Precision Potentiometric Output Ranges: 0-3, 0-9, 0-15, 0-30 inches

Flight/Crash Test Applications • 360° 2-Axis Mount CE

Specification Summary:

0-3, 0-9, 0-15, 0-30 inches, min.
voltage divider (potentiometer)
to 0.25% full stroke, see ordering information
± 0.02% full stroke
essentially infinite
Ø.019-in. nylon-coated stainless steel
anodized aluminum
aluminum or polycarbonate
conductive plastic-hybrid potentiometer

ELECTRICAL

Input Resistance	10K ohms (± 10%)
Power Rating, Watts 2.	0 at 158°F (70° C), derated to 0 @ 255°F (125°C)
Recommended Maximum Input Volta	age30V (AC or DC)
Output Signal Change Over Measure	ment Range94% ±4% of input voltage
Mating Plug	LEMO FGG.OB.304.CLAD52

MECHANICAL

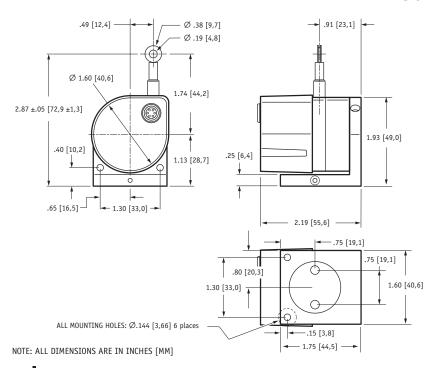
Measuring Cable Tension Options9, 14 and 33 oz., see ordering information Maximum Measuring Cable Acceleration............ 136 G's, see ordering information

ENVIRONMENTAL

Operating Temperature-65° to 255° F (-55° to 125°C)

GAM EG 13 CERTIFICATION

Specifications see back page



MT2A

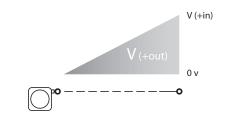


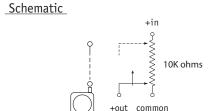
The MT2A is a member of our family of rugged, accurate miniature cable-extension position transducers designed specifically for test applications. One of the major benefits to this sensor its 2-axis 360° rotating mounting bracket to allow for fast and simple installation in any direction.

The MT2A comes in 4 different measuring ranges: 0-3", 0-9", 0-15" and 0-30" and features a highlytensioned heavy-duty measuring cable designed for the high-acceleration demands encountered in flight testing and automotive crash tests.

For extreme impact applications, a new rugged all aluminum sensor cover is now available!

Output Signal





Celesco Transducer Products, Inc. 20630 Plummer Street • Chatsworth, CA 91311 tel: 800.423.5483 • +1.818.701.2750 • fax: +1.818.701.2799

MT2A • Cable-Extension Transducer: Precision Potentiometric Output

Ordering Information

Model Number:

MT2A - ____ - __ - 10K - ___

Sample Model Number:

MT2A - 9E - 33 - 10K - M1A

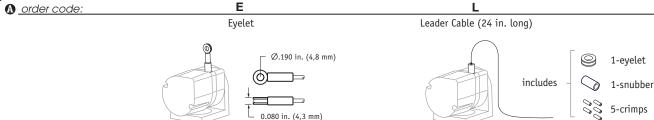
range: 9 inches
measuring cable termination: eyelet
measuring cable tension: 33 oz. (±6 oz.)

end-mounted connector w/ aluminum sensor cover

Full Stroke Ranae:

® order code:	3	9	15	30
full stroke range, min:	3 inches	9 inches	15 inches	30 inches
potentiometer cycle-life:	2.5×10^6	8.3×10^5	5.0×10^5	2.5×10^5
accuracy (% of full stroke):	1 %	.25%	.25%	.25%

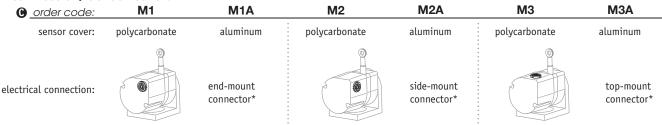
Measuring Cable Termination:

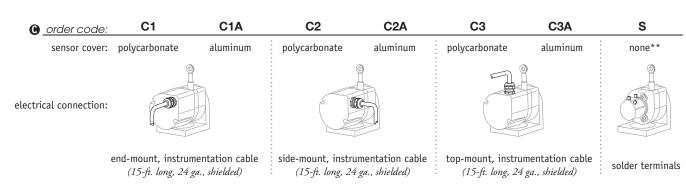


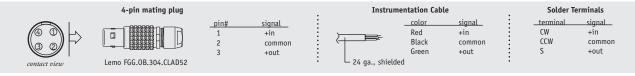
Measuring Cable Tension:

B <u>order code:</u>	9	14	33	
tension:	9 (±2) oz.	14 (±4) oz.	33 (±6) oz.	
max. cable acceleration:	99 G's	136 G's	136 G's	

Electrical Connection/ Sensor Cover:





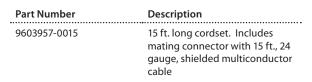


*mating plug included **blank cover available, see Accessories on next page



Accessories:







Additional blank sensor covers can be ordered seperately. This cover comes without electrical wiring access holes so customer can drill to their requirements.

Includes screws and gasket.

Part Number	Description
9604197-0000	Aluminum sensor cover
9603958-0000	Polycarbonate sensor cover

GAM EG 13 Certification

QUALIFICATION LEVEL FOR CLIMATIC AND THERMAL ENVIRONMENT

External Overpressure, operating (GAM EG 13 Fasc.21)

5 cycles: 1...4.5 Bar in 3 min., 4.5 Bar for 12 hours,

4.5...1 Bar in 1 min.

1 cycle: 1...3.2 Bar in 7.5 min., 3.2 Bar for 2 min.,

3.2...8 Bar in 5 sec., 8 Bar for 2 hours,

8...1 Bar in 2 Bar/sec.

1 cycle: 1...4.5 Bar in 20 msec., 4.5 Bar for 5 sec,

4.5...1 Bar in 20 msec.

Thermal Vacuum Transitory, operating (GAM EG 13 Fasc.10) Room pressure and temperature (1 Bar A; 20°C ±2°C)

1...10-3 mBar in 100 seconds Vacuum (10-3 mBar) for 10 min.

Climatic Cycles (GAM EG 13 Fasc.8)

Dry heat: 24 hours @ 70° C $\pm 2^{\circ}$ C Relative Humidity < 50%Wet heat: 24 hours @ 70° C $\pm 2^{\circ}$ C Relative Humidity = 50%Cold: 24 hours @ -10° C $\pm 2^{\circ}$ C Relative Humidity < 50%Wet heat: 24 hours @ 70° C $\pm 2^{\circ}$ C Relative Humidity = 100%

Dry Heat (Relative Humidity <50%)

Room temperature to 70°C in 30 mins 70°C for 5 hours, non operating

70°C for 5 hours, operating

70°C to room temperature in 20 minutes

QUALIFICATION LEVEL FOR MECHANICAL ENVIRONMENT

Random Vibrations (GAM EG 13 Fasc.42 mod. Op1) 20...2000 Hz, 3 min. per axis, operating, 34 g. 20...2000 Hz, 20 sec. per axis, operating, 45 g.

Random Vibrations (GAM EG 13 Fasc.41 mod. Op3)

Compensated Levels, short duration

3...300 Hz @ .2 - .002 g2/ Hz.

Reasearch Critical Frequency

Logarithmic Run, 1 octave / min., 1... 2000 Hz.

Steady Acceleration, operating (GAM EG 13 Fas.45) 37 q, 3 min. per direction (2 directions per axis)

Sinusoidal Vibrations, operating (Gam EG 13 Fasc.41 mod. Op3) Logarithmic run, 1 octave/min. on 3 axis

3...50 Hz., 9 hours per axis @0.6...1.25 g

Sinusoidal Vibrations, operating (Gam EG 13 Fasc.41 mod. Op3)

Logarithmic run, 1 octave/min. on 3 axis

5...2 KHz., 3 axis @12...25 g.

Average Shock (GAM EG 13 Fasc.43 Mode Op1) 1 shock, 1/2 sinusoidal, 100g., 6 msec. operating,

wlongitudinal and back direction

Free Fall (GAM EG 13 Fasc.43 Mode Op4)

6 consecutive drops on wood table, height = 100mm

version: 5.1 last updated: June 18, 2009

