



Alpha VT 32

Turbo transmission oil

Description

Castrol Alpha™ VT 32 has been developed specifically for Voith Turbo transmissions to provide long service life and reliability, and has been classified as Voith Index 1 for "enhanced thermal oxidative stability".

Application

Alpha VT 32 is formulated for hydrokinetic transmissions used mainly in railway locomotives and in hydrodynamic turbo couplings, turbo gears and combined turbo-coupling gears. Other applications include trucks and heavy off-highway equipment incorporating this type of transmission unit. The oil is also suitable for conventional industrial gearboxes where a low viscosity oil is suitable. This oil provides higher load carrying performance, together with excellent oxidation resistance, anti-corrosion and minimal foaming.

Alpha VT 32 is fully compatible with nitrile, silicone and fluropolymer seal materials.

Alpha VT 32 meets the requirements of:
Voith Turbo Specification 3.90-8e_2011-07
CLP 32 according to DIN 51517-3

Advantages

- Long service life
- Excellent load carrying and micropitting resistance
- Good seal compatibility
- Low foam and rapid air release
- Excellent demulsification

Typical Characteristics

Name	Method	Units	Alpha VT 32
Density @ 15°C / 59°F	ISO 12185, ASTM D4052	kg/m ³	870
Kinematic Viscosity @ 40°C / 104°F	ISO 3104, ASTM D445	mm ² /s	32
Kinematic Viscosity @ 100°C / 212°F	ISO 3104, ASTM D445	mm ² /s	5.4
Viscosity Index	ISO 2909, ASTM D2270	None	105
Pour Point	ISO 3016, ASTM D97	°C/°F	-42 / -44
Flash Point - open cup method	ISO 2592, ASTM D92	°C/°F	234 / 453
Water Separation @ 54°C / 129°F (40/37/3)	ISO 6614, ASTM D1401	minutes	5
Air Release @ 50°C / 122°F	ISO 9120, ASTM D3427	minutes	4
Foam Sequence I - tendency / stability	ISO 6247, ASTM D892	ml / ml	0 / 0
Foam Sequence II - tendency / stability	ISO 6247, ASTM D892	ml / ml	10 / 0
Foam Sequence III - tendency / stability	ISO 6247, ASTM D892	ml / ml	0 / 0
Rust test - synthetic seawater (24 hrs)	ISO 7120, ASTM D665B	-	Pass
FZG Gear Scuffing test - A/8.3/90	ISO 14635-1	Failure Load Stage	>12
FZG Gear Scuffing test - A/16.6/90	ISO 14635-1	Failure Load Stage	12
FZG Micropitting test @ 90°C/194°F	FVA 54/1	Failure Load Stage / Micropitting Rating	>10 (high)
FE-8 Bearing Wear test (F.562831.01-7.5/80-80)	DIN 51819-3	Roller wear (Mw50), mg	< 10

Subject to usual manufacturing tolerances.

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