# PRODUCT DATA

## Tygabolt® Flush Head Sleeve Anchor - 316 Stainless



The **Tygabolt**® is a pre-assembled single unit wedge-type anchors used in solid concrete applications. Fixing is achieved by controlled torquing of the head which draws the cone section up into the sleeve, thereby expanding it outward and forcing the Tygabolt® against the sidewall of the pre-drilled hole.

| Applications |
|---|
| • Hand rail fastening<br>• External furniture fixing<br>• Mechanical, electrical and pipe bracket fastening |

| | |
|---|---|
| **Material** | A4 316 Stainless |
| **Finish** | 316 316 Stainless |

| Part | QFind | Diam | Length | Pack Qty |
|---|---|---|---|---|
| | | (mm) | (mm) | |
| MTH16PM080045 | **MTH100** | 8 | 45 | 100 |
| MTH16PM080070 | **MTH101** | 8 | 70 | 50 |
| MTH16PM080090 | **MTH102** | 8 | 90 | 50 |
| MTH16PM100045 | **MTH103** | 10 | 45 | 50 |
| MTH16PM100060 | **MTH104** | 10 | 60 | 50 |
| MTH16PM100075 | **MTH105** | 10 | 75 | 50 |
| MTH16PM100095 | **MTH106** | 10 | 95 | 25 |
| MTH16PM120075 | **MTH107** | 12 | 75 | 25 |

### Features

- Suitable for light to medium duty loads
- Quick and easy to install
- Immediate loading is possible
- 316 stainless for high corrosion resistance

TygaBolt®

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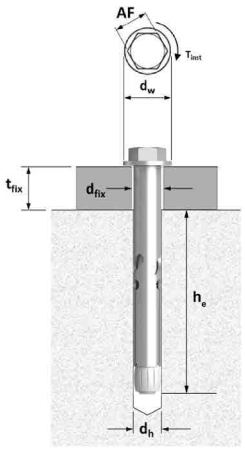
### Installation Guide

| Size | Thread Size | Hole | Minimum Depth | Hole on Fixture | Torque Guide | Wrench Size | Washer OD | Minimum Concrete Thickness | Minimum Spacing | Minimum Edge Distance |
|---|---|---|---|---|---|---|---|---|---|---|
| (mm) | D | $d_h$ (mm) | $h_{e\ min}$ (mm) | $d_{fix}$ (mm) | $T_{inst}$ (N-m) | AF (mm) | $d_w$ (mm) | $h_{min}$ (mm) | $S_{min}$ (mm) | $C_{min}$ (mm) |
| 8 | M6 | 8 | 40 | 10 | 8 | 10 | 12.8 | 100 | 50 | 50 |
| 10 | M8 | 10 | 50 | 12 | 25 | 13 | 16.8 | 100 | 60 | 60 |
| 12 | M10 | 12 | 60 | 14 | 40 | 15 | 20.3 | 100 | 75 | 75 |




### Basic Load Performance in 32 MPa non-cracked concrete

[1] *Design Resistance* is the governing minimum load resistance obtained by comparing relevant concrete and steel resistances. Strength reduction of $\phi$ = 0.60 for concrete and $\phi$ =0.80 for steel are already included.

[2] *Working Load* is the governing minimum allowed load obtained by comparing relevant concrete and steel working loads. Factor of safety FOS = 2.5 for steel and FOS = 3.0 concrete are already included.

| Thread Size | Embedment Depth | Design Tensile Resistance[1] | Working Load in Tension[2] |
|---|---|---|---|
| | $h_e$ (mm) | ø $N_d$ (kN) | $N_{WLL}$ (kN) |
| ø8 (M6) | 40 | 8.4 | 4.6 |
| | 60 | 8.4 | 5.6 |
| | 80 | 8.4 | 5.6 |
| ø10 (M8) | 40 | 8.4 | 4.6 |
| | 70 | 13.0 | 10.2 |
| | 90 | 13.0 | 10.2 |
| ø12 (M10) | 50 | 11.7 | 6.5 |
| | 75 | 21.6 | 12.0 |
| | 100 | 32.4 | 16.2 |

| Size | Embedment Depth | Edge Distance | Design Shear Resistance[1] | Working Load in Shear[2] |
|---|---|---|---|---|
| | $h_e$ (mm) | $c_1$ (mm) | ø $V_d$ (kN) | $V_{WLL}$ (kN) |
| ø8 (M6) | 50 | 50 | 6.2 | 2.0 |
| | | 60 | 8.2 | 2.7 |
| | | 80 | 8.4 | 3.3 |
| ø10 (M8) | 60 | 60 | 9.3 | 3.1 |
| | | 80 | 14.3 | 4.7 |
| | | 100 | 15.3 | 6.1 |
| ø12 (M10) | 70 | 75 | 14.4 | 4.8 |
| | | 90 | 18.9 | 6.3 |
| | | 120 | 24.3 | 9.7 |

### Installation