

## 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  $-54^{\circ}\text{C}$  to  $177^{\circ}\text{C}$ .

### [Representative Physical Properties]

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

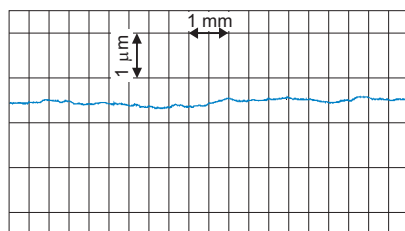
# [Fretting Resistance Test Data (Comparison of Raceway Conditions)]

Test conditions

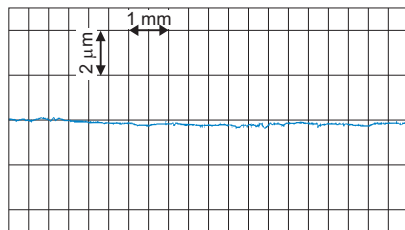
Item	Description
Stroke	3 mm
Number of strokes per minute	200 min <sup>-1</sup>
Total number of strokes	$2.88 \times 10^5$ (24 h)
Surface pressure	1118 MPa
Grease quantity	12 cm <sup>3</sup> (replenished every 8 h)

## AFC Grease

Pre-travel

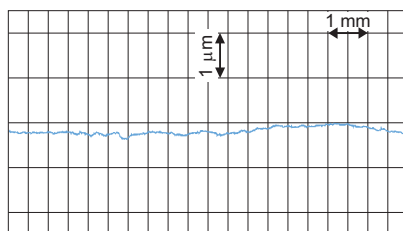


Post-travel



## General bearing grease

Pre-travel



Post-travel

