FALK®

LTG
LONG TERM GREASE

High Speed Grease Centrifuge


Typical Grease After Centrifuging

Facts on Lubrication

Separation — Grease is a blend of oil and a thickener or soap. These compounds are not very stable and will eventually bleed or separate under the high centrifugal forces generated in many coupling applications. Once a grease begins to separate, the thickener accumulates in the areas where lubrication is required, and rapid wear of the contacting surfaces occurs. The oil is now free to leak out of the coupling past the seals, causing premature failure of the coupling.

Service Intervals for All-Purpose Greases — It is common practice to lubricate all rotating equipment with one or two all purpose greases.

Most greases which are used as coupling lubricants were initially developed as bearing lubricants.

Bearing greases have a low viscosity and high bleed rate which is desirable to avoid heat caused by rolling friction. However, rolling friction is not present in couplings where the only movement is a sliding action caused by misalignment of shafts or thermal growth.

Bearing lubricants are adequate if the coupling manufacturer's service intervals are followed. These intervals are usually six (6) months for gear couplings and one (1) year for grid couplings.

Maintenance & Downtime — In today's industrial plants the cost of equipment downtime for servicing can easily exceed hundreds of dollars per hour. So rather than shutting down this critical equipment, the connecting shaft couplings are frequently allowed to run until failure occurs or until the more expensive drive components in the system require maintenance.

In an attempt to hold the line of high maintenance costs, some users have switched to non-lubricated coupling designs. This switch seldom works out for the best however, since many elastomer designs have a short life expectancy and they induce problems elsewhere in the drive system. When they do fail, the connected equipment often has to be moved to replace the element.

Now LTG — What is it?

Our engineers have spent years measuring the wear rates on coupling components using various lubricants and coatings. Virtually every common industrial lubricant has been centrifuged under laboratory conditions per ASTM standard test methods for "Oil Separation from Lubricating Grease by Centrifuging." The results of extensive research indicated that greases with high viscosities and low bleed rates produce the longest life.

Falk LTG is specially formulated to provide superior lubrication for flexible shaft couplings.

How does it work?

The consistency of Falk LTG changes with operating conditions. As manufactured it is an NLGI #1/2 grade. Working of the lubricant under actual service conditions causes it to become semifluid while the grease near the seals will set to a heavier grade, helping to prevent leakage.

LTG is highly resistant to separation, easily out performing all other lubricants tested. The resistance to separation allows the lubricant to be used for relatively long periods of time.

Benefits for your Application

- **Increased coupling life.**
- **Significantly extended re-lubrication intervals.**
- **Reduced maintenance costs.**
- **Reduced downtime.**
- **Superior lubrication.**
- **High load carrying capabilities.**
- **Usable up to 250°F (121°C).**

USDA Approval

LTG has the United States Department of Agriculture Food Safety & Inspection Service approval for applications where there is no possibility of contact with edible products (H-2 rating).

Compatibility

Falk LTG grease is compatible with most coupling lubricants. For optimum performance it is recommended that couplings be cleaned of old grease before packing with LTG.

Extended Maintenance Intervals

Steelflex® — When Steelflex couplings are initially lubricated with LTG, scheduled periodic maintenance is not needed. You can now get the superior protective features of the Steelflex, plus the toughness of steel, and eliminate periodic maintenance expense. Falk recommends that such couplings be inspected and re-lubed only when the connected equipment is being serviced or the coupling is opened for alignment checks.

Lifelign® Gear Couplings — Re-lube intervals for sensitive gear couplings have been extended from six (6) months to three (3) years.

Specifications

Thickener . . . . . Lithium Soap/Polymer

Base Oil . . . . . Highly Refined Mineral Oil
Viscosity @ 100°F (38°C) 3300SSU (715cSt)
Viscosity @ 210°F (99°C) 163SSU (33cSt)

NLGI Grade . . . . . ½

Consistency (ASTM D-217) — 60 stroke worked penetration value in the range of 315-360 measured at 77°F (25°C).

Minimum Timken EP O.K. Load (ASTM D 2509) . . . . . 40 lbs.

Four Ball EP (ASTM D 2596)
Load Wear Index . . . . . 46 kgf
Weld Point . . . . . 250 kgf

Four Ball Wear, Scar (ASTM D 2266) . . . . . .66 mm

Dropping Point . . . . . 350°F (177°C) min.

Flash Point . . . . . 450°F (232°C)

Oxidation and Rust Inhibitors . . . . . Yes

Centrifugal Separation
(ASTM D 4425-84) . . . . . K36# 2/24 max.

Color . . . . . Dark brown

Operating Range . . . . . –20°F (–29°C) to 250°F (121°C)

Minimum Pump . . . . . 20°F (-7°C)

Operating Speed Range
Steelflex Couplings . . . . . All Speeds
Gear Couplings . . . . . See Service Manual 458-110

Material Safety Data Sheet

(Form 950401) – Available upon request.

5 Year Warranty

A new Steelflex coupling initially lubricated with the proper amount of LTG as described in the service manual, operated within the specified ambient temperature range and installed and aligned within the limits specified in the installation manual is warranted for five *(5) years* against lubrication related grid member failure.

Packaging

Falk LTG is packaged to suit every need.

Polybags
Included with Sizes 1020-1090T couplings for initial handpacking at installation.

14 ounce cartridges
For use in standard industrial lubrication guns.

35 pound pails

120 pound kegs
For plants with many small couplings or large size couplings. Best for hand packing.

400 pound drums
For plants with a pressurized lubrication system.

A 10-pack of 14 oz. cartridges or a case of 3-10 packs of 14 oz. cartridges.
Ideal for distributor stocks.

Steelflex Coupling Size	Required Lube wt-lbs (kg)	Gear Coupling Size ★	Required Lube wt-lbs (kg)	GC 02 Coupling Size	Required Lube wt-lbs (kg)
1020T	.06 (.027)				
1030T	.09 (.040)	**1010G**	.09 (.041)	**1010G**	.025 (.011)
1040T	.12 (.055)				
1050T	.15 (.068)	**1015G**	.16 (.073)	**1015G**	.063 (.0283)
1060T	.19 (.086)				
1070T	.25 (.114)	**1020G**	.25 (.11)	**1020G**	.094 (.042)
1080T	.38 (.173)	**1025G**	.50 (.23)	**1025G**	.144 (.065)
1090T	.56 (.255)	**1030G**	.80 (.36)	**1030G**	.201(.093)
1100T	.94 (427)	**1035G**	2.00 (.91)	**1035G**	.269 (.122)
1110T	1.12 (.509)	**1040G**	2.50 (1.14)		
1120T	1.62 (.736)	**1045G**	3.00 (6.6)		
1130T	2.0 (.909)	**1050G**	3.50 (1.59)		
1140T	2.5 (1.136)	**1055G**	4.00 (1.81)		
1150T	4.3 (1.955)	**1060G**	4.50 (2.05)		
1160T	6.2 (2.818)	**1070G**	5.00 (2.27)		
1170T	7.7 (3.5)	**1080G**	21 (9.55)		
1180T	8.3 (3.773)	**1090G**	27		
1190T	9.7 (4.409)	**1100G**	33		
1200T	12.4 (5.636)	**1110G**	39		
1210T	23.2 (10.55)	**1120G**	46		
1220T	35.4 (16.09)	**1130G**	72		
1230T	53.0 (24.09)	**1140G**	73		
1240T	74.5 (33.86)	**1150G**	90		
1250T	110.5 (50.23)	**1160G**	95		
1260T	148.1 (67.32)	**1180G**	110		
		1200G	150		

★ Refer to Selection Guide 451-110 for larger sizes.

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