



FLUID

Premium Performance Hydraulic Oils

Product Overview

FLUID oils are high-performance antiwear hydraulic lubricants providing maximum protection to hydraulic equipment against wear-and-tear. FLUID series are made of superior-quality base oils with antifoam and anti-corrosion additives. They are particularly recommendable under severe operating conditions where the strong oil film provides effective protection to hydraulic systems and a good medium for the transmission of power.

Benefits

- FLUID oils are highly-resistant to oxidation and prolong the life of the whole system. Thanks to their anti-wear-and-tear properties coupled to a good filterability and the resistance of the oil film, they make equipment more reliable and energy efficient with fewer breakdowns and improved production
- Excellent protection against rust and corrosion
- Extended draining period
- High resistance to oxidation
- Easily separate with water
- Keeps systems clean
- Suitable for a wide range of equipment

Applications

- Hydraulic systems subject to the formation of deposits, such as ultra-sophisticated digitally controlled machine tools
- Hydraulic systems with small-step servo valves
- Equipment where the presence of water may damage the system
- Systems with gears and bearings
- Systems where deposits and sludge are likely to build up the conventional oils
- Equipment requiring high-load carrying capacity oil and high-load carrying capacity oil and high anti-wear-and-tear protection
- Applications where a film of anti-corrosion oil is required (systems where no water may be present)
- Systems with components using a variety of materials

Health and Safety

This lubricant is unlikely to produce any significant health or safety hazard when used in the application it has been designed for and according to the recommendations provided in the Material Safety Data Sheet. MSDS are available upon request through your sales advisor.

When disposing of used oil, please observe all current regulations and protect the environment.

FLUID SERIES

Meets or exceeds the following industry Specifications

Grade	10	15	22	32	46	68	100	150	220
DIN 51524 Part 2 category HLP	✓	✓	✓	✓	✓	✓	✓	✓	✓
AFNOR NF E 48-603 (HM)	✓	✓	✓	✓	✓	✓	✓		
Cincinnati Machine				P-68	P-70	P-69			
Rust Test ASTM D665 A & B	✓	✓	✓	✓	✓	✓	✓	✓	✓
Denison HF-0, HF-1 & HF-2				✓	✓	✓			
Eaton Brochure 694 for 35VQ25A (previously Vickers M-2952-S/I-286-S)		✓	✓	✓	✓	✓	✓	✓	✓
ISO 11158 category HM	✓	✓	✓	✓	✓	✓	✓	✓	✓
ASTM D 6158 type HM	✓	✓	✓	✓	✓	✓	✓	✓	✓
GM LS2	✓	✓	✓	✓	✓	✓	✓	✓	✓

Typical properties

Test parameters	Method									
Viscosity @ 40 °C, cSt	ASTM D 445	10	15	22	32	46	68	100	150	220
Viscosity @ 100 °C, cSt	ASTM D 445	2.8	3.3	4.3	5.4	6.7	8.7	11.1	14.6	17.9
Viscosity Index	ASTM D 2270	98	98	101	101	101	101	101	101	97
Flash Point, °C	ASTM D 92	150	190	190	210	234	240	246	250	250
Pour Point, °C	ASTM D 97	-30	-30	-24	-24	-24	-24	-27	-27	-27
Density @ 15 °C, Kg/m3	ASTM D 1298	863	865	818	818	882	888	890	892	892

Above characteristics are mean values given as information. They do not constitute a specification.