

Extensometer



ATEX

FEATURES

- Strain gage based sensor
- Alloy steel construction
- 2 bolt holes
- IP66 Hermetically sealed protection

OPTIONAL FEATURE

- EEx ia IIC T4 hazardous area approval

DESCRIPTION

The Model 178 extensometer is a load sensor designed for force measurement on any load-bearing structure. This extensometer provides the total solution for weighing, level control, stress and fatigue monitoring. The design also allows multiple sensors to be permanently mounted for more complex stress profiling and analysis.

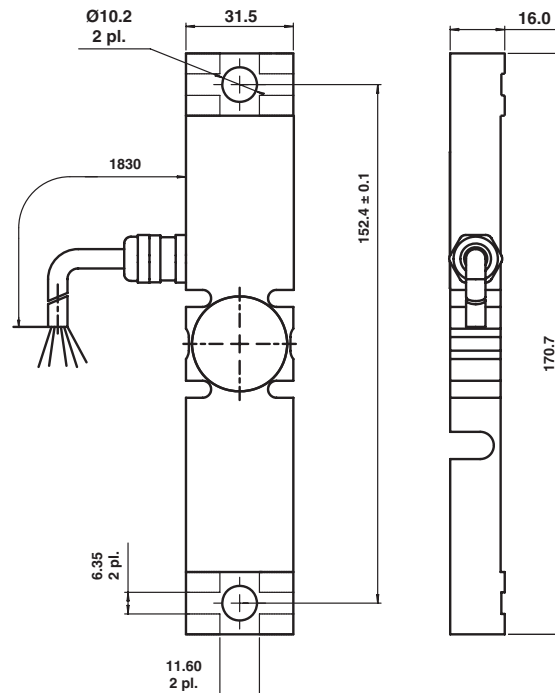
The Model 178 extensometer provides an ideal solution for non-intrusive level measurements for materials that are

subject to uneven buildup, bridging, or sidewall collection. Also, liquids or wetted materials that are not suited for direct contact level measurement are an ideal application for the Model 178 extensometer. The design of the Model 178 makes it an excellent solution for retrofitting existing structures without compromise of the integrity of the vessel or structure.

APPLICATIONS

- Tank weighing or level systems
- Agricultural equipment
- Rolling mill sensing
- Moment sensing
- Structural loading measurements
- Bridge structures

OUTLINE DIMENSIONS in millimeters



Model 178

Vishay Transducers

Extensometer



SPECIFICATIONS

PARAMETER	VALUE	UNIT
Calibrated output	1.7	mV/V at 500 $\mu\epsilon$
Overload capability (zero)	300	% of rated output
Overload capability (max)	500	% of rated output
Input resistance	350 \pm 10	Ω
Output resistance	350 \pm 10	Ω
Insulation resistance	>2000	M Ω
Excitation, recommended	10	Vdc
Excitations, range	5-20	Vdc
Thermal effect on zero	0.025	\pm % of FSO/ $^{\circ}$ C
Compensated temperature range	-30 to +80	$^{\circ}$ C
Construction	Painted steel	
Environmental protection	IP66	

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