# EXTERNAL LEAKAGE MONITORING





### **EXTERNAL**

# LEAKAGE MONITORING

#### WHY LEAKAGE MONITORING?

According to studies, the rotary union is the second most common failure component within a motor spindle. The main reason for this is operational wear of the primary seal in the flow. With ongoing wear, the sealing bushings fail which results in flooding of the rotary union bearings or in extreme cases liquids entering the motor spindle. Possible consequences range from malfunction of electronic components to spindle bearing damage.

#### EXTERNAL LEAKAGE MONITORING

External leakage monitoring detects the presence of coolant or oil in the leakage tube.

#### System Design

With external leakage monitoring, the calorimetric sensor is positioned in a measuring device that is installed in the leakage drain of the rotary union.

#### Operation

If the programmable and predetermined flow limit is exceeded inside the tube, a signal is emitted which appears directly on the measuring device or which can be sent to the machine control unit. Two basic variants are available: for water-based and oil-based coolants.

#### **TECHNICAL DATA**

Wear detection	An alarm sounds after 30 seconds if the (average) leakage is > 100 ml/min
Breakdown detection	Alarm sounds after ten seconds if (average) leakage > 250 ml/min
Permissible media (depending on order)	Coolant (aqueous emulsion, max. 15% oil) Hydraulic oil Water
Required media purity	-/17/14 (under ISO 4406)
Filter fineness	50 μm
Operating voltage	24 V DC (+/-10%)
Max. power consumption	100 mA
Transistor	PNP
Max. output current	100 mA (short-circuit-proof)
Temperature range of medium	o-85°C
Working temperature of electronics	50°C
Order number	9580001020

## Can be retrofitted

It can be installed at a later date without having to replace the rotary union.

#### Easy to install

As it is installed in the leakage tube, it is not necessary to interfere with the machine spindle

#### Various applications

Can be used wherever the leakage or drainage of a medium has to be monitored. It is also compatible with rotary unions from other manufacturers.

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