




Lubricator Grease 潤滑油脂

Name → Lubricant properties	NLGI grade	Thickener	Base oil	Operating temperature (°C)	Basic viscosity at +40 °C [mm ² /s]	Speed index	Roller bearings	Sliding bearings Sliding guides	Linear guides	Open gears Gear racks	Spindles
perma Multipurpose grease SF01 → Powerful multipurpose grease → Wear reducing thanks to EP additives → Free of heavy metals & silicone	2	Li/Ca	Mineral oil	-30 to +130	220	300,000	✓	✓	✓	-	✓
perma Extreme pressure grease SF02 → High-pressure grease with MoS2 → Ageing- & oxidation-resistant → Good dry-running properties	2	Li + MoS2	Mineral oil	-30 to +120	100	350,000	-	✓	-	✓	-
perma High temp. grease SF03 → Good oil retention → High thermal stability → Good corrosion protection	2	PHS + PTFE	Ester + PFPE	-20 to +220	420	300,000	✓	✓	-	-	-
perma High performance grease SF04 → Multipurpose lubricant for extreme requirements → Powerful at high temperatures & vibrations → Resistant to aggressive media	0/1	PHS	Mineral oil + PAO	-20 to +160	500	200,000	✓	✓	✓	✓	✓
perma High temp. / Extreme pressure grease SF05 → Multipurpose grease for extreme requirements → High load-carrying capacity → Good dry-running properties thanks to solid lubricants	0/1	PHS + MoS2	Mineral oil + PAO	-20 to +160	500	200,000	✓	✓	-	✓	-
perma Liquid grease SF06 → Good water resistance → High wear protection → Easily pumped	0	Al com.	Mineral oil	-20 to +130	220	300,000	✓	✓	✓	-	✓
perma High speed grease SF08 → High speed index → Low friction coefficient due to synthetic base oil → Broad operating temperature range	2	Ca com.	PAO	-40 to +140	100	600,000	✓	✓	-	-	-
 perma Multipurpose bio grease SF09 → Rapidly biodegradable → Water hazard class WGK 1 → Fully synthetic	2	PHS	Ester	-40 to +140	120	300,000	✓	✓	-	✓	-
 perma Food grade grease NSF H1 SF10 → Synthetic → Good wear protection & low temperature resistance → Good water resistance	1	Al com.	PAO	-45 to +120	150	500,000	✓	✓	✓	✓	✓

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Base oil

The base oil determines the properties and performance of the lubricant. Base oils are mineral oils, hydrocracked oils, polyalphaolefin (PAO) oils or synthetic ester oils.

Basic viscosity

The viscosity indicates the flowability of the base oil. Low viscosity base oils are used for very high speeds. High viscosity base oils are used for high load applications. The viscosity of a typical roller bearing grease at +40 °C is between 15 and 500 mm²/s.

NLGI grade

The NLGI grade (consistency number) denotes the consistency of a lubrication grease. Grades range from 000 (very fluid) to 6 (very hard). Greases up to NLGI grade 2 can be used in perma lubrication systems.

Thickener

The thickener acts like a sponge. It holds the individual components of the grease together and ensures that the oil stays at the contact point.