

PELCO[®] SEM Low Magnification Ruler Disc

Product No. 630

This comes mounted on a variety of standard mounts, or it can be mounted on a custom mount. The original scale was produced on a 15mm diameter glass disc as an inset on a rectangular microscope slide. The PELCO[®] SEM Low Magnification Ruler Disc is reproduced on a 1/8" nickel-plated copper disc from this master. The scale is 1mm long with 100 markings, subdivided to 0.01mm and highlighted every fifth and tenth line. Selected intervals on the original stage micrometer have been measured using a traveling microscope. The movement of the microscope was measured by means of a helium-neon laser interferometer. The wavelength of the laser has been determined by reference to the International Krypton-86 Standard. The distance between the lines was measured along the longitudinal axis of the scale.

<u>Number of Interval</u>	<u>Length of Interval at 20°C (in mm)</u>
0 to 10	0.0998
0 to 20	0.1997
0 to 30	0.2997
0 to 40	0.3998
0 to 50	0.4997
0 to 60	0.5596
0 to 70	0.6995
0 to 80	0.7994
0 to 90	0.8994
0 to 100	0.9994

Accuracy

The uncertainty of each length interval quoted is estimated to be less than plus or minus 0.0005mm.

Reference

These measurements were made at the National Physical Laboratory, Teddington, Middlesex, England. Test No. 08075 S/ML62-199, dated July 6, 1979.