>
Options	<ul style="list-style-type: none"> <li>• Custom mounting provisions</li> <li>• Integrated FORJ or position feedback device</li> </ul>

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Rotary Union Products  
Germany/og07

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