

MOLYKOTE® Longterm 2 Plus WE High Performance Grease

Lubricating grease, designed for the wind energy market, for metal/metal combinations with slow to medium speeds, especially at high loads

Features

- · Long-term lubrication
- · Wide service-temperature range
- · High load-carrying capacity
- Suitable for use in wind turbine bearings

Benefits

- · Corrosion and oxidation protection
- Moisture resistance
- · Protection against false brinelling

Composition

- Mineral oil
- Lithium soap thickener
- Solid lubricants
- EP additive
- · Corrosion inhibitor
- · Adhesion improver

Applications

This product has been developed to perform in environments where there is a risk of fretting corrosion, groove formation (false brinelling effect) or moisture ingress. Typical applications would include lubrication of bearings in wind energy turbines, such as pitch bearings or azimuth bearings.

Description

MOLYKOTE® Longterm 2 Plus WE High Performance Grease is lubricating grease for metal-to-metal combinations with slow to medium speeds, especially at high loads. It is particularly suggested for lubrication in high-moisture environments. It helps prevent false brinelling and corrosion.

It retains its properties over a wide range of temperatures, from -25°C to +110°C, (-13°F to 230°F).

In mixed friction, it provides wear protection due to solid lubricants and EP (extreme pressure) additives.

Typical properties

Specification writers: These values are not intended for use in preparing specifications. Please contact your local MOLYKOTE® sales representative prior to writing specifications on this product.

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Standard ⁽¹⁾	Test	Unit	Result	
	Color		Black	
Consistency, density, viscosity				
DIN 51 818	NLGI consistency class		2	
ISO 2137	Worked penetration	mm/10	260-300	
ISO 2811	Density at 20°C	g/ml	0.96	
DIN 51 562	Base oil viscosity at 40°C	Cst	275	
Temperature	•			
	Service temperature	°C	-25 to 110, short time +130	
ISO 2176	Drop point	°C	>175	
ASTM D1478-80	Low-temperature torque test at -20°C			
	Initial breakaway torque	Nm	608x10 ⁻³	
	Torque after 20 minutes running time	Nm	50x10 ⁻³	
Loading capacity, wear protection, service life				
	Four ball tester			
DIN 51 350 T.4	Weld load	N	4,000	
DIN 51 350 T.5	Wear scar under 800 N load	mm	1.08	
	Almen-Wieland machine OK load	N	20,000	
	Frictional force with OK load	N	1,940	
DIN 51 82102A	FAG roller element bearing tester FE 9, h (1,500/6,000-150, F50)	Н	176	

⁽¹⁾ DIN: Deutsche Industrie Norm. ISO: International Standardization Organization. ASTM: American Society for Testing and Materials.

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Typical properties (continued)

Standard ⁽¹⁾	Test	Unit	Result	
Speed				
	DN value	mm/min	250,000	
Resistance				
DIN 51 808	Oxidation resistance, pressure drop 100 h	Bar	0.4	
Corrosion protection				
DIN 51 802	SKF-Emcor method degree of corrosion		0-0	
Oil separation				
DIN 51 817	Standard test	%	2.5	

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How to use

Clean points of contact. As is usual with lubricating greases, apply by means of a brush, spatula, or automatic lubrication device. Can be used in central lubrication systems.

Handling precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION.

Usable life and storage

When stored at or below 20°C in the original unopened containers, this product has a usable life of 60 months from the date of production.

Packaging

This product is available in different standard container sizes. Detailed container size information should be obtained from your nearest MOLYKOTE® sales office or MOLYKOTE® distributor.

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