# HYDRALFA HVI 15/22/32/46/68/100/150 

## Product Description

HYDRALFA HVI series are high performance hydraulic oils of high viscosity index designed to meet requirements of hydraulic systems operating under severe pressure and temperature conditions.
They are designed to perform under extreme temperature variations, found in the marine applications.
They are blended from high VI mineral base oils and special additive packages, providing high $\mathrm{VI}, \mathrm{EP}$ I anti wear, rust and oxidation inhibitor properties.

## Performance Features

- High anti wear protection
- Superior thermal stability
- High viscosity index and shear stability
- Good oxidation stability and resistance
- Excellent anti rust and anti corrosion properties
- Good antifoam properties
- Enhanced demulsibility and excellent water separation properties
- Low pour point


## Application

HYDRALFA HVI oils are specially recommended for use in all shipboard modern hydraulic equipment and also in high pressure hydraulic systems operating within extremely wide temperature range and conditions.
HYDRALFA HVI oils meet the following requirements:
DIN 51524 part 2,US STEEL 136,127, DENISON HF-2,HF-1,HF-O, CINCINNATI MACHINE P 68/69fi0, VICKERS M-2950-S, VICKERS 1-286-S, AFNOR NFE 48690\{dry)/ NFE 48-691\{wet), GM LH-03-1/LH-04-1/LH-06-1,SAUER DANFOSS, BOSCH REXROTH, COMMERCIAL HYDRAULICS,JCMAS HK

Typical Properties:

| SAE grade | 15 | 22 | 32 | 46 | 68 | 100 | 150 | Method |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Specific gravity at $15^{\circ} \mathrm{C}, \mathrm{kg} / \mathrm{l}$ | 0.868 | 0.871 | 0.875 | 0.88 | 0.883 | 0.888 | 0.892 | $\begin{aligned} & \text { ASTM D- } \\ & 4052 \end{aligned}$ |
| Viscosity, Kinematic at $40^{\circ} \mathrm{C}, \mathrm{cSt}$ | 15 | 22 | 32 | 46 | 68 | 100 | 150 | ISO 3104 |
| Viscosity, Kinematic at $100^{\circ} \mathrm{C}$, cSt | 3.6 | 4.75 | 6.05 | 7.85 | 10.55 | 12.55 | 16.75 | ISO 3104 |
| Viscosity Index | 145 | 140 | 140 | 140 | 140 | 120 | 120 | ISO 2909 |
| Pour Point, ${ }^{\circ} \mathrm{C}$ | -42 | -39 | -39 | -36 | -33 | -27 | -21 | ISO 3016 |
| Flash Point COC, ${ }^{\circ} \mathrm{C}$ | 194 | 200 | 210 | 215 | 220 | 225 | 230 | ISO 2592 |

## Note:

The above information is indicative based on current production and does not constitute a specification. Results can be affected by allowable tolerances, not affecting performance.

