

Universal Dimensionair® Air Gaging Comparator (zero plus Min./Max. Master System)

Selecting either a single or dual master gaging system involves trade offs. The single master system is simple and economical to operate while the dual master system offers greater flexibility with the requirement of limit masters.

Mahr Federal can now provide the essential high quality air gage tooling to satisfy both gaging requirements. The Universal Dimensionair is part of a new series of adjustable magnification air comparators from Mahr Federal. Based on the precision of the standard Dimensionair - the new model offers the ability to work both as a single master or dual master air gaging system.

When calibrated with Mahr Federal restrictor kits for 2500:1, the Universal Dimensionair maintains the same performance and stability as a standard 2500:1 Dimensionair. Use it with your Mahr Federal tooling and one master for fast single mastering air gage applications.

With built in magnification and zeroing controls the Universal Dimensionair also takes on the role of a dual master air gage comparator. Select the appropriate dial configuration and use it with virtually any dual master air tooling and span masters to master the gaging span to the meter. Usually, product tolerance limits are selected as the mastering dimensions, assuring that parts can be easily classified as good or bad within the range of the comparator.

The user sets system sensitivity (scale factor) by adjusting the air comparator span to correspond to the difference between minimum and maximum setting masters, thus setting the sensitivity of all the components of the gaging system.

Features

- Uses regular shop air (60 -150 psig).
- Internal pressure regulators and differential meter assure ultimate stability over full operating range.
- Adjust span and zero setting to tune the gaging range to the interchangeable dial ranges.
- Interchangeable dials - dials provide an easy, inexpensive means to accommodate various ranges
- High visibility meter has fine line graduations and a needle thin hand for clear, precise readings.
- An air filter is included to remove dust and dirt contaminants from airline.
- Tooling mounts to the front of the unit. Adaptors are available for virtually any tooling configuration.



Interchangeable Dials



Universal Dimensionair® Air Gaging Comparator

Technical Data

Dial Size	82.6mm/3.25in diameter
Housing Dimensions	127mm x 187mm x 197mm(high) 5in x 7.125in x 7.75in
Weight (including filter) approx.	6.7kg/14.25 lbs.
Operating Pressure	414-1034kPa/60-150 psig

A plastic protective cover for Universal Dimensionair is available Order No. **ACV-1**

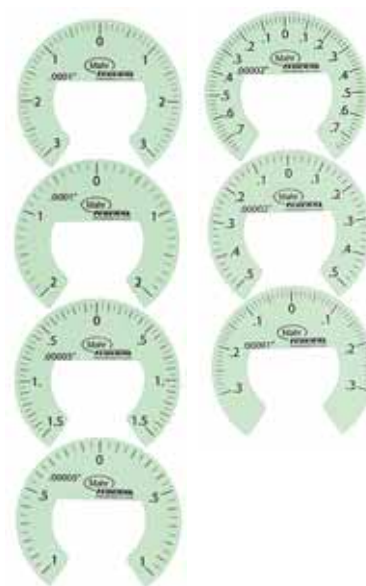
Each Universal Dimensionair is furnished with an adaptor (for connecting standard Mahr Federal air tooling) Optional adaptors are available for virtually any air tooling application.

Ordering Information

Universal Dimensionair, complete with air filter and tooling adaptor for standard Mahr Federal single master air tooling. Supplied with one 2242662 Dial. **Order No. 2098125**

Optional Dials

	Total Range	Range	Dial Graduations	Magnification	Order No.
(Inch)	.006"	±.003"	.0001"	1250:1	2242760
	.004"	±.002"	.0001"	1875:1	2242761
	.003"	±.0015"	.00005"	2500:1	2242662
	.002"	±.001"	.00005"	3750:1	2242763
	.0015"	±.00076"	.00002"	5000:1	2242764
	.001"	±.0005"	.00002"	7500:1	2242765
	.0006"	±.0003	.00001"	10000:1	2242766
(Metric)	152µm	±72µm	2µm	1250:1	2242770
	100µm	±50µm	2µm	1875:1	2242771
	76µm	±38µm	1µm	2500:1	2242772
	50µm	±25µm	1µm	3750:1	2242773
	38µm	±19µm	0.5µm	5000:1	2242774
	15.2µm	±7.6µm	0.2µm	10000:1	2242776



Tooling Adaptors

Adaptors are available for many standard-tooling configurations:

Thread/Adaptor style	Plug Type Sheffield/Edmund/Others	Order No.
1/4-28	2.7686mm/.109" to 12.547mm/.494"	AAD-193* AAD-312
10-32	12.547mm/.494" to 23.876mm/.940"	AAD-194* AAD-313
1/2-20	23.876mm/.940" to 139.7mm/ 5.500"	AAD-195* AAD-314
1/8 Barb		2242767
Setlock	Moore	2242777
8mm	Mahr Row	2240621
12mm	Mahr Row	2240623
9/32 - 40	Mahr Federal High Mag	AAD-165



* Includes bleed to simulate MFI jetting.