

## THK Original Grease

# L700 Grease

- Base oil: high-grade synthetic oil
- Consistency enhancer: calcium sulfonate complex-based



L700 Grease is an H1 grease product certified and registered by NSF International.\* Using a high-grade synthetic oil as the base oil in conjunction with a calcium sulfonate complex-based consistency enhancer, L700 Grease maintains excellent water and corrosion resistance and withstands extreme pressure. It is intended for use in medical, pharmaceutical, and food equipment.

\* A third party certification body for matters related to public safety and health

### [Features]

#### (1) NSF-certified

L700 Grease is an H1 grease product certified and registered by NSF International (NSF H1).

#### (2) Water and corrosion resistance

Calcium sulfonate (the consistency enhancer) makes L700 Grease more resistant to water and corrosion than ordinary H1 grease.

#### (3) Extreme pressure resistance

L700 Grease displays better extreme pressure resistance than general-purpose grease.

### [Representative Physical Properties]

Item	Representative value	Test method
Consistency enhancer	Calcium sulfonate complex-based	
Base oil	High-grade synthetic oil	
Base oil kinematic viscosity: mm <sup>2</sup> /s (40°C)	89	JIS K 2220 23
Worked penetration (25°C, 60 W)	314	JIS K 2220 7
Mixing stability (100,000 W)	324	JIS K 2220 15
Dropping point: °C	250	JIS K 2220 8
Evaporation amount: mass% (99°C, 22 h)	0.15	JIS K 2220 10
Oil separation rate: mass% (100°C, 24 h)	2.9	JIS K 2220 11
Copper plate corrosion (B method, 100°C, 24 h)	Accepted	JIS K 2220 9
Low-temperature torque: mN·m (-20°C)	Starting	JIS K 2220 18
	Rotational	
4-ball testing (welding load): N	3922	ASTM D2596
Service temperature range: °C	-40 to 200	
Color	Tan	

**[Water Resistance]**

- Leakage comparison with ordinary H1 grease by rotating a bearing containing grease mixed with 10 mass% of water

## Test conditions

Item	Description
Bearing	JIS B 1521 6204, Open type, Class 0, C3 clearance
Water content	10% of the grease weight
Rpm	600 min <sup>-1</sup>
Test duration	60 min

## Test result



L700 Grease



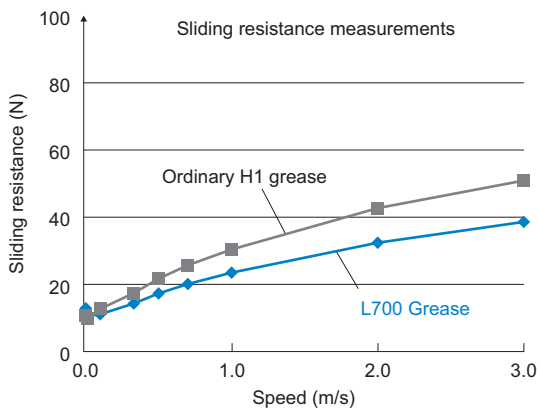
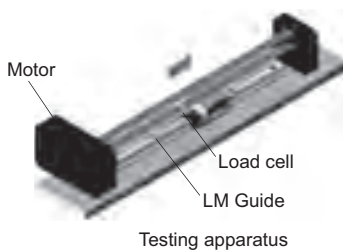
Ordinary H1 grease

### [Low Sliding Resistance]

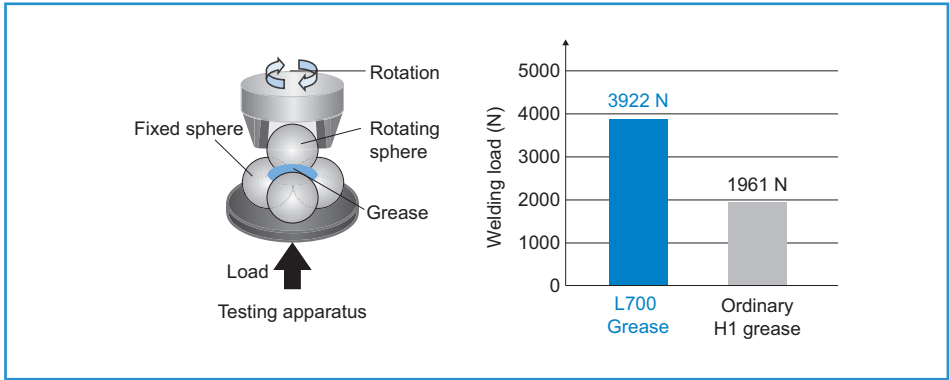
- Measurement of sliding resistance when an LM Guide is injected with grease and operated at low speed to high speed

Test conditions

Item	Description
Tested model	SHS25
Measurement speed	0.1 to 3.0 m/s
Acceleration	29.4 m/s <sup>2</sup> (3G)
Stroke	2300 mm



### [Extreme Pressure Resistance]



### [Low-Temperature Characteristics]

