

V158TI MARINE ENGINE

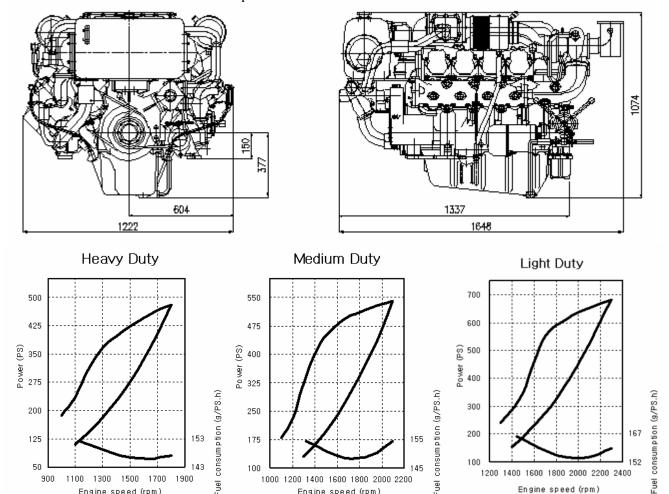


POWER RATING

Production tolerance: ± 3%

MODEL	CONDITIONS	POWER	rpm	Base Engine
V158TIH	HEAVY DUTY	480PS (353kW)	1,800	
V158TIM	MEDIUM DUTY	540PS (397kW)	2,100	D2848LB
V158TIL	LIGHT DUTY	680PS (500kW)	2,300	

Note: 1) No reduction in rating for intake air temperature is up to 45 °C (318K) and sea water temperature is up to 32 °C (305K), relative humidity is up to 60 % all data are based on operation to ISO 3046.



Heavy Duty: Operation hours are unlimited per year, at average load is up to 90 %, at full load is up to 80 % Typical gearbox ratio: 2.5 ~ 6

1000 1200 1400 1600 1800 2000 2200

Engine speed (rpm)

- (Fishing trawler, Tug boat, Pushing vessel, Cargo boat, Freighter, Ferry)
- **Medium Duty:** Operation hours are up to 3,000 per year, at average load is up to 70 %

At full load is (up to 30 % / 4hrs per 12 hour operation period).

Typical gearbox ratio: 2 ~ 3.5

Fuel

(Fishing boat, Pilot boat, Escort boat, Passenger boat, Ferry, Cruising vessel)

Light Duty : Operation hours are up to 1,000 per year, at average load is up to 50 %

At full load is (up to 20 % / 2hrs per 12 hour operation period)

Typical gearbox ratio: $1 \sim 2.5$

(Light weight fishing boat, Yacht, Coastguard boat, Fast boat, Fire pump, Navy, Bow thruster)

Fuel

900

1100 1300

1500

Engine speed (rpm)

Engine speed (rpm)



V158TI MARINE ENGINE



Engine Specification

Model		Units	V158TIH	V158TIM	V158TIL
Engine type			4 cycle, V type, direct- injection, water cooled with wet turbo charger & inter-cooler		
Rating output (B.H.P)		PS(kW)/rpm	480(353)/1,800	540(397)/2,100	680(500)/2,300
Displacement		cc	14,618		
Cylinder number - bore(φ) x stroke		mm	8 - \$\phi128 x 142		
Valve clearance at cold In / Ex		mm	0.25 / 0.35		
Low idling rpm		rpm	725 ± 25		
No load max. rpm		rpm	below 2,070	below 2,415	below 2,645
Mean effective pressure		kg/cm ²	16.4	15.8	18.2
Mean piston speed		m/sec.	8.52	9.94	10.89
Compression ratio			15:1	15:1	14.6:1
Firing order			1-5-7-2-6-3-4-8		
Governor type of injection pump			Mechanical variable speed (R.Q.V)		
Fuel consumption		g / PS.h	147	154	159
		Lit / h	85	100	130
Injection timing (B.T.D.C)		deg	20 °± 1°	20 °± 1°	20 °± 1°
Starting system			Electric Starting by starter motor		
Starter motor capacity		V - kW	24 - 6.6		
Alternator capacity		V-A	24 - 50		
Battery		V - Ah	24 - 200		
Cooling system			Indirect sea water cooling with heat exchanger		
Cooling water capacity	Max. / Min.	lit.	89 / 78		
Fresh water pump type			Centrifugal type, driven by belt		
Sea water pump type			Bronze impeller type driven by belt		
Lubricating oil (Engine)	pan capacity	lit.	Max: 31, Min: 25 (Engine total: 35)		
	pressure	kg/cm ²	Full: 3.5, Idle: 1.2		
Direction of revolution	crankshaft		Counter clockwise viewed from stern side		
Engine Size (L x W x H)		mm	1,337 x 1,222 x 1,074		
Engine dry weight		kg	1,350	1,350	1,435

psi = kg/cm² x 14.22 lb/ft. = N.m x 0.737 kW = 0.2388 kcal/s lb= kg x 2.205 lb/PS.h = g/kW.h x 0.00162 cfm = m^3 /min x 35.3 hp = PS x 0.98635 U.S gal. = liter x 0.264

Head office

7-11, Hwasu-Dong, Dong-Gu, Incheon, Korea

TEL: 82-32-760-1951, 1953 FAX: 82-32-761-2759

Seoul Office

Doosan Infracore Co. Ltd.,

22nd Floor, Doosan Tower, 18-12, Euljiro 6-ga, Jung-gu,

Seoul, Korea.

Web site: www.doosaninfracore.com

***** Specifications are subject to change without prior notice.