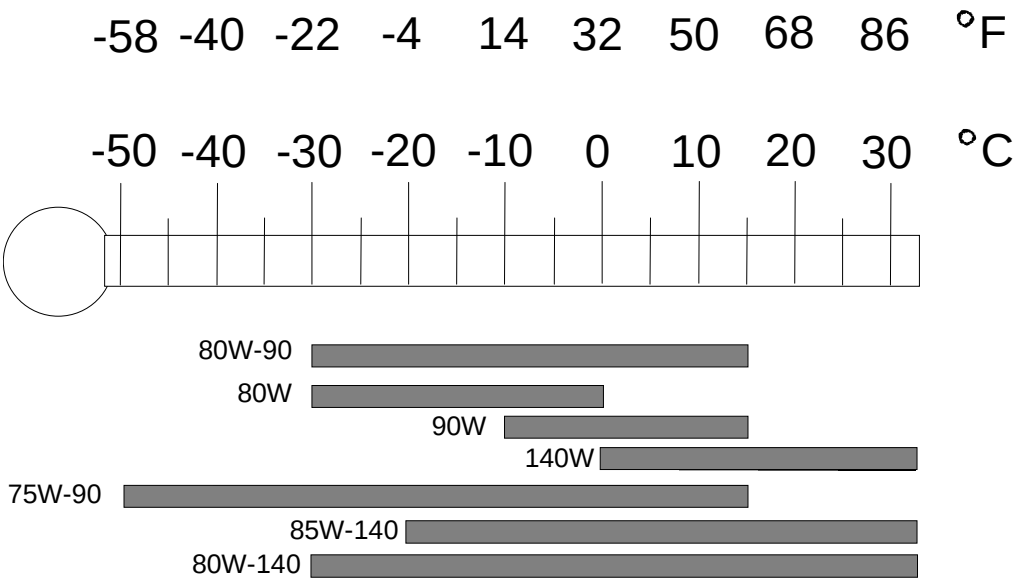
Oil Recommendation

Lubricants used shall be extreme pressure gear oils that meet the requirements of API (American Petroleum Institute) gear oil classification GL-5.
The use of synthetic oil is preferred in extreme low and high ambient temperatures. The used oil type shall be in low temperature conditions "full synthetic" SAE 75w-90 and in very hot conditions SAE 140 offering good viscosity index values.

Viscosity according to prevailing ambient temperature shall be as follows:



Oil Temperatures in Operating Conditions

Oil suppliers define allowed operating temperatures for their various oil types, which shall not be exceeded. Good thermal stability shall be considered as an oil selection criteria.
Typical axle temperature values measured in operating conditions can reach 80-100°C, in extreme conditions 120°C. Temperatures continuously over 100°C require normally an adequate oil cooling system to be applied. Sisu Axles will also accept higher, continuously up to 140°C (284°F) operating temperature with the following conditions:
- The pinion installation angle is between 0...+3°.
- Fully synthetic SAE XXW-140, API GL5 gear lubricant (XX is 80, 85 or 90) should be used.
- The oil level should be dropped 1/2" (12,7mm) from the current level at the lower edge of the level plug hole.
- The oil change interval will be half of the current mileage, not however more than 50,000km (31,000miles).

Oil Change Intervals

Oil change intervals shall be monitored in extreme conditions by oil analysis. In case of high metal content or decreased lubrication properties oil change intervals shall be reduced. Warranty will not cover damages caused by poor lubrication in case of using reduced oil quality.

Pinion Angles and Oil Levels

In the illustration below there are shown the pinion angles in the FRFP-13/16-S, FRMP-13/16-S and FRDP-13/16-S axles and also the oil levels relative to the oil plugs.