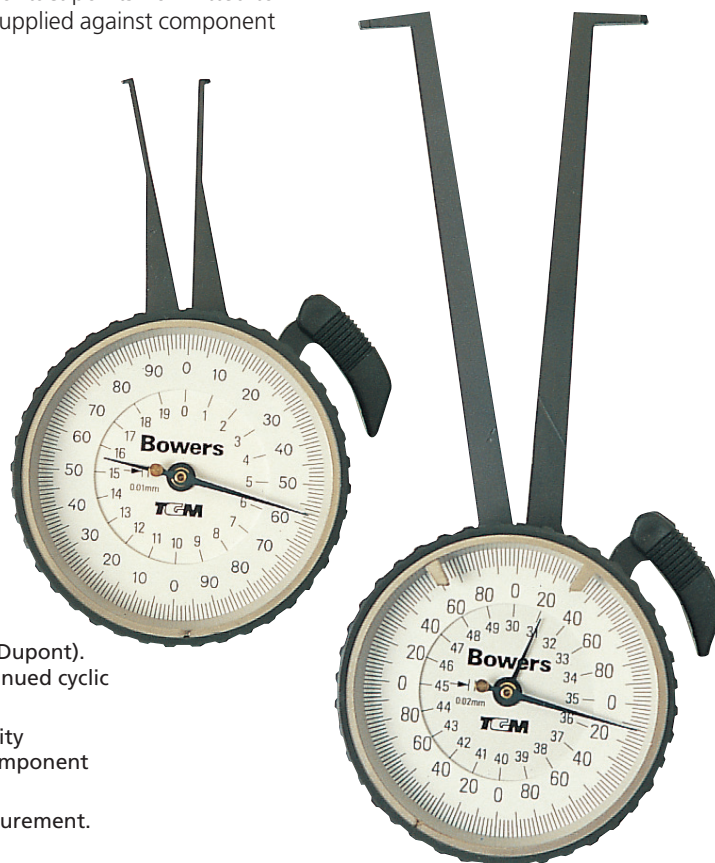


## TGM Internal Minor Calipers

The extensive range of internal **Bowers TGM calipers** has been further improved to ensure maximum durability and accuracy, with carbide contact points now fitted to all models. Quotations for non-standard calipers can be supplied against component drawings.



### Features:

- High performance braded cable made from Dacron (by Dupont). For longer cable life and excellent repeatability. In continued cyclic testing Dacron out-performed braded steel cable.
- Carbide ball contacts as standard to give enhanced quality of feel, longer contact life and less prone to marking component surfaces.
- Longer tapered contacts for easy access on groove measurement.
- Easy setting with rotating scale and protective bezel for workshop use.

### SHORT LEG TECHNICAL DATA

#### Metric

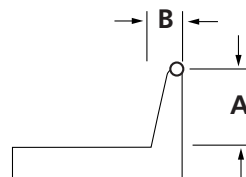
| Model No.      | Measuring Range mm | Dimensions A | B   |
|----------------|--------------------|--------------|-----|
| <b>TGA020M</b> | 5 - 15             | 1.1          | 1.5 |
| <b>TGA021M</b> | 10 - 20            | 3.3          | 1.5 |
| <b>TGA022M</b> | 15 - 25            | 4.0          | 1.8 |
| <b>TGA023M</b> | 20 - 30            | 7.0          | 2.5 |
| <b>TGA024M</b> | 25 - 35            | 9.0          | 2.8 |
| <b>TGA025M</b> | 30 - 40            | 9.75         | 2.8 |
| <b>TGA026M</b> | 35 - 45            | 9.75         | 2.8 |
| <b>TGA027M</b> | 40 - 50            | 9.75         | 2.8 |

#### Inch

| Model No.      | Measuring Range inch | Dimensions A | B     |
|----------------|----------------------|--------------|-------|
| <b>TGA020i</b> | 0.25-0.75            | 0.044        | 0.060 |
| <b>TGA021i</b> | 0.50-1.00            | 0.125        | 0.060 |
| <b>TGA022i</b> | 0.75-1.25            | 0.250        | 0.100 |
| <b>TGA023i</b> | 1.00-1.50            | 0.375        | 0.110 |
| <b>TGA024i</b> | 1.25-1.75            | 0.375        | 0.100 |
| <b>TGA025i</b> | 1.50-2.00            | 0.375        | 0.100 |

### Short Leg Calipers

Metric graduations 0.01mm  
Imperial graduations 0.0005"  
Effective leg length 39.7mm/1.55"  
A = Maximum groove depth  
B = Maximum groove width at depth A



### LONG LEG TECHNICAL DATA

#### Metric

| Model No.      | Measuring Range mm | Dimensions A | B   |
|----------------|--------------------|--------------|-----|
| <b>TGA040M</b> | 10 - 30            | 3.3          | 1.8 |
| <b>TGA041M</b> | 20 - 40            | 7.0          | 2.5 |
| <b>TGA042M</b> | 30 - 50            | 9.75         | 2.8 |
| <b>TGA043M</b> | 40 - 60            | 9.75         | 2.8 |
| <b>TGA044M</b> | 50 - 70            | 9.75         | 2.8 |
| <b>TGA045M</b> | 60 - 80            | 9.75         | 2.8 |
| <b>TGA046M</b> | 70 - 90            | 9.75         | 2.8 |
| <b>TGA047M</b> | 80 - 100           | 9.75         | 2.8 |

#### Inch

| Model No.      | Measuring Range inch | Dimensions A | B     |
|----------------|----------------------|--------------|-------|
| <b>TGA040i</b> | 0.25-1.25            | 0.044        | 0.060 |
| <b>TGA041i</b> | 0.50-1.50            | 0.125        | 0.060 |
| <b>TGA042i</b> | 1.00-2.00            | 0.375        | 0.100 |
| <b>TGA043i</b> | 1.50-2.50            | 0.375        | 0.110 |
| <b>TGA044i</b> | 2.00-3.00            | 0.375        | 0.110 |
| <b>TGA045i</b> | 2.50-3.50            | 0.375        | 0.110 |
| <b>TGA046i</b> | 3.00-4.00            | 0.375        | 0.110 |

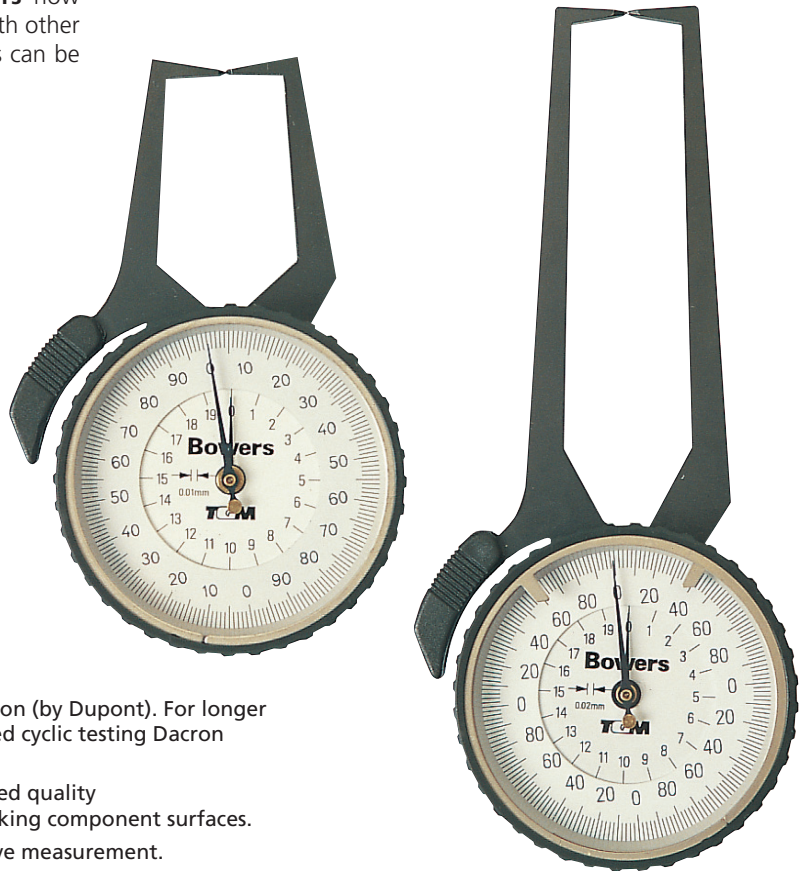
### Long Leg Calipers

Metric graduations 0.02mm  
Imperial graduations 0.001"  
Effective leg length 87mm/3.42"  
A = Maximum groove depth  
B = Maximum groove width at depth A



## TGM External Minor Calipers

The external versions of **Bowers TGM calipers** now include carbide contact points as standard. As with other Bowers TGM products non-standard applications can be quoted against a component drawing.



### Features:

- High performance braided cable made from Dacron (by Dupont). For longer cable life and excellent repeatability. In continued cyclic testing Dacron out-performed braided steel cable.
- Carbide ball contacts as standard to give enhanced quality of feel, longer contact life and less prone to marking component surfaces.
- Longer tapered contacts for easy access on groove measurement.
- Easy setting with rotating scale and protective bezel for workshop use.

### SHORT LEG TECHNICAL DATA

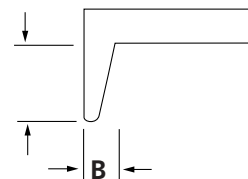
#### Metric

| Model No. | Measuring Range mm | Dimensions A | B   |
|-----------|--------------------|--------------|-----|
| TGA010M   | 0 - 10             | 9.3          | 3.0 |
| TGA011M   | 5 - 15             | 9.3          | 3.0 |
| TGA012M   | 10 - 20            | 9.3          | 3.0 |
| TGA013M   | 15 - 25            | 9.3          | 3.0 |
| TGA014M   | 20 - 30            | 9.3          | 3.0 |
| TGA015M   | 25 - 35            | 9.3          | 3.0 |
| TGA016M   | 30 - 40            | 9.3          | 3.0 |
| TGA017M   | 35 - 45            | 9.3          | 3.0 |
| TGA018M   | 40 - 50            | 9.3          | 3.0 |

#### Inch

| Model No. | Measuring Range inch | Dimensions A | B     |
|-----------|----------------------|--------------|-------|
| TGA010i   | 0-0.50               | 0.375        | 0.120 |
| TGA011i   | 0.25-0.75            | 0.375        | 0.120 |
| TGA012i   | 0.50-1.00            | 0.375        | 0.120 |
| TGA013i   | 0.75-1.25            | 0.375        | 0.120 |
| TGA014i   | 1.00-1.50            | 0.375        | 0.120 |
| TGA015i   | 1.25-1.75            | 0.375        | 0.120 |
| TGA016i   | 1.50-2.00            | 0.375        | 0.120 |

Metric graduations 0.01mm  
Imperial graduations 0.0005"  
Effective leg length 39.7mm/1.55"  
A = Maximum groove depth  
B = Maximum groove width at depth A



### LONG LEG TECHNICAL DATA

#### Metric

| Model No. | Measuring Range mm | Dimensions A | B   |
|-----------|--------------------|--------------|-----|
| TGA030M   | 0 - 20             | 9.3          | 3.0 |
| TGA031M   | 10 - 30            | 9.3          | 3.0 |
| TGA032M   | 20 - 40            | 9.3          | 3.0 |
| TGA033M   | 30 - 50            | 9.3          | 3.0 |
| TGA034M   | 40 - 60            | 9.3          | 3.0 |

#### Inch

| Model No. | Measuring Range inch | Dimensions A | B     |
|-----------|----------------------|--------------|-------|
| TGA030i   | 0-1.0                | 0.375        | 0.120 |
| TGA031i   | 0.5-1.5              | 0.375        | 0.120 |
| TGA032i   | 1.0-2.0              | 0.375        | 0.120 |
| TGA033i   | 1.5-2.5              | 0.375        | 0.120 |
| TGA034i   | 2.0-3.0              | 0.375        | 0.120 |

### Long Leg Calipers

Metric graduations 0.02mm  
Imperial graduations 0.001"  
Effective leg length 87mm/3.42"  
A = Maximum groove depth  
B = Maximum groove width at depth A