



## Motorized Pulley 500L, 500M & 500H, Ø 500 mm

To match your requirements in diameter 500 mm, our product range offers three different loading performances for your **BULK** applications:

- **L** for Light-duty
- **M** for Medium-duty
- **H** for Heavy-duty

You have a choice.

Therefore, it is important to notice the differences to choose the right type of pulley for the right application based on estimated belt tension (radial load) = T1+T2. The actual radial load **MUST** be **LESS** than the max. allowable radial load shown in this catalogue.

Be aware of increased belt tensions using **multi-ply thick heavy belts** and/or larger belt widths.

If you do not find the belt tension needed in this diameter, you might have to choose a larger one.

### L for Light-duty

500L is meant for similar applications as 400M **except** for the fact that the belt requires a larger pulley diameter. (Motor/gearbox origin from 400M).

500L are typically used in grain storage, cement, steel, fertilizer and heavy mobile crushing & screening applications.

As to outer dimensions, 500L cannot replace 500H (Former TM500/TM501).

### M for Medium-duty

Using a solid and robust 3-stage gearbox, 500M provides the necessary torque & belt pull needed for low speeds combined with high power for irregular loadings.

(Motor/gearbox origin from 400H).

As to outer dimensions, 500M cannot replace 500H (Former TM500/TM501).

### H for Heavy-duty

The construction of 500H is the heaviest of this particular range with internal parts such as gearbox, Ø 65 mm shaft, matching bearings etc. are designed for tough, irregular, extreme and brutal working conditions.

### STANDARD SPECIFICATION of Motorized Pulley

- Crowned mild steel Ø 500 mm steel shell painted yellow – min. layer of 60 µm
- Bolted powder coated cast iron bearing housings and covers, all painted yellow – min. layer of 60 µm
- Mild steel shafts
- Shaft sealing system - degree of protection IP66/67(EN60034-5)
- Cast iron terminal box painted yellow – min. layer of 60 µm
- 3-phase induction motors with thermal protector
- 3-phase single voltage. Most common voltages available. Please specify!
- Motor winding insulation Class F
- Dynamically balanced rotor
- Two oil plugs each fitted with a magnet to filter the oil
- Black painted brackets – KL60 for 500L and 500M available on request
- Yellow painted graphite cast iron mounting brackets – 500H only!
- Oil change recommended every 20.000 operational hours
- Minimum RL Please refer to page 53/59
- Maximum RL – Please inquire!
- Non standard RL's available
- To be used in horizontal positions ±5 degree only!
- Nitrided shaft sleeves

#### Please note:

- Special speeds available on request.
- Motorized Pulleys for non-horizontal positions available on request
- Parallel shell available. Diameter equal to dimension Ø A

### SEMI-RUST-FREE options

#### TS11 – (500L & 500M)

- Painted mild steel shell – min. layer of 120 µm
- Stainless steel shafts – AISI 303-4 range
- Painted cast iron end housings – min. layer of 120 µm
- Regreasable covers with labyrinth grooves and grease nipples in stainless steel – AISI 304 range
- Zinc-plated oil plugs
- Zinc-plated exterior bolts
- Shaft sealing system – degree of protection IP66/67 (EN60034-5)
- Painted terminal box – min. thickness layer of 120 µm

#### TS11 – (500H)

- Painted mild steel shell – min. layer of 120 µm
- Painted cast iron end housings – min. layer of 120 µm
- Stainless steel covers with labyrinth grooves – AISI 304 range
- Zinc-plated oil plugs – each with magnet
- Zinc-plated exterior bolts
- Shaft sealing system – degree of protection P66/67 (EN60034-5)
- Painted terminal box – min. layer of 120 µm
- Nickel plated mounting brackets with labyrinth grooves

#### TS12

- As TS11, but without re-greasable seals.
- Covers - standard

#### Please note:

- FDA & USDA food grade recognized oil and grease are NOT included in TS11 & TS12, but available on request

**When ordering, please specify the required voltage, electrical connection and eventual TS-number, options, brackets and idler pulleys.**

- Environmental considerations: page 77-78
- Technical precautions: pages 81-92
- Optional extras: page 51 and back cover
- Connection Diagrams: page 100.