

# Dial Test Indicators

Comparison measuring instruments which ensure high quality, high accuracy and reliability.

## SPECIFICATIONS

### Metric

| Order No.   |             |             | Graduation (mm) | Range (mm) | Dial reading | MPE* (µm)       |          |                    |            | Mass (g)    | Measuring force (N) | High accuracy | With revolution counter | Long contact point | Standard | Double scale spacing | Compact | Carbide contact point (Slightly magnetic) | Ruby contact point |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
|-------------|-------------|-------------|-----------------|------------|--------------|-----------------|----------|--------------------|------------|-------------|---------------------|---------------|-------------------------|--------------------|----------|----------------------|---------|---|--------------------|---------------|---------|---|---|----|-------------|-------------|--|--|--|--|--|--|--|--|--|--|
| Basic set   | Plus set    | Full set    |                 |            |              | Measuring range | One rev. | 10 scale divisions | Hysteresis |             |                     |               |                         |                    |          |                      |         |   |                    | Repeatability |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
| 513-424-10E | 513-424-10A | 513-424-10T | 0.01            | 0.5        | 0-25-0       | 6               | -        | 4                  | 45         | 0.3 or less |                     |               |                         |                    |          |                      |         |   |                    |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
| 513-478-10E | -           | -           |                 |            |              |                 |          |                    |            |             |                     |               |                         |                    |          |                      |         |   |                    | 10            | 10      | 5 | 3 | 45 | 0.2 or less |             |  |  |  |  |  |  |  |  |  |  |
| 513-466-10E | -           | -           |                 |            |              | 16              | 10       | 5                  | 3          | 45          | 0.4 or less         |               |                         |                    |          |                      |         |   |                    |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
| 513-414-10E | 513-414-10A | 513-414-10T |                 |            |              |                 |          |                    |            |             |                     |               |                         |                    |          |                      |         |   |                    |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
| 513-426-10E | 513-426-10A | -           |                 |            |              | 1.0             | 0-50-0   | 10                 | -          | 5           | 45                  | 0.2 or less   |                         |                    |          |                      |         |   |                    |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
| 513-404-10E | 513-404-10A | 513-404-10T |                 | 0.002      | 0.2          |                 |          |                    |            |             |                     |               |                         |                    |          |                      |         |   |                    |               | 0-100-0 | 4 | - | 3  | 45          | 0.3 or less |  |  |  |  |  |  |  |  |  |  |
| 513-474-10E | -           | -           |                 |            |              | 0.6             | -        | 7                  | 5          | 4           | 45                  | 0.4 or less   |                         |                    |          |                      |         |   |                    |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
| 513-464-10E | -           | -           |                 | 0.001      | 0.14         |                 |          |                    |            |             |                     |               |                         |                    |          |                      |         |   |                    |               | 0-70-0  | 4 | - | 3  | 45          | 0.3 or less |  |  |  |  |  |  |  |  |  |  |
| 513-415-10E | 513-415-10A | 513-415-10T |                 |            |              |                 |          |                    |            |             |                     |               |                         |                    |          |                      |         |   |                    |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
| 513-477-10E | -           | -           |                 |            |              |                 |          |                    |            |             |                     |               |                         |                    |          |                      |         |   |                    |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
| 513-405-10E | 513-405-10A | 513-405-10T |                 |            |              |                 |          |                    |            |             |                     |               |                         |                    |          |                      |         |   |                    |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
| 513-475-10E | -           | -           |                 |            |              |                 |          |                    |            |             |                     |               |                         |                    |          |                      |         |   |                    |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
| 513-465-10H | -           | -           |                 |            |              |                 |          |                    |            |             |                     |               |                         |                    |          |                      |         |   |                    |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
| 513-425-10E | 513-425-10A | -           |                 |            |              |                 |          |                    |            |             |                     |               |                         |                    |          |                      |         |   |                    |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
| 513-401-10E | -           | -           |                 |            |              |                 |          |                    |            |             |                     |               |                         |                    |          |                      |         |   |                    |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |
| 513-471-10E | -           | -           |                 |            |              |                 |          |                    |            |             |                     |               |                         |                    |          |                      |         |   |                    |               |         |   |   |    |             |             |  |  |  |  |  |  |  |  |  |  |

### Inch

| Order No.   |          |             | Graduation (in) | Range (in) | Dial reading | MPE* (in) |            |               | Mass (g) | Measuring force (N) | High accuracy | With revolution counter | Long contact point | Standard | Double scale spacing | Compact | Carbide contact point (Slightly magnetic) | Ruby contact point |        |       |         |         |          |         |             |             |  |  |  |  |  |  |        |
|-------------|----------|-------------|-----------------|------------|--------------|-----------|------------|---------------|----------|---------------------|---------------|-------------------------|--------------------|----------|----------------------|---------|---|--------------------|--------|-------|---------|---------|----------|---------|-------------|-------------|--|--|--|--|--|--|--------|
| Basic set   | Plus set | Full set    |                 |            |              | One rev.  | Hysteresis | Repeatability |          |                     |               |                         |                    |          |                      |         |   |                    |        |       |         |         |          |         |             |             |  |  |  |  |  |  |        |
| 513-402-10E | -        | 513-402-10T | 0.0005          | 0.03       | 0-15-0       | ±0.0005   | 0.0002     | ±0.0002       | 45       | 0.3 or less         |               |                         |                    |          |                      |         |   |                    |        |       |         |         |          |         |             |             |  |  |  |  |  |  |        |
| 513-472-10E | -        | -           |                 |            |              |           |            |               |          |                     |               |                         |                    |          |                      |         |   |                    | 0.0005 | 0.03  | 0-15-0  | ±0.0005 | 0.0002   | ±0.0002 | 45          | 0.2 or less |  |  |  |  |  |  |        |
| 513-412-10E | -        | 513-412-10T |                 |            |              |           |            |               |          |                     |               |                         |                    |          |                      |         |   |                    |        |       |         |         |          |         |             |             |  |  |  |  |  |  |        |
| 513-479-10E | -        | -           |                 |            |              |           |            |               |          |                     |               |                         |                    |          |                      |         |   |                    | 0.0005 | 0.03  | 0-15-0  | ±0.0005 | 0.0002   | ±0.0002 | 45          | 0.3 or less |  |  |  |  |  |  |        |
| 513-462-10E | -        | -           | 0.0005          | 0.03       | 0-15-0       | ±0.0005   | 0.0002     | ±0.0002       | 45       | 0.3 or less         |               |                         |                    |          |                      |         |   |                    |        |       |         |         |          |         |             |             |  |  |  |  |  |  |        |
| 513-407-10E | -        | 513-407-10T |                 |            |              |           |            |               |          |                     |               |                         |                    |          |                      |         |   | 0.0001             | 0.008  | 0-4-0 | ±0.0001 | 0.0001  | ±0.00004 | 45      | 0.3 or less |             |  |  |  |  |  |  |        |
| 513-403-10E | -        | 513-403-10T | 0.0001          | 0.008      | 0-4-0        | ±0.0001   | 0.0001     | ±0.00004      | 45       | 0.3 or less         |               |                         |                    |          |                      |         |   |                    |        |       |         |         |          |         |             |             |  |  |  |  |  |  |        |
| 513-473-10E | -        | -           |                 |            |              |           |            |               |          |                     |               |                         |                    |          |                      |         |   |                    |        |       |         |         |          |         |             |             |  |  |  |  |  |  | 0.0001 |
| 513-463-10E | -        | -           |                 |            |              |           |            |               |          |                     |               |                         |                    |          |                      |         |   |                    |        |       |         |         |          |         |             |             |  |  |  |  |  |  |        |

### Metric/Inch

| Order No.   |          |             | Graduation           | Range              | Dial reading    | MPE* (µm)       |                    |            |               | Mass (g) | Measuring force (N) | High accuracy | With revolution counter | Long contact point | Standard | Double scale spacing | Compact | Carbide contact point (Slightly magnetic) | Ruby contact point |
|-------------|----------|-------------|----------------------|--------------------|-----------------|-----------------|--------------------|------------|---------------|----------|---------------------|---------------|-------------------------|--------------------|----------|----------------------|---------|---|--------------------|
| Basic set   | Plus set | Full set    |                      |                    |                 | Measuring range | 10 scale divisions | Hysteresis | Repeatability |          |                     |               |                         |                    |          |                      |         |   |                    |
| 513-409-10E | -        | 513-409-10T | 0.002 mm / 0.0001 in | 0.2 mm / 0.0076 in | 0-10-0 / 0-38-0 | 4               | 2                  | 3          | 1             | 45       | 0.3 or less         |               |                         |                    |          |                      |         |   |                    |

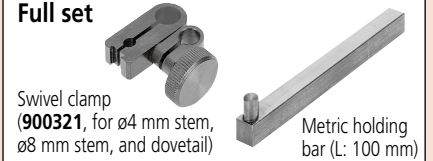
### Inch/Metric

| Order No.   |          |             | Graduation          | Range            | Dial reading    | MPE* (in) |            |               | Mass (g) | Measuring force (N) | High accuracy | With revolution counter | Long contact point | Standard | Double scale spacing | Compact | Carbide contact point (Slightly magnetic) | Ruby contact point |
|-------------|----------|-------------|---------------------|------------------|-----------------|-----------|------------|---------------|----------|---------------------|---------------|-------------------------|--------------------|----------|----------------------|---------|---|--------------------|
| Basic set   | Plus set | Full set    |                     |                  |                 | One rev.  | Hysteresis | Repeatability |          |                     |               |                         |                    |          |                      |         |   |                    |
| 513-406-10E | -        | 513-406-10T | 0.0005 in / 0.01 mm | 0.03 in / 0.7 mm | 0-15-0 / 0-35-0 | ±0.0005   | 0.0002     | ±0.0002       | 45       | 0.3 or less         |               |                         |                    |          |                      |         |   |                    |

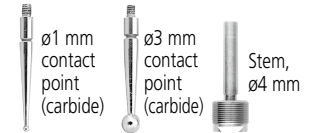
\* We guarantee the accuracy of completed products by inspecting them with the dial face facing upward.  
Note: Stem with dovetail groove is not included in the mass.

## Set Configuration: Metric and Metric/Inch

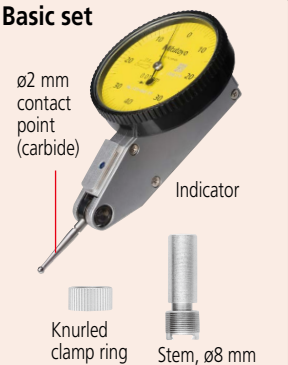
### Full set



### Plus set

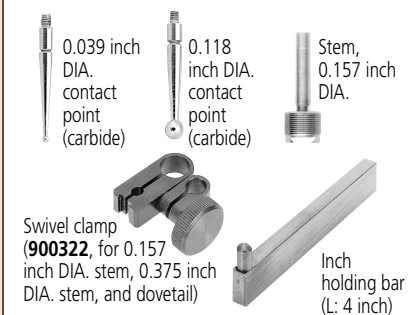


### Basic set



## Set Configuration: Inch and Inch/Metric

### Full set



### Basic set

