



Applications in Special Environmental Conditions

Low ambient temperature

For low temperatures below -25°C please consult Rulmeca. Special oil, special seals, and possible anti-condensation heater may be required. Re-greasable seals to avoid drying out the labyrinth seals.

High ambient temperature

For high ambient temperatures above $+40^{\circ}\text{C}$ please consult Rulmeca.

Extremely dusty/ abrasive, wet/ high humidity

IP66/67 re-greasable seals, special finish, e.g. stainless steel – AISI 303/4 or even AISI 316, semi-rust-free, special coating, rubber lagging.

Grain handling - Extremely dusty where dangerous atmospheric conditions apply

Dust explosion proof Motorized Pulleys – ATEX 95 - Zone 22 – for applications handling dusty grain etc. Executions according to the European Directive 94/9/CE. This directive is known as “ATEX (Explosion Atmosphere) directive”.

Please contact Rulmeca for further details.

Frequent start/ stops

Type	Max. No. of Start/stops
138E	240 per hour
165E	180 per hour
220M & H	120 per hour
320L, 320M & 320H, 400L, 400M & 400H	25 per hour
500L, 500M, 500H, 630M & 630H, 800M & 800H	10 per hour

For more frequent start/stops please consult Rulmeca.

Food handling applications

Re-greasable seals; Stainless steel versions in TS7N, TS9N or TS10N for high pressure and chemical wash down; food grade oil and grease; Food quality rubber lagging being oil, fat & grease resistant. FDA, USDA, FSIA & FESD recognized materials.

Underwater applications

Where IP66/67 specified, the Rulmeca Motorized Pulley has been tested for 30 minutes under 1 m of water. However, the motor is NOT intended for continuous underwater performances (IEC 529). If in doubt, please consult Rulmeca.

Indexing conveyor/ decline conveyor/ reversible inclined conveyor

Electromagnetic brake. Special shafts prepared to fit an external brake - 500H-800H.

Inclined conveyor (not reversible)

Mechanical backstop

Reversible conveyor

Sufficient time delay between forward and reverse. The Motorized Pulley must come to a complete stop before reversing.

Variable speed conveyor

Two speed motor. AC frequency converter.

Using a Motorized Pulley without conveyor belt or with a belt covering less than 2/3 of the Pulley face width

Use drives only from a special range of Motorized Pulleys developed for this purpose. Do not use standard Motorized Pulleys unless accepted by Rulmeca. Insulation class H, extra oil. Connect thermal protector.

Motorized Pulleys mounted non-horizontally between 5° - $\leq 90^{\circ}$

Special execution! Please consult Rulmeca. Extra oil, grease packed top bearing. Electrical outlet:

- To be re-positioned to the opposite end of standard
- To be positioned at the top when installed.

Impact load

Over-sized Motorized Pulley. Please consult Rulmeca.

Handling materials with oil, grease and fat content

Stainless steel version:

- TS7N (138E & 165E),
- TS9N/TS10N (220M-400H).

Semi-stainless steel version:

- TS11N/ TS12N (220M-400H) or
- TS11/TS12 (400L-800H)

Food quality lagging being oil, fat and grease resistant.

High power rated motors. Starting under load

All RULMECA Motorized Pulleys are developed for direct starting.

To reduce the starting current it is possible to use starting devices such as star/delta starter, electronic soft starter etc.

Extremely low noise/vibration requirements

Balanced shell. Special oil. Please contact Rulmeca for special solution.

Marine environment. Ship loading/unloading conveyors etc.

Re-greasable IP66/67 sealing system and/or stainless steel or semi stainless options – TS7N, TS9N-TS12N or TS11-TS12.

Rubber or ceramic lagging.



Applications in Special Environmental Conditions

High altitude >1000 m

Please consult Rulmeca.

Chemical and/or aggressive environments

Please consult Rulmeca.

Underground mining/tunnelling applications where possible dangerous atmospheric conditions apply or where the Motorized Pulley is to be flame proof or intrinsically safe

Rulmeca Motorized Pulleys are not intrinsically safe or explosion proof to meet these requirements. Please consult Rulmeca.

Critical speed requirements

Nominal speeds can deviate by +/- 10%. Where exact speeds are required, please consult Rulmeca.

Recycling, aggressive environments

Stainless steel shafts, re-greasable labyrinth seals, special painting and/or special oil.

Metal separators and metal detectors

Special execution as to amount of oil, type of bearings, electrical connection and built-in position.



Application: Fertilizer and potash.
Still in work after more than 30 years in an aggressive environment.