

HFS

HYDRAULIC OIL ISO CLASS HM
WITH HIGH CLASS OF PURITY

220082-220083/10.13

Rev. 1

DESCRIPTION & APPLICATIONS

The HFS are hydraulic oils, very pure and filtered, with a zinc-free anti-wear additive, with exactly the same formulations and characteristics as the HYDRO S, but in addition, they are filtered to 3 microns absolute during manufacturing to achieve a purity class NAS 6.

HFS is compatible with:

- Other hydraulic oils of type DIN 51524 HLP, Group I and II base oils
- With most of the seals (PTFE, Viton, neoprene, Buna-N, polyester, acetal, ABS, PF, PA, PC, polyetherimide, TPI, PPO, PSU, PBT, nitrile)

HFS has a broad scope.

INDUSTRY.

All hydraulic systems with vane pumps, worm or gear pumps up to 350 bar (plastic injection machines, for example)

Note: HFS may also be used to spur gearing under moderate pressure (rationalization of purchases) (hydraulics and gearboxes, machine tools, for example)

PUBLIC WORKS.

All hydraulic circuits of mobile equipment for which oil from the ISO Class HM is required.

ADVANTAGES

- Outstanding filterability even in the presence of water through the technology of zinc-free formulation
- Purity increased through the filter 3 micron absolute in manufacturing.
This is particularly important for hydraulic systems with proportional valves and servo valves (plastic injection machines, etc.)
- Excellent resistance to oxidation and high anti-wear.
- Low pour points at low temperatures.
- Fully compatible with all types of joints.

HFS

PERFORMANCES

Satisfies to the following specifications:

ISO 6743 HM
DIN 51524 Teil 2 HLP
US STEEL 136
NFE 48600 HM
NFE 60200 HM
DENISON HF0

ENVIRONMENT, HEALTH & SAFETY

Please consult also the Safety Data Sheet about how to manipulate and to stock the product as well as to learn about the first aid measurements in case of accident.

Elimination after use must be made in conformity with the local rules in force about used oils disposal.

When needed, Safety Data Sheet can be obtained upon request.

Conservation of the product: 3 year(s) in closed container and sheltered.

PROPERTIES

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA	
ISO VG	-	-	46	68
Specific gravity at 15°C	kg/m ³	NFT 60101	879	880
Kinematic viscosity at 40°C	mm ² /s (cSt)	NFT 60100	45,6	68,1
Kinematic viscosity at 100°C	mm ² /s (cSt)	NFT 60100	6,7	8,6
Viscosity index	-	NFT 60136	99	97
Flash point	°C	NFT 60118	242	240
Pour point	°C	NFT 60105	-24	-24
Aniline Point	°C	NFM 07021	101	103
TAN (TotalAcid Number)	mg KOH/g	ASTM D 664	0,24	0,24
Product number	-	-	220082	220083

CHARACTERISTICS	UNITS	METHODS	TYPICAL DATA
Antiwear and EP characteristics	-	FZG test	stage 12
Oxidation resistance (TOST)	hour	ASTM D943	2600
Filtrability	second	DENISON HF 0	without water: 72
Copper corrosion	-	ASTM D 130	1a

The average values are given for information only.