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GENERAL INFORMATION INSTRUCTIONS FOR USE OF OPTICAL GRATING THREAD COUNTERS

Thread Counter, Type L-110-44 counts/inch (4-17 counts/centimeter)Thread Counter, Type B-125-60 counts/inch (10-23 counts/centimeter)Thread Counter, Type S-235-80 counts/inch (13-31 counts/centimeter)

Resolution: 1 thread per inch (0.5 thread per centimeter) Accuracy: Within 1 thread per inch (within 0.5 thread per centimeter)

Optical grating thread counters are hand-held devices which, when placed on the surface of a textile fabric, will develop an optical pattern which points to the thread count per inch or centimeter on the scale.

The thread counter should be placed flat on the surface of the fabric. The variable-spaced diffraction grating (parallel black lines) should be parallel to the threads to be counted (weft or filling threads) and perpendicular to the length-wise direction of the fabric (warp threads). Once the thread counter is oriented in this direction on the fabric, the thread counter should be rotated several degrees in each direction. As the thread counter is rotated, interference (moiré) patterns appear in arc-like form converging toward (pointing to) the actual thread count on the scale. The thread count can then be read in threads per inch or centimeter.