

## Deublin Rotating Union with SpindleShield® Alert System

### Description

The Deublin patented SpindleShield® system protects spindles by reliably warning the machine of leakage due to excessive seal wear. Long, expensive and unplanned machine standstill periods will be avoided.

All Deublin Rotating Union designs and Deublin Sealing Technologies can be equipped with the SpindleShield® alert system.

### Industry

Machine Tool

### Application

All application with water-based coolant through the spindle (TSC)

### Characteristics

Available for all union designs;

- Bore-mounted, rotor-mounted; bearingless

Available for all Deublin seal technologies;

- AutoSense®; Pop-Off®; Closed Seal

### Media Detection

- Water-based Coolant;

### Leak Sensor Features

- Reverse polarity protection
- Output short circuit protection
- ESD protection
- Wide operating voltage and temperature range
- Integrated leak sensor test function
- Very low power dissipation
- Zero leakage current if no load is attached at output



Design example

### Sensor Specifications

Parameter	Min	Max	Unit	Notes
Operating voltage	18	28	V	
Operating temperature	-30	85	°C	
ESD protection on all 4 ports		±2	kV	Human body model
Maximum output load switch drain current		250	mA	@ 28 V
Leak test function		Yes		Short to system ground to test leak function
Sensor power dissipation		0.36	W	Vout = Vin -5% Voltage drop

### Available Products

Part number	Seal technology	Union design
1103-840-835	Pop-Off®	Bore-mounted
1103-302-105	Pop-Off®	Bore-mounted
1103-431-105	AutoSense®	Bore-mounted
1103-442-730	AutoSense®	Bore-mounted
1103-440-188	AutoSense®	Rotor-mounted
1113-335-105	Closed Seal	Bore-mounted