ASTM D6775 Ribbon Grip

Capstan Ribbon Grips for Webbing, Tape and Braid

Built to ASTM D6775 — Standard Test Method for Breaking Strength and Elongation of Textile Webbing, Tape and Braided Material



OVERVIEW

Capstan-style ribbon grips for tensile testing of textile webbing, tape and braided material per ASTM D6775. The specimen wraps around a curved drum before being clamped, so tension is gradually reduced by friction before reaching the clamp. This prevents jaw breaks and gives true breaking strength.

KEY FEATURES

- Curved capstan surface reduces load at the clamp to prevent jaw breaks
- Accepts flat webbing, tape and braided narrow fabrics
- Smooth, radiused wrap surface avoids stress concentrations
- Quick-clamping end for fast specimen loading
- Matched upper/lower pair keeps the specimen on the load axis

TECHNICAL SPECIFICATIONS

Test method	Breaking strength and elongation of narrow fabrics
Test type / loading	Tension, constant rate of extension
Specimens	Textile webbing, tape and braided material per ASTM D6775
Load capacity	50 kN standard; higher capacities on request
Grip type	Capstan (wrap) drum with clamping end
Gripping surfaces	Smooth radiused drum; serrated or smooth clamp face
Machine connection	Clevis pin or threaded adapter, to suit customer frame
Compatible frames	Electromechanical and servo-hydraulic universal test machines

APPLICATIONS

- Safety harness and lanyard webbing
- Cargo straps and tie-downs
- Braided cord and narrow tapes
- Military and outdoor textile QC

ABOUT THE STANDARD

ASTM D6775 determines the breaking strength and elongation of textile webbing, tape and braided materials. Specimens are pulled to rupture on a constant-rate-of-extension tensile machine, using grips that prevent slippage and premature failure at the jaws. The method is used for narrow fabrics such as safety harness webbing, cargo straps and braided cords.

Ordering & customization: Specify maximum webbing width and thickness, expected breaking load and test machine connection. Supplied as a matched pair.

Specifications are typical and may vary by configuration; confirm at time of quote. Users should refer to the current edition of the standard for test procedures. Part ref. UGC-D6775-RG