## Installation Guide

## Ancon MBT Headed Anchor

Ancon MBT Headed Anchors must be correctly installed to ensure that the full working capacity can be achieved. The anchors must be complete with the correct number of bolts and the two serrated strip saddles in place inside the coupler. For correct installation, all the bolts must be tightened until the heads shear off.

1a) Headed Anchor with no hole in plate - place the headed anchor over the rebar such that the end plate and rebar are in contact within the tube. Tighten the lockshear bolts onto the bar by hand. Check the alignment and make any necessary adjustments.

1b) Headed Anchor with hole in plate - place the headed anchor over the rebar and hold in the required position. The rebar should be level with, or project beyond, the surface of the plate. Tighten the lockshear bolts onto the bar by hand sufficient that the anchor is held in place. Check the alignment and make any necessary adjustments.
2) The lockshear bolts must be tightened using either a ratchet wrench or an electric or pneumatic wrench designed to deliver constant tightening force. Do not use impact power tools. Starting from the plate end and working outwards, partly tighten all of the
 lockshear bolts.
3) Repeat step 2, starting from the plate end outwards, but this time fully tighten all of the lockshear bolts, using an appropriate tool, until the bolt heads shear off.

| Bar Diameter (mm) |  | 10 | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| External Diameter (mm) | $d$ | 33.4 | 33.4 | 42.2 | 48.3 | 54.0 | 66.7 | 71.0 | 75 | 81.0 |
| Coupler Length (mm) | 1 | 55 | 75 | 82 | 104 | 129 | 156 | 156 | 215 | 247 |
| Total Length (mm) | 10 | 65 | 85 | 92 | 114 | 139 | 168 | 171 | 230 | 262 |
| Plate Thickness (mm) | $t$ | 10 | 10 | 10 | 10 | 10 | 12 | 15 | 15 | 15 |
| Plate $\mathrm{w} \times \mathrm{h}$ (mm) | $p$ | 70 | 70 | 80 | 90 | 100 | 110 | 130 | 150 | 150 |
| Socket Size A/F (ins) |  | 1/2 | 1/2 | 1/2 | 1/2 | 5/8 | 5/8 | 5/8 | 3/4 | $3 / 4$ |
| Number of Bolts |  | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 7 |
| Approx. Weight (kg) |  | 0.64 | 0.74 | 1.07 | 1.58 | 2.29 | 4.14 | 4.72 | 5.83 | 8.30 |
| Torque (Nm) |  | 55 | 55 | 108 | 108 | 275 | 275 | 360 | 525 | 600 |
| Torque (lbf ft) |  | 40 | 40 | 80 | 80 | 203 | 203 | 265 | 386 | 442 |
| Handle Length* (mm) |  | 300 | 300 | 600 | 600 | 1100** | 1100** | 1500** | 2100** | 2400** |
| Part No. (No hole in plate) |  | MBTHA10 | MBTHA12 | MBTHA16 | MBTHA20 | MBTHA24 | MBTHA28 | MBTHA32 | MBTHA36 | MBTHA40 |
| Part No. (Hole in plate) |  | MBTHA10H | MBTHA12H | MBTHA16H | MBTHA2OH | MBTHA24H | MBTHA28H | MBTHA32H | MBTHA36H | MBTHA40H |

Note: Minimum compressive strength of concrete $25 \mathrm{~N} / \mathrm{mm}^{2}$. Other sizes available on request.

* The minimum length of handle to limit the force required to shear the bolts to 250 N . This is approximately equivalent to lifting 25 kg or 56 lbs .
${ }^{* *}$ Although these can be tightened using a hand ratchet wrench, we recommend the use of an electric or pneumatic wrench designed to deliver a steady tightening force to the bolts. Appropriate tools can be purchased or hired from Leviat. Do not use impact power tools.

