

# ROTARY JOINT 4.0 maierCONNECT

Innovative sensor technology for rotary joints and many other applications

### **PROCESS & QUALITY CONTROL** SAFETY MONITORING **PREDICTIVE MAINTENANCE**



Leave nothing to chance when it comes to the efficiency of your system: Sensors from the maierGROUP support you in improving machine availability and safety, optimizing maintenance, and identifying potential savings.

With the help of the IO-Link standard, you have critical processes reliably under control. Simply integrate the sensor measurement data into your machine control and analysis tools. On your dashboard, you can capture the status at a glance and intervene in time if necessary.



#### **PRODUCTION MONITORING**

• Monitoring of pressure differentials between inlet and outlet • Detection of slippage between roller and product

#### SAFETY MONITORING

• Monitoring of torque and leakage

• Protection of hose connections, especially for hot media

• Early detection of bearing problems

• Reduced risk of hose rupture

PROTECTION OF PEOPLE, MATERIAL, AND ENVIRONMENT

Learn more about **maier**CONNECT



### **SENSORS** maierCONNECT

The sensors developed by the **maier**GROUP are designed for the specific requirements of the industry. Especially in conjunction with rotary unions, they fully leverage their strengths. This enables you to monitor your production very closely to the process. By continuously checking the measured values, you can perform condition-based maintenance and contribute to increasing operational safety.

SENSOR INTEGRATION MADE EASY

With IO-Link, your sensors can be seamlessly integrated into the plant control system in no time. Sensors from the maierGROUP can also be used on existing rotary unions and are available as easy-to-install accessories.



#### **PROCESS SENSOR SENSE P/T**

- Detection of media pressure and temperature
- Suitable for water, steam, oil, air
- Temperature range: up to 250 °C, Pressure range: 0 to 20 bar
- Thread sizes for media access: M10, G 1/4, G 1/2
- With optionally available adapters suitable for all series of the maierGROUP



#### WEAR SENSOR SENSE W

- Precise monitoring of the ring seal thickness remaining service life\* of the mechanical seal
- Detection of the degree of wear of the mechanical seal from 100 to 0%
- Available for the DS and H series
- \*available with maierCONNECT pro



#### LEAKAGE SENSOR SENSE L

- Monitoring of the leakage quantity
- Suitable for thermal oil or water
- Leakage quantity: 0 to 20 kg/h
- Available for the DS and DQL series with the respective matching connection set





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#### SPEED SENSOR SENSE S

- Easy monitoring of non-driven rollers
- Speed range: 0 to 5000 rpm
- Available for the DS and H series

#### **TORQUE SENSOR SENSE M**

- Monitoring of the bearing and overall friction of the rotary union
- Torque range -100 to +100% of the maximum allowable torque
- Available for the DS, H, and DQ series







#### SENSE L



• Available for most existing rotary union thread connections

• Easy mechanical retrofitting through adapter pieces

• Quick and convenient mounting of the pressure and temperature sensor one of three possible positions

• Wear and speed monitoring with just one sensor through maierGROUP's patented measurement technology

• Mounting on existing housing and rotor flange

Can be retrofitted on a refurbished rotary joint

• Optional connection set available for connecting the rotary union with the leakage sensor for many types



Details

## CONNECTIVITY maierCONNECT

#### FROM SENSOR TO MACHINE CONTROL OR CLOUD

The interface module Link C is the key to your sensor data. By using the IO-Link standard, the control and the sensor can exchange information via all communication standards.

With the Link C, you can enjoy all the benefits of IO-Link technology:

- Automated parameterization
- Device-specific diagnostics
- Full data access to the sensor
- No additional wiring effort through the use of a 3-pin standard cable



### () $\bullet \bullet \bullet \bullet$ 0000 Cloud Dashboard Gateway Sensor--OLink C information 0000 -OLink C **IO-Master** Machine Control •• INTEGRATE PROCESS VALUES DIRECTLY INTO THE MACHINE CONTROL

- 🔁 fast process chain
- Iocal data acquisition

#### **PRODUCT PURCHASE**

– Analysis - Consulting – Training

#### - Installation and assembly – Instruction – Alignment

COMMISSIONING

#### EVERYTHING IN SIGHT - maierCONNECT CLOUD

The maierGROUP offers field-proven rotary unions, intelligent sensors, and excellent service from a single source. With the digital cloud solution from the maierGROUP, you are always up to date, wherever you are - a real plus in transparency and security. The transmission of data to the cloud via mobile networks offers high security and guarantees the integrity of your infrastructure.

#### **YOUR BENEFITS**

#### All relevant data at a glance

By providing relevant real-time data on a user-friendly dashboard, you can make dynamic decisions and efficiently control your production.

#### Monitoring & Analysis

Data evaluation and monitoring by experts: With regular reports, you stay up to date and can focus on your core competencies.

Just as much transparency as you need - choose between our packages maierCONNECT basic and maierCONNECT pro. With both service packages, you have access to your dashboard. With maierCONNECT pro, you additionally benefit from the expertise of our rotary union experts. We secure your production through continuous data monitoring and monthly reports.

Minimum contract term		
Warranty on sensor hardware		
Access to individual dashboard		
Free support hotline (during business hours: Mon - Fri 8:00 am - 4:00 pm)		
Data monitoring by the customer		
Notification of threshold exceedance		
IO-Key included in the package		
Individual threshold values		
Data history		
Monitoring of the rotary union by <b>maier</b> GROUP (during business hours: Mon - Fri 8:00 am - 4:00 pm)		
Monthly evaluations		
Link C included in the package		
Additional sensors included in the package		

#### **OPERATION**

- Monitoring and analysis
- Provision of process data
- Spare parts supply
- Inspection

#### REPAIR

- Predictive maintenance – Repair at **maier**GROUP
- On-site maintenance

#### Predictive Maintenance

By using our wear sensor, you can accurately monitor the wear of your rotary union. Avoid costly downtimes and preserve your resources.

#### Plug and Play

Sensor components from the maierGROUP make installation easy for you: No machine programming required.

maierCONNECT basic	maierCONNECT pro
12 months	12 months
1-year	continuous
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	optional

Learn more about our service.







# Rotary joints of the **maier**GROUP –

a union for life

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