

Nearly a Century of Compact Diesel Engine Innovation, Value and Leadership

Yanmar introduced the world's first compact diesel engine in 1933 thus revolutionizing the concept of reliable and efficient compact diesel power. Nearly 100 years later, Yanmar has grown in to a diversified manufacturer with a portfolio of products that serve ever growing global demand in the following industries:

Components - Industrial - Agricultural - Marine - Energy

Yanmar products continue to be sought after world-wide by customers based on our reputation for innovation, unmatched quality, high reliability, environmental stewardship and our focus on the customer and the environment.

Thinking Outside the Gear Box

Yanmar compact diesel engines are available in single, two, three and four cylinder configurations with output ratings ranging from 4.7 through 83.5 horsepower. Yanmar is proud to claim that we maintain in-house control and



expertise in engine and engine component design and manufacturing which allow Yanmar to offer compact diesel engines characterized by:

- Compact Size**
- Low Noise and Vibration**
- Superior Fuel Economy**
- Emissions Compliance**
- Reliability and Durability**

Environmentally Focused

Yanmar's commitment to a greener environment extends beyond clean, quiet, compact diesel engines. It's inherent in our culture and our commitment of "Grateful to serve for a better world." All Yanmar facilities make every effort to reduce air, water and noise pollution and recycle waste materials.

Quality Counts Most

Throughout nearly a century of growth and success Yanmar has never lost sight of its mission: "To be an innovator and leader in harnessing energy through the delivery of unrivaled products and services." As a result, the company's reputation for quality and dedication to customer satisfaction, across the board, is second to none.

Attesting to its strict adherence to the industry's best practices and highest quality standards, every one of Yanmar's manufacturing plants is ISO 9001 certified. Additionally, the company is proud to have been awarded the Deming Prize – the apex of manufacturing excellence.

Backed by a significant investment in R&D, Yanmar research centers are continually exploring innovative new technologies and methods for making diesel power not only more affordable, but also reliable and user friendly.

Combining its rich heritage for building trust with a sharp focus on producing diesel engines and energy systems in tune with the needs of a more environmentally conscious society, Yanmar is well-prepared for meeting the challenges of tomorrow.

Global Reach

Yanmar is constantly expanding in order to keep its manufacturing centers close to its customers.

Organized into six sales companies and ten manufacturing companies, Yanmar is an integrated global network of technical centers, engine plants and strategically positioned parts depots, including three modern U.S. sites.

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Yanmar Asia (Singapore) Corporation Pte. Ltd.

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L-V Series

MINIMAX Series

TNV Series

TNV Gen Drives

YDG Series



Nearly a Century of Innovation and Leadership

In 1912 automobile manufacturing, as we know it, was in its infancy; and the move to mechanize farming, boating, construction and a host of other industries was just beginning to gain momentum. Yet in Japan, a young, family owned company named Yanmar was already establishing itself as a leading engine maker – not only by building a quality product, but also by building trust.

From the company's humble beginnings in Osaka, Japan, Yanmar's founders saw opportunity for growth – built on the simple concept of working with others to produce the compact and efficient engines and implements that would power our world. Today, through enduring business relationships forged across more than 130 countries, Yanmar's motto of "Grateful to serve for a better world" is more relevant than ever.





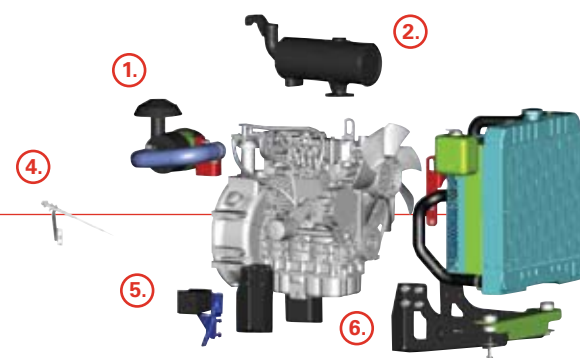
These single-cylinder, air-cooled direct injection diesel engines are EPA & CARB exhaust emission compliant and utilize a counter-balancing system for smooth, high speed operation. Multiple PTO shaft are available along with electric or recoil starting. Three power levels are offered.



Big power from a small package offers Tier 4 compliance right out of the box. The first ladder frame cylinder block in its class allows the MM Series to produce less noise and vibration than competing engines. Its perfect size means ease of installation into a variety of equipment.



The Total New Value engine series already conforms to the strict EC (European) and EPA (USA) emission regulations. 2-cylinder, 3-cylinder and 4-cylinder versions are offered in a four-cycle, inline configuration. They are water-cooled and utilize indirect fuel injection. Horsepower ranges from 13.7 to 83.5. Direct injection and a turbocharger on the highest horsepower version are available. All TNV series engines offer an electric start function.



L-V SERIES

Model - Modelo - Modèle	L48V	L70V	L100V
Cylinders - Cilindros - Nombre de Cylindres	1		
Bore x Stroke, inches	2.8 x 2.2	3.0 x 2.6	3.4 x 2.9
Diámetro x Carrera, mm - Alésage x Course, mm	70 x 57	78 x 67	86 x 75
Displacement, in ³	13.4	19.5	26.6
Cilindrada, cc - Cylindrée, cc	219	320	435
Combustion Type	Direct Injection		
Tipo de Combustión - Type de Combustion	Inyección Directa - Injection Directe		
Aspiration	Natural Aspiration		
Aspiración - Aspiration	Aspiración Natural - Non Suralimenté		
Net Intermittent Hp	4.7	6.4	9.1
Potencia Neta Intermitente, kW - Puissance Intermitente net, kW	3.5	4.8	6.8
Rated Speed, rpm	3600		
Velocidad de Régimen, rpm - Vitesse nominale, rpm	3600		
Governor Type	Mechanical	Mechanical	Mechanical
Tipo de Gobernador - Type de Gouverneur	Mecánico	Mecánico	Mecánico
Length, inches	13.1	14.9	16.4
Longitud, mm - Longueur, mm	332.5	378.2	417.0
Width, inches	15.1	16.6	18.5
Ancho, mm - Largeur, mm	384.5	422.0	470.5
Height, inches	16.5	17.8	19.4
Alto, mm - Hauteur, mm	417.8	453.0	493.0
Dry Weight, lbs. (Recoil Start)	58	78	106
(Arranque Manual) Peso en Seco, kg - Poids à sec, kg (Démarrage manuel)	26.5	35.5	48.0
Dry Weight, lbs. (Electric Start)	71	88	120
(Arranque Eléctrico) Peso en Seco, kg - Poids à sec, kg (Démarrage électrique)	32.0	40.0	54.5

MINIMAX

Model - Modelo - Modèle	3TNM68	3TNM72
Cylinders - Cilindros - Nombre de Cylindres	3	3
Bore x Stroke, inches	2.7 x 2.8	2.8 x 2.9
Diámetro x Carrera, mm - Alésage x Course, mm	68 x 72	72 x 74
Displacement, in ³	47.8	55.1
Cilindrada, cc - Cylindrée, cc	784	903
Combustion Type	Indirect Injection	
Tipo de Combustión - Type de Combustion	Inyección Indirecta - Injection Indirecte	
Aspiration	Naturally Aspirated	
Aspiración - Aspiration	Aspiración Natural - Non Suralimenté	
Net Intermittent Hp	18.9	23.6
Potencia Neta Intermitente, kW - Puissance Intermitente net, kW	14.1	17.6
Rated Speed, rpm	3600	
Velocidad de Régimen, rpm - Vitesse nominale, rpm	3600	
Governor Type	Mechanical	Mechanical
Tipo de Gobernador - Type de Gouverneur	Mecánico	Mecánico
Length, inches	17.0	17.7
Longitud, mm - Longueur, mm	431	450
Width, inches	15.7	15.7
Ancho, mm - Largeur, mm	400	400
Height, inches	19.7	19.9
Alto, mm - Hauteur, mm	500	505
Dry Weight, lbs.	161	190
Peso en Seco, kg - Poids à sec, kg	73	77

TNV SERIES

Model - Modelo - Modèle	2TNV 70	3TNV 70	3TNV 70	3TNV 76	3TNV 76	3TNV 82A	3TNV 82A	3TNV 82A	3TNV 84T	3TNV 84T	3TNV 84T	3TNV 88	3TNV 88	3TNV 88	3TNV 88	4TNV 84T	4TNV 84T	4TNV 84T	4TNV 88	4TNV 88	4TNV 88	4TNV 98	4TNV 98T
Specification Especificación - Spécification	ASA	ASA	ASA3	CSA	CSA3	BDSA	BDSA2	BDSA3	BKSA	BKSA2	BKSA3	BDSA	BDSA2	BDSA3	ZDSA	ZDSA2	ZDSA3	BDSA	BDSA2	BDSA3	ZNSA	ZNSA	ZNSA
Cylinders - Cilindros - Nombre de Cylindres	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Bore x Stroke, inches	2.8 x 2.9	2.8 x 2.9	2.8 x 2.9	3.0 x 3.2	3.0 x 3.2	3.2 x 3.3	3.2 x 3.3	3.2 x 3.3	3.3 x 3.5	3.3 x 3.5	3.3 x 3.5	3.4 x 3.5	3.4 x 3.5	3.4 x 3.5	3.4 x 3.5	3.3 x 3.5	3.3 x 3.5	3.4 x 3.5	3.4 x 3.5	3.4 x 3.5	3.4 x 3.5	3.9 x 4.3	3.9 x 4.3
Diámetro x Carrera, mm - Alésage x Course, mm	70 x 74	70 x 74	70 x 74	76 x 82	76 x 82	82 x 84	82 x 84	82 x 84	84 x 90	84 x 90	84 x 90	88 x 90	88 x 90	88 x 90	84 x 90	84 x 90	84 x 90	88 x 90	88 x 90	88 x 90	88 x 90	98 x 110	98 x 110
Displacement, in ³	34.8	52.1	52.1	68.1	68.1	81.2	81.2	81.2	91.3	91.3	91.3	100.2	100.2	100.2	121.7	121.7	121.7	133.6	133.6	133.6	202.5	202.5	
Cilindrada, cc - Cylindrée, cc	570	854	854	1116	1116	1330	1330	1330	1496	1496	1496	1642	1642	1642	1995	1995	1995	2189	2189	2189	3318	3318	
Combustion Type	Indirect Injection					Direct Injection											Direct Injection						
Tipo de Combustión - Type de Combustion	Inyección Indirecta - Injection Indirecte					Inyección Directa - Injection Directe											Inyección Directa - Injection Directe						
Aspiration	Naturally Aspirated					Naturally Aspirated	Turbo Charged		Naturally Aspirated	Turbo Charged		Naturally Aspirated	Naturally Aspirated	Turbo Charged		Naturally Aspirated	Naturally Aspirated	Turbo Charged		Naturally Aspirated	Naturally Aspirated	Turbo Charged	
Aspiración - Aspiration	Aspiración Natural - Non Suralimenté					Aspiración Natural - Non Suralimenté	Turbo cargado - Turbocompresé		Aspiración Natural - Non Suralimenté	Turbo cargado - Turbocompresé		Aspiración Natural - Non Suralimenté	Aspiración Natural - Non Suralimenté	Turbo cargado - Turbocompresé		Aspiración Natural - Non Suralimenté	Aspiración Natural - Non Suralimenté	Turbo cargado - Turbocompresé		Aspiración Natural - Non Suralimenté	Aspiración Natural - Non Suralimenté	Turbo cargado - Turbocompresé	
Net Intermittent Hp	13.7	21.9	21.9	25.0	25.0	30.2	30.2	38.9	35.9	35.9	55.2	47.5	67.7	83.5	47.5	67.7	83.5	47.5	67.7	83.5	67.7	83.5	
Potencia Neta Intermitente, kW - Puissance Intermitente net, kW	10.2	16.3	16.3	18.6	18.6	22.5	22.5	29.0	26.8	26.8	41.2	35.4	50.1	62.3	35.4	50.1	62.3	35.4	50.1	62.3	50.1	62.3	
Rated Speed, rpm	3600					3600			2800		3000		3000		2500		2500		2500		2500		
Velocidad de Régimen, rpm - Vitesse nominale, rpm	3600					3600			2800		3000		3000		2500		2500		2500		2500		
Governor Type	Mechanical					Mechanical							Electric		Mechanical		Electric						
Tipo de Gobernador - Type de Gouverneur	Mecánico - Mécanique					Mecánico - Mécanique							Eléctrico - Électrique		Mecánico - Mécanique		Eléctrico - Électrique						
Length, inches	16.3	20.8	19.8	22.4	21.4	23.0	21.3	21.0	24.7	23.0	24.7	23.0	22.6	28.4	26.7	26.3	28.4	26.7	26.3	29.8	29.8	29.8	
Longitud, mm - Longueur, mm	414.0	528.3	502.9	568.9	543.6	584.2	541.0	533.4	627.4	584.2	584.2	627.4	584.2	721.4	678.2	668.0	721.4	678.2	668.0	756.9	756.9	756.9	
Width, inches	16.5	16.8	16.8	16.8	16.8	20.0	20.0	20.0	20.2	20.2	20.2	20.2	20.2	20.5	20.5	20.5	20.2	20.2	20.2	21.9	21.9	21.9	
Ancho, mm - Largeur, mm	417.8	426.7	426.7	426.7	426.7	508.0	508.0	508.0	513.1	513.1	513.1	513.1	513.1	520.7	520.7	520.7	513.1	513.1	513.1	556.3	556.3	556.3	
Height, inches	20.6	21.5	21.5	22.6	22.6	24.0	24.0	24.0	27.4	27.4	27.4	26.2	26.2	26.2	28.0	28.0	28.0	25.5	25.5	25.5	33.0	33.0	
Alto, mm - Hauteur, mm	523.2	546.1	546.1	574.0	574.0	609.6	609.6	609.6	695.9	695.9	695.9	665.5	665.5	665.5	711.2	711.2	711.2	647.7	647.7	647.7	838.2	838.2	
Dry Weight, lbs.	185	220	198	243	198	282	282	282	355	355	355	342	342	342	397	397	397	375	375	375	518	540	
Peso en Seco, kg - Poids à sec, kg	83.9	99.8	89.8	110.2	89.8	127.9	127.9	127.9	161.0	161.0	161.0	155.1	155.1	155.1	187.1	187.1	187.1	170.1	170.1	170.1	234.9	244.9	

SA = Flywheel / flywheel housing SA2 = Semi - flywheel housing SA3 = Flywheel / backplate

TNV GEN DRIVES

Model - Modelo - Modèle	2TNV 70	3TNV 70	3TNV 70	3TNV 76	3TNV 76	3TNV 82A	3TNV 84T	3TNV 88	4TNV 84T	4TNV 88	4TNV 88	4TNV 98	4TNV 98T
Specification - Especificación - Spécification	HGE	GGE	HGE	GGE	HGE	GGE	BGGE	BGGE	BGGE	BGGE	BGGE	ZGGE	ZGGE
Cylinders - Cilindros - Nombre de Cylindres	2	3	3	3	3	3	3	3	4	4	4	4	
Bore x Stroke, inches	2.8 x 2.9	2.8 x 2.9	2.8 x 2.9	3.0 x 3.2	3.0 x 3.2	3.2 x 3.3	3.3 x 3.5	3.4 x 3.5	3.3 x 3.5	3.4 x 3.5	3.4 x 3.5	3.9 x 4.3	
Diámetro x Carrera, mm - Alésage x Course, mm	70 x 74	70 x 74	70 x 74	76 x 82	76 x 82	82 x 84	84 x 90	88 x 90	84 x 90	88 x 90	88 x 90	98 x 110	
Displacement, in ³	34.8	52.1	52.1	68.1	68.1	81.2	91.3	100.2	121.7	133.6	133.6	202.5	
Cilindrada, cc - Cylindrée, cc	570	854	854	1116	1116	1330	1496	1642	1995	2189	2189	3318	
Combustion Type	Indirect Injection					Direct Injection					Direct Injection		
Tipo de Combustión - Type de Combustion	Inyección Indirecta - Injection Indirecte					Inyección Directa - Injection Directe					Inyección Directa - Injection Directe		
Aspiration	Naturally Aspirated					Naturally Aspirated	Turbo Charged	Naturally Aspirated	Turbo Charged	Naturally Aspirated	Naturally Aspirated	Turbo Charged	
Aspiración - Aspiration	Aspiración Natural - Non Suralimenté					Aspiración Natural - Non Suralimenté	Turbocargado - Turbocompresé	Aspiración Natural - Non Suralimenté	Turbocargado - Turbocompresé	Aspiración Natural - Non Suralimenté	Aspiración Natural - Non Suralimenté	Turbocargado - Turbocompresé	
Net Intermittent Hp	13.4	10.7	21.5	14.3	26.1	17.7	25.2	21.7	35.9	29.0	54.7	67.2	
Potencia Neta Intermitente, kW - Puissance Intermitente net, kW	10.0	8.0	16.0	10.7	19.5	13.2	18.8	16.2	26.8	21.6	40.8	50.1	
Rated Speed, rpm	3600	1800	3600	1800	3600	1800	1800	1800	1800	1800	1800	1800	
Velocidad de Régimen, rpm - Vitesse nominale, rpm	3600	1800	3600	1800	3600	1800	1800	1800	1800	1800	1800	1800	
Governor Type	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Mechanical	Electric	
Tipo de Gobernador - Type de Gouverneur	Mecánico	Mecánico	Mecánico	Mecánico	Mecánico	Mecánico	Mecánico	Mecánico	Mecánico	Mecánico	Mecánico	Eléctrico	
Length, inches	16.3	21.5	21.5	22.3	22.3	21.8	23.5	23.5	27.2	27.2	31.1	31.1	
Longitud, mm - Longueur, mm	414.0	546.1	546.1	566.4	566.4	553.7	596.9	596.9	690.9	690.9	789.9	789.9	
Width, inches	16.5	16.8	16.8	16.8	16.8	20.0	20.2	20.2	20.5	20.2	21.9	21.9	
Ancho, mm - Largeur, mm	417.8	426.7	426.7	426.7	426.7	508.0	513.1	513.1	520.7	513.1	556.3	556.3	
Height, inches	20.6	21.5	22.7	23.7	23.7	24.0	27.4	26.2	28.0	25.5	33.0	33.0	
Alto, mm - Hauteur, mm	523.2	546.1	576.6	601.9	601.9	609.6	695.9	665.5	711.2	647.7	838.2	838.2	
Dry Weight, lbs.	185	198	254	271	271	318	373	384	439	450	584	606	
Peso en Seco, kg - Poids à sec, kg	83.9	89.8	115.2	122.9	122.9	144.2	169.2	174.2	199.1	204.1	264.9	274.9	

TNV POWER UNITS	
1. AIR CLEANER	Filtro de Aire Filtre d'admission d'air
• Dry type	Tipo seco Type élément - sec
• Includes rain cap	Incluye tapon para lluvia Avec chapeau pour intempérie
• Provision for adding restriction indicator	Provision para agregar indicador de restricción Prévu pour adaptation d'un indicateur de colmatage
2. EXHAUST MUFFLER	Silenciador de Escape Silencieux d'échappement
• Industrial type	Tipo industrial Type industriel
• Includes rain cap	Incluye tapon para lluvia Avec clapet
3. HEAVY DUTY COOLING SYSTEM	Sistema de Enfriamiento de Uso Pesado Système de refroidissement haut rendement pour conditions de service extrêmes
• High ambient rated	Rango de ambiente alto Pour température ambiante élevée
• Includes fan guard	Incluye protector del ventilador Garde de protection- ventilateur
• Includes core guard	Incluye guarda del cuerpo Garde de protection- radiateur
• Includes coolant recovery bottle	Incluye botella de recuperación del refrigerante Vase de récupération- liquide de refroidissement