



Rando[®] HDZ LT

High durability heavy-duty all-temperature hydraulic fluids

Customer benefits

Heavy-duty system protection

Rando HDZ LT high performance heavy-duty hydraulic fluids are designed to deliver advanced multi-grade performance across a range of severe operating conditions, and at a wide spectrum of temperatures. Leading edge fluids in this range deliver excellent low pour-point performance, maximising fluidity and system protection across the extremes of temperature.

Rando HDZ LT's highly stable viscosity index improver additive technologies deliver exceptional shear stability in severe high speed, high pressure operations over very long operating periods, maximising anti-wear and anti-oxidation performance. This robust and highly reliable wear and oxidation protection provides a significantly extended service life to all types of hydraulic system, in a very wide range of applications, and in a wide spectrum of temperatures and climatic conditions.

Performance at the extremes of service

Rando HDZ LT highly durable wear protection additives deliver optimised surface protection to all types of system, including high pressure, high speed vane and gear pumps and maximise protection in mixed metallurgy systems, such as axial systems, where bronze, steel and silver plated components may be present.

This leading edge wear protection is combined with supplemental rust and corrosion inhibitor technologies, and high performance foam suppression additives, designed to optimise system protection against deposit formation or air entrainment, maximising system performance and component protection over long and severe service periods.

Product features

Rando HDZ LT delivers high performance protection and extended service life to high speed, high pressure hydraulic pumps operating in the most extreme conditions, across a wide range of climatic conditions, including very low temperatures.

Applications

- Recommended for use in all high-performance, heavy duty hydraulic systems operating under a wide range of environmental and operating temperatures, including high speed, high pressure vane and gear pumps, and axial piston pumps. Excellent compatibility with bronze, steel and silver-plated components.

Approvals, performance and recommendations

- DIN 51524 part 2 HLP and part 3 HVLP
- Swedish Standard SS 15 15 34

Rando HDZ LT series exceed major manufacturers' specification requirements:

- Denison HF-O (severe duty axial piston and vane pump service)
- Vickers M-2950-S (mobile hydraulic systems)
- Cincinnati Milacron P-68, P-69 and P-70 (machine tool)
- US Steel 127

Typical test data

Test	Test methods	Results	
Viscosity Grade		32	46
Appearance	Visual	B & C	B & C
Kin. Viscosity at 40°C, mm ² /s	ISO 3104	32	46
Kin. Viscosity at 100°C, mm ² /s	ISO 3104	7.25	9.4
Viscosity Index	ISO 2909	200	196
Flash Point COC, °C	ISO 2592	160	200
Pour Point, °C	ISO 3016	-42	-39
Density, 15°C, kg/l	ASTM D1298	0.8372	0.876
CU corrosion, 3h, 100°C	ASTM D0130	1B	1B
FZG Damaged Load, a/8.3/90	DIN 51354	11	11
Hours to TAN 2.0 mg KOH/g:h	ASTM D0943	2500	2500
Sulphated Ash, %wt	ASTM D0874	0.12	0.12

The information given in the typical data does not constitute a specification but is an indication based on current production and can be affected by allowable production tolerances. The right to make modifications is reserved. This supersedes all previous editions and information contained in them.

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