

## MANUAL TORQUE MULTIPLIER HT5-25:1 - TECHNICAL DATA <br> PART 16090

## DESCRIPTION

The Christie Manual Torque Multiplier employs multiple stages of epicyclic gearing to give a accurate torque output and ratio.
Ratio quoted is the torque multiplication ratio, not the velocity ratio as given for some competitor's products. For example, the velocity ratio may be 29.752:1 to give a torque multiplication of $25: 1+/-4 \%$.
The reaction force works in the opposite direction to the applied torque. The point of reaction should be kept as far away as practicable from the centres of the square drive to minimise this force.

Where the standard reaction plate is not suitable, it may be possible to adapt it. Please contact W. Christie (Industrial) Limited for assistance.

The multiplier can be thought of as a spring which must be fully wound before any tightening / untightening work can be applied to the bolt. The anti wind-up ratchet ensures that the 'spring' stays wound and that any further torque input to the multiplier is applied directly to the bolt.
The unit must always be used with the following:-

- Impact Quality Sockets
- Reaction Arm
- Manual Torque Wrench


## SPECIFICATION

| Part Number: | 16090 |
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| Input Square: | $1 / 2 "$ Female $(12.7 \mathrm{~mm})$ |
| Output Square: | $1 "$ Male $(25.4 \mathrm{~mm})$ |
| Direction: | Forward / Reverse |
| Torque Accuracy: | $+/-4 \%$ |
| Torque Ratio: | $25: 1$ |
| Velocity Ratio: | $29.752: 1$ |
| Minimum Output Torque: | $340 \mathrm{Nm}(250 \mathrm{lbf} . \mathrm{ft})$ |
| Maximum Output Torque: | $3,400 \mathrm{Nm}(2,500 \mathrm{lbf} . \mathrm{ft})$ |
| Maximum Input Speed: | 105 rpm |
| Tool Weight: | $7.5 \mathrm{Kg}(16.54 \mathrm{lbs})$ |
| Reaction Plate Weight: | $2.5 \mathrm{Kg}(5.52 \mathrm{lbs})$ |

## ACCESSORIES AVAILABLE

The following accessories are available upon request and can be custom made to suit requirements. Please contact W. Christie (Industrial) Limited for more information:-

- Electronic Torque Transducers (For Precise Torque Monitoring)
- Manual Torque Wrench
- Special Reactions
- Impact Quality Sockets
- Torque Checking System (Rundown Fixture)

