VN Series

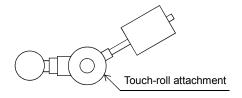
Specifications

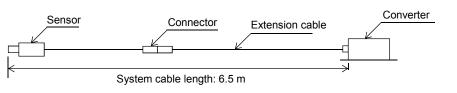
VND Thickness Measurement Converter (10 mm range)

Page 1 of 2 (€

	Specifications	Notice
Converter	VND-100A-*	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-100*	converter.
Thickness measurement range	0.0 mm - 10.0 mm (actual gap: 0.8 mm - 10.8 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 adjust the device. Since the accuracy of the feeler gauge to be used depends on the
Sensor offset gap	0.8 mm	
Calibration material	Chilled steel (flat)	measurement accuracy, use a gauge which matches the required
Output sensitivity	1.0 V/mm	accuracy.
Linearity	±0.5% of F.S. (for 6-point or 11-point adjustment)	2. Assembling the device
Zero shift range	Approx. ±10% of F.S.	Before connecting the sensor, extension cable, and converter,
Resolution	1 <i>μ</i> m	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.
	4-digit thickness display (unit: mm), 1-digit code	Having the wrong combination of serial numbers may result in
	Accuracy: ±0.03 mm	specifications not being met.
Display LED	Power (red)	3. Megger testing of the signal transmission cables that connect to the
	Meas. (green)	instrumentation
	Teach (green)	After you perform a megger test on the signal transmission cable,
	Cal. Z/S (green)	make sure to discharge the electrical charge before connecting
Frequency response	DC - 20 Hz (-1 dB typ.)	the cable to the converter.
Output impedance	100 Ω	Connecting the cable to the converter or the instrumentation while
Operating temperature		on a charged state may cause a failure
range	(Connector part: -25°C to +85°C)	4. Sensor installation location
	Extension cable: -25°C to +85°C	Do not use the device outdoors where the sensor can be subject
	Converter: 0°C to +50°C	to rain water.
Temperature	Sensor: ±1.5% of F.S.	Doing so may cause deterioration of the insulation and alter the
characteristics	Condition gap: 50% of the thickness measurement range, Target: Chilled steel (flat), Temperature: +25°C is the normal temperature. Range is 0°C to +100°C Extension cable: ±1.5% of F.S.	sensitivity of the sensor.
	Condition gap: 50% of the thickness measurement range, Target: Chilled steel (flat), Temperature:+25°C is the normal temperature.	
	Range is 0°C to +80°C	
	Converter: ±1.5% of F.S.	
	Condition gap: 50% of the thickness measurement range,	
	Target: Chilled steel (flat),	
	Temperature: +25°C is the normal temperature. Range is 0°C to +50°C	
Operating humidity range	20% to 95% RH (non-condensing, non-immersing)	
Power supply	+24 VDC ±10%, Ripple (p-p) 10% or lower	
Current consumption	Мах. of 120 mA	1
Terminal block	Terminal block screw size: M3	
Converter part	Between the power supply terminal and the FG terminal:	
insulation resistance	20 M Ω or higher on 500 VDC	
Converter part	Between the power supply terminal and the FG terminal:	
withstand voltage	60 Hz on 500 VAC within 1 minute	
Mass	Sensor: Approx. 0.7 kg	
	Extension cable: Approx. 1.3 kg	
	Converter: Approx. 1.0 kg	
Other		

Configuration





6H16-028 Rev. 2 Issued : Dec. 2016 Revised : Feb. 2017 VN Series

Specifications

VND Thickness Measurement Converter (10 mm range)

Page 2 of 2 (**€**

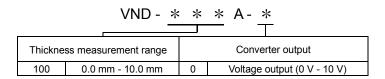
)



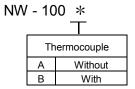
Model code / Additional spec. code (

No entry if additional spec. code

Converter



• Extension cable (6 m)



• Sensor (0.5 m)

Touch-roll attachment