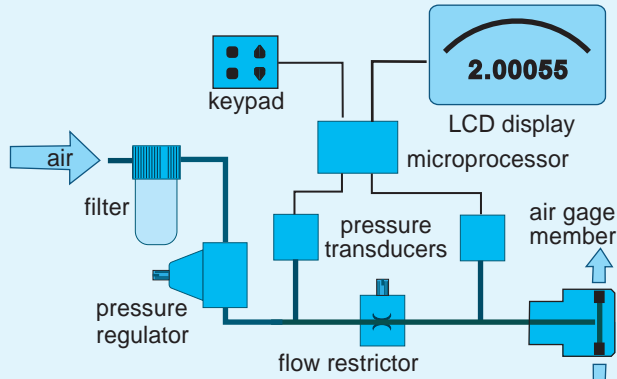


AIR & ELECTRONIC GAGE READOUTS

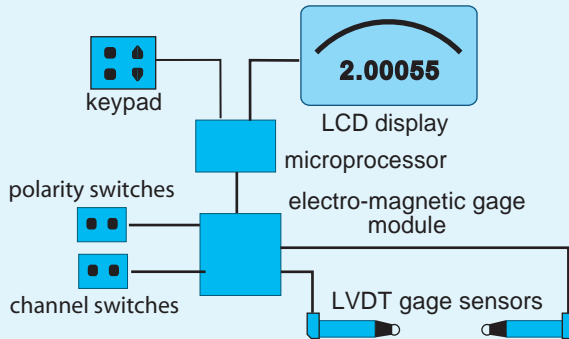
MilliCheck & Micro II Readouts operate all popular makes of dual and single master type air gage members, as well as LVDT type electronic gages. Incorporating sealed controls, solid state pressure sensors, digital and bargraph LCD displays, these instruments perform exceptionally well on the shop floor as well as in metrology lab environments.

Air gage Readout Block Diagram



Air gage circuit - Pressure signals from solid state piezo-resistive pressure transducers are sent to a microprocessor where the bargraph and digital display readings are calculated. Utilizing outputs from two transducers, one measuring the backpressure from the air gage nozzles, and one monitoring the regulator pressure, the microprocessor eliminates errors related to supply pressure variations. Being highly stable, Micro II instruments can be operated using one or two setting masters. The adjustable flow restrictor incorporated in these instruments provides an exceptional range capability, accommodating gaging members with wide ranges of nozzle sizes and magnifications.

Electromagnetic Readout Block Diagram



Electromagnetic gage circuit - AC voltage is supplied to the LVDT gage sensors which return signals proportional to the displacement of the sensor styluses from their null voltage positions. The Electromagnetic gage module processes the voltage from the sensors and directs the signal to the instrument's microprocessor where the bargraph and digital display values are calculated. Polarity and Channel switches provide capability to sum or difference inputs from the sensors.



MilliCheck model AEC 30-10 with dual master air probe and setting rings.



MilliCheck model AEC 30-E2 with VeeCheck O.D. gage and setting master

MilliCheck gage readouts feature high resolution LCD bargraphs and four decade digital displays. Designed for low power consumption, they operate from either standard "D" Cell batteries or AC power adapters. With user selectable multiple inch and metric gaging ranges, these readouts provide economical replacements for mechanical air gage instruments. They can be configured for either LVDT type electronic gages or air gages.

See page 7 for specifications and order codes.

MILLICHECK TECHNICAL DATA

Bargraph display:

Circular 121 Segment LCD

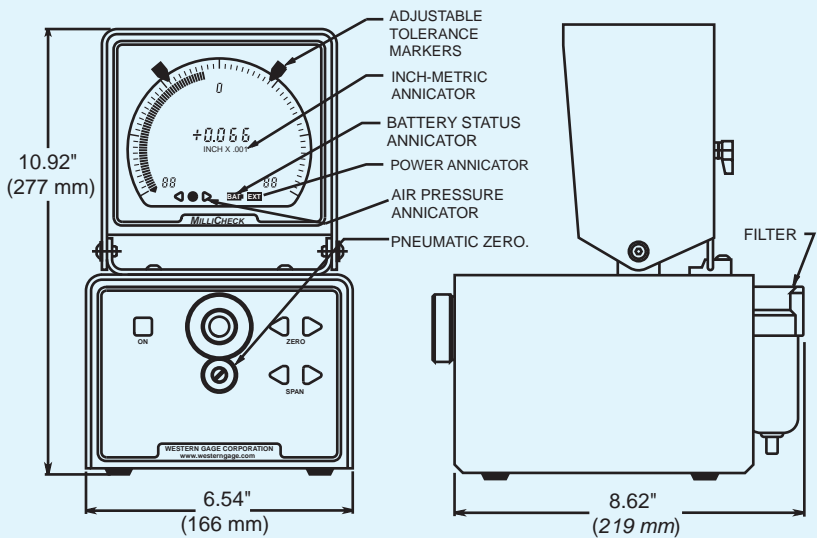
Digital display: 4 Decade LCD

Features, front panel:

- Power-on
- Zero adjust
- Span adjust (dual master only)
- Tolerance markers
- Pneumatic Zero adjust -- (air gage modules only)
- Air status indicator

Features, rear panel:

- Inch - Metric selection
- Operator front panel lockout
- Auto on-off time select*
- Input polarity
- Scale selection (Field selectable scales are listed at the right.)



Weight: 10 Lbs (4.5 Kg)

Gage inputs Select gage type listed below and add a suffix to order code as shown at the bottom of this page.

Series 10 Air gage -- (All dual master type air gages).

Series 60,70 or 80 Air gage -- (Single master type air gages).

E1, E2 or E3 High resolution LVDT -- use on scale ranges $\pm .0015"$ or $\pm .030$ mm or less.

E4, E5, or E6 Extended range LVDT -- Use on ranges $\pm .00075"$ or $\pm .015$ mm or greater.

Power:

- Internal Battery*-- 4 "D" cells
- External power adapters, specify one:
 - 110/125 VAC - 9 VDC, 60 Hz, adapter is standard.
 - 100-240 VAC - 9VDC, 47-63 Hz, universal adapter with optional field changeable foreign outlet plugs.

Air gage module requirements:

.5 to 2 SCFM @ 40 to 125 psi (The actual air flow depends on nozzle sizes and gaging ranges of the air gage members connected to the readout).

MilliCheck instruments incorporate an auto off mode to extend battery life. Actuating the power button wakens the gage with no loss of calibration. The auto-off mode can be turned off when operating from external power.

MilliCheck scales -- inches			
Range Selector	Magnification	Resolution	
		Analog	Digital
$\pm .00015$	30000	.000003	.000002
$\pm .00030$	15000	.000005	.000005
$\pm .00075$	6000	.000013	.00001
$\pm .0015$	3000	.000025	.00002
$\pm .003$	1500	.00005	.00005
$\pm .006$	750	.00010	.00005
$\pm .015$	300	.00025	.0001
$\pm .030$	150	.0005	.0001

MilliCheck scales -- millimeters			
Range Selector	Magnification	Resolution	
		Analog	Digital
$\pm .003$	37500	.00005	.00005
$\pm .006$	18750	.00010	.0001
$\pm .015$	7500	.00025	.0002
$\pm .030$	3750	.0005	.0005
$\pm .060$	1875	.0010	.0010
$\pm .150$	750	.0025	.002
$\pm .300$	375	.005	.002
$\pm .600$	188	.010	.002

MilliCheck Order Codes:

AEC 3X - XX

Product category / model

AEC 30 - 110/125 VAC 60 Hz
AEC 31 - 100/240 VAC 47/63 Hz
 (External power adapters)

Gage inputs

Code	Description
-10	Air gage, dual master type, series 10
-60	Air gage, single master type, series 60
-70	Air gage, single master type, series 70
-80	Air gage, single master type, series 80
-E1, E4	LVDT Channel A only (High gain, Low gain)
-E2, E5	LVDT [Ch.A + Ch.B] (High gain, Low gain)
-E3, E6	LVDT [Ch.A - Ch.B] (High gain, Low gain)