MAKER HYDRAULIC SC

Description

Top quality oils for hydraulic circuits. Manufactured from paraffinic bases using ashless technology. They include special additives for hydraulic systems with extremely fine tolerance servo-valves where an excellent filterability in the hydraulic fluid is required.

Properties

- High resistance to ageing and sludge formation.
- High viscosity index.
- Excellent EP properties.
- Very easy water separation.
- High capacity to eliminate air.
- Excellent filterability.
- Excellent anti-foam properties.
- Good anti-rust and anti-corrosion capacity.
- Compatible with joints and elastomers.

Quality levels, approvals and recommendations

- ARBURG* (ISO 46)
- MANULI: Hydraulics* (ISO 46)
- AFNOR: NFE 48603-HM (ISO 32, ISO 46, ISO 68)
- FIVES CINCINNATI: P-68 (ISO 32)
- FIVES CINCINNATI: P-70 (ISO 46)
- PARKER DENISON: HF0, HF1, HF2 (ISO 32, ISO 46, ISO 68)
- KRAUSS-MAFFEI: Hydraulic Oil* (ISO 46, ISO 68)
- SIEMENS: zinc free hydraulic oils HLP 46* (ISO 46)
- DIN: 51524-HLP (ISO 32, ISO 46, ISO 68)
- FIVES CINCINNATI: P-69 (ISO 68)
- ISO: 6743/4 HM, 11158 HM (ISO 32, ISO 46, ISO 68)

*Formal approval

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Technical specifications

	UNIT	METHOD	VALUE			
ISO Viscosity Grade			20	32	46	68
Viscosity at 40 ºC	cSt	ASTM D445	20	32	46	68
Viscosity at 100 ºC	cSt	ASTM D445	4.1	5.1	6.6	8.7
Viscosity index	-	ASTM D2270	106	100	98	98
Flash point, open cup	ºC	ASTM D92	195	226	231	246
Pour point	ºC	ASTM D97	-33	-27	-27	-24
Water separability at 54 °C	min	ASTM D1401	20	20	20	20
Corrosion Cu, 3hrs 100 °C	-	ASTM D130	1	1	1	1
Rust resistance, method A	-	ASTM D665	Pass	Pass	Pass	Pass
TAN	mg KOH/g	ASTM D974	0.60	0.26	0.26	0.26
Air release at 50 °C	min	ASTM D3427	2	2	3	6
Oxidation (TAN = 2)	h	ASTM D943	>2,000	>2,000	>2,000	>2,000
FZG, damage stage	-	DIN 51583	11	11	11	11
Four ball wear, scar diameter (1h, 40 kg, 75 °C)	mm	ASTM D4172	-	0.35	0.30	0.30
Four-ball engine, wear load index	-	ASTM D2783	-	28	34	35

The above mentioned characteristics are typical values and should not be considered product specifications.