

# Circumference Dendrometer Type DC1

## Technical Specifications



<b>Name of the Sensor</b>	Circumference Dendrometer 1 Type DC1
<b>Use area</b>	For measuring circumference growth of trees
<b>Suitable for plant size</b>	Diameter: 5 -32 cm
<b>Limitation</b>	The mechanical pressure of the wire cable on the tree is dependent from the tree size. The smaller the tree, the higher the pressure. Therefore, the measuring data from trees with different diameters are usually not comparable
<b>Range of the sensor</b>	11 mm
<b>Resolution</b>	The resolution of the sensor itself is infinite. The resolution of readings is determined by connected data logger, e.g. CR1000: 1.5 $\mu\text{m}$ Dendrometer logger DL18: 0.2 $\mu\text{m}$
<b>Accuracy</b>	Dendrometer dependent: Max. $\pm 4.5\%$ of reading (stable offset) Logger dependent, e.g.: CR1000: $\pm (0.04\%$ of reading +4.4 $\mu\text{m})$ Dendrometer logger DL18: $\pm 0.1\%$
<b>Temperature coefficient of the sensor</b>	$< 0.2 \mu\text{m}/^\circ\text{C}$ in the whole range
<b>Temperature coefficient of the wire cable</b>	$< 1.4 \times 10^{-6}/\text{K}$
<b>Linearity</b>	$< 1\%$
<b>Environment</b>	Outdoor condition: -25 to 70°C air temperature, 0 to 100% relative air humidity
<b>Weight of the sensor</b>	13 g without cable
<b>Power supply</b>	Stabilized Vex of 0.5 – 10 VDC, power consumption practically zero
<b>Material</b>	Stainless steel and Aluminium
<b>Cable length</b>	5 m, extendable up to 100 m