

**How to Determine Lubrication Interval**—The useful life of antifriction bearing grease can be estimated, based on service conditions, frame type, and motor rpm. An example of determining the correct lubrication interval is provided below.

**Ex:** A fan motor, operating at an ambient temperature of 109°F (43°C) in a moderately corrosive atmosphere. The motor has a NEMA 286T/(IEC 180) frame and is rated at 1750 rpm.

1. Table 1 classifies the service condition as “severe.”
2. Table 2 specifies a 0.5 service condition multiplier value for “severe” service condition.
3. Table 3 specifies 9500 hours as the recommended lubrication interval for frame sizes 254 to 286 (see nameplate), given standard service conditions.
4. Multiply .5 (*service condition multiplier value*) by 9500 hours (*recommended lubrication interval*) = 4750 hours (*calculated lubrication interval*).
5. Table 4 shows that the amount of grease to be added is 0.32 ounces (9.1 grams).

**Table 1 — Determining the Service Condition**

Severity of Service	Maximum Ambient Temperature	Atmospheric Contamination	Type of Bearing
Standard	104°F (40°C)	Clean, little corrosion	Deep groove ball bearing
Severe	122°F (50°C)	Moderate dirt, corrosion	Ball thrust, Roller
Extreme	>122°F (>50°C) or Class H Insulation (Note 1)	Severe dirt, abrasive dust, corrosion	All bearings
Low Temperature	-22°F (-30°C) (Note 2)		

**Note 1:** Special high temperature grease is recommended.

**Note 2:** Special low temperature grease is recommended.

**Table 2 — Service Condition Multiplier Value**

Operating Condition	Multiplier
Standard	1.0
Severe	0.5
Extreme	0.1