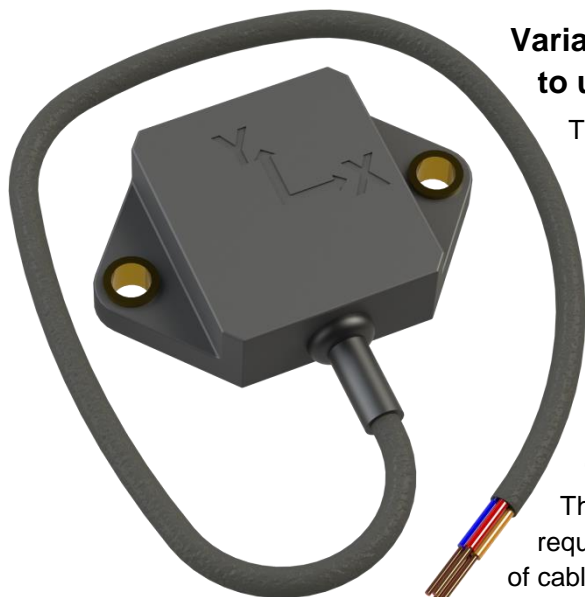


TILT METER

MLDOC-VAR and MLDOCCABLE-FT



Variable check valve open sensor - Range: $\pm 90^\circ$ - Easy to use voltage output - High resolution

The dual Axis Inclinometer is mainly developed with focus on check valve monitoring, platform leveling, dynamic engine management, tip-over protection and tilt alarm.

A fast response time and good accuracy makes this device the ideal choice for most leveling applications, mobile or not. It features digital signal processing including temperature compensation.

The integrated filter improves performance and allows using the sensor in many noisy environments including vibrating equipment.

The length of cable supplied is based on the customer's requirements. Part number MLDOCCABLE-FT represents one foot of cable.

FEATURES

- 8-30V supply voltage digital signal processing includes
 - filter (e.g. vibration damping)
 - temperature compensation
- 12 bit resolution
- up to 100Hz refresh rate
- -40°C to $+85^\circ\text{C}$ temperature range
- Accuracy typically
 - 0.5° (-40°C to $+85^\circ\text{C}$)
 - 0.15° at $+25^\circ\text{C}$

PARAMETERS

Parameter	Value	Comment
Range	$\pm 90^\circ$	Pitch & roll
Accuracy, typ.	0.5°	$T = -40^\circ\text{C} \sim +85^\circ\text{C}$
Accuracy, typ.	0.15°	$T = +25^\circ\text{C}$
Resolution	12 bit	
Refresh rate	50~100 Hz	
Startup time	<1s	Valid output angles
Supply/excitation voltage	8 ~ 30V	
Supply current	~15mA	
Output	0.5 ~ 4.5V	$-90^\circ \sim +90^\circ$
Cable	4 wire 0.25mm, outer diameter 6.5mm	Part number MLDOCCABLE-FT required. It represents one foot of cable Full temperature range, flexible
Operation temperature range	$-40^\circ\text{C} \sim +85^\circ\text{C}$	
Storage temperature range	$-40^\circ\text{C} \sim +85^\circ\text{C}$	
Weight	<50g	
Dimensions	70.5 x 45 x 15 mm 2.77 in x 1.77 in x 0.59 in	W x D x H

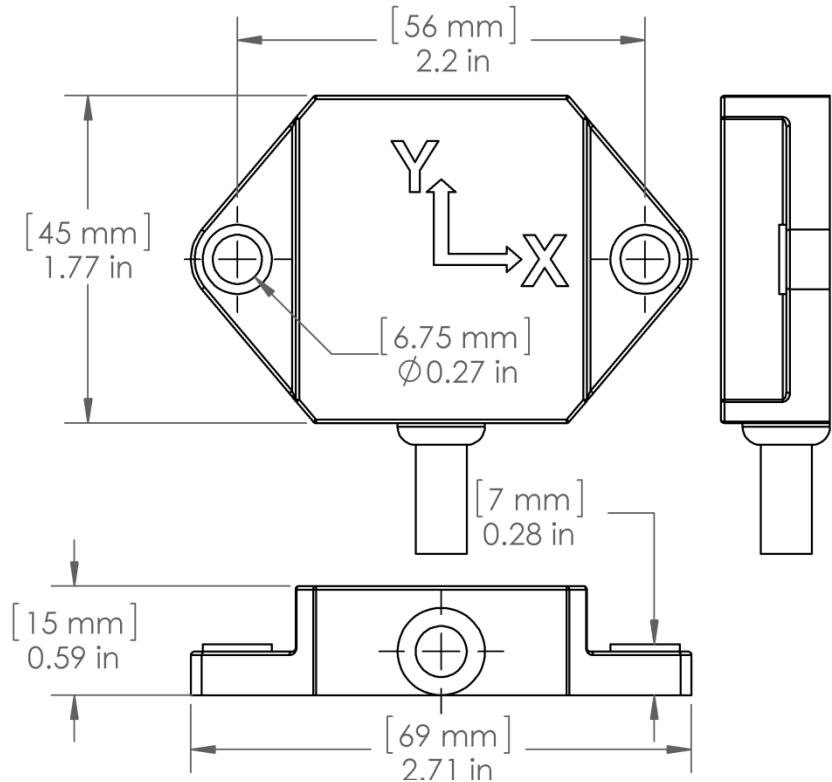
INTERFACE

Function	Description
VCC	+8 ~ 30V supply input
GND	GND
Output X	0.5 ~ 4.5V, X axis output
Output Y	0.5 ~ 4.5V, Y axis output

COMMENTS

The inclinometer includes a powerful digital signal processing that offers various filter algorithms and allows customer specific adaptations. It is possible to adjust the sensor to different environments to yield an optimized performance.

The housing is very compact in size and has compression limiter bushings for safe installation of the sensor. In contrast to uncoated (casted) aluminum, this sensor is resistant to atmospheric attack. It is compatible with oil, grease and fuel also.



The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Maid Labs Technologies Inc. reserves the right to make changes without further notice to any product herein. Maid Labs Technologies Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Maid Labs Technologies Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Maid Labs Technologies Inc. does not convey any license under its patent rights nor the rights of others.