WKN-142 SERIES

Two-wire TRANSUDUCER
**SIMPLE WIRING**

**TWO -WIRE TRANSDUCER**

The WKN Series transmitter combines the signal conditioning circuit with the probe driver into one package for easy installation. The two wire current loop drives the transducer and transmits signals at the same time, saving wiring cost.

- Ideal for monitoring of general purpose rotating equipment and compressors.
- Compact, space-saving (50% smaller, 60% lighter than the conventional)
- Current output allows for long wiring distances.
- Direct connection to PLCs and DCS control systems. No external signal conditioner required.
- Phoenix terminal type allows for quick and efficient wiring.
- RoHS and CE compliance.

### System configuration

**Transmitter Outline Drawing (by mount type)**

- 35 mm DIN rail mounting plate type
  - Sensor input connector
  - Name plate
  - GAP output connector
  - Sensor and cable:
    - 9 m System: 7.87 mV/μm ±6.5 % typ.
  - Calibration Target:
    - JIS SCM440 flat surface
  - Linear Range:
    - 1.4 mm (Gap : 0.3 to 1.7 mm)
  - Scale Factor:
    - 7.87 mV/μm
  - Scale Factor Error:
    - 5 m, 7 m System: 7.87 mV/μm ±6.5 % typ.
    - 5 m System: 7.87 mV/μm ±10 % typ.
  - Output Impedance:
    - 10 kΩ (calibrated at 10 MD load impedance)
  - Frequency Response:
    - 5 Hz to 6,000 Hz (+0 dB, -3 dB)
  - Operation Temperature:
    - Transmitter: Operation, 0 to 70 °C; Storage, -34 to +100 °C
    - Sensor and cable: Operation -34 to +177 °C (Connector: Max. 125 °C)
  - Relative Humidity:
    - 30 to 95 % RH (non-condensing)
  - Power Supply Voltage:
    - 12 to 35 VDC
  - System Cable Length:
    - 5 m, 7 m, 9 m

* The specifications above apply to a system of WL-142K sensor, WW-142K extension cable and WKN-142 transmitter under the following conditions: calibration target, SCM440 flat surface, 24VDC power supply voltage; ambient temperature, 25 °C.
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