

Environmental Conditions

Hygienic conditions

For food processing and other applications where hygiene is important, we recommend the following materials, connectors and accessories:

- Stainless steel shell
- Stainless steel shaft
- Stainless steel end housings
- IP69 sealing
- Hot vulcanized Lagging, FDA approved and/or oil and fat resistant
- Oil, food-grade, synthetic
- Stainless steel terminal box or straight or elbow connectors in stainless steel
- Diamond patterned lagging is not suitable for food processing because it is difficult to clean and can leave traces of bacteria

Conveyor frame

According to EHEDG design rules, it is highly recommended to incorporate rust-free open conveyor frames to facilitate easy cleaning, wash down, and disinfection of the conveyor, Motorized Pulley, and belt. The rubber material shall be USDA/FDA and EC1935/2004 compliant.

Altitude higher than 3,300 ft

The operation of a Motorized Pulley at an altitude above 3,300 ft above sea level may result in a loss of power and overheating due to low atmospheric pressure and the lower density of the air, which cools the motor. The altitude of the final application should be taken into consideration when calculating the required power. For more information please contact Rulmeca.

Wet and washdown applications

Wet and washdown applications require stainless steel materials for the Motorized Pulley shell and sealing system. The following materials and accessories are available:

- Stainless steel shell with hot vulcanized lagging (if necessary)
- Stainless steel shaft
- Stainless steel end housing
- IP69 sealing
- Lagging, all types are possible
- Diamond patterned lagging can be used for non-food wet applications
- Cable connectors, all types are possible
- For IP69 sealing option, limit high pressure wash down at various angles to a maximum of 2,150 psi at +176°F at 6 inches from Motorized Pulley for 30 seconds.

Dry and dusty applications

All standard Rulmeca Motorized Pulleys, regardless of specification or material, are sealed to IP66 protection rating. For applications in hazardous areas requiring intrinsically safe or explosion-proof motors, please contact Rulmeca.

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Low temperature

In ambient temperatures below -20° F, consider heating the motor windings to keep the oil, seals, and internal parts at a constant temperature. If the motor current is switched off for an extended period of time when the ambient temperature is very low, the motor oil viscosity increases. It is also possible that ice crystals could form within the oil seals and cause premature seal wear. In this situation, select anti-condensation heating system (e.g. trickle voltage through motor.) Contact Rulmeca for additional information.

When a Motorized Pulley is operated in low temperatures (less than +40 ° F), the viscosity of the oil and temperature of the motor when it is not running should be considered. Consider also that condensation inside the Motorized Pulley and terminal box may occur with varying wide ranging temperatures. Also note that very low temperatures reduce the effectiveness of rubber lagging to increase friction.

We recommend the use of the following materials, cables and accessories:

- Stainless steel shell
- Stainless steel shaft
- Stainless steel end housing
- IP69 sealing
- Optional special oils for low temperatures
- Anti-condensation internal heating
- Lagging, all types are possible
- Cable connections, all kinds are possible