

Band dendrometer DR26

ANALOG OUTPUT

The band dendrometer enables continuous, non-invasive monitoring of changes in stem circumference. Its stepless reading allows precise monitoring of stem growth. The measurement range for changes in circumference is 65 mm; by resetting the band, the dendrometer can be readjusted to measure a larger overall circumference. The dendrometer is suitable for stems with a minimum diameter of 8 cm; with an optional base plate upgrade, stems with diameters from 4 to 8 cm can also be measured. There is no upper limit for stem diameter. The dendrometer is easy to attach non-invasively with a tension force of 15 to 20 N. Linearity is $\pm 1\%$ over the full measurement range.

MAIN FEATURES DR26

- Output signal 0 to 2500 mV
- Power voltage 5 to 16 V
- Accessories: stainless tape; cable 10 m

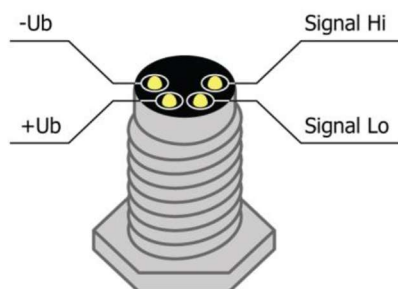


TECHNICAL DATA

PARAMETERS	SPECIFICATIONS
Dimension (L x W x H)	100 x 70 x 100 mm
Weight	~350 g
Housing protection class	IP 63
SENSOR	
Sensor type	Rotary position sensor
Measurement range (change in circumference)	65 mm
Minimum diameter of trunk	8 ... ∞ cm (optionally 4 ... 8 cm with base plate upgrade)
Linearity	$\pm 1\%$ of full scale
Resolution	stepless
Reading	stepless
Accuracy	in accordance with the data logger's specifications

PARAMETERS	SPECIFICATIONS
POWER SUPPLY	
Supply voltage	5 to 16 V
Supplying current	1 mA
CONNECTION / COMMUNICATION	
Connector	four wire M8 connector male
Cable length	10 m (custom lengths available upon request)
Communication / Output	Analog output: - accuracy in accordance with the data logger's specifications - output signal 0 to 2500 mV - sensitivity 0.0256 mm/mV
ENVIRONMENTAL CONDITIONS	
Operating temperature	-40 ... 60 °C
Air humidity	0 ... 100 %
STAINLESS STEEL TAPE	
Tape length	20 m
Tape width and thickness	12 x 0.2 mm
Tension force	15 to 20 N in the entire area
Tape temperature coefficient	16 $\mu\text{m}/(\text{m}\cdot\text{K})$

MALE CONNECTOR WIRING



STANDARD M8 FEMALE CONNECTOR CABLE WIRING



Brown - Signal Hi
 White - Signal Lo
 Blue - -Ub
 Black - +Ub

WIRING DIAGRAM

