

SHELL GADUS S3 T100

PREMIUM QUALITY INDUSTRIAL BEARING GREASE

RECOMMENDED REPLACEMENT FOR SHELL STAMINA RL

DESIGNED TO MEET CHALLENGES

Shell Gadus S3 T100 is a high technology grease designed to give optimum performance for grease lubrication in industrial bearings. Shell Gadus S3 T100 is based on mineral oil with a special diurea thickener to give long life, low wear and shear-stable properties at high temperatures.

PERFORMANCE FEATURES

- n Outstanding life at high temperatures
- n Excellent wear protection
- n Excellent mechanical stability at high temperatures
- n Excellent oxidation resistance
- n Good protection against false brinnelling
- n Low oil separation
- n Excellent corrosion resistance
- n Provides protection from the elements of corrosion
- n Versatile
- n Water resistant
- n Withstands washing with water, preventing loss of protection.

HIGH TEMPERATURE PERFORMANCE

- n The diurea thickener used in Shell Gadus S3 T100 has a high melting point and the grease performance is limited only by the properties of the base oil and additive components.
- n The low volatility and excellent oxidation stability of the base oil are such that they give it an excellent service life in bearings operating between -20°C and 150°C. With caution, Shell Gadus S3 T100 may, in some circumstances, be used at temperatures up to 180°C, but only if the re-lubrication period is suitably adjusted.

CORROSION PROTECTION

- n When a bearing is running, most high quality greases can maintain an adequate lubricating film even when the grease is loaded with water. However, when the grease bearing is idle, corrosion may occur causing pitting which can be destructive. Shell Gadus S3 T100 is formulated with corrosion inhibitors to help protect bearing surfaces even when the grease is contaminated with water.
- n The lubrication properties of Shell Gadus S3 T100 have been used very successfully in slow moving, loaded large bearings such as those found in continuous casters in steel plants.

APPLICATIONS

- n Shell Gadus S3 T100 is particularly recommended for use in high temperature (150°C), lightly loaded industrial bearings.
- n It is recommended for use where long operational life and extended re-greasing intervals are an important consideration.

OPERATING TEMPERATURE RANGE

- n -20°C to 150°C.

RE-LUBRICATION

Grease life varies considerably from application to application, even with bearings operating under normally identical conditions. Variables such as air flow, dirt and humidity can have a considerable effect in addition to the more commonly recognised parameters of load, speed and temperature.

The use of Shell Gadus S3 T100 usually permits considerable extension of the re-lubrication interval.

OXIDATION STABILITY

Shell Gadus S3 T100 has a high temperature oxidation inhibitor system to help ensure that it will withstand high operating temperatures without forming deposits. Unlike the soap thickeners used in most greases, the diurea thickener in Shell Gadus S3 T100 does not catalyse grease oxidation, indeed the diurea thickener offers inherent anti-oxidant properties. This contributes to longer grease life at higher temperatures.

The base oil component of Shell Gadus S3 T100 is a specially selected high viscosity index mineral oil with excellent oxidation and evaporation resistance.

SEALING

The rheology of Shell Gadus S3 T100 is such that at low shear rates and with heating the consistency increases. Consequently, in bearings operating at high temperatures the grease remains in place providing good sealing and continuous lubrication even in the presence of vibration.

WATER WASHOUT

Shell Gadus S3 T100 exhibits very good resistance to water washout by immersion or spray.

TYPICAL PHYSICAL CHARACTERISTICS

CHARACTERISTICS	2
Colour	Brown
Soap Type	Diurea
Base Oil Type	Mineral
Base Oil Viscosity (IP 71/ASTM D 445) @ 40°C mm ² /s	100
@ 100°C mm ² /s	11
Dropping Point °C (IP 132/ASTM D 566-76)	250
Cone Penetration worked @ 25°C 0.1mm (IP 50/ASTM D 217)	265-295
Pumpability (long distance)	Fair