# THK Original Grease

# **AFF Grease**

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



AFF Grease uses a high-grade synthetic oil, lithium-based consistency enhancer and a special additive. It achieves stable rolling resistance, low dust generation and high fretting resistance, at a level that conventional vacuum greases or low dust generation greases have not reached.

### [Features]

- (1) Stable rolling resistance
  - Since the viscous resistance is low, the rolling resistance fluctuation is also low. Thus, superb conformity is achieved at low speed.
- (2) Low dust generation
  - AFF Grease generates little dust, making itself an ideal grease for use in clean rooms.
- (3) Fretting resistance
  - Since AFF Grease is more resistant to wear from microvibrations than other low particle generative grease, it allows the greasing interval to be extended.

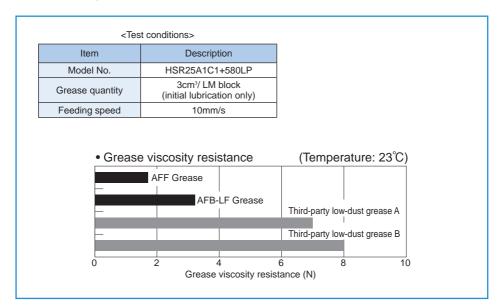
# [Representative Physical Properties]

Item		Represen- tative value	Test method	
Consistency enha	ncer	Lithium- based		
Base oil		high-grade synthetic oil		
Base oil kinematic mm²/s (40°C)	viscosity:	100	JIS K 2220 23	
Worked penetration (25°C, 60W)	n	315	JIS K 2220 7	
Mixing stability (100,000 W)		345	JIS K 2220 15	
Dropping point ℃		220	JIS K 2220 8	
Evaporation amount: mass% (99°C, 22h)		0.7	JIS K 2220 10	
Oil separation rate mass% (100°C, 24		2.6	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	220	JIS K 2220 18	
	(revolutions)	60		
4-ball testing (burn-in load): N		1236	ASTM D2596	
Service Temperature Range °C		-40 to 120		
Color		Red- dish brown		

# Lubrication

**AFF Grease** 

# [Grease viscosity resistance measurements]



# [Test Data on Low Dust Generative Characteristics]

• Test Data on AFF Grease (Comparison of Particle Accumulation)
The test data in the figure compares the results of particle accumulation testing on this product and other greases.

Item	<test< th=""><th>conditions&gt;</th><th></th></test<>	conditions>	
Grease quantity  1cm³/ LM block (initial lubrication only)  Amount of air supplied  500cm³/min  [Measurement instrument]  Diameter of particle measured  Feeding speed  30m/min  Stroke  200mm	Item	Description	
Grease quantity   (initial lubrication only)	Model No.	SR20W1+280LP	
[Measurement instrument] Particle counter  Diameter of particle measured 0.3µm or more  Feeding speed 30m/min  Stroke 200mm	Grease quantity		
instrument]  Diameter of particle measured  Feeding speed  Stroke  3000  Particle counter  0.3µm or more  200mm	Amount of air supplied	500cm³/min	
measured 0.5µm of more Feeding speed 30m/min Stroke 200mm		Particle counter	
Stroke 200mm		0.3μm or more	
3000	Feeding speed	30m/min	
AFF Grease — AFE-CA Grease — Competitor's low dust generative grease — Third-party grease  2000  AFF  AFF  AFF  AFF  AFF  AFF  AF	Stroke	200mm	
	article Accumulation (No. of particles per 2min. • ii	<ul> <li>Competitor's low dust generative gr</li> </ul>	
		Tim	e (min)

# Lubrication

**AFF Grease** 

# [Rolling Resistance Characteristics at Low Speed]

# Rolling Resistance at Low Speed

The data in the figure represent the test results of comparing rolling resistances at low speed between AFF Grease and other greases.

