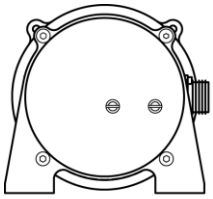
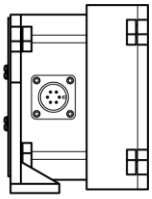


5.4″ [137 mm]



3.7″ [95 mm]

IT9101

Inclinometer • Voltage Divider

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

Aluminum or Stainless Steel Enclosure Options

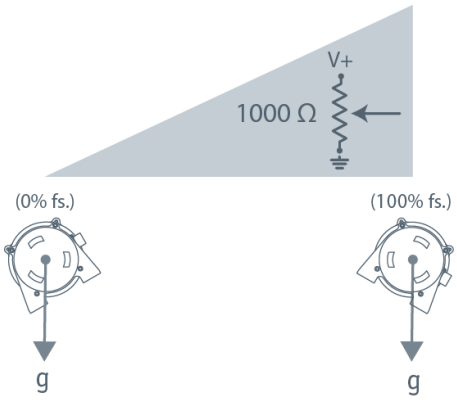
Perfect for Water Management/ Tainter Gate Position

IP68 • NEMA 6 Protection

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



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.

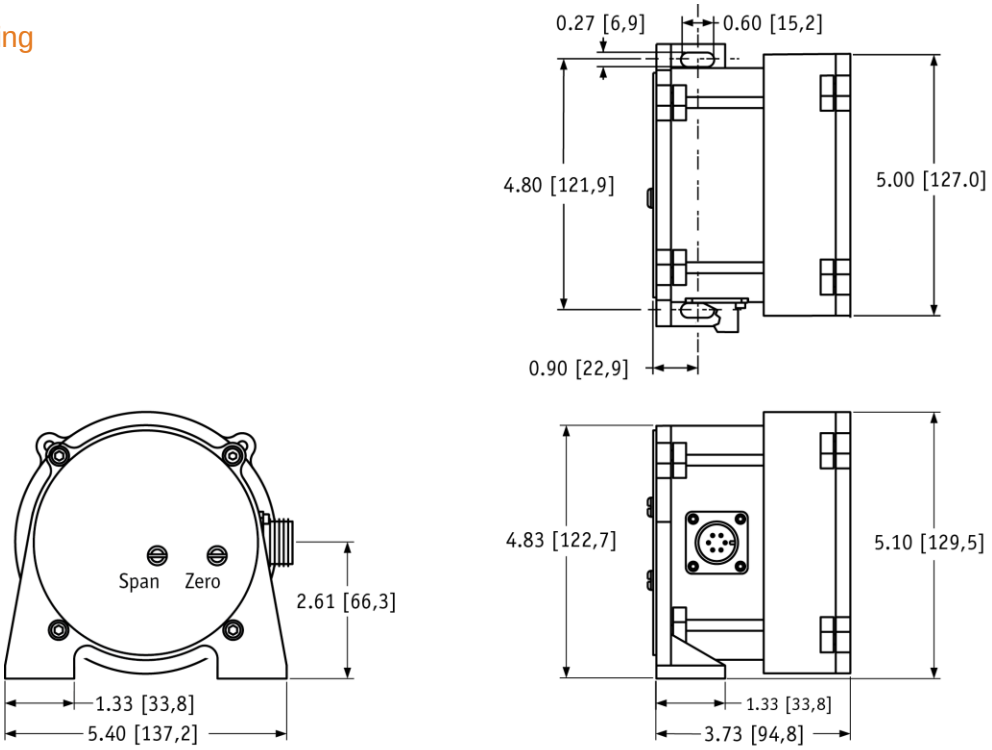
Electrical

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



DIMENSIONS ARE IN INCHES [MM]
tolerances are ±0.02 in. [±0,5 mm] unless otherwise noted

Ordering Information

Model Number:

IT9101 - ____ - ____ - ____ **1** ____ ____
order code: CW CCW Ⓐ Ⓑ Ⓒ Ⓓ

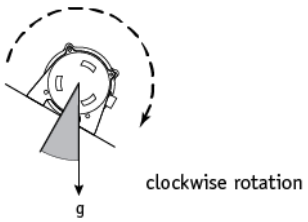
Sample Model Number:

IT9101 - 060 - 120 - 1110

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

Full Clockwise Rotation:

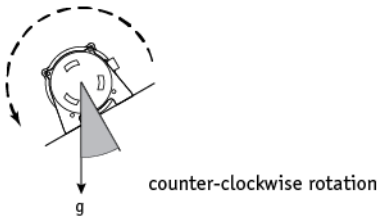
CW *order code:*	000	015	030	045	060	075	090	105	120
	0°	15°	30°	45°	60°	75°	90°	105°	120°



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°

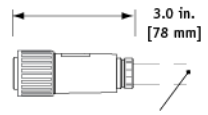
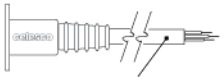


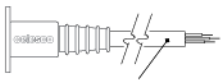
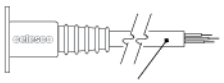
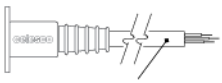
Important--
the sum of the Clockwise and Counter-Clockwise Rotations must be in the range of 105° to 240°

Enclosure Material

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

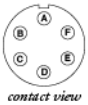
Electrical Connection:

Ⓒ order code:	1	2	4
	6-pin plastic connector w/mating plug **IP 67, NEMA 4X**,6**	10-ft. [3 M] waterproof cable **IP 67, NEMA 4X**, 6**	25-ft. [7.5 M] instrumentation cable **IP 67, NEMA 6**
			
	1/2 - 5/16" [14 - 8 mm] cable dia. 16 AWG max conductor size connector: MS3102E-14S-6P mating plug: MS3106E-14S-6S	10 ft. x 0.4-in. dia. [3 M x 10 mm dia.] 18 AWG, type SJTOW	25 ft. x 0.2-in. dia. [7,5 M x 5 mm dia.] 24 AWG, shielded

Ⓒ order code:	5	6	7
	100-ft. [30 M] waterproof cable **IP 67, NEMA 4X**,6**	10-ft. [3 M] **pressure tested*** waterproof cable **IP 68, NEMA 4X**, 6P**	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	10 ft. x 0.4-in. dia. [3 M x 10 mm dia.] 18 AWG, type SJTOW	100 ft. x 0.4-in. dia. [30 M x 10 mm dia.] 18 AWG, type SJTOW

6-pin Mating Plug

pin	signal
A	+ in
B	common
C	+ out
D	-



contact view

Waterproof Cable

color code	signal
WHITE	+ in
BLACK	common
GREEN	+ out

Instrumentation Cable

color code	signal
RED	+ in
BLACK	common
GREEN	+ out
WHITE	-

**–Test pressure: 100 feet [30 meters] H_2O (40 PSID) Test Medium: Air; Duration: 2 hours. ** –applies to stainless steel enclosure only.*

Dampening Option:

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

NORTH AMERICA

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