

## THK Original Grease

# AFB-LF Grease

- Base oil: refined mineral oil
- Consistency enhancer: lithium-based



AFB-LF Grease is a general-purpose grease developed with a lithium-based consistency enhancer using refined mineral oil as the base oil. It excels in extreme pressure resistance and mechanical stability.

### [Features]

- (1) High extreme pressure resistance  
Compared with lithium-based greases available on the market, AFB-LF Grease has higher wear resistance and outstanding resistance to extreme pressure.
- (2) High mechanical stability  
AFB-LF Grease is not easily softened and demonstrates excellent mechanical stability even when used for a long period of time.
- (3) High water resistance  
Compared with ordinary lithium grease, this product is a highly water resistant grease with minimal softening due to moisture penetration and very little deterioration under extreme pressures.
- (4) Long service life  
It provides many times the lubrication life of lithium soap-based greases. As a result, it offers a lower maintenance workload and greater economy due to the longer intervals between greasing.

### [Representative Physical Properties]

Item	Representative value	Test method
Consistency enhancer	Lithium-based	
Base oil	refined mineral oil	
Base oil kinematic viscosity: mm <sup>2</sup> /s (40°C)	170	JIS K 2220 23
Worked penetration (25°C, 60W)	275	JIS K 2220 7
Mixing stability (100,000 W)	345	JIS K 2220 15
Dropping point °C	193	JIS K 2220 8
Evaporation amount: mass% (99°C, 22h)	0.4	JIS K 2220 10
Oil separation rate: mass% (100°C, 24h)	0.6	JIS K 2220 11
Copper plate corrosion (B method, 100°C, 24h)	Accepted	JIS K 2220 9
Low temperature torque: N·m (-20°C)	Start	130
	(revolutions)	51
4-ball testing (burn-in load): N	3089	ASTM D2596
Service Temperature Range °C	-15 to 100	
Color	Yellowish brown	

**[Comparison of Grease Service Life Data]**

<Test products>

LM Guide HSR25CA1SS + 600L

<Test conditions>

Load : 9.8 kN/block

Stroke : 350mm

Speed : 30m/min (MAX)

Time constant : 200msec

Greasing quantity : 4g/block (initial lubrication only)

Travel distance until flaking occurs by grease type

Grease	Distance	(km)								
		0	100	200	300	400	500	600	700	
AFB-LF Grease										
Ordinary lithium-soap based grease										