

Hydraulic oils

ISO L-HV

HIDO[®] HV FF

HIDO[®] HV FF oils are high performance oils produced from solvent neutral base oils of naturally high viscosity index and suitable additives balanced to meet multiple requirements. These oils have high thermal and oxidation stability with significant antiwear characteristics of premium quality. They have great shear stability, and innovative ultra-pure properties protect critical components of the system by prolonging the application period, enabling high efficiency in operation. It is particularly filtered in order to meet strict oil purity requirements per NAS 1638.

ADVANTAGES

- Exceptional oxidation and thermal stability allows for extended application of this oil, without deposit formation in hydraulic systems exposed to high pressures and temperatures;
- Carefully selected additives give this oil extraordinary antiwear properties and enable its efficiency in various operating conditions, including severe working conditions followed by heavy loads;
- High viscosity index allows efficient operation in wide temperature range;
- Efficient anticorrosion protection properties of non-ferrous metals (copper, brass and bronze);
- Excellent hydrolytic stability in the presence of moisture provides protection against rust and corrosion;
- Exceptional filtrability characteristics, which are one of the main requirements of the manufacturers of modern hydraulic systems, enable effective oil filtration even under the most severe exploitation conditions and they prevent the harmful effect of the most common contaminants such as water and calcium, which cause filter clogging;
- Remarkable demulsibility properties that allow quick water separation in the tank if it penetrates into the hydraulic system; it prevents the creation of harmful emulsion and consequent damage to the oil pump and system;
- Fast air separation and absence of oil foaming ensure impeccable operation of hydraulic devices and prevent the appearance of cavitation of the oil pump thus protecting the hydraulic system and oil performances;
- Neutrality to standard seals and compatibility with most pumps.

QUALITY LEVEL

| | | |
|----------------------|---------------------------------------|-------------------------------|
| ISO 6743-4 | Parker Hannifin (Denison) HF-0 | Eaton Brochure 03-401-2010 |
| ISO 11 158 HV | Parker Hannifin (Denison) HF-1 / HF-2 | Eaton Vickers I-286-S |
| DIN 51524/3 (HVLP) | MAG IAS P-68 (VG 32) | Eaton Vickers M-2950-S |
| AFNOR NF E 48 603 HV | MAG IAS P-70 (VG 46) | AIST (US Steel) 126, 127, 136 |
| ASTM D 6158 HV | MAG IAS P-69 (VG 68) | |

APPLICATION

HIDO[®] HV FF oils are applied in all hydraulic systems, especially in sensitive systems requiring high safety in operation with big changes in temperatures, pressures and speeds over a long period of time, where conventional hydraulic oils cannot meet the requirements.

HIDO[®] HV FF oils are also applied on precision and programmed tooling machines, automatic production lines and lines and devices with sensitive hydraulic installation elements, which do not tolerate higher changes in viscosity with temperature change. They are very suitable for use in open-air mobile hydraulic systems at low starting temperatures, such as installations in mining, construction, shipbuilding, etc.

TYPICAL CHARACTERISTICS

| | HIDO [®] HV FF | | | | | | | | | | METHOD |
|--|-------------------------|------|------|------|------|------|------|------|------|------|------------------|
| | 10 | 15 | 22 | 32 | 46 | 55 | 68 | 100 | 220 | 320 | |
| Density at 15°C, g/ml | 0,86 | 0,87 | 0,88 | 0,87 | 0,88 | 0,88 | 0,88 | 0,89 | 0,89 | 0,89 | SRPS EN ISO 3675 |
| Kinematic viscosity at 40°C, mm ² /s | 10 | 15 | 22 | 32 | 46 | 55 | 68 | 100 | 220 | 320 | SRPS ISO 3104 |
| Kinematic viscosity at 100°C, mm ² /s | 3,0 | 4,0 | 5,0 | 6,5 | 8,0 | 9,1 | 10,6 | 14,1 | 25,0 | 32,5 | SRPS ISO 3104 |
| Viscosity index | 170 | 160 | 150 | 150 | 146 | 146 | 144 | 144 | 143 | 142 | SRPS ISO 2909 |
| Flash point, °C | 165 | 170 | 175 | 185 | 205 | 207 | 210 | 220 | 230 | 240 | SRPS EN ISO 2592 |
| Pour point, °C | -42 | -42 | -39 | -36 | -33 | -30 | -30 | -24 | -21 | -21 | SRPS ISO 3016 |
| Cu corrosion, 3h/100°C, degree | 1a | | | | | | | | | | SRPS EN ISO 2160 |
| Class of oil purity, degree | 6 | | | | | | | | | | NAS 1638 |

STORAGE

Store in covered area. If stored outdoors, it is necessary to place the drums in a horizontal position to prevent the accumulation of water on the surface of the drum. Do not store at elevated temperatures or in locations exposed to direct sunlight.

All necessary instructions can be found in the product SDS. It contains the details of possible hazards, warnings and first aid measures, as well as the impact on the environment and the necessary measures for the storage and handling.

PACKING

Drums 180kg, 60L and plastic containers of 10L and 20L.

Data are orientational, manufacturer reserves the right to make changes in order to improve product quality.

