

ELBAFLEX ELS 18

ELBAFLEX ELS 18 is low viscosity synthetic hydrocarbon/Ester oil thickened with lithium soap. It is fortified with additives to promote thermo oxidative stability, prevent corrosion, and provide tribochemical activity under sub-EHD operating conditions. This grease is ultra-filtered to 10 microns promoting improved grease access to the ball/race contact zone. ELBAFLEX ELS 18 is a low-noise; high speed spindle grease for plain and rolling bearings.

ELBAFLEX ELS 18 is suitable for plain and rolling bearings, small and miniature bearings, Low-noise and precision bearings, for precision mechanical and optical equipment, very light lubricating grease, For high speeds, Good corrosion protection, Resistant to oxidation and ageing and low- temperature applications.

Recommended Temperature Range: -54°C to 125°C

Speed factor (n x dm), mm x min, approx.1,000,000**

Application

ELBAFLEX ELS 18 is suitable for plain and rolling bearings operating at low temperatures and/or high speeds, for example in grinding spindles, machine tool spindles, spindle bearings, textile spindles, bearings in OE-spinning turbines, low-noise bearings in precision and optical equipment.

TYPICAL PROPERTIES	METHOD	RESULT
Base Fluid	Report	Ester / Synthetic Hydrocarbon
Kinematic Viscosity, 100°C	ASTM D445	4.5 cSt
Kinematic Viscosity, 40°C	ASTM D445	18.9 cSt
Thickener	Report	Lithium Soap
Color	Visual	Light Tan
Appearance	Visual	Smooth
Po	ASTM D217	265
P60	ASTM D217	269
NLGI Grade	ASTM D217	2
Dropping point	ASTM D226	175°C
Oil Separation, 24h at 100°C	ASTM D618	1.6%
Evaporation, 24h at 100°C	CTM	0.24%
Copper Corrosion, 24h at 100°C	ASTM D4048	1b
Apparent Viscosity, -40°C	CTM	3.3 x 106 mPa.s
Oxidation Stability, 210°C	ASTM D5483	55 minutes
Density, 25°C	CTM	0.84 g/cc
Volatility, air, t1/2	TGA	290°C
Rust Prevention	CTM	TBD
Wear Prevention	ASTM D2266	0.39 mm
Apparent Viscosity, 25°C, 2.1 s-1	CTM	246,900 mPa.s
Apparent Viscosity, 25°C, 25 s-1	CTM	9,272 mPa.s
Apparent Viscosity, -40°C	CTM	4.86 x 106 cP
Acid Number	ASTM D974	0.62 mgKOH/g

SAFETY:

ELBAFLEX ELS 18 does not contain hazardous ingredients. If fumes are generated at elevated temperatures, ventilation is required. See the Material Safety Data Sheet for additional safety related information on the grease.

