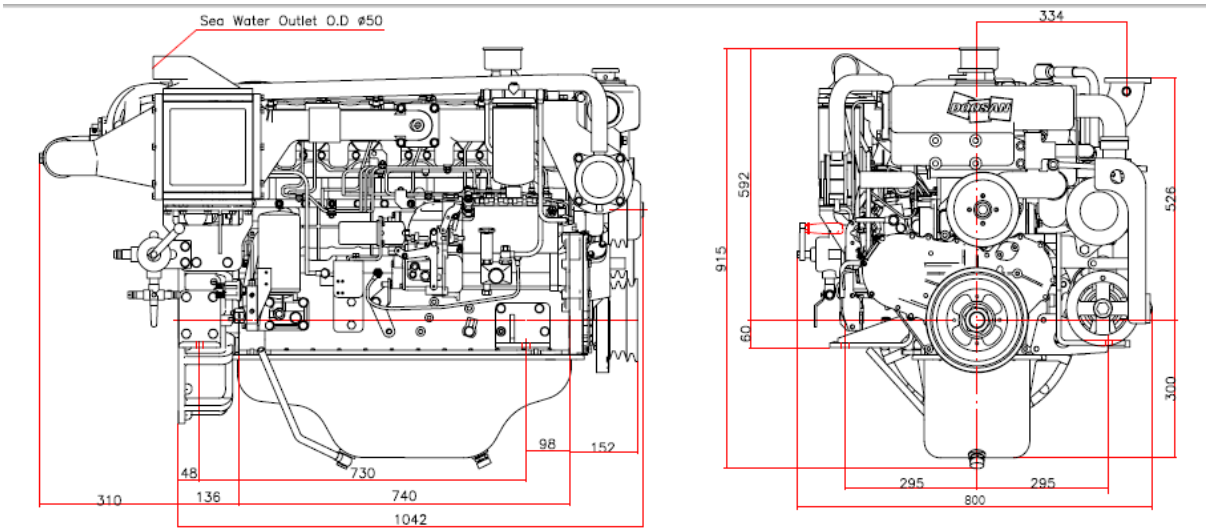
L066TI MARINE ENGINE

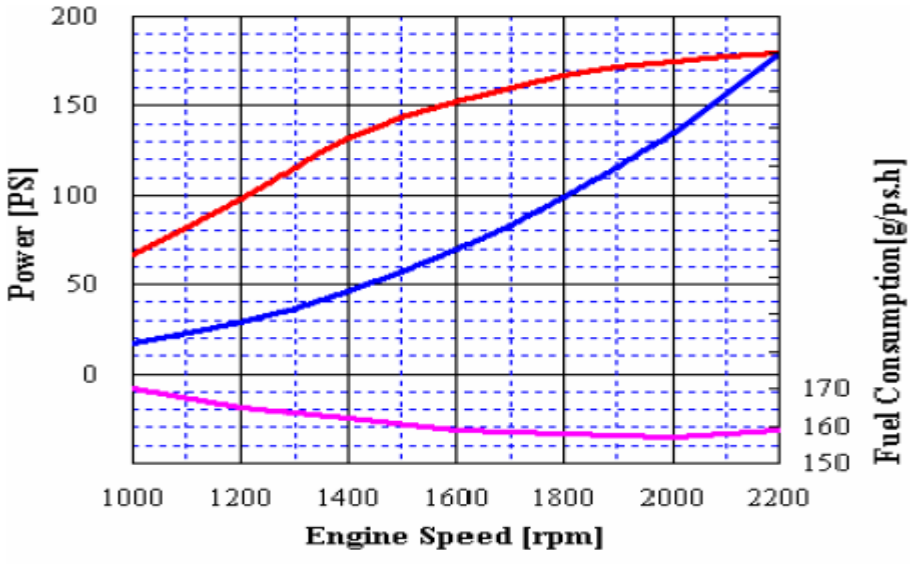
POWER RATING

Production tolerance : ± 3%

MODEL	CONDITIONS	POWER	rpm	Base Engine
L066TIH	HEAVY DUTY	180PS (132kW)	2,200	DB58TI

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
  (Fishing trawler, Pushing vessel, Cargo boat, Ferry)

Engine Specification

Model		Units	L066TIH
Engine type			4 cycle, In line, direct- injection, water cooled with turbo charger & inter-cooler
Rating output (B.H.P)		PS(kW)/rpm	180(132)/2,200
Displacement		cc	5,785
Cylinder number - bore(ϕ) x stroke		mm	6 - ϕ102 x 118
Valve clearance at cold	In / Ex	mm	0.4 / 0.4
Low idling rpm		rpm	750 ± 25
No load max. rpm		rpm	below2,420
Mean effective pressure		kg/cm^2	12.73
Mean piston speed		m/sec.	7.87
Compression ratio			19.5 : 1
Firing order			1 – 5 – 3 – 6 – 2– 4
Compression pressure	at 200 rpm	kg/cm^2	above 30 (Initial condition)
Governor type of injection pump			Mechanical all speed (R.S.V)
Fuel consumption		g/PS.h	159
		lit / h	34.5
Injection timing (B.T.D.C)		deg	15° ± 1°
Fuel inj.nozzle opening pressure		kg/cm^2	200
Starting system			Electric Starting by starter motor
Starter motor capacity		V- kW	24 – 4.5
Alternator capacity		V- A	24 – 45
Battery		V- Ah	24 – 100
Cooling system			Indirect sea water cooling with heat exchanger
Cooling water capacity	Max. / Min.	lit	25 / 20
Fresh water pump type			Centrifugal type, driven by V- belt
Sea water pump type			Rubber impeller type driven by V- belt
Lubricating oil (Engine)	pan capacity	lit	Max : 19 , Min : 14 (Engine total : 21)
	pressure	kg/cm^2	Full : 3.5, Idle : 1.0
Marine gear	Model		DMT70TF (Dong-I)
	Gear ratio		1.61 2.06 2.45 2.82 3.12 3.46
Direction of revolution	crankshaft		Counter clockwise viewed from stern side
	propeller		Clockwise viewed from stern side
Engine size (L x W x H)	without R/G	mm	1,042 x 800 x915
	with R. gear	kg	1,397 x800 x 915
Engine dry weight	without R/G	kg	535
	with R. gear	kg	717

$psi = kg/cm^2 \times 14.22$ lb= kg x 2.205 hp = PS x 0.98635
lb/ft. = N.m x 0.737 lb/PS.h = g/kW.h x 0.00162 U.S gal. = liter x 0.264
kW = 0.2388 kcal/s $cfm = m^3/min \times 35.3$