

THK Original Grease

AFE-CA Grease

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



AFE-CA Grease uses urea as a consistency enhancer and a high-grade synthetic oil as the base oil. It has low dust generative characteristics and is therefore a suitable grease for clean room environments.

[Features]

(1) Low dust generation

Compared with vacuum greases in conventional use, AFE-CA Grease generates less dust and therefore is ideal for use in clean rooms.

(2) Long service life

Unlike ordinary soap based grease for metal lubrication, AFE-CA Grease excels in anti-oxidation stability and therefore can be used for a long period of time. As a result, maintenance work is reduced.

[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°C)	99	JIS K 2220 23
Worked penetration (25°C, 60W)	280	JIS K 2220 7
Mixing stability (100,000 W)	310	JIS K 2220 15
Dropping point °C	260	JIS K 2220 8
Evaporation amount: mass% (99°C, 22h)	0.1	JIS K 2220 10
Oil separation rate: mass% (100°C, 24h)	0.1	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)	76
4-ball testing (burn-in load): N	1236	ASTM D2596
Service Temperature Range °C	-40 to 180	
Color	Light yellowish brown	

[Test Data on Low Dust Generative Characteristics]

● Test Data on AFE-CA Grease (Comparison of Particle Accumulation)

The test data in the figure compares the results of particle accumulation testing on this product and other greases.

<Test conditions>

Item	Description
Sample model No.	THK KR4610
Screw Ball rotational speed	1000min ⁻¹
Stroke	210mm
Grease quantity	2 cc in both the Ball Screw and the LM Guide
Flow rate during measurement	1ℓ/min
Measuring instrument	Dust counter
Particle size	0.5μm

