WKN SERIES TRANSDUCER SPECIFICATIONS

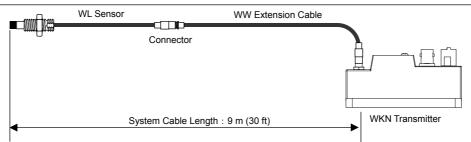
# WKN-142K5 2-WIRE VIBRATION TRANSDUCER

9 m System

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SPECIFICATIONS		NOTICE	
Current Output		1. CALIBRATION MATERIAL	
4 to 20 mA OUTPUT RANGE	0 to 100 μm pk-pk 0 to 125 μm pk-pk 0 to 200 μm pk-pk 0 to 250 μm pk-pk 0 to 400 μm pk-pk	MODEL WKN-142K 2-wire Vibration Transmitters are calibrated with JIS SCM440 (AISI 4140 equivalent) flat surface (more than 15 mm dia.).  It is not calibrated with any other target.  2. CONNECTOR ISOLATION, etc.  The connector connecting the sensor cable and the extension cable shall be insulated with the attached insulation sleeve (transparent shrink tube) or fluoro resin insulation tape.  The vinyl-insulating tape shall not be used, which may cause the wiring trouble in the case of the temperature more than 80 °C.  The connector shall not be located in the oil environment.  The oil penetration to cable through the connector may cause the sensitivity change, due to the change of the cable capacitance.	
4 to 20 mA OUTPUT CONVERSION ACCURACY	±1.5 % of Full Scale Range (From test signal input pin to current output)		
MAX. LOAD RESISTANCE	43.5 × (Vps-12) $\Omega$ (Vps=Power supply voltage)		
NOT-OK FUNCTION	Current output: 3.6 mA or less. Not-OK condition: Open or short of sensor, Outside of linear range. Delay time to resume; 2 to 3 seconds after Not-OK condition is removed.		
GAP Output (Wave form output)		3. MEGGER TEST OF SIGNAL CABLE	
CALIBRATION MATERIAL	JIS SCM440 FLAT (AISI 4140 equivalent )	If megger test is made on the signal cable (2-wire shielded cable), be sure to discharge the charged electric load before connecting the	
LINEAR RANGE*	1.4 mm (Gap : 0.3 to 1.7 mm)	cable to transmitter.  If this caution is not adhered the transmitter could be damaged.	
SCALE FACTOR* SCALE FACTOR	7.87 mV/µm 7.87 mV/µm±10 % typ.	_	
ERROR*	(including interchangeability errors) Step: 200 μm, Target: 30 mm dia.	WIRING BETWEEN GAP OUT TERMINAL AND EQUIPMENT     a). Non-grounding type equipment     Connect directly with coaxial cable within 3 meters long.	
OUTPUT IMPEDANCE*	10 k $\Omega$ (It is calibrated at load impedance 10 M $\Omega$ )	b). Grounding type equipment     Use an isolator between the transmitter and the equipment.	
System		Use coaxial cable within 3 meters long between the transmitter	
FREQUENCY RESPONSE*	5 Hz to 6,000 Hz (+0 dB, -3 dB) at 900 μm Gap	and the isolator. 5. INSTALLATION ENVIRONMENT	
TEMPERATURE RANGE OF TRANSMITTER	Operating : 0 to 70 °C (32 to 158 °F) Storage : -34 to +100 °C (-29 to +212 °F)	Not available for rainwater at out door use and for occurring place of corrosive gasses.	
TEMPERATURE RANGE OF SENSOR AND EXTENSION CABLE	Operating : -34 to +177 °C (-29 to +350 °F) (Connector : Max. 125 °C (257 °F)) Storage : -34 to +177 °C (-29 to +350 °F) (Connector : Max. 125 °C (257 °F))	It may cause the sensitivity change and insulation down.  6. The instructions manual contains important information such as conditions necessary for safe handling of the system.  Such information and conditions are important and indispensable for ensuring safety. Therefore, be sure to read the instructions manual	
RANGE OF TEMPERATURE AT EXPLOSION PROOF CONSTRUCTION	CSA,ATEX : 0 to +70 °C (Sensor, Ext. Cable & Transmitter)	thoroughly before handling the system.	
RELATIVE HUMIDITY RANGE	30 to 95 %RH (non condensing)	Other	
POWER SUPPLY VOLTAGE	12 to 35 VDC	Geothermal specification (Additional Spec. Code: /GEO) is not applicable.	
SENSOR TIP DIAMETER	Approx. 5.5 mm (0.217 inch) dia.		
CABLE DIAMETER	Approx. 2.7 mm (0.106 inch) dia.		
CONNECTOR DIAMETER	Approx. 7.1 mm (0.280 inch) dia.		
SYSTEM CABLE LENGTH	9 m		
APPLICABLE WIRE	WKN-142K5-□-1 (L) 90 mm × (W) 40 mm × (H) 46.2 mm (3.54 in) (1.57 in) (1.82 in) WKN-142K5-□-2 (L) 90 mm × (W) 74 mm × (H) 45.2 mm (3.54 in) (2.91 in) (1.78 in) Mass: Approx. 200 g (0.44 lb)  0.2 to 1.5 mm² (1.0 mm² recommended)		
GAUGE   1.5 mm (1.5 mm recommended)			
	SCM440 (AISI 4140 equivalent) steel flat target.		

## CONFIGURATION



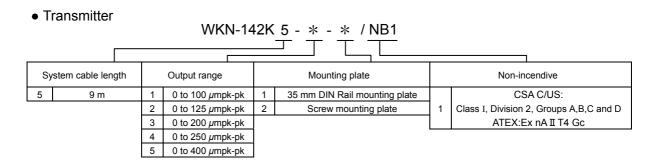
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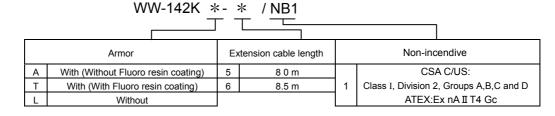
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Model Code / Additional Spec. Code( Spec. code is not specified. )



#### Extension Cable



### Sensor

