# μΜαχμm<sup>®</sup> II Digital Comparator



MIN 1















### **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 ID
- Data output with selectable continuous output
- or single request of reading(s)

### **Features**

### **Standard 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.
- Calibratable if ever needed values remembered even after battery change.
- · Marconnect data output: USB, OPTO RS232C, Digi-
- Auto-power down provides extremely low battery consumption, assuring long life from readily available commercial batteries.
- Increased resolution (0.0002mm / 10uinch) for today's demanding tolerances.
- Unilateral Tolerances
- Go/NoGo Display Feature

### Mode A:

Actual value + bargraph Display of tolerance



### Mode B:

GO/NOGO display



### **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
- Setup mode lockout with password entry

# **Ordering Information**

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

# μΜαχμm<sup>®</sup> // Digital Comparator

### **Technical Data**

**Display Range:** ±0.042in

±1.067mm

**Spindle Range:** -0.050 to +0.060in.

-1.25 to 1.50mm

**Resolution:** 0.00001in

0.0002mm

 Accuracy:
 ±0.020" range: 50μin (0.25%)

 (% of range)
 ±0.040" range: 200μin (0.50%)

 $\pm 0.5$ mm range:  $1.25\mu$ m (0.25%)  $\pm 1.0$ mm range:  $5.0\mu$ m (0.50%)

**Gaging Force:** 3 to 4 oz (ounce) -

85 to 122 g (grams) -

- at center of travel

Weight: 6 oz

170 g

Spindle Velocity: Unrestricted

Temperature

**Operating:** 40° to 130°F

5° to 54°C

Storage: 0° to 140°F

-17° to 60°C

**Repeatability:** ± 1 LSD (Least Significant Digit)

**Battery Life:** 6000 hours

~12 months normal usage\*

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 8mm dia. stem model

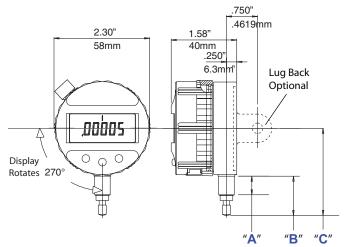
**Power:** 3 volt lithium coin cell (2 per unit),

type CR 2450. Order#: EBY-1018

**Display:** Rotates through 270°

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

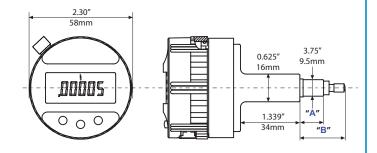
### **Standard Model**



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

<b>Dimensions</b> mm / inch	Α	В	c
	11.7 / 0.46"	24.1 / 09.5"	53.6 / 2.11"
	38.0 / 1.50"	57.2 / 2.25"	86.6 / 3.41"

## **Perpendicular Model**



### **Acessories**

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