

# Inductive Digital Comparator µMaxµm® II



6-8





















## resolu

## **Features**

#### **Functions:**

- Inch/Metric operator selectable with switchable resolution.
- · Normal / Reverse Sensing
- Preset capabilities to view actual size
- "Absolute" Transducer no overspeed errors or constant re-zeroing. Transducer always remembers its location, even if power is off
- High resolution digital readout and analog bar graph – digital display shows deviation from zero or actual dimension size (Preset)
- Lightweight, contamination resistant – ruggedly built to withstand hard use

   gasketed case, crystal and stem assemblies resist fluid contamination

#### Mode A:

Actual value + bargraph Display of tolerance



- Calibratable if ever needed

   values remembered even after battery change.
- MarConnect data output: USB, OPTO RS232C, Digimatic
- Auto-power down provides extremely low battery consumption, assuring long life from readily available commercial batteries.
- Increased resolution (0.0002 mm / 10 μinch) for today's demanding tolerances
- Unilateral Tolerances
- Go/NoGo Display Feature

## Mode B:

GO/NOGO display



#### Advanced Functions:

- Dynamic mode operation: Max, Min, TIR
- Two point difference measurement provides comparison of two readings or measuring locations.
- # Calculate the distance between 2 measured values
- Multiplier factor for ratio measurements
- Hold function holds reading on display until ready to resume measuring
- Data output with serial number identification capability
- Data output with selectable continuous output or single request of reading(s)

### **Optional Factory Configured Features:**

- Locked Multiplier factor for ratio measurements
- Disabled sleep mode (manual ON/OFF)
- · Locked inch or mm display unit
- Power up in inch or mm unit on battery change
- Calibration mode lockout (with password entry)
- Setup mode lockout with password entry

#### **Technical Data** Model Order no. Range Resolution Accuracy Stem Stem Length % of digital range diameter mm / inch mm inch mm inch Standard 0.375" 11.7 0.46" 2034101 Standard 0.375" 38.0 1.50" 2034103 0.0002 / 0.00001" Standard 2034105 ±0.25% over 8 mm 11.7 0.46" 0.0005 / 0.00002" Standard 2034107 ±0.50 mm / ±0.020" 8 mm 38.0 1.50" 0.001 / 0.00005" ±0.50% from ±1.00 / ±0.040" / 0.00001" 0.002 Advanced 0.375" 11.7 0.46" 2034201 ±0.50 mm / ±0.020" 0.005 / 0.0002" Advanced 0.375" 38.0 1.50" 2034203 to 0.01 / **0.0005**" ±1.00 mm / ±0.040" Advanced 11.7 2034205 8 mm 0.46" 0.02 / 0.001" Advanced 38.0 2034207 8 mm 1.50" Advanced Perpendicular 0.375" 11.7 0.46" 2034401

## **Technical Data**

**Display Range:**  $\pm 1.067 \text{ mm} / \pm 0.042$ "

**Spindle Range:** -1.25 to 1.50 mm / **-0.050 to +0.060**"

**Resolution:** 0.0002 mm / **0.00001**"

 Accuracy:
 ±0.5mm range: 1.25μm (0.25%)

 (% of range)
 ±1.0mm range: 5.0μm (0.50%)

 ±0.020" range: 50μin (0.25%)

±0.040" range: 200μin (0.50%)
85 to 122 g (grams) - at center of tr

**Gaging Force:** 85 to 122 g (grams) - at center of travel **3 to 4 oz (ounce)** - at center of travel

Weight: 170 g / 6 oz Spindle Velocity: Unrestricted

Temperature

Operating:  $5^{\circ}$  to  $54^{\circ}$ C /  $40^{\circ}$  to  $130^{\circ}$ F Storage:  $-17^{\circ}$  to  $60^{\circ}$ C /  $0^{\circ}$  to  $140^{\circ}$ F Repeatability:  $\pm$  1 LSD (Least Significant Digit)

**Battery Life:** 6000 hours

~12 months normal usage\*

\* normal usage= 12 hr/day x 7 day/wk

Contact Point: (PT-223 radiused tip, 4-48 thread,

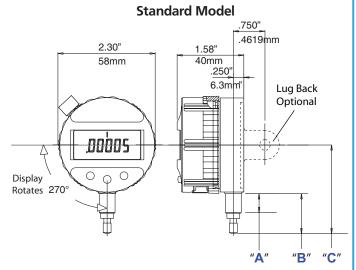
furnished on 0.375" dia. Stem model) **EPT-1037-W1** radiused tip, M2.5 thread furnished on 8 mm dia. stem

model

**Power:** 3 volt lithium coin cell (2 per unit),

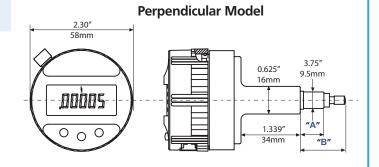
type CR 2450. Order no. **EBY-1018** 

**Display:** Rotates through 270°



For contact points please refer to pages 5-25, 5-27, 5-25 & 5-53

| <b>Dimensions</b><br>mm / <i>inch</i> | Α | В                                       | С |
|---------------------------------------|---|---|---|
|                                       |   | 24.1 / <b>0.95"</b> 57.2 / <b>2.25"</b> |   |



#### **Accessories** Order no. Order no. Other Hardware: Backs: Flat Black (Standard on all models) **EBK-1018 Splash Cover** ECV-1307-W2 **Post Back** (0.5" dia. x 1" long) EBK-1012 Adaptor Bushing (8 mm to 3/8") **BU-197** Lug Back (Horizontal / Vertical) **EBK-1010 Thread Adaptor** (M2.5 to 4-48 thread) **AD-185 Screw Back** (11/16" dia x 0.5", 1/4-28 thread) EBK-1013 **Spring** (for lighter gaging force: 35g) SP-351 **Adj. Slide Back** (0.5" slot, 1/4-20 thread) **EBK-1016** Adj. Rack Back\* **EBK-1014** For further mounting accessories refer to page 6-13 \* used on AT-28 or AT-116 - Sold seperately. Data Interface: **USB Cable** (for MarCom or PC, 2m length) 4346023 RS232 Cable (10 pin plug, 2m length) 4346020 **Digimatic Cable** (10 pin plug, 2m length) 4346021 **Transmitter** (Mahr t, used w/ FM1 Receiver) 2121369