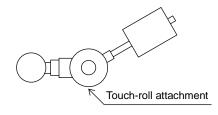
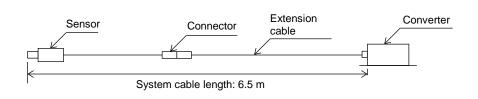
VND Thickness Measurement Converter (2 mm range) Page 1 of 2		
Thickness measurement range Converter output		
020 0.0 mm - 2.0 mm 0 Voltage output (0 V - 2 V) 2 Voltage output (0 V - 10 V)		
NW - 100 🗔		
Thermocouple A Without B With		
Thickness measurement range Thermocouple		
020 0.0 mm - 1.0 mm and 0.0 mm - 2.0 mm A Without B With		
Specification Angle Swing limit: Horizontal ±15° No weight		
0 0° 1 10°		
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VN Series

Specifications

VND Thickness Measurement Converter (2 mm range)

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	Specifications	Notice
Converter	VND-020A-	1. Things to prepare before using this device:
Extension cable	NW-100	Four M6 screws or four M6 bolts are required to install the
Sensor	NS-020□	converter.
Thickness measurement range	0.0 mm - 2.0 mm (actual gap: 0.8 mm - 2.8 mm)	For the feeler gauge, a 20% of F.S. pitch (for 6-point adjustment) or a 10% of F.S. pitch (for 11-point adjustment) is required to
Sensor offset gap	0.8 mm	adjust the device. Since the accuracy of the feeler gauge to be used depends on the
Calibration material	Chilled steel (flat)	measurement accuracy, use a gauge which matches the required
Output sensitivity	1.0 V/mm, 5.0 V/mm	accuracy.
Linearity	±0.5% of F.S. (for 6-point or 11-point adjustment)	2. Configuration
Zero shift range	Approx. ±20% of F.S.	Before connecting the sensor, extension cable, and converter,
Resolution	1 μm	make sure to match the serial numbers indicated on the converter
Digital display	5-digit, 7-segment LED (orange)	name plate or inspection test report.
3	4-digit thickness display (unit: mm), 1-digit code	Having the wrong combination of serial numbers may result in
	Accuracy: ±0.005 mm	specifications not being met.
Display LED	Power (red)	When shipping sensor, extension cable or converter alone, we
	Meas. (green)	have confirmed the operation in combination with our standard
	Teach (green)	equipment.
	Cal. Z/S (green)	Before use, please calibrate the converter with the combination of
Frequency response	DC - 20 Hz (-1 dB typ.)	the sensor, extension cable and converter that are actually used.
Output impedance	100 Ω	Please refer to the instruction manual for the calibration method of
Operating temperature	Sensor: -30°C to +130°C	the converter.
range	(Connector part: -25°C to +85°C)	The temperature characteristics (temperature drift) of the sensor,
0	Extension cable: -25°C to +85°C	extension cable or converter when shipped alone are as follows.
	Converter: 0°C to +50°C	Sensor: ± 1.5% of F.S. (typical),
Temperature	Sensor: ±1.5% of F.S.	Extension cable: $\pm 2.2\%$ of F.S. (typical),
characteristics	Condition gap: 50% of the thickness measurement range,	Converter: ± 2.2% of F.S. (typical).
	Target: Chilled steel (flat),	In case of ordering the extension cable alone, please inform us
	Temperature: +25°C is the normal temperature.	the sensor range information to be used in combination.
	Range is 0°C to +100°C	3. Megger testing of the signal transmission cables that connect to the
	Extension cable: ±1.5% of F.S.	instrumentation
	Condition gap: 50% of the thickness measurement range,	After you perform a megger test on the signal transmission cable,
	Target: Chilled steel (flat),	make sure to discharge the electrical charge before connecting
	Temperature: +25°C is the normal temperature.	the cable to the converter.
	Range is 0°C to +80°C	Connecting the cable to the converter or the instrumentation while
	Converter: ±1.5% of F.S.	on a charged state may cause a failure
	Condition gap: 50% of the thickness measurement range,	4. Sensor installation location
	Target: Chilled steel (flat),	Do not use the device outdoors where the sensor can be subject
	Temperature: +25°C is the normal temperature. Range is 0°C to +50°C	to rain water.
Operating humidity	20% to 95% RH (non-condensing, non-immersing)	Doing so may cause deterioration of the insulation and alter the sensitivity of the sensor.
range		
Power supply	+24 VDC ±10%, Ripple (p-p) 10% or lower	
Current consumption	Max. of 120 mA	4
Terminal block	Terminal block screw size: M3	4
Converter part insulation resistance	Between the power supply terminal and the FG terminal:	
	20 M Ω or higher on 500 VDC	4
Converter part withstand voltage	Between the power supply terminal and the FG terminal:	
	60 Hz on 500 VAC within 1 minute	4
Mass	Sensor: Approx. 0.3 kg	
	Extension cable: Approx. 1.3 kg	
	Converter: Approx. 1.0 kg	-
Other		