

Micrometer discs

For Rapid, Accurate Measurements of Small Parts

Optical measurement by use of micrometer discs in a microscope eyepiece, permits rapid, convenient determination of minute dimensions in small parts, with a precision and flexibility that is difficult and expensive to achieve by mechanical gaging. It also assures positive measurements, so that varying skills of individual operators will not affect the accuracy of measurements. Error due to wear is completely eliminated, since optical measurement is precise and accurate throughout the life of the instrument. The micrometer discs are easy to use and install. Simply place in the microscope eyepiece and assign values through calibration with a stage micrometer. All micrometer discs are 21mm in diameter, 1 to 1.5mm thick.

For optimum performance and accuracy, it is recommended that the 31-15-67 10X Widefield Focusable Eyepiece be used in conjunction with the Micrometer Discs. The use of this eyepiece assures the correct location of the disc in the optical system.

For Conventional Microscopes and Body Tubes

- 31-16-01 Scale 5mm long, ruled to 0.05mm, every twentieth line numbered.
- 31-16-02 Scale 10mm long, ruled to 0.1, every tenth line numbered.
- 31-16-03 To measure 0.001" divisions on the specimen when used with calibrated combination of 16mm objective and 10X Eyepiece.
- 31-16-04 Each least division 0.002" at 2X objective power.
- 31-16-05 Scale 5mm long, ruled to 0.1mm, every tenth line numbered.
- 31-16-07 Each least division 0.005" at 1X objective power.
- 31-16-08 Each least division 0.001" at 3X objective power.

- 31-16-09 Micron Disc with instructions.
- 31-16-11 0.5mm squares. Every second line on two adjacent sides numbered.
- 31-16-12 1.0mm squares. Every line on two adjacent sides numbered.
- 31-16-71 Grid Reticle. 100 squares, 1 x 1 mm each, one central square divided into 25 smaller squares, 0.2 x 0.2 mm each.

For StereoZoom Microscopes

- 31-16-04 100 divisions, each 0.002", with 2X objective power. Numbered every 0.01".
- 31-16-07 100 divisions, each 0.005", with 1X objective power. Numbered every 0.05".
- 31-16-08 100 divisions, each 0.001", with 3X objective power. Numbered every 0.01".
- 31-16-30 Cross line disc, 90° angle ± 1 (line width 0.08mm \pm 0.002mm).
- 31-16-42 150 divisions, each 0.001", with 3X objective power, and 0.0005" with 6X objective power. Numbered every tenth division.
- 31-16-43 100 divisions, each 0.1mm with 1X objective power and 0.02mm with 5X objective power. Numbered every tenth division.
- 31-16-44 150 divisions, each 0.01mm with 7X objective power and 0.005mm at 14X objective power. Numbered every tenth division.
- 31-16-45 Grid reticle. 64 squares, one of which is divided into 25 squares. Smallest square is 0.002" and intermediate square 0.010" with 5X objective power.
- 31-16-46 Protractor reticle, single degrees through 360°. Numbered every 15° from 0 to 180. Can be used with 10X or 15X wide field eyepieces.
- 31-16-47 General purpose reticle. One quadrant, radii 1/32" to 1/4" in 1/32" steps. One quadrant single degrees, numbered every 15° from 15 to 75. Two linear scales—divisions of 0.005" (0 to .3") and 0.1mm (0 to 5mm) with 1X objective power. For 10X wide field eyepiece, but can be used in 15X wide field eyepiece.

- 31-16-71 Grid Reticle. 100 squares, 1 x 1 mm each, one central square divided into 25 smaller squares, 0.2 x 0.2 mm each.
- 31-16-87 Stage Micrometer, glass, ruled to 0.005"
- 31-16-89 Stage Micrometer, glass, ruled to 0.001"
- 31-16-90 Stage Micrometer, glass, ruled to 0.01mm
- 31-16-99 Stage Micrometer, precision ruled to 0.01mm

For BALPLAN Microscopes

- S-31-16-69 Micro Disc - Read .001"
- 31-16-33 Graphite Flake, Reticle (25X)
- 31-16-34 Graphite Flake, Reticle (100X)
- 31-16-35 Micrometer Scale (.001")
- 31-16-36 Dirt Count Reticle
- 31-16-37 Intercept Length Reticle
- 31-16-38 Twinned Grain Size Reticle
- 31-16-71 Grid Reticle. 100 squares, 1 x 1 mm each, one central square divided into 25 smaller squares, 0.2 x 0.2 mm each.

