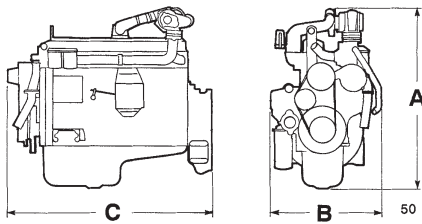


TD 1030 VE

Engine for industrial applications

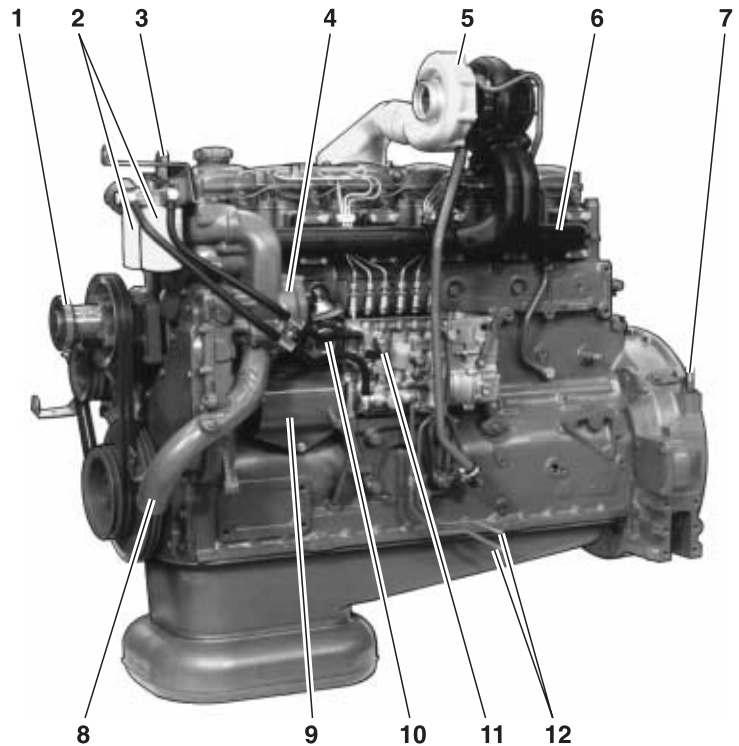
TAD 1030 VE

- Turbocharged
- Air to air intercooled
- Diesel fuel
- Displacement indication (l)
- Generation
- Version
- Versatility engine
- Emission controlled

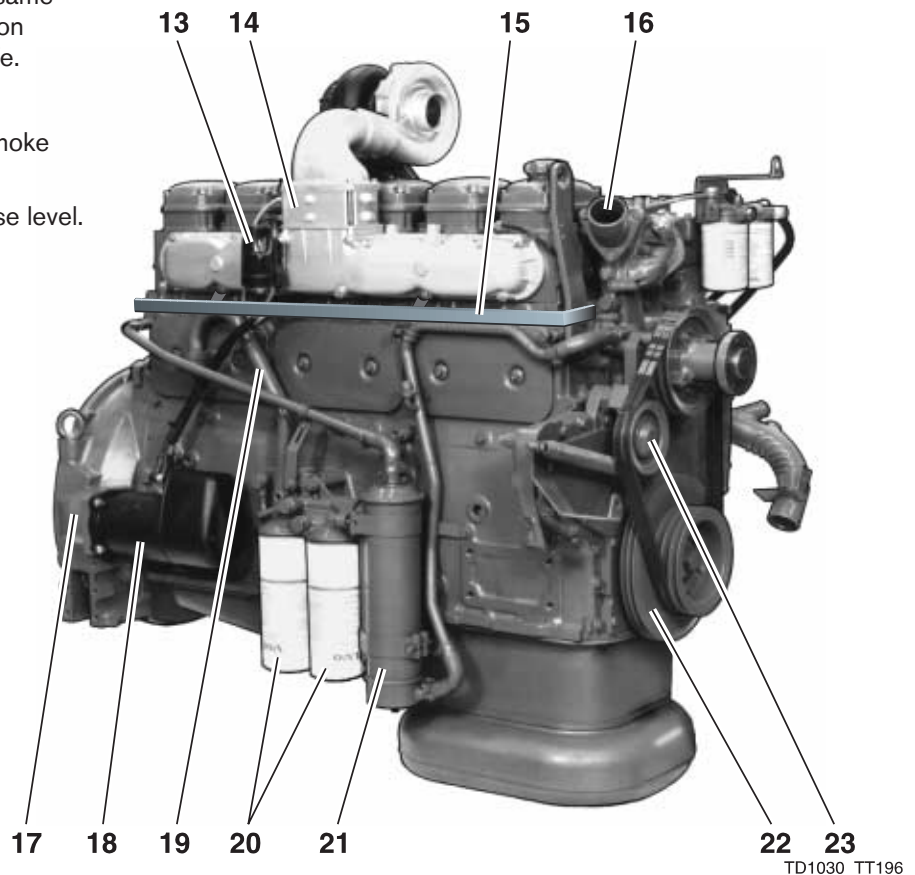


A = 1322 mm / 52.0 in.
 B = 750 mm / 29.5 in.
 C = 1374 mm / 54.1 in.

- Based on Volvo's well proven, dependable six-in-line turbocharged engine.
- Built with a high degree of precision to withstand high outputs and at the same time correspond to high demands on operational reliability and service life.
- Exhaust emission control.
- Smoke control through effective smoke limiter.
- Low fuel consumption and low noise level.



TD1030 TT195



TD1030 TT196

1. Fan hub
2. Twin fuel filters of throw-away type
3. Lift eyelet
4. Gear-driven coolant pump
5. Turbocharger
6. Air-cooled exhaust manifold
7. Lift eyelet
8. Coolant pipe, inlet
9. Pump coupling guard
10. Smoke limiter
11. Injection pump
12. Fuel pipes for tank connection
13. Relay for inlet manifold heater
14. Inlet manifold heater
15. Cable iron
16. Coolant pipe, outlet
17. Flywheel housing SAE 1
18. Starter motor
19. Crankcase ventilation
20. Full-flow oil filter of spin-on type
21. Oil cooler
22. Vibration damper
23. Automatic belt tensioner

**VOLVO
PENTA**

TD1030VE

Volvo Penta reserves the right to make changes at any time, without notice, as to technical data, prices, materials, standard equipment, specifications and models, and to discontinue models.

Technical Data

General

In-line four-stroke diesel engine with direct injection

Turbocharged		Bore	120.65 mm / 4.75 in
Number of cylinders	6	Stroke	140.0 mm / 5.51 in
Displacement, total	9.60 liter / 586 in ³	Compression ratio	18.0:1
Firing order	1-5-3-6-2-4	Dry weight	945 kg / 2083 lb
Rotation direction, anti-clockwise viewed towards flywheel		Wet weight	980 kg / 2161 lb

TD 1030 VE	Speed, rpm	1500	1800	2000	2200
Performance	Test number	29000569			
IFN Power without fan	kW / hp	167 / 227	187 / 254	190 / 258	190 / 258
with fan	kW / hp	164 / 223	181 / 246	182 / 248	180 / 248
ICXN Power without fan	kW / hp	152 / 207	170 / 231	173 / 235	173 / 235
with fan	kW / hp	149 / 203	164 / 223	165 / 224	163 / 222
Torque at IFN Power	Nm / lbft	1063 / 784	994 / 733	910 / 671	825 / 609
ICXN Power	Nm / lbft	968 / 714	902 / 665	826 / 609	751 / 554
Mean piston speed	m/s / ft/sec	7.0 / 23.0	8.4 / 27.6	9.3 / 30.5	10.3 / 33.8
Effective mean pressure at ICXN Power	MPa / psi	1.27 / 184	1.18 / 171	1.08 / 157	0.98 / 142
Max combustion pressure at ICXN Power	MPa / psi	10.6 / 1537	10.8 / 1566	11.3 / 1638	11.7 / 1696
Total mass moment of inertia, J (mR ²)	kgm ² / lbft ²	2.51 / 59.56			
Degree of irregularity at ICXN Power		1:90	1:200	1:375	1:370
Residual speed droop at load increase from 0 to 100% at IFN Power	%	6-8			
Friction Power	kW	24	33	40	48

Lubrication system

Lubricating oil average consumption at IFN power	liter/h / gal/h	0.2 / 0.053
Oil system capacity including filters	liter / US gal	36 / 9.5
Oil change interval VDS-2 oil quality	h	600
VDS oil quality	h	400
CCMC D5 oil quality	h	200

Fuel system

Specific fuel consumption at					
25% of IFN Power	g/kWh / lb/hph	255 / 0.413	279 / 0.452	304 / 0.493	333 / 0.540
50% of IFN Power	g/kWh / lb/hph	217 / 0.352	231 / 0.374	243 / 0.394	260 / 0.421
75% of IFN Power	g/kWh / lb/hph	211 / 0.342	219 / 0.355	228 / 0.369	241 / 0.391
100% of IFN Power	g/kWh / lb/hph	209 / 0.339	213 / 0.345	222 / 0.360	233 / 0.378

Intake and exhaust system

Air consumption at IFN Power	m ³ / min / cfm	13.7 / 483	15.0 / 530	17.2 / 607	19.0 / 671
Max allowable air intake restriction	kPa / In wc	5 / 20			
Heat rejection to exhaust at IFN Power	kW / BTU/min	139 / 7905	163 / 9270	177 / 10060	197 / 11200
Exhaust gas temperature after turbine at IFN Power	°C / °F	550 / 1022	505 / 941	490 / 914	485 / 905
Max allowable back-pressure in exhaust line	kPa / In wc	4.0 / 16.0	6.5 / 26.0	8.0 / 32.0	10.0 / 40.0
Exhaust gas flow at IFN Power	m ³ /min / cfm	32.2 / 1137	39.3 / 1387	43.1 / 1521	46.7 / 1648
Exhaust gas smoke	Bosch units	0.8	0.6	0.7	0.7

Cooling system

Heat rejection radiation from engine at IFN power	kW / BTU/min	10 / 569	11 / 626	12 / 682	12 / 682
Heat rejection to coolant at IFN power	kW / BTU/min	99 / 5630	112 / 6369	120 / 6824	126 / 7166

Power Standards

The engine performance corresponds to ISO 3046, BS 5514 and DIN 6271. The technical data applies to an engine without cooling fan and operating on a fuel with calorific value of 42.7 MJ/kg (18360 BTU/lb) and a density of 0.84 kg/liter (7.01 lb/US gal, 8.42 lb/Imp gal), also where this involves a deviation from the standards.

Rating Guidelines

ICXN power rating corresponds to ISO Standard Power for continuous operation with 10% overload available. It is intended for constant load applications with uninterrupted service for extended periods of time. The ICXN power can be exceeded by 10% 1 hour within any period of 12 hours of continuous operation. The average load factor must not exceed the continuous rating.

VOLVO PENTA

AB Volvo Penta
SE-405 08 Göteborg, Sweden