SHOULDER & BUTTON HEAD GRIPS

Withdrawal Resistance Test Fixture

Pull-out cage fixtures with interchangeable inserts for withdrawal and pull-through tests



OVERVIEW

Upper-grip pull-out fixtures for measuring the withdrawal resistance of anchors, fasteners and inserts. The specimen head passes through a slotted insert in an open cage, which bears on it while the cage is pulled upward; the specimen body is held in a separate lower grip or T-slot platen. Versions differ in cage size, gap, internal height and coupling.

KEY FEATURES

- Open cage design with side slot for easy specimen loading
- Interchangeable inserts with different hole sizes
- Choice of gap width and internal height to suit specimen
- Universal joint adapter versions for self-alignment
- Nickel-plated steel construction for corrosion protection
- Used with a lower grip or T-slotted base platen

TECHNICAL SPECIFICATIONS

Test type	Withdrawal / pull-out resistance
Cage size	100 × 100 mm, Ø 118 mm or Ø 136 mm
Gap / internal height	4-60 mm gap; 50-130 mm height (by version)
Insert holes	12, 18, 20, 24 or 32 mm
Max. load	Version-dependent, up to 500 kN
Material	Steel, nickel-plated
Coupling	Female clevis Ø 15.9 mm (5/8 in) or Ø 20 mm; others via adapter
Lower fixture	Lower grip required; T-slotted platen 250 x 250 mm available

AVAILABLE VERSIONS

Ø 136 mm, inserts 18/20/24 mm	Three 50 × 50 mm inserts, female clevis Ø 15.9 mm (5/8 in)
Ø 136 mm, gap 32 mm, height 50 mm	Inserts 32/24/12 mm, universal joint, female clevis Ø 15.9 mm (5/8 in)
Ø 118 mm, slot 25 mm, height 58 mm	Insert Ø 24 mm, R3, female clevis Ø 20 mm
Gap 10 mm, height 100 mm	Universal joint, female clevis Ø 15.9 mm (5/8 in)
Gap 30 mm, height 80 mm	Universal joint, female clevis Ø 15.9 mm or Ø 20 mm
100 × 100 mm, slot 4 mm	Female clevis Ø 15.9 mm (5/8 in)

APPLICATIONS

- Anchors and fixings
- Construction fasteners
- Inserts in concrete and panels
- Component pull-out testing

Ordering & customization: Specify the specimen head diameter and height, the required gap and insert holes, the expected maximum load and the coupling of your testing machine.

Drawings available on request
Contact us for dimensional drawings or 3D models of this product.

Specifications are typical and may vary by configuration; confirm at time of quote. Custom versions, couplings and adapters available on request. Part ref. UGC-SH-210