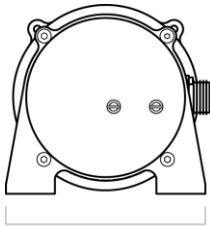
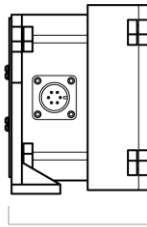




CE



5.4" [137 mm]

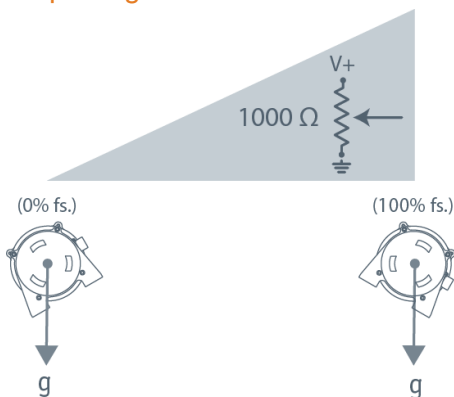


3.7" [95 mm]

The model IT9101 is a rugged and simple device which provides a voltage divider feedback signal for incline position up to 240 degrees. The heart of the IT9101 is a magnetically-damped pendulum coupled to a conductive plastic precision potentiometer.

A highly linear relationship between inclination and the output signal is maintained over the full range of the IT9101.

Output Signal



IT9101

Inclinometer • Voltage Divider

Measuring Range Options from 0-105° to 0-240°

Aluminum or Stainless Steel Enclosure Options

Perfect for Water Management/ Tainter Gate Position

IP68 • NEMA 6 Protection

General

Available Full Stroke Ranges	0-105 to 0-240 degrees
Enclosure Material Options	powder-painted aluminum or stainless steel
Sensor	plastic-hybrid precision potentiometer
Electrical Connector	MS3102E-14S-6P
Mating Plug (included)	MS3106E-14S-6S
Weight, Aluminum (Stainless Steel) Enclosure	5 lbs. (10 lbs.) max.

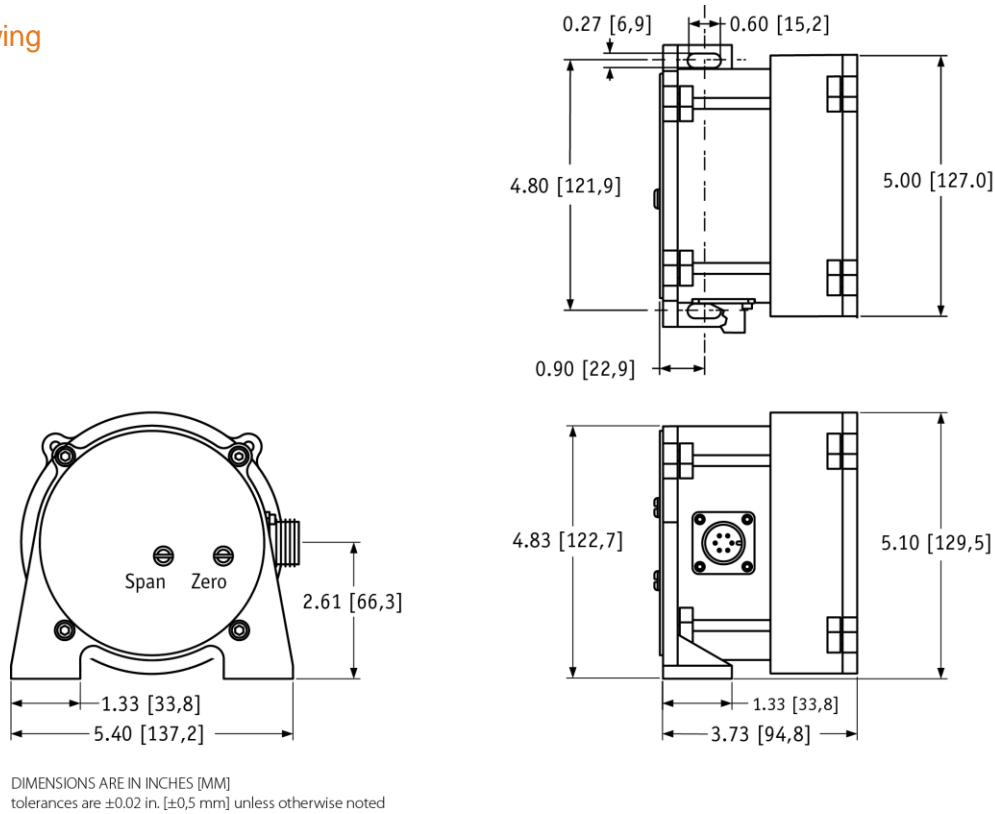
Electrical

Output Signal	voltage divider (potentiometer)
Input Resistance	1000 Ω (±10%)
Recommended Maximum Input Voltage	30 V (AC/DC)
Full Scale Output Signal Change (Vdc)	92% ± 6% of input voltage

Environmental

Enclosure	NEMA 4/4X/6, IP 67/68
Operating Temperature	-30° to 200°F (-34° to 90°C)
Vibration	up to 10 g to 2000 Hz maximum

Outline Drawing



Ordering Information

Model Number:

IT9101 - - - **1** - - -

order code: CW CCW A B C D

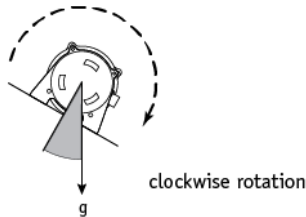
Sample Model Number:

IT9101 - 060 - 120 - 1110

CW clockwise rotation: 60°
CCW counter-clockwise rotation: 120° } total rotation = 180°
A enclosure: aluminum
B electrical connection: 6-pin plastic connector
D magnetic dampening: yes

Full Clockwise Rotation:

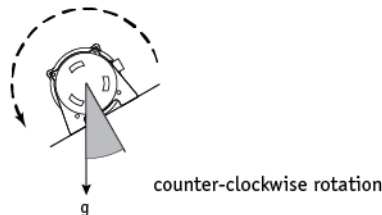
CW order code:	000	015	030	045	060	075	090	105	120
	0°	15°	30°	45°	60°	75°	90°	105°	120°



Important--
the sum of the Clockwise and Counter-Clockwise Rotations must be in the range of 105° to 240°

Full Counter-Clockwise Rotation:

CCW order code:	000	015	030	045	060	075	090	105	120
	0°	15°	30°	45°	60°	75°	90°	105°	120°

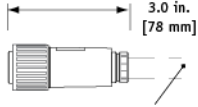
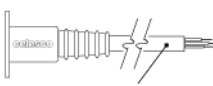

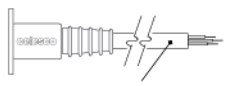
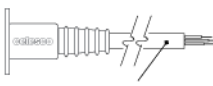
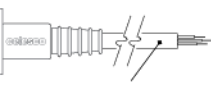



Important--
the sum of the Clockwise and Counter-Clockwise Rotations must be in the range of 105° to 240°

Enclosure Material

A order code:	1	2
	powder-painted aluminum	303 stainless steel

Electrical Connection:

C <i>order code:</i>	1 6-pin plastic connector w/mating plug IP 67, NEMA 4X**, 6  1/2 - 5/16" [14 - 8 mm] cable dia. 16 AWG max conductor size connector: MS3102E-14S-6P mating plug: MS3106E-14S-6S	2 10-ft. [3 M] waterproof cable IP 67, NEMA 4X**, 6  10 ft. x 0.4-in. dia. [3 M x 10 mm dia.] 18 AWG, type SJTOW	4 25-ft. [7.5 M] instrumentation cable IP 67, NEMA 6  25 ft. x 0.2-in. dia. [7.5 M x 5 mm dia.] 24 AWG, shielded																												
C <i>order code:</i>	5 100-ft. [30 M] waterproof cable IP 67, NEMA 4X**, 6  100 ft. x 0.4-in. dia. [30 M x 10 mm dia.] 18 AWG, type SJTOW	6 10-ft. [3 M] pressure tested* waterproof cable IP 68, NEMA 4X**, 6P  10 ft. x 0.4-in. dia. [3 M x 10 mm dia.] 18 AWG, type SJTOW	7 100-ft. [30 M] pressure tested* waterproof cable IP 68, NEMA 4X**, 6P  100 ft. x 0.4-in. dia. [30 M x 10 mm dia.] 18 AWG, type SJTOW																												
	6-pin Mating Plug <table> <tr><th>pin</th><th>signal</th></tr> <tr><td>A</td><td>+ in</td></tr> <tr><td>B</td><td>common</td></tr> <tr><td>C</td><td>+ out</td></tr> <tr><td>D</td><td>-</td></tr> </table>  <i>contact view</i>	pin	signal	A	+ in	B	common	C	+ out	D	-	Waterproof Cable <table> <tr><th>color code</th><th>signal</th></tr> <tr><td>WHITE</td><td>+ in</td></tr> <tr><td>BLACK</td><td>common</td></tr> <tr><td>GREEN</td><td>+ out</td></tr> </table>	color code	signal	WHITE	+ in	BLACK	common	GREEN	+ out	Instrumentation Cable <table> <tr><th>color code</th><th>signal</th></tr> <tr><td>RED</td><td>+ in</td></tr> <tr><td>BLACK</td><td>common</td></tr> <tr><td>GREEN</td><td>+ out</td></tr> <tr><td>WHITE</td><td>-</td></tr> </table>	color code	signal	RED	+ in	BLACK	common	GREEN	+ out	WHITE	-
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*—Test pressure: 100 feet [30 meters] H₂O (40 PSID) Test Medium: Air; Duration: 2 hours. **—applies to stainless steel enclosure only.

Dampening Option:

D order code:	0	1
	with magnetic dampening	without magnetic dampening