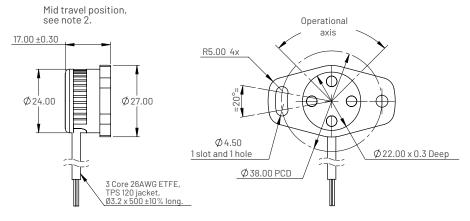
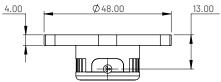
MHT5100 Series - Tilt sensor / Inclinometer

General-purpose



Dimensions





Electrical and mechanical specification

Parameters	Values			Units		
		Input speci	fication			
Supply voltage (Vs)	6 to +30 unregulated					VDC
Over voltage protection			VDC			
Supply current			mA			
Reverse polarity protection	Up to -60					VDC
Power on settlement time	<500					ms
	(Output spec	ification			
Output type		Analogue voltage				
Voltage output (Vout)		10 - 90% Vs 0.5 - 4.5 VDC			.5 VDC	
Line regulation			%FS			
Load resistance	>10K					Ohms
Output noise	<2					mV RMS
	Peri	ormance sp	pecification			
Measurement range	20°	40°	60°	120°	180°	- %FS
	(±10°)	(±20°)	(±30°)	(±60°)	(±90°)	
Resolution			%measurement			
Sensitivity (see note 3)	Ideal	span (4000	mV/°			
Sensitivity tolerance			%			
Non-linearity (see note 3)	<±0.5					%FS
Temperature coefficient (Vout)	<±0.011 TBD					%FS/°C
Bandwidth (-3db)	1.5					Hz
Cross axis sensitivity	4%					Max
	G	eneral spec	ification			
Weight (approx.)			grams			
Protection/sealing		IP68 and IP69K				
Operational temperature		See	°C			
Storage temperature			°C			
Shock	1 metre on to concrete (Max 20,000g)					
Materials		Hous				
Max torque screw setting (M4 with washer)	1.8				Nm	

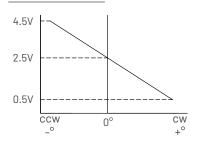
Ordering code

MHT5100-AV-XXX

Electrical connections (see note 1)

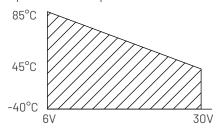
Wire Colour	Function
Red	Supply Voltage (Vs)
White	Output Voltage (Vout)
Black	Ground

Typical output when viewed on top with slot on right



Input voltage de-rating graph

Input volts vs temperature



Notes

- Incorrect wiring may cause internal damage.
- 2. When cable exit facing down as shown, instrument is mid travel.
- Sensitivity and non-linearity is calculated from least squares best fit method.
- 4. General dimension tolerance is ±0.25mm.

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