THK Original Grease

AFG Grease

- Base oil: high-grade synthetic oil
- Oconsistency enhancer: urea-based



AFG Grease is a high-grade grease for ball screws that uses high-grade synthetic oil as its base and a urea-based grease as its consistency enhancer. This ensures that it has superior low heat-generating properties, allowing for use over a wide temperature range—from low to high temperatures.

[Features]

(1) Low heat generation

Since the viscous resistance is low, the grease generates only a minimal level of heat even during high-speed operation.

(2) Low torque properties

Features a low base oil kinematic viscosity, making it ideal for ball screws.

(3) Water resistance

AFG Grease is a highly water-resistant grease that is less vulnerable to softening and reductions in extreme pressure resistance due to moisture penetration.

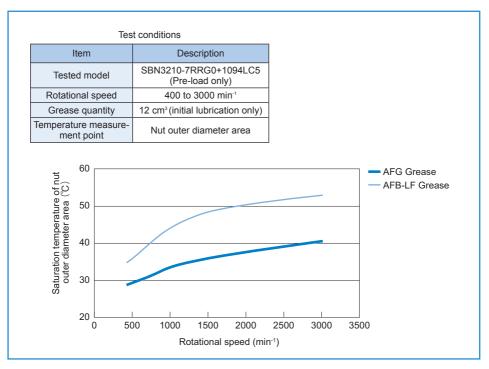
[Representative Physical Properties]

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Item		Representative value	Test method
Consistency enhancer		Urea-based	
Base oil		High-grade synthetic oil	
Base oil kinematic viscosity: mm²/s (40°C)		25	JIS K 2220 23
Worked penetration (25°C, 60 W)		285	JIS K 2220 7
Mixing stability (100,000 W)		329	JIS K 2220 15
Dropping point: ℃		261	JIS K 2220 8
Evaporation amount: mass% (99°C, 22 h)		0.2	JIS K 2220 10
Oil separation rate: mass% (100℃, 24 h)		0.5	JIS K 2220 11
Copper plate corrosion (B method, 100℃, 24 h)		Accepted	JIS K 2220 9
Low-temperature torque: mN·m (–20°C)	Starting	170	JIS K 2220 18
	Rotational	70	
4-ball testing (welding load): N		3089	ASTM D2596
Service temperature range: °C		-45 to 160	
Color		Brown	

Lubrication

AFG Grease

[Low Heat Generation Test Data]



[Ball Screw Torque Data]

