



HYDRAULIC OIL

HM ZF 46

Product Description:

HYDRAULIC OIL HM ZF 46 is a premium quality zinc free mineral oil with a high viscosity index for use in high pressure hydraulic systems, light duty gearboxes, bearings, and general lubrication. The oil is not suitable for turbine applications.

HYDRAULIC OIL HM ZF 46 is formulated with high quality refined mineral base stocks in combination with a special additive technology to achieve the following performance:

- Good stability against oxidation.
- High Viscosity Index
- Very good protection against wear.
- Good water demulsibility.
- Very good foaming properties.
- Very effective to rust and corrosion.
- Good thermal stability.

HYDRAULIC OIL HM ZF 46 exceeds the following performance criteria.:

DIN 51524-2 HLP **ISO 11158 HM** **ASTM D6158 HM**
AFNOR NF E 48-603 HM **Cincinnati P-70** **Sauer Danfoss 520L0463**
Denison HF-0/HF-1/HF-2 **Bosch Rexroth RE 90 220** **Eaton Vickers M-2950-S / I-286**
General Motors LS-2



Property	Unit	Test Method	Typical Value
ISO grade		ISO 3448	46
Density @15°C	kg/m ³	ASTM D4052	880.3
Kin. Viscosity @40°C	mm ² /s	ASTM D7042	46.9
Kin. Viscosity @100°C	mm ² /s	ASTM D7042	6.9
Viscosity Index		ASTM D2270	101
Flash Point COC	°C	ASTM D92	>200
Pour Point	°C	ASTM D7346	-27
Air Release Value @50°C	Minutes	ASTM D3427	Pass
Demulsibility @54°C	Minutes	ASTM D1401	Pass

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