REXNORD

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 degrees Fahrenheit (F) (121 C)
- Extended warranty

USDA Approval

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

Packaging Options

Falk LTG is packaged to suit every need:

- **Polybags** — included with Sizes 1020T-1090T couplings for initial hand packing at installation
- **14-ounce (.4 kg) cartridges** — for use in standard industrial lubrication guns
- **35-pound (15.9 kg) pails**
- **120-pound (54.5 kg) kegs** — for plants with many small couplings or large size couplings, best for hand packing
- **400-pound (181.8 kg) drums** — for plants with a pressurized lubrication system
- **A 10 pack of 14-ounce (.4 kg) cartridges**

Falk Long Term Grease

Falk Long Term Grease (LTG) for flexible shaft couplings.

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 American Society for Testing and Materials (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 LTG works

The consistency of Falk LTG changes with operating conditions. As manufactured it is a National Lubricating Grease Institute (NLGI) #1 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. Falk LTG is highly resistant to separation, easily outperforming all other lubricants tested. The resistance to separation allows the lubricant to be used for relatively long periods of time.

Compatibility

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

Extended maintenance intervals

Falk Steelflex® Grid Couplings — when Falk Steelflex Grid Couplings are initially lubricated with Falk LTG, scheduled periodic maintenance is not needed. You can now get the superior protective features of these couplings, plus the toughness of steel, and eliminate periodic maintenance expense. Rexnord 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.

Falk Lifelign® Gear Couplings — re-lube intervals for sensitive gear couplings have been extended from six months to three years.

Warranties

When a new coupling is aligned, installed, lubricated and operated within the limits specified in the Falk Lifelign Gear Coupling or Falk Steelflex Grid Coupling installation instructions, the following warranties apply from date of purchase.

Falk Steelflex Grid Couplings are warranted for five years and Falk Lifelign Gear Couplings for three years when LTG is used. If other approved coupling greases are used, our standard one-year warranty applies to both coupling designs.

FALK®

Lubrication facts

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 that 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.

Maintenance and downtime — in today's industrial plants the cost of equipment downtime for servicing can easily exceed thousands 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 because 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.

Falk LTG specifications

- **NLGI Grade:** #1
- **Thickener Type:** Lithium/Polymer
- **Color, Visual:** Dark Brown
- **Penetration, Worked, 25 Celsius (C), ASTM D 217:** 325
- **Dropping Point, C, ASTM D 2265:** 215
- **cSt @ 40 C:** 680
- **Centrifugal Bleed, ASTM D 4425, K36, 24 hrs, 38 C, vol %:** 0
- **Penetration Change, ASTM D 217, from 60X to 10,000X, mm/10:** 25
- **Bomb Oxidation, ASTM D 942, Pressure drop at 100 hrs, kPa:** 35
- **Four-ball Wear Test, ASTM D 2266:** 0.35
- **Four-ball EP Test, ASTM D 2596, Weld Point, Kg Load Wear Index, Kgf:** 315 51
- **Timken OK Load, ASTM D 2509, lb:** 60
- **Corrosion Prevention, ASTM D 1743:** Pass
- **Copper Strip Corrosion, ASTM D 4048:** 1A
- **Operating Range:** -20 F (-29 C) to 250 F (121 C)
- **Minimum Pump:** 20 F (-6 C)
- **Operating Speed Range**
  - **Falk Steelflex Grid Couplings:** All speeds
  - **Falk Lifelign Gear Couplings:** Minimum speed per Table 1. See service manual 458-110, 458-112 or 458-120 for more information.

Table 1

Falk Steelflex Grid Coupling		Falk Lifelign Gear Coupling				
		Flanged Sleeve		Continuous Sleeve		Minimum Speed with LTG or NLGI #1 Grease**
Size***	Required Lube wt-lbs (kg)	Size*	Required Lube wt-lbs (kg)	Size	Required Lube wt-lbs (kg)	
1020T	.06 (.027)	**1010G**	.09 (.041)	**1010GC**	.025 (.011)	1,030
1030T	.09 (.041)	**1015G**	.16 (.073)	**1015GC**	.063 (.028)	700
1040T	.12 (.055)	**1020G**	.25 (.113)	**1020GC**	.094 (.042)	550
1050T	.15 (.068)	**1025G**	.50 (.23)	**1025GC**	.144 (.065)	460
1060T	.19 (.086)	**1030G**	.80 (.36)	**1030GC**	.201 (.093)	380
1070T	.25 (.113)	**1035G**	1.20 (.54)	**1035GC**	.269 (.122)	330
1080T	.38 (.173)	**1040G**	2.00 (.91)	—	—	290
1090T	.56 (.255)	**1045G**	2.30 (1.04)	—	—	250
1100T	.94 (.427)	**1050G**	3.90 (1.77)	—	—	230
1110T	1.12 (.509)	**1055G**	4.90 (2.22)	—	—	210
1120T	1.62 (.736)	**1060G**	7.00 (3.18)	—	—	190
1130T	2.0 (.909)	**1070G**	9.60 (4.35)	—	—	160
1140T	2.5 (1.136)	**1080G**	21 (9.55)	—	—	140
1150T	4.3 (1.955)	**1090G**	27 (12.24)	—	—	120
1160T	6.2 (2.818)	**1100G**	33 (15)	—	—	110
1170T	7.7 (3.5)	**1110G**	39 (17.7)	—	—	100
1180T	8.3 (3.773)	**1120G**	46 (21.8)	—	—	94
1190T	9.7 (4.409)	**1130G**	72 (32.6)	—	—	88
1200T	12.4 (5.636)	**1140G**	73 (33.1)	—	—	82
1210T	23.2 (10.55)	**1150G**	90 (40.8)	—	—	76
1220T	35.4 (16.09)	**1160G**	95 (43.1)	—	—	72
1230T	53.0 (24.09)	**1180G**	110 (49.9)	—	—	64
1240T	74.5 (33.86)	**1200G**	150 (68)	—	—	58
1250T	110.5 (50.23)	—	—	—	—	—
1260T	148.1 (67.32)	—	—	—	—	—

* Refer to the Falk Lifelign Gear Couplings catalog (458-112) for larger sizes.
** For Falk Lifelign Gear Coupling speeds below these values, use NLGI #0 grease. For coupling speeds less than half of these values use an EP (extreme pressure) oil. When using oil lubrication, be sure to seal keyways and flange connection to prevent leakage.
*** Falk Steelflex Grid Couplings use Falk LTG Grease or equivalent for all speeds.

Material Safety Data Sheet (950401) available at: ***www.rexnord.com/documentation***