

Air Gage Series Classifications & Interchangeability

Interchangeability The compatibility of various makes of air gage readouts and gaging members varies widely. Readouts designed for single setting master operation have factory preset sensitivities, and must be operated with gaging members that have gaging nozzles with matching sensitivities. Readouts with user adjustable metering valves can accommodate most makes of gaging members, but they must be scaled using two setting masters for each air gage member. Western's air gage readouts can be configured to operate both single and dual mastered gaging members but this choice must be specified when ordering.

Series classifications are used to define air gage members and air comparator instruments that are interchangeable. Order codes for gaging members utilize two digit series classifications in which the first digit indicates the type of readout the member is intended to be operated with, and the last digit indicating the nominal operating clearance between the gaging member and the workpiece.

Series 10 Air gage members are designed to operate with back pressure type instruments incorporating user adjustable metering valves. These instruments accommodate a wide range of nozzle sizes, so practically all sizes of gaging members can be operated. Being user calibrated, two setting masters are required for each gaging member.

Series 40 & 50 Air gage members are designed for use with flow meter type "glass tube" column instruments. These readouts require series 40 members that have .078" jets in order to obtain the magnifications marked on the flow tubes. Series 50 air gage member are for use on columns with fractional amplification scales that correct for the reduction in magnification that occurs when smaller than standard jets are used. Series 10 gaging members have significantly larger nozzle recess depths than the series 40 & 50 members and, generally will not operate on flowmeter columns, but series 10 readouts will operate series 40 and 50 gaging members.

Series 60 thru 80 Readouts are back pressure type instruments intended for single master operation. Flow restrictors in these instruments are not user adjustable. They are factory calibrated to predetermined pneumatic scale factors using master test orifices. Gaging members made for these instruments have gaging nozzles that are sized to match the scale factor of the comparator series which they are to be used. Note that series 70 gaging members utilize smaller jets, cost more, and have less gaging range than the series 60 members; consequently it is recommended that they be used only in applications requiring small jet holes.

DUAL MASTER SYSTEMS

Series 10 Air gage members use on **Western Gage Corporation spec 10 Readouts**

A/so:

Edmunds Gage
Moore Products
Air Gage Products (El Segundo, CA)
Air Gage Company (Livonia, IL)
Sheffield A-E columns
Other adjustable dial type gages & adjustable air-electronic columns

Series 40 Air gage members Use on Sheffield flow meter (glass tube) columns with full amplification scales. Series 40 members require .078" jets and are not available in sizes below .323".

Series 50 Air gage members use on Sheffield flow meter (glass tube) columns with fractional amplification scales. These members utilize smaller than .078" air jets.

SINGLE MASTER SYSTEMS

Series 60

Spec. 63 Air gage members use on:

Western Gage Readouts calibrated Series 60 or Mahr-Federal Dimensionair D-5000, D-8000, EAG-32XXX (Scale ± 0.00075 " Tool Code 20)

Spec. 64 Air gage members use on:

Western Gage Readouts calibrated Series 60 or Mahr-Federal Dimensionair D-2500, D-4000 / EAG-31XXX (Scale ± 0.0015 " Tool Code 50)

Series 70

Spec. 71 Air gage members use on:

Western Gage Readouts calibrated Series 70 or Mahr-Federal Dimensionair D-20000, D-32000 / EAG-34XXX (Scale ± 0.00015 " Tool Code 5)

Spec. 72 Air gage members use on:

Western Gage Readouts calibrated Series 70 or Mahr-Federal Dimensionair D-10000, D-16000 / EAG-33XXX (Scale ± 0.0003 " Tool Code 10)

Series 80

Spec. 85 Air gage members use on:

Western Gage Readouts calibrated Series 80 or Mahr-Federal Dimensionair D-1250 / EAG(N.A.) (Scale ± 0.003 " Tool Code 100)

Western Gage's sales & engineering staff is available to assist with your air gage specifications.