

Thank you for purchasing a Sealey product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.



IMPORTANT

PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS, AND CAUTIONS. USE THIS PRODUCT CORRECTLY AND WITH CARE, FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY.

1. SAFETY INSTRUCTIONS

- ❑ **WARNING!** Ensure Health and Safety, local authority and general workshop practice regulations are adhered to when using tools and equipment.
- x **DO NOT** use the gauge if damaged.
- x **DO NOT** apply a voltage to any part of the gauge.
- ✓ Maintain the gauge in good and clean condition for best and safest performance.
- ✓ Keep the work area clean, uncluttered and ensure there is adequate lighting.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- ✓ Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery. Contain or tie back long hair.
- ✓ Keep children and unauthorised persons away from the work area.

2. INTRODUCTION & SPECIFICATION

The gauge operates on a precision mechanism coupled to electronic digital readout. Instantly switchable between Metric and Imperial units, it includes a zero function and comes fitted with mounting lug. The unit comes supplied in storage case with SR44(1.5V) battery included.

| Model: | Measuring Range: | Resolution: | Repeatability: |
|---------|------------------|------------------|------------------|
| AK9612D | 0 - 10mm / .4" | 0.01mm / 0.0005" | 0.01mm / 0.0005" |
| AK9613D | 0 - 30mm / 1.18" | 0.01mm / 0.0005" | 0.01mm / 0.0005" |

Max. measuring speed:
1.5m/s or 60"/s
1.5m/s or 60"/s

Working conditions: Temperature: 0 ~ 40°C
Relative humidity: < 80%
Storage temp: -10 ~ 60°C

Power: One 1.55V Silver Oxide button cell. Estimated life 8 - 12mths on 1 battery.

Key to Fig.1.

- | | |
|------------------------|-----------------------|
| 1. Zero setting button | 5. mm/inch Conversion |
| 2. Lift cap | 6. Function button |
| 3. Upper sleeve | 7. Lower sleeve |
| 4. LCD display | 8. Measuring spindle |
| | 9. Measuring head |

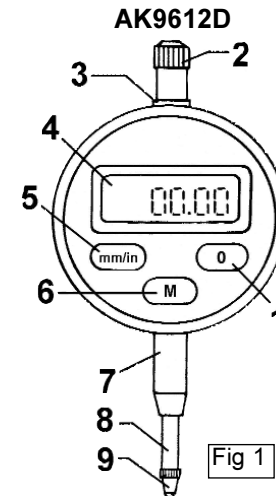


Fig 1

3. OPERATION

- 3.1. **Preparation:** Clean the measuring spindle (8), head (9), lower sleeve (7) and surfaces with soft cotton fabric. Check to ensure the unit is undamaged and in good working order.
Turn the gauge on by pressing the units button (mm/in) or by moving the spindle.
- 3.2. Press the "mm/in" button (5) to select the desired units of measurement. NOTE: If the function symbols are showing at the top of the display, repeatedly press the blue 'M' button until no symbols show.
- 3.3. Clamp the gauge and ensure that it will remain steady while work is in progress.
- 3.4. **BASIC MEASUREMENT.**
To take a basic measurement bring the measuring tip into contact with the surface of the workpiece so that a movement of at least 0.15mm is shown on the display. Then press the red '0' button to zero the display. Rotate/move the workpiece and observe the display.
- 3.5. **MAX/MIN MEASUREMENT**
The gauge will display the maximum (positive) and minimum (negative) movement either side of a zero datum. (If the function symbols are showing at the top of the display, keep pressing the blue 'M' button until no symbols show.)
Bring the measuring tip into contact with the workpiece so that the spindle is sufficiently depressed to accommodate the likely minimum and maximum movement of the workpiece. Press the red '0' button to zero the display. Press the blue 'M' button so that an 'H' (hold) symbol appears at the top of the display.

Press the '0' button again so that the 'H' symbol changes to an F.T symbol. The gauge is now in 'fast trace' mode and will show any movement above and below the set zero datum as the workpiece is moved.

3.6. **MAX/MIN DISPLAY & HOLD.**

The gauge can be set to display and hold either the maximum or minimum limit of movement of the work piece. (If the function symbols are showing at the top of the display, keep pressing the blue 'M' button until no symbols show.) Bring the measuring tip into contact with the workpiece so that the spindle is sufficiently depressed to accommodate the likely minimum and maximum movement of the workpiece. Press the red '0' button to zero the display.

3.7. **To show and hold the minimum figure** press the blue 'M' button 3 times so that an 'H' symbol and a 'MIN' symbol appear at the top of the display. Now press the red '0' button so that the 'H' symbol changes to the 'F.T' symbol. Rotate/move the workpiece and observe the display. As the spindle reaches its greatest negative travel (spindle extending) and then moves back towards the zero datum the 'minimum' figure will be shown and retained on the display. Keep the gauge in contact with the workpiece. Make a note of the minimum figure before proceeding to obtain the maximum figure.

3.8. **To show and hold the maximum figure** press the blue 'M' button 3 times so that an 'H' symbol and a 'MAX' symbol appear at the top of the display. Now press the red '0' button so that the 'H' symbol changes to the 'F.T' symbol. Rotate/move the workpiece and observe the display. As the spindle reaches its greatest positive travel (spindle retracting) and then moves back towards the zero datum the 'maximum' figure will be shown and retained on the display.
To return the gauge to basic mode repeatedly press the blue 'M' button till all symbols disappear from the top of the display. Then 'zero' the display by pressing the red '0' button. The gauge will turn off automatically when not used for 3 minutes.

4. MAINTENANCE







- 4.1. The gauge must be kept clean at all times - DO NOT USE WATER. The surfaces may be wiped with pure alcohol - DO NOT USE ACETONE.
- 4.2. **Replacing the battery.** (Ensure that the work area is clean and dust free.)
- 4.3. Remove the four small countersunk screws that hold the backplate in place and lift off the backplate.
- 4.4. A small circular metal plate retains the battery. Remove the single screw fixing and lift off the plate.
- 4.5. Remove the old battery.
- 4.6. Place a new battery into the recess with the button side down so that + (positive) symbol is visible on the flat back of the cell.
- 4.7. Replace the small battery retaining plate on top of the battery and retain with the single screw.
- 4.8. Refix the backplate onto the gauge and hold in place with the four small countersunk screws.



5. TROUBLE SHOOTING

| Problem: | Possible cause: | Solution: |
|---|--------------------------------------|--|
| Display flashes constantly. | Low battery. | Replace the battery. |
| Fixed display. | Circuit failure. | Remove battery, wait 1 minute, reinstall battery. |
| No display when measuring spindle is moved. | Poor battery contact or low battery. | Check to ensure battery contact is sufficient or replace battery. |
| Indicating "error beyond limit" after it has been used for some time. | Dirt in the transducer. | Remove the rear cover and blow on the chip with clean pressurised air to a limit of < 5kg/cm3. |

NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.
IMPORTANT: No liability is accepted for incorrect use of product.
WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.
INFORMATION: For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including your postcode.



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