



YANMAR

AIR-COOLED DIESEL ENGINE
L-N/L-V/L-W

AIR-COOLED DIESEL ENGINE

Since 1959, YANMAR has been producing a wide range of compact air-cooled diesel engines ranging in size from 2.6 to 14.7 kW, with total production reaching more than 1.5 million units. Today, these air-cooled diesel engines are powering leading-edge mobile and stationary off-highway equipment around the world.

L-N Series

L48N 3.5kW
L70N 4.9kW
L100N 7.4kW

MAIN MARKETS
• Southeast Asia
• Middle East
• Africa



L-V Series

L48V 3.4kW
L70V 4.8kW
L100V 6.8kW

MAIN MARKETS
• E.U.
• Japan



L-W Series

L70W 4.8kW
L100W 6.8kW
MAIN MARKET
• U.S.A.

History

1959 —————> 1966 —————> 1971 —————> 1989 —————> 2010

A / 2A Series 2.6 - 13.2kW 8 models



Main model : A3
Combustion system : Special swirl chamber type
Displacement : 0.239L
No. of Cylinders - Bore x Stroke : 1 - Φ 65mm x 72mm
Rated Output : 3.3kW / 3000min⁻¹
Engine Weight : 49kg

L / 2L Series 2.6 - 14.7kW 8 models



Main model : L65
Combustion system : Pre-combustion chamber type
Displacement : 0.238L
No. of Cylinders - Bore x Stroke : 1 - Φ 65mm x 72mm
Rated Output : 3.3kW / 3000min⁻¹
Engine Weight : 46kg

L-A / L-EE Series 2.6 - 7.4kW 12 models



Main model : L60A
Combustion system : Direct injection type
Displacement : 0.273L
No. of Cylinders - Bore x Stroke : 1 - Φ 75mm x 62mm
Rated Output : 4.4kW / 3600min⁻¹
Engine Weight : 39kg

Exceeding Power and Environmental Expectations.

Designed with YANMAR's proprietary direct injection technology, maximum combustion efficiency is achieved through an ideal match between the combustion chamber and injection system. This means a powerful, yet environmentally friendly engine.



Compact, Direct Injection Engine = Easy Installation & Low Fuel Consumption

Keeping with the traditional compact design, the L series engines are simple to install by fitting into cramped spaces without sacrificing power and performance. YANMAR's proprietary direct injection technology allows the engine to sip rather than gorge on fuel, which means lower running costs in the world of rising fuel prices.

Quick, Easy Starting With Standard Recoil

A special auto-return decompressor and YANMAR's own efficient combustion system breeze through starting with electric starting also offered as an option.

Low Vibration and Noise

Superior vibration and noise reduction is achieved through the use of precision balancers, which leads to operating comfort even during long work hours.

The Total FIE Expertise Only a Complete Diesel Engine Manufacturer Can Provide

YANMAR developed one of the world's smallest fuel injection systems. We have since raised it to a level of efficiency that ensures maximum power from every drop of diesel. Its extraordinarily low fuel consumption is a result of our super-precise FIE, and our direct injection system, the first to ever go into this type of engine.



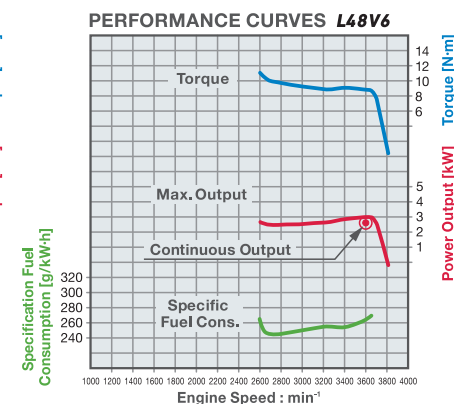
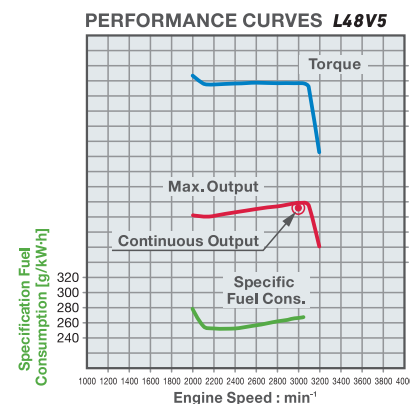
L-V Series

- For information about applications and each country's regulations, please contact your local YANMAR sales network.

Boasting many features superior to the conventional L series, L-V series engines also achieve lower levels of emissions through technology. High-pressure injection technology minimizes the fuel required for ignition, while the combustion chamber itself is also improved, and there is an EGR(Exhaust Gas Recirculation) system for recirculating some of the exhaust gas back into the air intake. Only L48V reduces exhaust emission using a DOC(Diesel Oxydation Catalyst).



3.4kW
/3600min⁻¹

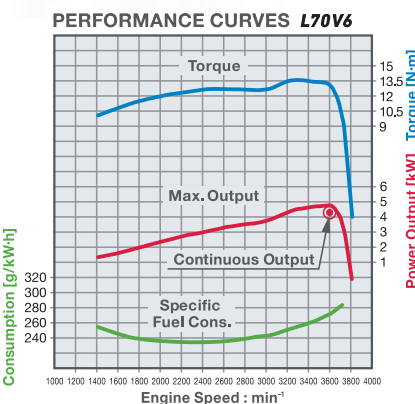
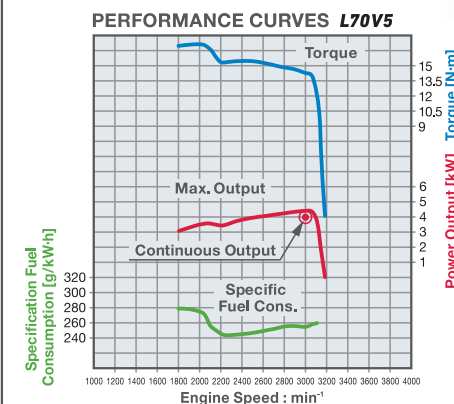


* Note: Performance based on the following conditions.

2-Ø 11 HOLES
2-11X16 HOLES
CYLINDER CENTER
CRANKSHAFT CENTER (PTO SHAFT)
5/16-24UNF-2B DEPTH 20/29
Ø 16.039
4.7 ± 0.064
35
Ø 25.403
95
210
0.4126 HR
3.2
58.3
14
38.5
74
15
147.5
ENGINE MOUNTING PLATE AND PTO SHAFT VIEW FROM THE TOP OF ENGINE

428
378
Ø 38.1
52
52
58
130
0.21
87
184
332
256
448
135
(193)
8-M8 THREAD DEPTH 17

4.8kW
/3600min⁻¹



* Note: Performance based on the following conditions

2-Ø11 HOLES

2-Ø18 HOLES

CYLINDER CENTER

CRANKSHAFT CENTER (PTO SHAFT)

7/16-20UNF-2B DEPTH 20/29

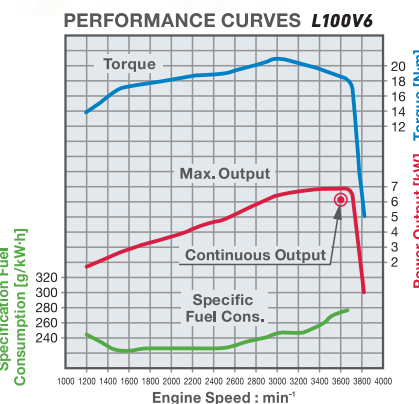
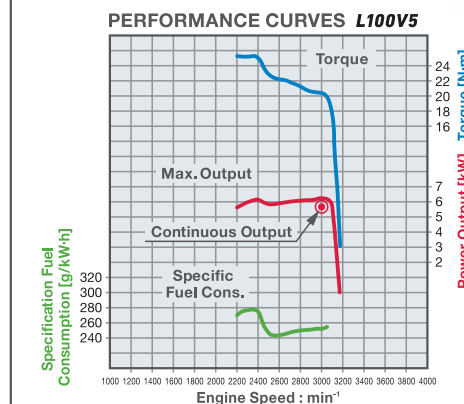
8-M8 THREAD DEPTH 17

ENGINE MOUNTING PLATE AND PTO SHAFT VIEW FROM THE TOP OF ENGINE

Dimensions (mm):

- 22 ±0.161
- 6.3 ±0.063
- 0.25 ±0.025
- 0.45H8
- 0.30 ±0.030
- 62 ±0.5
- 104
- 248
- 16.3
- 4
- 43.6
- 85
- 72.2
- (96)
- 184.5
- 483
- 411
- 0.29
- 30°
- 30°
- 45°
- 45°
- 10146/1067
- PC0171
- PC0163
- 65
- 145
- 0.25
- 4.5 (0146.08h7)
- 96
- 194
- 378
- 163
- (204)
- 422
- 218

6.8kW
/3600min⁻¹

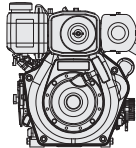
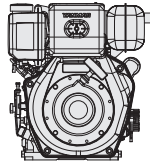
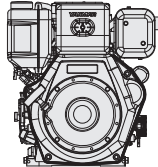
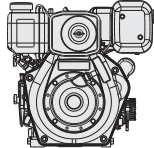
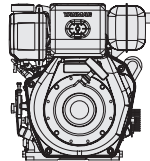
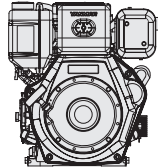
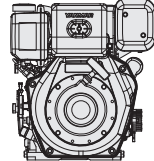
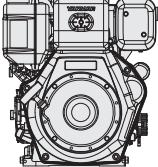


* Note: Performance based on the following conditions

[illegible]

* • After 30 hrs. initial running • Atmospheric conditions: Temperature 298K(25° C) / Pressure 100kPa (750mmHg) / Humidity 30%

Engine Specifications

Engine Series			L-N Series						L-V Series						L-W Series						
Engine Model			L48N		L70N		L100N		L48V		L70V		L100V		L70W		L100W				
																					
Type			4 stroke, vertical cylinder, air-cooled diesel engine																		
ATS(After Treatment System)			-						DOC		-										
No. of Cylinders			1																		
Bore x Stroke			mm		Φ70 × 57		Φ78 × 67		Φ86 × 75		Φ70 × 57		Φ78 × 67		Φ86 × 75		Φ78 × 67		Φ86 × 75		
Displacement			liter		0.219		0.320		0.435		0.219		0.320		0.435		0.320		0.435		
Continuous Rated Output	Engine Speed	rpm(min ⁻¹)	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	
	Output	kW	3.1	2.8	4.4	4.1	6.6	5.7	3.1	2.7	4.3	4.0	6.2	5.7	4.3	4.0	6.2	5.7	4.3	4.0	
Maximum Rated Output	Engine Speed	rpm(min ⁻¹)	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	
	Output / Eng. Speed	kW	3.5	3.1	4.9	4.5	7.4	6.5	3.4	3.0	4.8	4.4	6.8	6.3	4.8	4.4	6.8	6.3	4.8	4.4	
High Idling			rpm(min ⁻¹)	3800±30	3175±30	3800±30	3175±30	3800±30	3175±30	3800±30	3175±30	3800±30	3175±30	3800±30	3175±30	3800±30	3175±30	3800±30	3175±30	3800±30	3175±30
Engine Weight (Dry)	Electric Starter	kg	32.0		41.0		53.5		34.5		41.0		53.5		43.0		53.5				
	Recoil Start	kg	27.0		36.0		48.5		29.5		36.0		48.5		38.0		48.5				
Cooling System			Forced air-cooling by flywheel fan																		
Lubricating System			Forced lubricating system																		
Starting System			Electric start / Recoil start																		
Dimension	Overall Length (L)	mm	332		378		412		332		378		412		395		429				
	Overall Width (W)	mm	384		422		472		448		422		472		448		472				
	Overall Height (H)	mm	417		453		494		425		453		494		472		494				
Lubricating System	Dispstick Upper Limit	liter	0.8		1.1		1.6		0.8		1.1		1.6		1.1		1.6				
	Dispstick Lower Limit	liter	0.6		0.7		1.0		0.6		0.7		1.0		0.7		1.0				
Fuel Oil Tank Capacity			liter		2.4		3.3		5.4		2.4		3.3		5.4		3.3		5.4		

Note : Specifications are subject to change depending on the engine parts and optional kits selected.

Accessories

○ = Standard
△ = Option

Engine Series		L-N Series									L-V Series										L-W Series								
Engine Model		L48N			L70N			L100N			L48V			L70V				L100V				L70W				L100W			
Category *		G	GE	P	G	GE	P	G	GE	P	G	GE	P	G	GE	P	V	G	GE	P	V	G	GE	P	V	G	GE	P	V
Fuel system	Fuel tank (2.4 liter)	○	○	○							○	○	○																
	Fuel tank (3.3 liter)				○	○	○							○	○	○	○					○	○	○	○				
	Fuel tank (5.4 liter)							○	○	○								○	○	○	○					○	○	○	○
	w/o Fuel tank	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
Starting system	Starting motor (w/Recoil starter)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Recoil starter	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	Key switch	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	△	○	○	○	△	○	○	○	△	○	○	○	△
	w/o Key switch	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	○	△	△	△	○	△	△	△	○	△	△	△	○
Electric system	Charging dynamo (12V-15A)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	Charging dynamo (12V-1A)	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	w/o Charging dynamo	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
PTO system	Straight (E-D)	○			○			○			○			○			△	○			△	○			△	○			△
	Straight (D)	△			△			△			△			△			○	△			○	△			○	△			○
	Taper (E-DG)		○			○			○			○			○				○				○				○		
	Taper (DG)		△			△			△			△			△				△				△				△		
	Taper (E-DI)		△			△			△			△			△				△				△				△		
	Thread (E-DP)			○			○			○			○			○				○				○				○	
	Thread (DP)			△			△						△			△								△					
Speed control device	General use (by remote & hand)	○	△	△	○	△	△	○	△	△	○	△	△	○	△	△	△	○	△	△	△	○	△	△	△	○	△	△	△
	Constant speed type (by hand)	△	○	△	△	○	△	△	○	△	△	○	△	△	○	△	△	△	○	△	△	△	○	△	△	△	○	△	△
	Friction plate type (by hand)	△	△	○	△	△	○	△	△	○	△	△	○	△	△	○	△	△	△	○	△	△	△	○	△	△	○	△	△
	Remote control type	△	△	△	△	△	△	△	△	△	△	△	△	△	△	○	△	△	△	○	△	△	△	○	△	△	△	○	
Maintenance tools		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

* : G = General / GE = Generator / P = Pump / V = V-machine
Note: For other accessories, please contact your YANMAR sales network.

PTO Dimensions [mm]

	Application code	Keyway shaft		Taper shaft		Thread shaft		PTO Flanges
	E-D	D	E-DG	DG	E-DI	E-DP	DP	
L48N L48V								
L70N L70V L70W								
L100N L100V L100W								