



# Technical Bulletin No. 109

## Motorized Pulley Labyrinth Seals & Grease Canisters



**Purpose of Labyrinth Seals:** Rulmecca labyrinth seals provide an extra barrier of protection for shaft oil seals. They protect the IP67 oil seals against contamination by forming a toruous grease-filled path for corrosive and abrasive material.

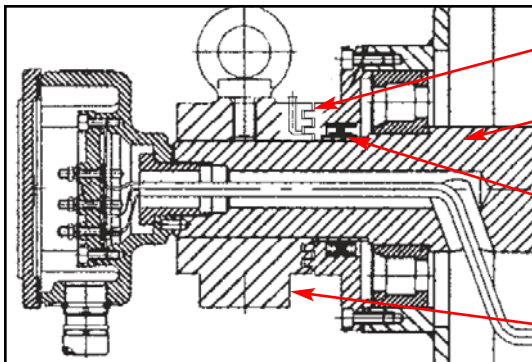
**Technical Precaution:** Note that grease-packed labyrinths extend shaft oil seal life compared to standard seals, as long as contaminants are purged from the labyrinths. Shaft oil seal life will be compromised if contaminants are permitted to attack oil seals.



**Small Pulley Labyrinth Seal:** Photo shows grease nipple and exterior of labyrinth seal option for Motorized Pulley models 220M, 220H, 320L, 320M, 320H, 400L, 400M, and 400H. Labyrinth seal consists of one lip and groove formed between stationary labyrinth seal plate and rotating bearing cover. Grease may be purged manually, using grease nipple, or automatically, using Labyrinth Seal Grease Canister.



**Large Pulley Labyrinth Seal:** Photo shows grease nipple and exterior of labyrinth seal option for Motorized Pulley models 500H, 630M, 630H, 800M, and 800H. As shown below, labyrinth seal consists of two lips and grooves formed between stationary mounting bracket and rotating bearing cover. Grease may be purged manually, using grease nipple, or automatically, using Labyrinth Seal Grease Canister.



**Grease Barrier**  
**Shaft**  
**Oil Seals**  
**Mounting Bracket**

### Large Pulley Labyrinth Seal Cross Section:

Diagram shows positions of lips and grooves for Motorized Pulley model 500H and larger. These grooves must be completely filled with grease and purged to prevent contamination from attacking oil seals on pulley shaft.

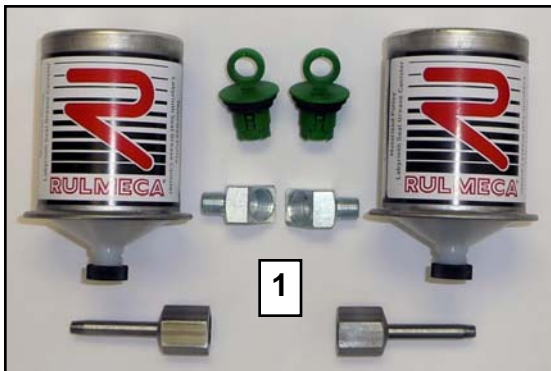


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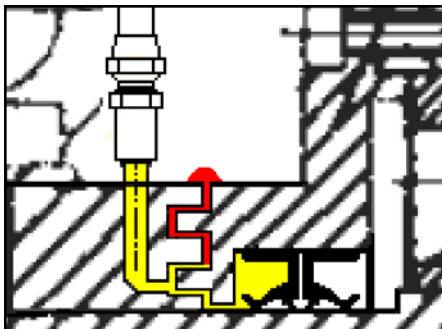
## Motorized Pulley Labyrinth Seals & Grease Canisters



**Labyrinth Seal Grease Canister (mounted):** Fitting extension and angled fitting orients canister at 45 degree angle on Motorized Pulley labyrinth seal plate for models 220M, 220H, 320L, 320M, 320H, 400L, 400M, and 400H. Canister and fitting arrangement for larger models is similar except that canister mounts on mounting bracket and fitting extension is not needed.



**Labyrinth Seal Grease Canister Kits:** Each canister contains 4 oz (120 cc) of custom sealing grease. Green activators dispense grease over 90 days. Available kits: (Photo 1) Small Pulley OEM (P/N SZPLK2) 2 canisters, 2 activators, 2 angled fittings, 2 extension fittings; Large Pulley OEM (P/N SZPLK1) same as small except without extension fittings; (Photo 2) Small Pulley Retrofit (P/N SZPLK4) 4 canisters, 4 activators, 2 angled fittings, 2 extension fittings, and 1 tube of purging grease; Large Pulley Retrofit (P/N SZPLK3) same as small except without extension fittings; (Photo 3) Refill (P/N SZPLK5) 4 canisters, 4 activators; (Photo 4) All kits are also available with cold temperature sealing grease.



**Contamination Prevention:** It is essential that contamination be prevented from migrating through the labyrinths into the oil seal chamber. Grease canisters provide a continuous flow of grease outward by maintaining a positive pressure within the canisters.

**Technical Precaution:** Canisters must be replaced when grease is depleted. Canister labels are designed to record dates.



### RULMECA Corporation (USA)

6508-B Windmill Way, Wilmington, NC 28405

Tel. 910-794-9294, Fax. 910-794-9296

Email: [mgawinski@rulmecacorp.com](mailto:mgawinski@rulmecacorp.com)

Website: [www.rulmecacorp.com](http://www.rulmecacorp.com)