

## Features

- A bolt that can tighten with about half the force of conventional products and loosen with about $1 / 3$ the force.
- High torque bolt can tighten by anyone with the same force when a high torque wrench is used.

| Size | L | H | D | I | Standard tightening force ( $\mathrm{N} \cdot \mathrm{m}$ ) | Applicable high torque wrench | Part Number |  | $\begin{gathered} \hline \text { Unit Price } \\ \hline 1 \sim 4 \text { pcs } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Type | No. |  |
| M12 | 97 | 27 | 32 | 70 | 35 | M - HTWF1235 | M-HTB | 1270 |  |
| M16 | 100 | 30 | 38 | 70 | 90 | $\begin{aligned} & \text { M-HTWF1690 } \\ & \text { M-HTWA1690 } \end{aligned}$ |  | 1670 |  |
|  | 110 |  |  | 80 |  |  |  | 1680 |  |
|  | 120 |  |  | 90 |  |  |  | 1690 |  |
|  | 130 |  |  | 100 |  |  |  | 16100 |  |
| M20 | 138 | 38 | 46 | 100 | 180 | M - HTWF20180 |  | 20100 |  |
|  | 148 |  |  | 110 |  |  |  | 20110 |  |
|  | 158 |  |  | 120 |  |  |  | 20120 |  |



## Precautions for use

- When tightening the high torque bolt without using a high torque wrench, it is adequate to tighten by about $90^{\circ}$ from the place where it stopped after the bolt is tightened by hand. Excessive tightening can cause breakage and is extremely dangerous.



## ■ Features

- A nut that can tighten with about half the force of conventional products and loosen with about $1 / 3$ the force.
- High torque bolt can tighten by anyone with the same force when a high torque wrench is used.
- Due to the effect of the built-in balls, the nut is tightened only by the rotational friction of the balls while the box is stationary, the most of the tightening torque is converted to tightening force, achieving a powerful tightening force.

| Size | H | D | Standard tightening force ( $\mathrm{N} \cdot \mathrm{m}$ ) | B | h | Applicable high torque wrench | Part Number |  | Unit Price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Type | No. | 1~4 pcs |
| M12 | 23.3 | 31 | 35 | 19 | 11.3 | M - HTWF1235 | M-HTN | 12 |  |
| M16 | 27.9 | 37 | 90 | 24 | 12.9 | $\begin{aligned} & \text { M-HTWF1690 } \\ & \text { M-HTWA1690 } \end{aligned}$ |  | 16 | Quotation |
| M20 | 34.5 | 45 | 180 | 30 | 15.2 | M HTWF20180 |  | 20 |  |

$\square$ Precautions for use

- When tightening the high torque bolt without using a high torque wrench, it is adequate to tighten by about $90^{\circ}$ from the place where it stopped after the bolt is tightened by hand. Excessive tightening can cause breakage and is extremely dangerous.

