

# TNV IDI Series Industrial Diesel Engine



### **Features**

#### **Clean Emissions**

Building off the proven TNE design, Yanmar has achieved superior exhaust emissions by improving the combustion chamber and fuel injection equipment design. Engines are compliant with 2008 EPA Tier 4.

#### Reliable and Durable

The TNV engines now proudly take up the running as Yanmar's premium small industrial diesel. They offer even more enhanced durability due to better block cooling, a stiffer crank and pistons, finer tolerance in the journal, and more. CAE analysis has brought lower vibrations and higher strength to the mounting structure for even better reliability in heavy-duty jobs.

#### Fuel Delivery and Economy

A newly designed, in-line ML fuel injection pump is utilized to assure more precise fuel delivery and control. The result is reduced emissions, improved performance over a wide range of applications and good fuel economy which assures that Yanmar's reputation for superior starting characteristics continues.

#### **Noise Level Reduction**

Yanmar's original CAE techniques have optimized the stiffness, minimized transformation, and reduced radiant noise in the cylinder block. Gear noise reduction is achieved through an improved gear tooth profile resulting in less mechanical noise.

#### Additional Information

Yanmar America Corp 101 International Pkwy Adairsville, GA 30103 www.yanmar.com **Distributed By:** 

## 2TNV70-ASA General Specification 13.7 hp (10.2 kW) @ 3600 rated rpm\*

# **Standard Engine Equipment**

#### General

Intake & Exhaust Manifold Muffler/Exhaust Pipe Gasket (shipped loose)

#### **Lubrication System**

1.7 L Capacity Shallow Oil Pan Trochoid Oil Pump Paper Element Oil Filter Oil Pressure Switch Crankcase Breather, Closed Type

#### Electrical System

12V, 40 Amp Alternator 12V Starter Motor 12V Super Quick Glow Plugs Preheat Timer (shipped loose) Stop Solenoid Timer (shipped loose)

#### Fuel System

In-line ML Fuel Injection Pump 12V Electric Fuel Pump (shipped loose) Paper Element Fuel Filter Water Separator (shipped loose) Stop Solenoid, Integral to Fuel Injection Pump

#### Cooling System

Water Pump, Belt Driven 5-Blade, 270mm Cooling Fan—Puller Type 21° C (160° F) Thermostat Temperature Switch Fan Belt

#### **Power Take Off**

Flywheel, SAE 7 1/2" Flywheel Housing, SAE #6 (80 mm deep)

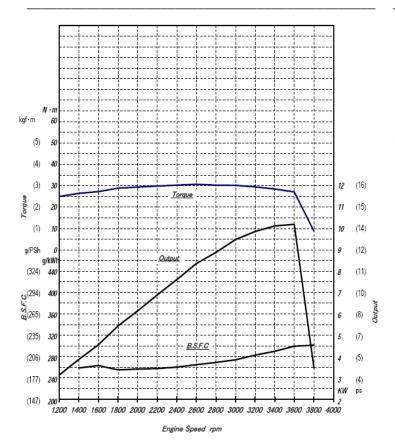


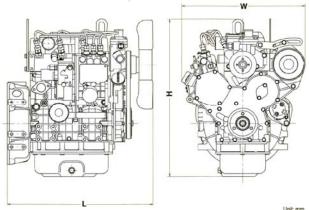
# 2TNV70-ASA

# Industrial Diesel Engine

#### Performance Data

#### **Dimensions**





Length	16.4 in (418 mm)		
Width	17.6 in (449 mm)		
Height	20.5 in (523 mm)		

Note: Dimensions depend on final specifications.

kW to Hp conversion used is expressed as: hp = (kW value) x 1.34

Rated Speed (rpm)	Net rated kW	Net rated hp	Intermediate Torque (ft-lb)
3600	10.2	13.7	23.8 @ 2600 rpm

# **Ratings Definitions and Conditions**

\*Rated power listed is NET engine output. The engine operating environment and driven machine conditions must be studied carefully when selecting an engine in order to ensure correct engine selection, maximize engine performance, extend engine service life and improve machine capacity.

Consult the TNV Application Manual for additional engine ratings and engine application information.

Application standards for Yanmar industrial engines: Inlet air standard conditions with a total barometric pressure of 100kPa (29.5 in. Hg), with 30% relative humidity, and 25° C (77°F).

Materials and specifications herein are intended to serve as a guide in engine selection and subject to change without notice.

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