



Marine Diesel Engine

MD196TI

Daewoo Heavy Industries has made a fresh start as **Doosan Infracore**.

- *Compact Design*
- *Excellent Performance*
- *Super Low Fuel Consumption*
- *Easy Maintenance*



- Continuous Rating (BHP)
· 235kW (320PS)
- Displacement
· 11,051cc
- Dimension (L×W×H)
· 1,695×854×1,155mm
· Including Reduction Gear

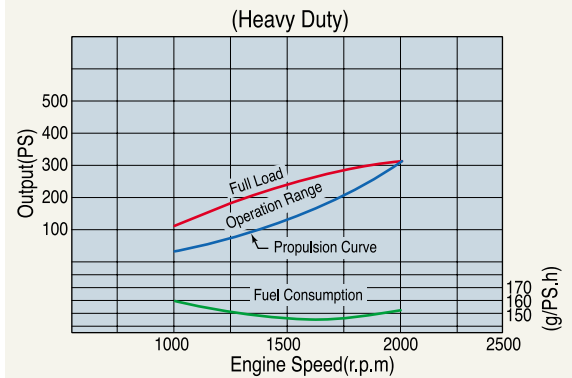


Infracore

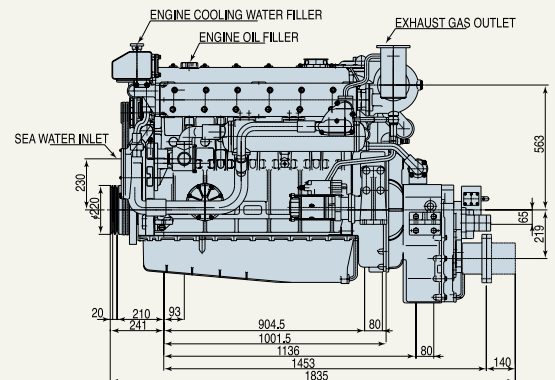
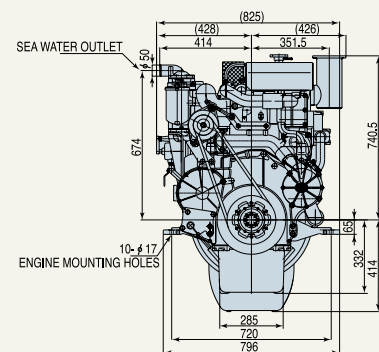
Main Specification

Model		Units	MD196TI
Engine type			4cycle, In line, direct-injection, watercooled, with wet turbo charger & inter - cooler
Rating output (B.H.P)		kW(PS) / rpm	235(320)/2,000
Displacement		cc	11,051
Cylinder number - bore (φ) × stroke		mm	6 - φ 123 × 155
Valve clearance at cold	In / Ex	mm	0.3 / 0.3
Low idling rpm		rpm	750 ± 25
No load max. rpm		rpm	below 2,200
Mean effective pressure		kg / cm ²	13.03
Mean piston speed		m / sec.	10.33
Compression ratio			16.5 : 1
Firing order			1 - 5 - 3 - 6 - 4 - 2
Max. firing pressure of cylinder		kg / cm ²	105
Compression pressure	At 200rpm	kg / cm ²	28 (Initial condition)
Governor type of injection pump			Hydraulic mechanical all speed (R.Q.V)
Fuel consumption		g / PS.h	158
		Lit/h	61
Injection timing(B.T.D.C)		deg	12° ± 1°
Fuel inj. nozzle opening pressure		kg / cm ²	1st : 160, 2nd : 200
Starting system			Electric Starting by starter motor
Starter motor capacity		V - kW	24 - 6.0
Alternator capacity		V - A	24 - 50
Battery		V - Ah	24 - 150
Cooling system			Indirect sea water cooling with heat exchanger
Cooling water capacity	Max. / Min.	lit	24 / 19
Fresh water pump type			Centrifugal type, driven by V-belt
Sea water pump type			Bronze impeller type driven by V-belt
Lubricating oil (Engine)	Pan capacity	lit	Max : 25, Min : 19 (Engine total : 27)
	Pressure	kg / cm ²	Full : 3.5, Idle : 1.2
Marine gear	Gear ratio		1.97 2.53 3.04 3.42
Direction of revolution	Crankshaft		Counter clockwise viewed from stern side
	Propeller		Clockwise viewed from stern side
Engine Size (L×W×H)	Without M/G	mm	1,242×854×1,073
	With M.gear	mm	1,695×854×1,155
Engine dry weight	Without M/G	kg	1,009
	With M.gear	kg	1,329

Installation Dimension



Performance Curve



MD196TI(July/05)



Infracore

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AUTHORIZED DEALER

* Specifications are subject to change without prior notice.