

# INDUSTRY 4.0

## ROTARY UNIONS SLIP RINGS COMBINED SYSTEMS



FOR THE RELIABLE TRANSFER OF HIGH DATA VOLUMES  
AND INTEGRATION IN NETWORKED SYSTEMS TO ENABLE  
PROCESS-CONTROLLED MAINTENANCE



**GAT**<sup>®</sup>

**MOOG**

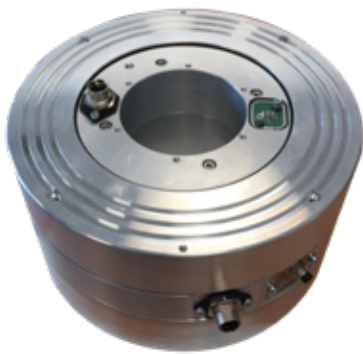
# INDUSTRY 4.0

The fourth industrial revolution enables companies to take control of smart real-time processes and related events. Taking active control of real-time processes can facilitate process automation, making the sensor data collected available for analytic evaluation.

We can support this step by offering you solutions tailored to your needs. Our focus is on the transmission of power, signals, data and media into and out of rotary systems. You can also integrate our products in the process-controlled maintenance via 'Condition Monitoring'.

## ROTOCAP

### SLIP RING WITH CONTACTLESS CAPACITIVE DATA TRANSMISSION TECHNOLOGY

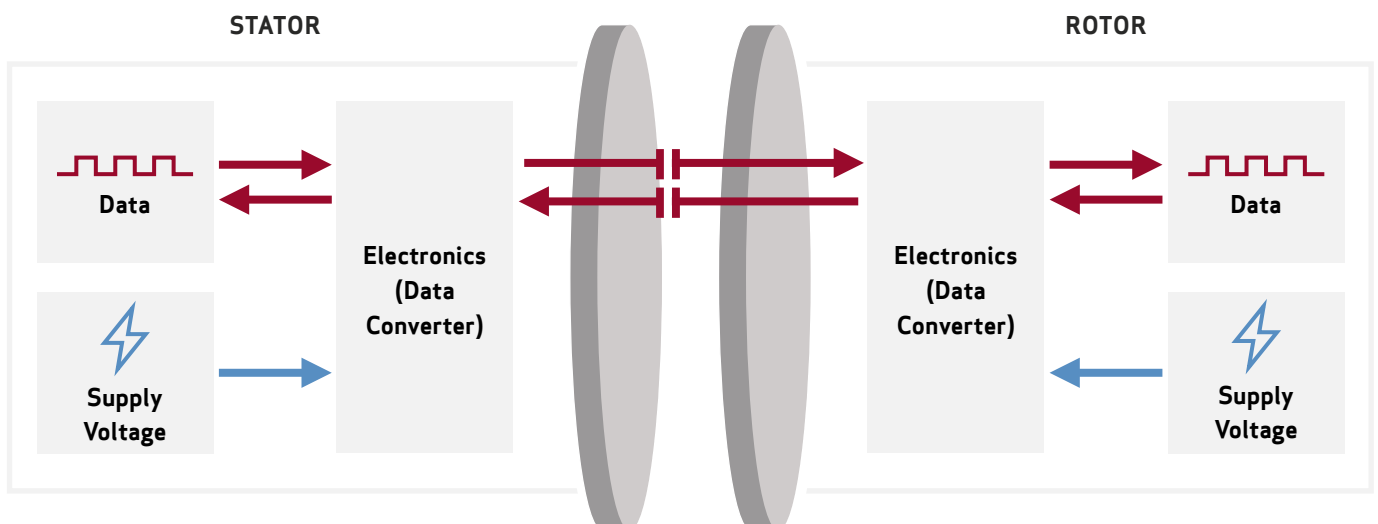


ROTOCAP with hollow shaft

#### Increased machine efficiency and reliability

- Reliable and safe real-time data transmission
- Transmission rates from 100 Mbit/s (100 BASE-TX) up to 1 Gbit/s (1000 BASE-TX)
- Direct compatibility with industry standards (e.g. ETHERNET, PROFINET, SERCOS III, EtherCAT, POWERLINK, MECHATROLINK-III)
- Maintenance-free (uninterrupted plant availability)
- Integrated device identification in the network and device status indication
- Suitable for retrofitting in existing Moog GAT slip ring systems

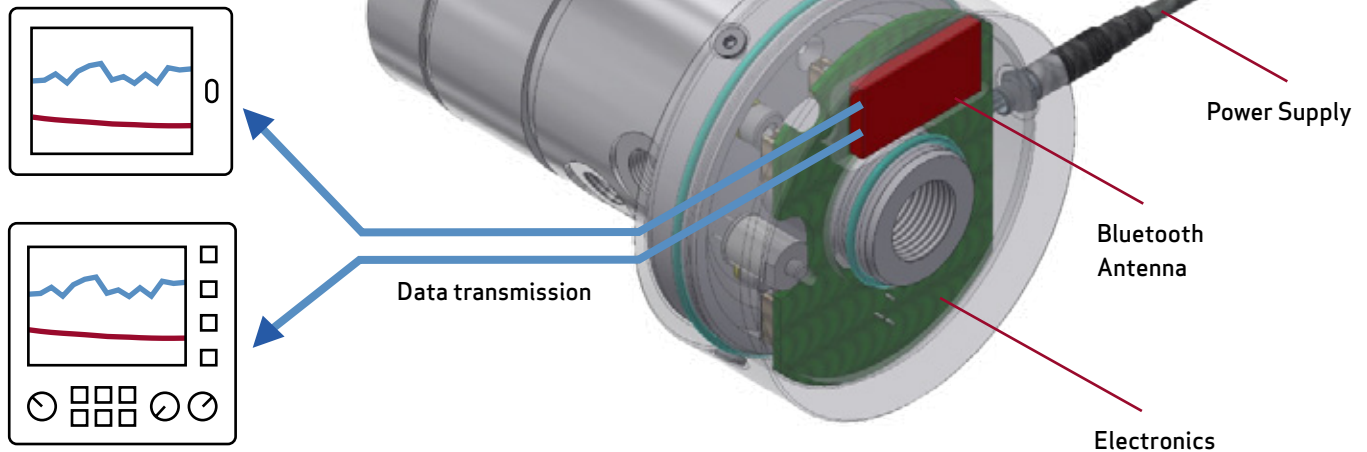
### SCHEMATIC FUNCTION PRINCIPLE



# CONDITION MONITORING

## APPLICATION EXAMPLE OF A ROTARY UNION

**ROTODISK**  
with integrated  
condition monitoring



We offer a solution enabling you to determine the current operating parameters (load monitoring) of our products up to the defined output of operating states (condition monitoring). This facilitates optimal planning of service intervals and prepares the ground for automated process-controlled maintenance.

Plannable service operations optimize our products' service life, thus reducing maintenance and parts costs. Condition monitoring can be realized for all our rotary unions and slip rings.

### DATA INTERFACES WITH SUPERORDINATE SYSTEMS

- Data transfer via plug-type connectors
- Data transfer via Bluetooth

### ELECTRONICS INSIDE DEVICE

- Saving of sensor data
- Evaluation of sensor data (load monitoring)
- Data comparison based on limit values (condition monitoring)
- RFID (device identification)

### SENSOR SYSTEM

- Temperature sensor
- Vibration sensor
- For further sensors please inquire

# THE COMPANY

Moog GAT GmbH with headquarters in Geisenheim, Germany, is a leading international technology company.

Since 1978 Moog GAT has been developing and producing tailored products for the most diverse industry applications in the fluid and sealing technology sectors as well as electrotechnical transmission technology.

Moog GAT is a technology leader in the production of electrical slip rings, rotary unions, precision air bearings, as well as test rig equipment.

Our team of highly qualified engineers and product specialists offers competent expert advice by meeting the requirements of our customers and, choosing from our wide range of products, to deliver a standard or custom-made solution.

We design, produce and distribute high-tech precision products used in machine and plant engineering as well as energy generation worldwide.

The product specialists in our worldwide sales offices ensure that customers receive competent technical advice and that economic considerations are taken into account. All this contributes to the success of our customers.



**MADE IN  GERMANY**



**Visit our website to find the Moog office nearest you, [www.gat-mbh.de](http://www.gat-mbh.de)**

For product information, visit **[www.gat-mbh.de/en/applications/automation](http://www.gat-mbh.de/en/applications/automation)**

For service information, visit **[www.gat-mbh.de/en/contact/service](http://www.gat-mbh.de/en/contact/service)**

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