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| **At a Glance**   * Predictive maintenance in hazardous areas * Intrinsic safety barrier for vibration monitoring in intrinsically safe applications * Compatible with all standard vibration sensors, including AC sensors without a power supply |

# Predictive Maintenance in Hazardous Areas

## Intrinsic Safety Barriers for Vibration Monitoring in Intrinsically Safe Applications

**With the KCD2-VR4-Ex1 from Pepperl+Fuchs, a voltage repeater is now available for transmitting high-frequency signals up to 20 kHz from hazardous areas to control, safety and monitoring systems.**

The 1-channel module is currently the only device on the market where the sensor voltage supply can be set using easily accessible DIP switches on the front.

Sensors without a voltage supply can also be used, making the KCD2-VR4-Ex1 not only suitable for 2- or 3-wire sensors, but also for AC sensors that do not require a voltage supply.

This allows signals from all common vibration, acceleration, and positioning sensors, as well as from magnetic and seismic sensors, to be transmitted with a single intrinsic safety barrier.

The flexibility of the module eliminates the previous need for workarounds when using certain sensors, such as Zener barriers, which also means that special grounding is no longer required for intrinsic safety.

The KCD2-VR4-Ex1 can be used for all standard sensors. This helps to standardize system designs and simplifies planning, documentation, and storage.

The low power dissipation of the KCD2-VR4-Ex1, which is only 12.5 mm wide, allows unrestricted use in ambient temperatures ranging from -40 °C to +70 °C (-40 °F to +158 °F).  
  
The module is designed for applications up to SIL 2 with an SC3 in accordance with IEC/EN 61508 Ed 2, and can even be used redundantly in SIL 3 circuits.  
  
DIP switches on the front of the device provide easier access for configuration than side-mounted or internal switches that cannot be seen once the product is installed.

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| **Caption** | The KCD2-VR4-Ex1 voltage repeater transmits high-frequency signals from vibration sensors in hazardous areas. |
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| **Author** | Andreas Grimsehl |
| **Keywords** | Predictive maintenance, condition monitoring, vibration monitoring, intrinsic safety barriers, K-System |
| **Characters** | 1.533 including spaces |
| **Type** | Distribution report - press kit |
| **Business division** | Process automation |

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