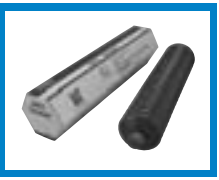
THK Original Grease

AFC Grease

●Base oil: high-grade synthetic oil
●Consistency enhancer: urea-based



AFC grease uses high-grade synthetic oil as its base and a urea-based grease as its consistency enhancer, while also featuring special additives. This gives it excellent fretting resistance.

[Features]

(1) Fretting resistance
It is designed to be highly effective in preventing fretting corrosion.

(2) Wide temperature range
Since a high-grade synthetic oil is used as the base oil, the lubricating performance remains high over a wide range of temperatures, from −54℃ to 177℃.

[Representative Physical Properties]

Item		Representative value	Test method
Consistency enhancer		Urea-based	
Base oil		High-grade synthetic oil	
Base oil kinematic viscosity: mm^2/s (40℃)		25	JIS K 2220 23
Worked penetration (25℃, 60 W)		288	JIS K 2220 7
Mixing stability (100,000 W)		341	JIS K 2220 15
Dropping point: ℃		269	JIS K 2220 8
Evaporation amount: mass% (99℃, 22 h)		0.2	JIS K 2220 10
Oil separation rate: mass% (100℃, 24 h)		0.6	JIS K 2220 11
Copper plate corrosion (B method, 100℃, 24 h)		Accepted	JIS K 2220 9
Low-temperature torque: mN·m (−20℃)	Starting	160	JIS K 2220 18
	Rotational	68	
4-ball testing (welding load): N		3089	ASTM D2596
Service temperature range: ℃		−54 to 177	
Color		Brown	

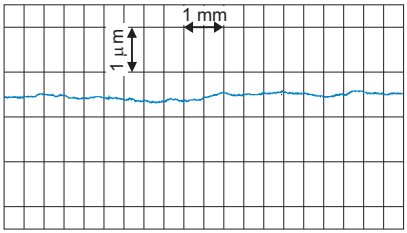
[Fretting Resistance Test Data (Comparison of Raceway Conditions)]

Test conditions

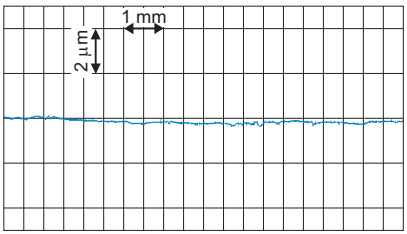
Item	Description
Stroke	3 mm
Number of strokes per minute	200 min^{-1}
Total number of strokes	2.88×10^5 (24 h)
Surface pressure	1118 MPa
Grease quantity	12 cm^3 (replenished every 8 h)

AFC Grease

Pre-travel

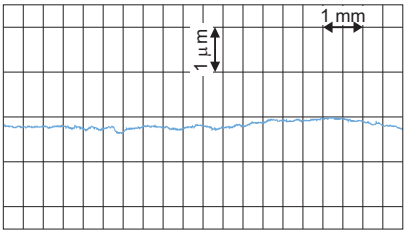
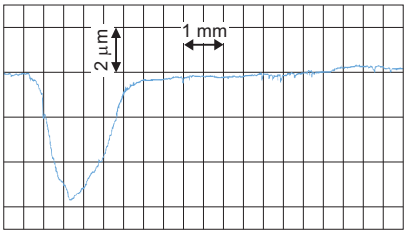


Post-travel



General bearing grease

Pre-travel



Post-travel