



# MAKER TELEX E

## Description

These oils are specially designed for use in hydraulic circuits requiring lubricants with marked anti-wear properties. Manufactured from carefully selected bases with specific to notably enhance their properties.

They are specially suitable for hydraulic circuits and civil works machines equipped with any type of pump, particularly working under high pressures and, in general for all kinds of mechanisms requiring stable oils and in those in which the maximum anti-wear levels required by international standards must be attained and exceeded.

## Properties

- High resistance to oxidation and sludge formation.
- High deaeration capacity.
- High viscosity index.
- Very good anti-foam and anti-rust properties.
- Excellent water separation.
- Excellent filterability.
- Very good compatibility with joints and retainers.
- Maximum anti-wear level.
- Excellent load capacity.
- High thermal and hydrolytic stability.

## Quality levels, approvals and recommendations

- ABB: Turbocharger VTR304-11 / -21\* (68)
- IBERCISA\* (32, 46)
- ORTLINGHAUS: Standard ON 9.2.19\* (46)
- AFNOR: NF ISO 11158 HM, 48-690, 48-691 (100, 15, 22, 32, 46, 68)
- DIN: 51524-HLP (100, 15, 22, 32, 46, 68)
- Fives Cincinnati: P-69 (32, 68)
- ISO: 6743/4 HM, 11158 HM (100, 15, 22, 32, 46, 68)
- ENGEL: Engel Injection Moulding Machines\* (46)
- NEGRI BOSSI: ELEOS, eCANBIO JANUS Y VESTA series\* (46)
- PARKER DENISON: HF0, HF1, HF2\* (32, 46, 68)
- BOSCH REXROTH: RDE 90235 (32, 46, 68)
- EATON VICKERS: I-286-S Y M2950-S (32, 46, 68)
- Fives Cincinnati: P-70 (46)
- THYSSENKRUPP: (HLP)\* (32, 46, 68)

\*Formal approval



## MAKER TELEX E

## Technical specifications

	UNIT	METHOD	VALUE					
ISO Viscosity Grade			15	22	32	46	68	100
Viscosity at 100 °C	cSt	ASTM D445	3.4	4.4	5.4	6.8	8.5	11.0
Viscosity at 40 °C	cSt	ASTM D445	15	22	32	46	68	100
Viscosity index	-	ASTM D2270	113	107	100	98	98	97
Density at 15 °C	g/cm3	ASTM D4052	0.861	0.867	0.874	0.880	0.884	0.887
Flash point, open cup	°C	ASTM D92	198	210	226	231	246	264
Pour point	°C	ASTM D97	-27	-27	-24	-24	-24	-21
Corrosion Cu, 3hrs 100 °C	-	ASTM D130	1a	1a	1a	1a	1a	1a
Water separability at 54 °C	min	ASTM D1401	<20	<20	<25	<30	<45	<30(82 °C)
Resistance to rust, A and B	-	ASTM D665	Pass	Pass	Pass	Pass	Pass	Pass
Air release at 50 °C	min	ASTM D3427	1	1	1.5	2.4	3.6	6
FZG, load step	-	DIN 51354	-	-	12	12	12	12
TAN	mg KOH/g	ASTM D664	0.38	0.38	0.38	0.38	0.38	0.38
RPVOT	min	ASTM D2272	400	400	400	400	400	400

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