

Edge Finders provide a fast and accurate method of allowing the work piece to be moved to a known position relative to the centreline of the machine spindle

Edge Finders can only be used on conductive materials as they depend on an electrical circuit being made through the machine tool when the probe touches the work piece.

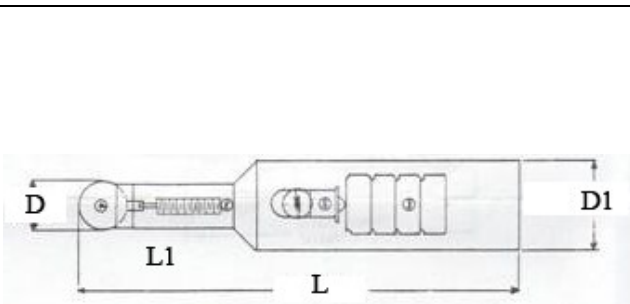
4 x Highly visible red indicator lights placed at intervals of 90° around the body of the instrument.

Main Body and Ball Contact manufactured from high quality tool steel, hardened to 60 HRC

Instrument Accuracy: T.I.R. within 0.01mm / 0.0004"

Packed Weight and Dimensions

| Code | Description | Weight g | W mm | H mm | L mm |
|-----------|--------------------|----------|------|------|------|
| EF-Metric | Edge Finder Metric | 139 | 35 | 30 | 98 |
| EF-Imp | Edge Finder Inch | 139 | 35 | 30 | 98 |
| Battery | Battery A76 / LR44 | 2 | 25 | 5 | 25 |

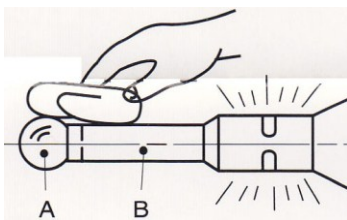


Dimensions:

| Code | D | D1 | L | L1 | ToI. D1 |
|-----------|------|-------|-------|-------|----------|
| EF-Metric | 10mm | 20mm | 93mm | 32mm | ±0.006mm |
| EF-Imp | 0.4" | 0.75" | 3.66" | 1.25" | ±0.0002" |

Parts:

| | |
|---|--------------------------------|
| 1 | 4 x Battery A76 / LR44 |
| 2 | Lamp #338 |
| 3 | Spring |
| 4 | Ball Metric: 10mm or Ball Inch |



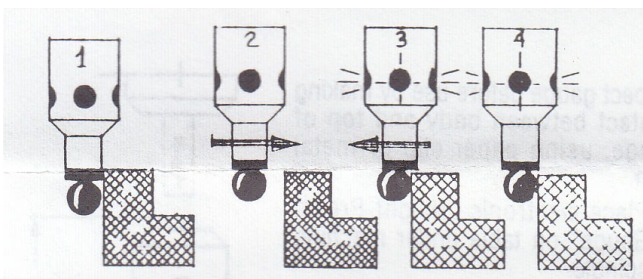
Inspect the Edge Finder before use by making contact between ball and body using a metal paper clip or steel rule

1 Do not place the Edge Finder's body below the surface of the work piece
Ensure that the centre of the ball is approximately 1mm below the surface of the work piece

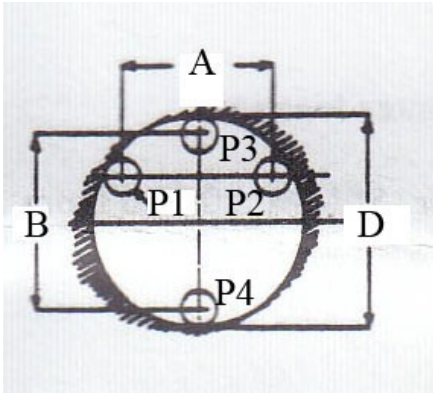
2 Feed the work piece slowly towards the Edge Finder.
When contact is made between ball and work piece the indicator lamp will illuminate.

3 The Edge Finder has a spring loaded ball which can run out of its ceramic seat and will protect the instrument from damage due to over travel

4 In the case of over travel, move backwards and re feed until the lamp illuminates.
At this position, the work piece can be moved half the diameter of the ball to bring the centre line of the spindle in line with the edge of the work piece



Hole Diameter Measurement & Centre Location



- 1 Move the work piece below the sensor and align within the hole.
Position the sensor spindle at a depth between 1 - 5mm from the top of the surface of the hole
Feed the work piece on its X axis slowly towards the sensor spindle so it touches at position P1. Set DRO to zero
Traverse the work piece on its X axis so that the sensor touches the hole at P2. The DRO now indicates the A dimension
- 2 Move the work piece back along its X axis by half the A dimension
- 3 The centre line of the sensor now coincides with the centreline of the hole on its X axis.
- 4 Feed the work piece on its Y axis slowly towards the sensor spindle so it touches at position P3. Set DRO to zero
- 5 Move the work piece slowly back along its Y axis towards the sensor spindle so it touches at position P4. The DRO now indicates the B dimension.
- 6 To calculate the diameter of the hole: Add B dimension to Sensor Spindle Diameter
- 7 To align machine spindle centre with hole centre: Move the work piece back along its Y axis by half the B dimension