

# ROTARY JOINT 4.0

# maierCONNECT

Innovative sensor technology for rotary joints  
and many other applications



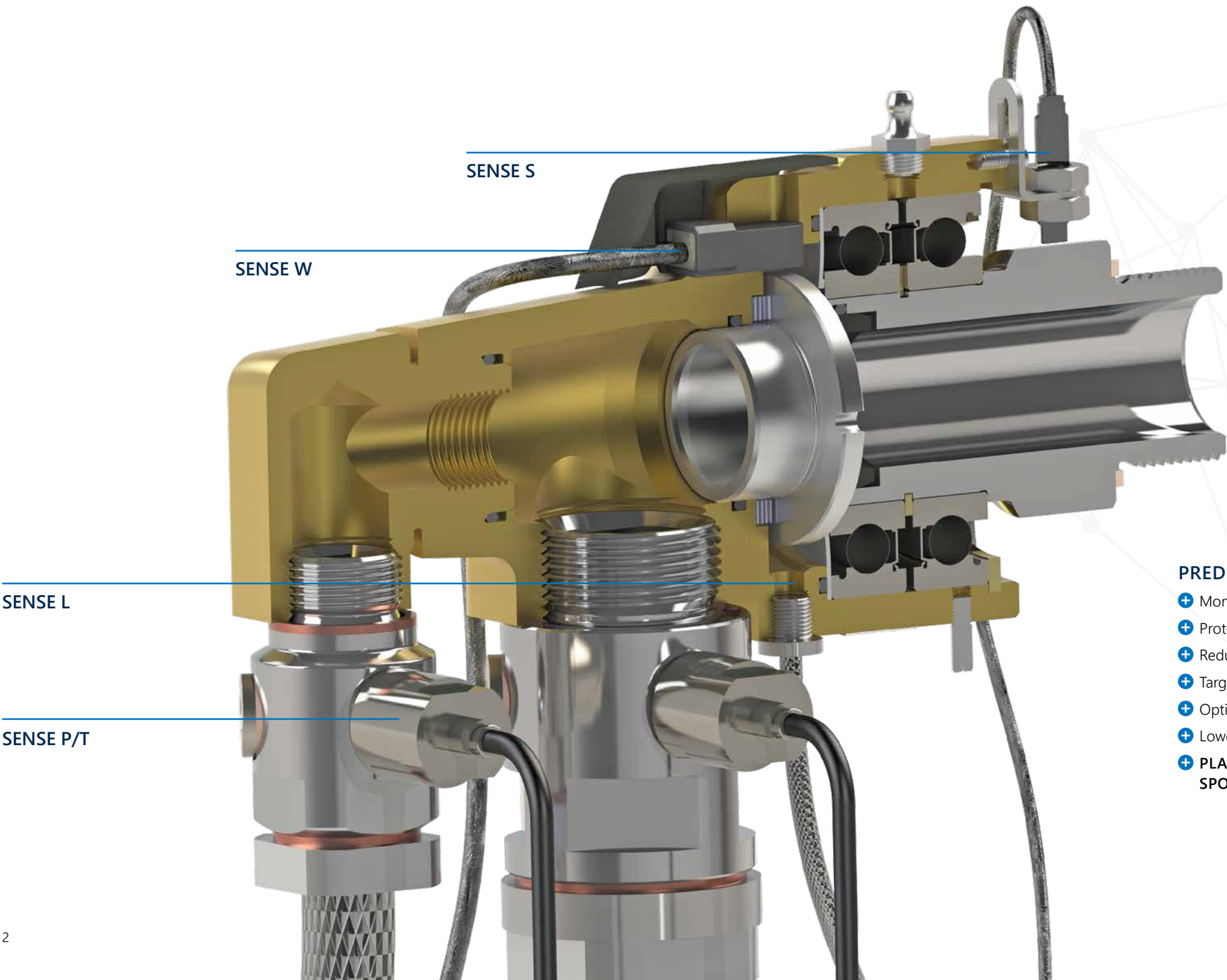
# PROCESS & QUALITY CONTROL

## 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
- + Reduction of waste and subpar product quality
- + **QUALITY ASSURANCE OF THE END 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**

### PREDICTIVE MAINTENANCE

- + Monitoring of wear and leakage
- + Protection of the plant from leaking fluids
- + Reduced maintenance requirements
- + Targeted allocation of personnel and resources
- + Optimized spare parts inventory
- + Lower maintenance costs
- + **PLANNED MAINTENANCE INSTEAD OF SPONTANEOUS FAILURES**

Learn more  
about  
**maierCONNECT**

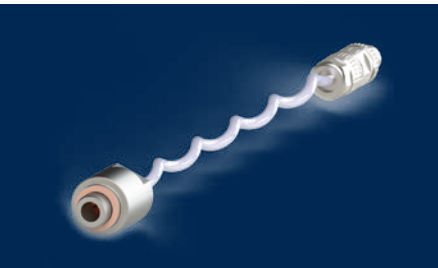




# SENSORS

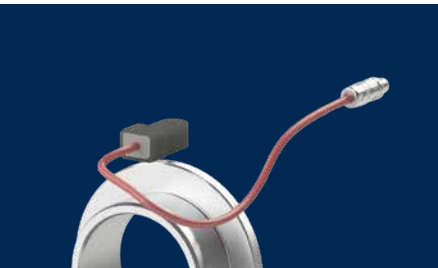
## maierCONNECT

The sensors developed by the **maierGROUP** 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.



### PROCESS SENSOR SENSE P/T

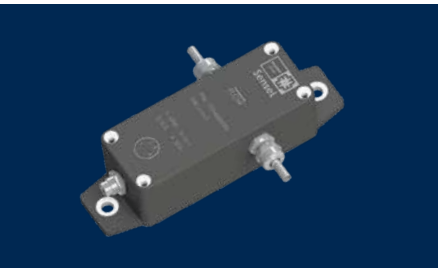
- Detection of media pressure and temperature
- Suitable for water, steam, oil, air
- Temperature range: up to 250 °C, Pressure range: 0 to 20 bar
- Thread sizes for media access: M10, G 1/4, G 1/2
- With optionally available adapters suitable for all series of the **maierGROUP**



### 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**



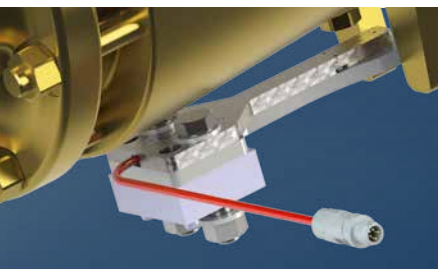
### LEAKAGE SENSOR SENSE L

- 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



### SPEED SENSOR SENSE S

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

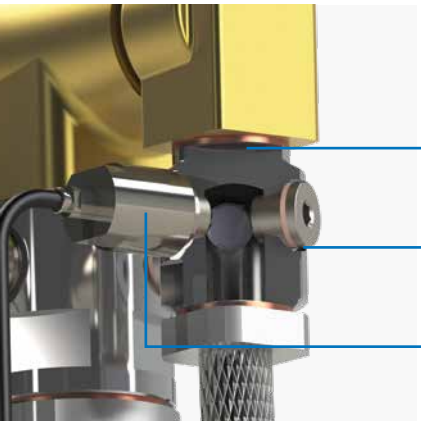


### TORQUE SENSOR SENSE M

- 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

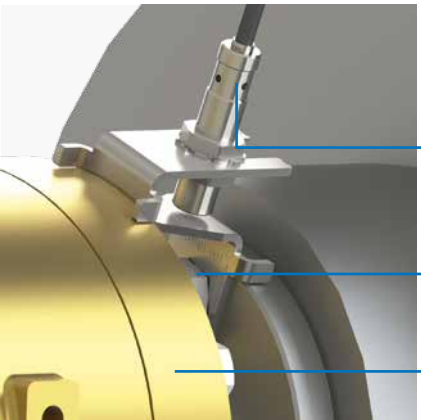
## SENSOR INTEGRATION MADE EASY

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.



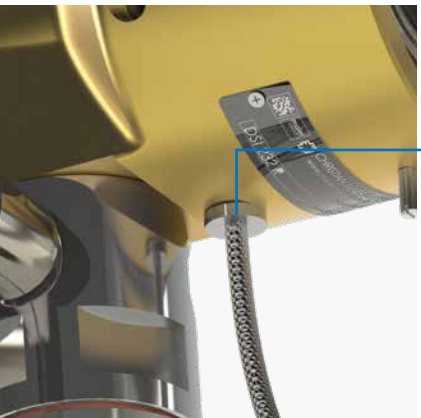
### SENSE P/T

- + 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



### SENSE W (H SERIES)

- + 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



### SENSE L

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

Details



# CONNECTIVITY

## maierCONNECT

### PRODUCT PURCHASE

- Analysis
- Consulting
- Training

### COMMISSIONING

- Installation and assembly
- Instruction
- Alignment

### OPERATION

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

### REPAIR

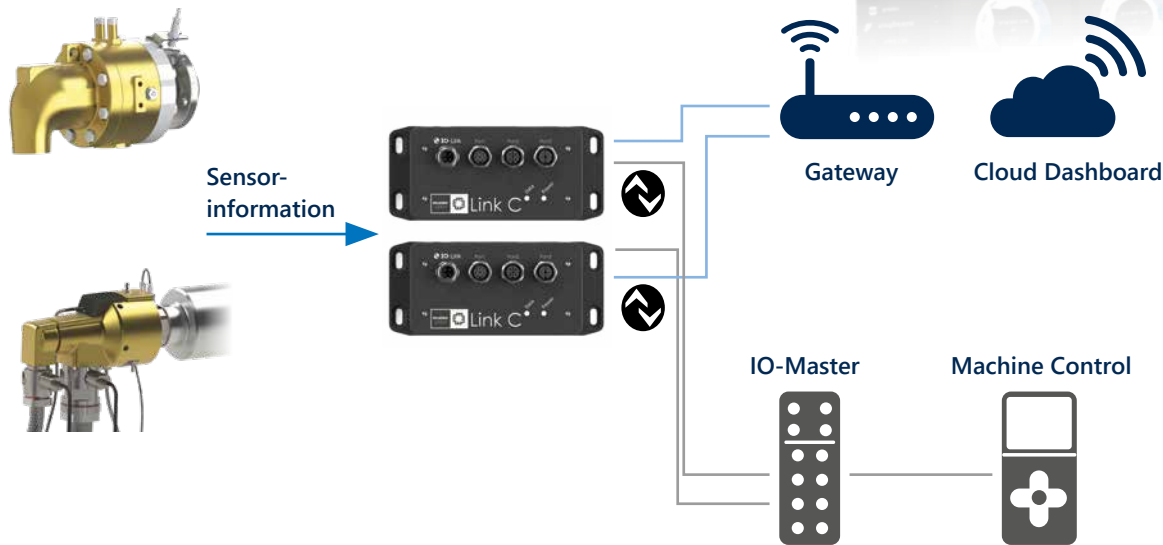
- Predictive maintenance
- Repair at **maierGROUP**
- On-site maintenance

### 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



### INTEGRATE PROCESS VALUES DIRECTLY INTO THE MACHINE CONTROL

- + fast process chain
- + local data acquisition

### 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

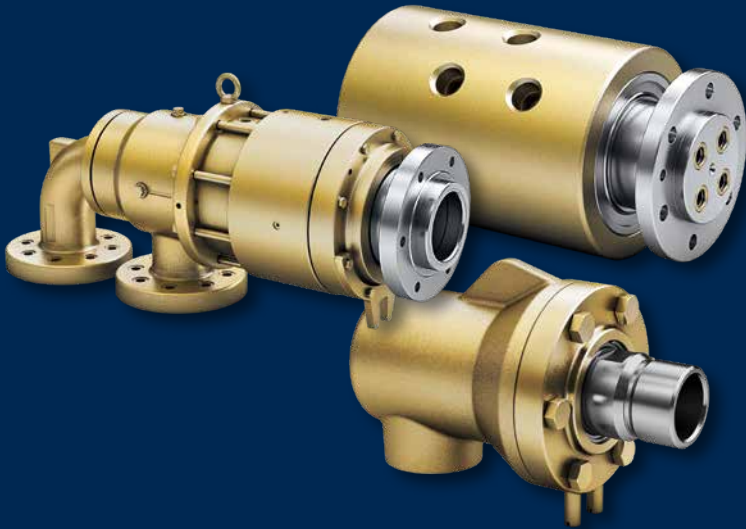
- + All relevant data at a glance**  
By providing relevant real-time data on a user-friendly dashboard, you can make dynamic decisions and efficiently control your production.
- + Predictive Maintenance**  
By using our wear sensor, you can accurately monitor the wear of your rotary union. Avoid costly downtimes and preserve your resources.
- + Monitoring & Analysis**  
Data evaluation and monitoring by experts: With regular reports, you stay up to date and can focus on your core competencies.
- + Plug and Play**  
Sensor components from the **maierGROUP** make installation easy for you: No machine programming required.

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.

	maierCONNECT basic	maierCONNECT pro
Minimum contract term	12 months	12 months
Warranty on sensor hardware	1-year	continuous
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>maierGROUP</b> (during business hours: Mon - Fri 8:00 am - 4:00 pm)		■
Monthly evaluations		■
Link C included in the package		optional
Additional sensors included in the package		optional

Learn more  
about our  
service.





## Rotary joints of the **maierGROUP** – a union for life

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