

VALCO PL-PROTECT 4.8

Engine oil 15W40 HD

Engine oil for heavy duty vehicles and public works appliances.

Its formulation has been studied to offer anti-wear properties and optimal detergency to keep engine cleanliness and ensure its longevity.

VALCO PL-PROTECT 4.8 is particularly suitable when ACEA E7 or API CI-4 performance level is recommended. It is also suitable for engines from main manufacturers requiring this level of performance (see specifications below).

Specifications

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| <ul style="list-style-type: none"> ✓ ACEA E7 ✓ API CI-4 / SL ✓ MB 228.3 ✓ MAN 3275 ✓ Volvo VDS-3 ✓ Deutz DQC-III ✓ MTU Type 2.0 | <ul style="list-style-type: none"> ✓ Mack EO-N ✓ Cummins CES 20077 / 20078 ✓ Caterpillar ECF-1a ✓ Renault RLD-2 ✓ JASO DH-1 ✓ Global DHD-1 ✓ DDC 93k215 |
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Physicochemical Characteristics

Characteristics	Method	Unit	Typical value	Min.	Max.
Viscosity grade	SAE J300	-	15W40	-	-
Kinematic viscosity @ 100°C	ASTM D 7042	cSt	14.1	13.8	16.3
Kinematic viscosity @ 40°C	ASTM D 7042	cSt	102	-	-
Viscosity index	ASTM D 2270	-	144	-	-
CCS viscosity @ -20°C	ASTM D 5293	mPa.s	4800	-	7000
HTHS viscosity @ 150°C	ASTM D 4683	mPa.s	3.9	3.7	-
MRV viscosity @ -25°C	ASTM D 4684	mPa.s	25000	-	60000
Density @ 20°C	ASTM D 7042	-	0,868	-	-
Pour point	ASTM D 97	°C	-41	-	-25
T.B.N.	ASTM D 2896	Mg KOH/g	11.1	10.0	12.0
Spectrometric analysis	ICP	ppm			
Phosphorus			990	-	-
Zinc			1100	800	-
Calcium			3600	-	-
Molybdenum			160	-	-
NOACK volatility	ASTM D 5800	% mass	9.7	-	12.0
Colour	ASTM D 1500	-	2.5	-	4.5

Security

See Safety Data Sheet