



ENGLISH

# Datasheet

## RS Pro Large Electronic Digital Caliper 600mm / 24"

RS Stock No: 877-1788



### Specifications:

Hardened stainless steel frame and measuring jaws

Fine adjustment with knurled locking screws

Clear LCD Display

Large 13mm digits

Inch/Metric conversion

Absolute / Relative measuring modes

Pre-set Facility

Resolution: 0.01mm / 0.0005"

Repeatability: 0.01mm / 0.0005"

Measuring Speed Maximum: 1 metre per second

Individual serial numbers

Power: 1 x Lithium Battery CR 2032 3V

Operating temperature: 5 - 40°C

Relative humidity: Maximum 80%

Warranty: 1 year

| Order Code | Manufacturers Code | Description                          |
|------------|--------------------|--------------------------------------|
| 877-1788   | 49-900-600N        | Electronic Digital Caliper 600mm/24" |



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### Button Functions:

|   |        |                                   |
|---|--------|-----------------------------------|
| 1 | ON/OFF | Power on/off                      |
| 2 | ZERO   | Zero sets display                 |
| 3 | ABS    | Selects relative or absolute mode |
| 4 | In/mm  | Selects inch or metric mode       |
| 5 | Pre+   | Moves digits in plus direction    |
| 6 | Pre-   | Moves digits in minus direction   |

| Range     | Resolution       | Repeatability    | External Jaw Length | Internal Jaw Length |
|-----------|------------------|------------------|---------------------|---------------------|
| 600mm/24" | 0.01mm / 0.0005" | 0.01mm / 0.0005" | 100mm               | 20 x 18mm           |

### Accuracy:

$\pm 0.02\text{mm} + (0.00005 \times L)$

where L = length from origin to given position

### Operating Instructions:

When using the Caliper for the first time or after a period of non-use, wipe the beam scale with a dry clean cloth

to remove any condensation or oil deposits.

Prior to setting the caliper for measuring, first clean the measuring faces with a soft clean cloth or paper.



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### 600mm / 24"

#### Setting Instructions:

##### Absolute Measurement External:

Switch caliper on and slide measuring jaws together.  
The caliper will be in Absolute mode when it is first switched on (INC not displayed)  
Select required measuring system either Metric or Inch  
With the measuring jaws together press ZERO to zero display in this position  
The caliper is now ready to indicate absolute measurement over its full range

##### Absolute Measurement Internal:

Switch caliper on and slide measuring jaws together.  
The caliper will be in Absolute mode when it is first switched on (INC not displayed)  
Select Metric measuring system  
The caliper jaws are ground to start internal measurements at 20.00mm so initial setup is carried out in metric mode and if required can be converted to inch following setup  
Press and hold ZERO button so SET flashes on screen  
Press Pre+ whilst holding ZERO button, the digits will now advance in a plus direction towards 20.00mm  
The digits will start slowly and then gather speed. Release the Pre+ button to stop the digits before reaching 20.00mm. Press Pre+ again and the digits will start slowly making it easier to stop at the desired size.  
If the size is over-run, use the above method and the Pre- button to achieve the correct size setting.  
When the size is achieved release all buttons and SET will continue to flash on the display  
Press ZERO button to set preset size into the caliper's memory  
The caliper is now ready to measure internal dimensions above 20.00mm



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### Relative Measurement

When set in Absolute mode move measuring jaw to display the desired dimension.

Press ABS button to zero the caliper in this position

INC will be displayed on the screen

Movement of the measuring jaw will indicate a + or – reading relative to the zero set position

Pressing the ABS/zero button will return the caliper to its original Absolute zero position ready for taking

absolute measurements

### Pre-Set Facility

Use same system to preset any size as used for setting internal measurement datum size

### Operating Care

Clean measuring faces with dry soft cloth

Keep away from strong magnetic fields

Prevent ingress of oil / liquids into electronics

Remove battery if instrument is not used for a long period of time

Do not disassemble or drop the instrument

Do not mark instrument by engraving, etching or any other permanent marking method, as this will

invalidate the warranty

### Fault Finding

| Fault   | Cause                           | Action  |
|---|---------------------------------|---|
| Display flashes                                   | Battery voltage below 1.45volts | Replace battery   |
| Display frozen                                    | Circuit overload                | Remove battery and replace after 4 minutes  |
| Accuracy below specification but within +/- 0.1mm | Dirt in sensor                  | Remove slider cover assembly, clean face of sensor with dry clean compressed air (5kg/cm <sup>2</sup> ) |
| No display  | Poor battery contact            | Remove battery and carefully adjust battery contacts, replace battery.                                  |
|   | Dead battery                    | Replace battery.  |