

Air Gauging

Air Gauging is a fast, user friendly method of providing high precision results in even the most challenging of shop-floor environments. Using air flow volumes and pressures to measure parts, air gauging is a reliable, repeatable technology well-suited for applications such as precision medical tapers where tolerances are tight. Air gauging technology is flexible; enabling measurement of not only dimensions but geometric and relational characteristics, such as squareness and parallelism; ovality, taper, and straightness of bores; and distance between hole centres.

Bowers PC-2200 Air/Electronic Column

The **Bowers PC-2200** is a state of the art flexible electronic/air column capable of operating with air gauging products and measuring probes. The advanced new column contains a multitude of measuring functions including static and dynamic gauging, classification grading, probe mixing, (A+B), (A-B), etc.

Features

- Metric/Imperial
- 3 colour LED display
- Digital display
- Status indicator
- 2 probe input
- 4 probe input option
- Probe mixing, (A+B), (A-B), etc.
- Compatible with most electronics probes
- Air convertor option (1 or 2)
- Dynamic mode Max, Min, TIR, etc.
- Tolerance limit setting
- Approach limit setting
- Calibration, single or Max/Min
- Accuracy 0.5% full scale +/- resolution
- 6 range settings
- Resolution 0.1um (5 settings)
- Grading (1-100)
- RS-232 output
- Can be linked to PLC or Logic controller
- Dual supply voltage (220 / 110 volt)



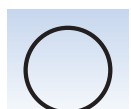
Concentricity



Squareness



Runout



Ovality



Flatness



Diameter



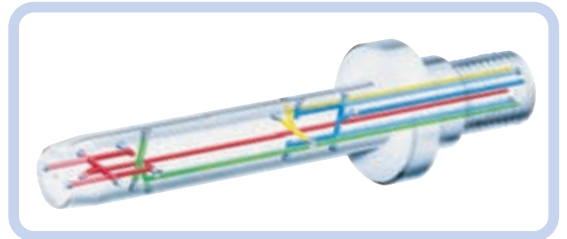
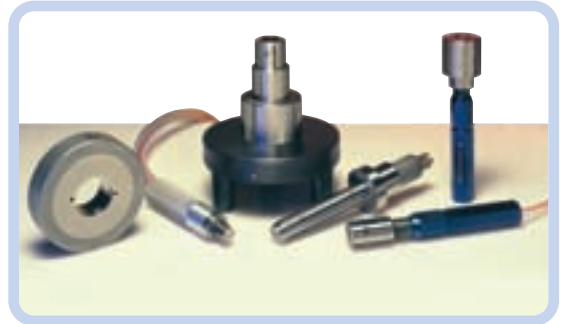
Parallelism

Bowers Air Plugs and Rings

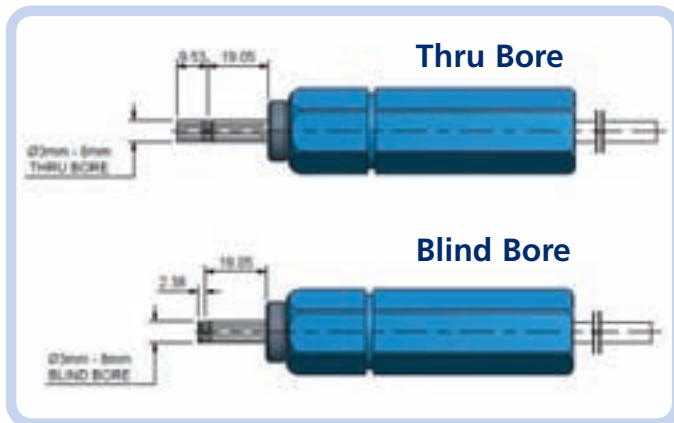
Bowers offers the most comprehensive range of standard air plugs, rings, calipers, etc, currently available. To complement this service we also produce bespoke air gauging products to help solve customer's specific measuring problems. Our hi-tech manufacturing plant incorporates a first class UKAS calibration laboratory, ensuring the quality and accuracy of our air gauging products.

Features

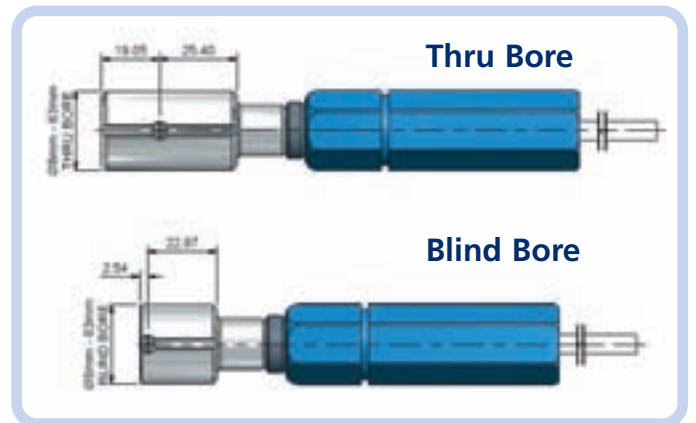
- High resolution
- 3mm to 150mm diameter
- High repeatability
- Non contact
- Static or dynamic measurement
- Multi parameter measurement
- Compatible with instruments from other sources
- Air plugs for internal measurement
- Air rings and calipers for external measurement
- In-cycle, in-process and post-process



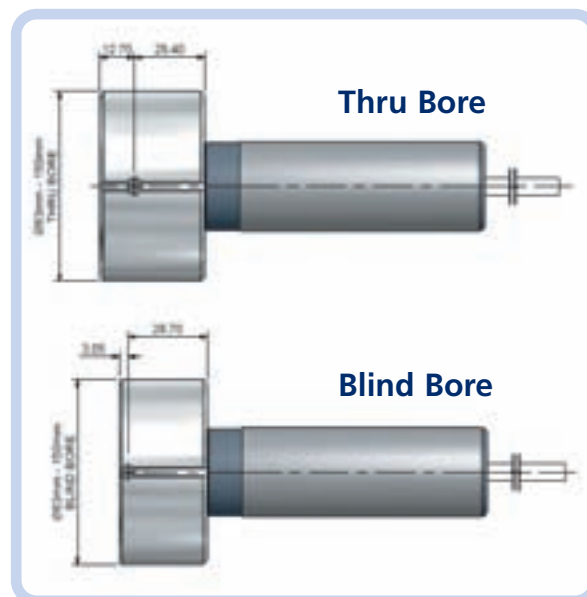
Standard: 3-8mm



Standard: 8-63mm

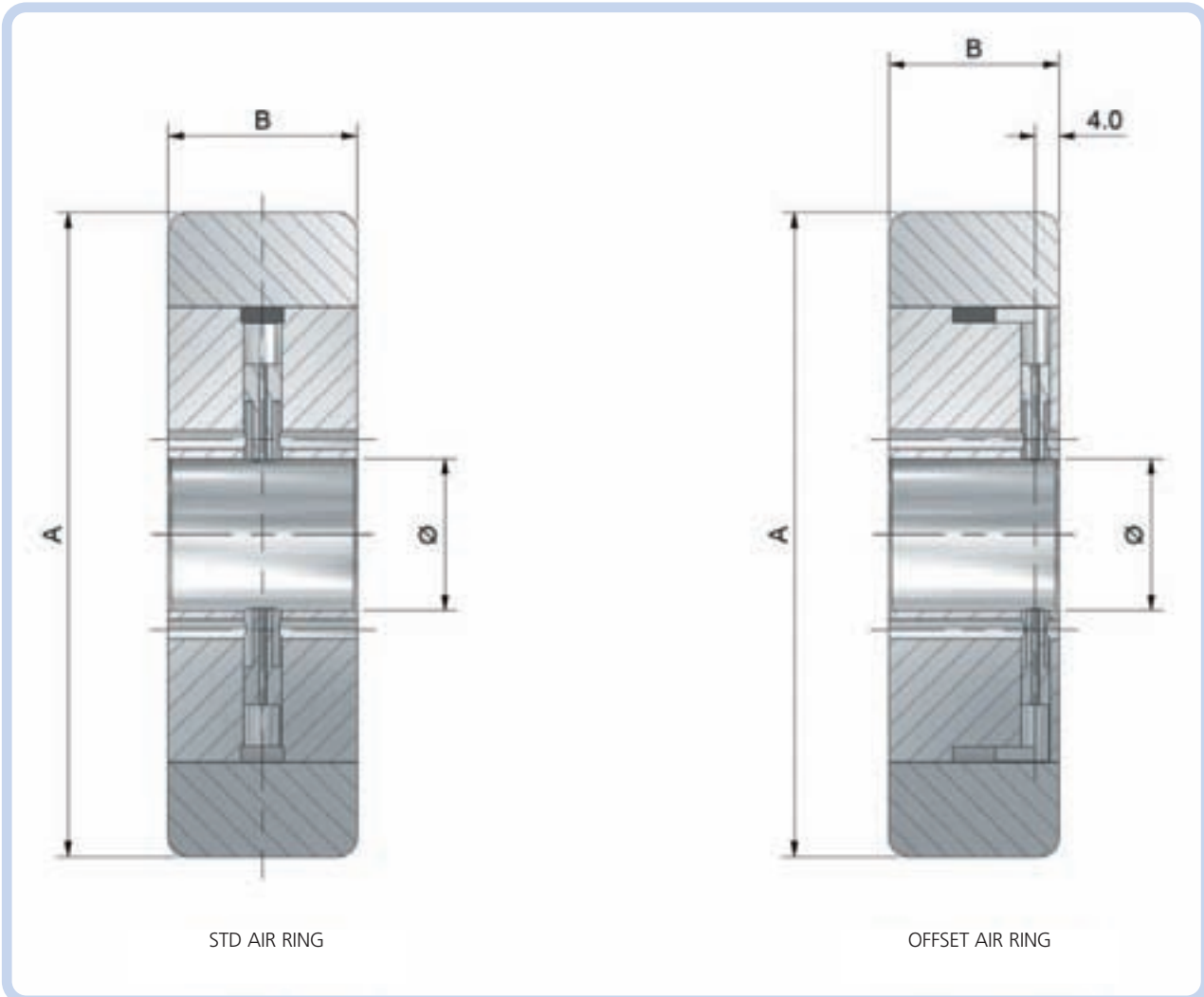


Standard: 63-150mm



Bowers Air Rings

Air Rings - Standard & Offset

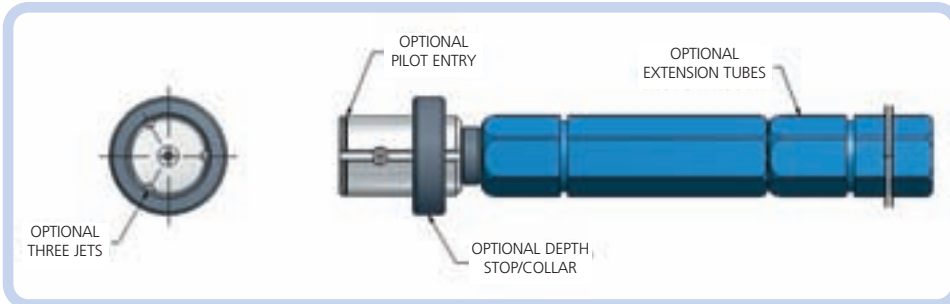


AIR RINGS - SPECIFICATION

Size Range Ø	A (mm)	B (mm)
3.0 - 6.3	63.5	25.4
6.3 - 25.4	82.6	28.6
25.4 - 38.1	108	31.8
38.1 - 50.8	120.7	31.8
50.8 - 63.5	133.4	31.8

Air Gauging Options and Applications

Options



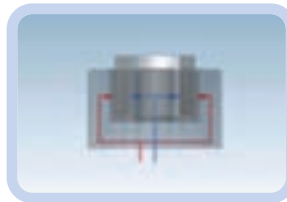
Applications



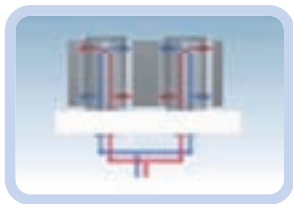
Straightness



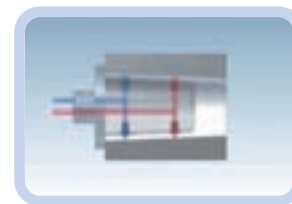
Concentricity of 2 Inside Diameters



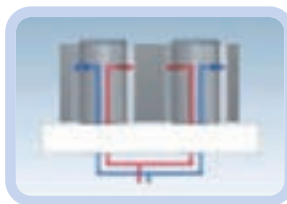
Simultaneous Int/Ext Measurement



Parallelism of 2 Bores



Taper



Centre Distance of 2 Holes

PC-2200 Electronic Column

Code No	Description	Price (£)
55-MCOL2	PC-2200 Column mm/inch	£902.00
55-MAIND2	A-IND2 analogue board (HBT) - 2 channels	£125.00
55-MAIND4	A-IND4 analogue board (HBT) - 4 channels	£244.50
55-MALVD2	A-IND2 analogue board (LVDT) - 2 channels	£125.00
55-MALVD4	A-IND4 analogue board (LVDT) - 4 channels	£244.50
55-MACAP2	A-CAP2 analogue board (Sylvac) - 2 channels	£191.00
55-MACAP4	A-CAP4 analogue board (Sylvac) - 4 channels	£383.50

PC-2200 Air / Electronic Column

Code No	Description	Price (£)
55-MCOL2	PC-2200 Column mm/inch	£902.00
55-MC	AIR Converter + regulator	£425.00
55-MAIR1	AIR1 1 channel analogue board	£131.50
55-MAIR2	AIR2 2 channels analogue board	£250.00
55-PC2332	Cable, column to A/E converter	£24.00
55-WKXT4248	Air Regulator / Filter	£122.00

Accessories

Code No	Description	Price (£)
55-PC2302	Power jump cable	£10.00
55-PC2311	RS232 cable (9p/M/F)	£20.00
55-PC2312	Output cable (9p/M-> no connector)	£15.00
55-PC2312	External control cable (9p/M-> no connector)	£15.00
55-PC2312	DC-out cable (9p/M-> no connector)	£15.00
55-PC2321	Foot pedal with cable for 1 col.	£24.00
55-PC2341	Switch box (4 functions) with cable for 1 col.	£80.00
55-PC2332	CH-BUS cable for 2 col.	£24.00
55-SOFTWARE	Programming Software	£125.00

Aluminium Base plates

Code No	Description	Price (£)
55-MALP 1	For 1 Column	£48.50
55-MALP 2	For 1 Column & 1 Converter	£56.50
55-MALP 3	For 1 Column & 2 Converters	£77.50
55-MALP 4	For 2 Column & 2 Converters	£103.00
55-MALP 5	For 2 Column & 3 Converters	£134.50
55-MALP 6	For 2 Column & 4 Converters	£170.00