

## L136T/TL MARINE ENGINE

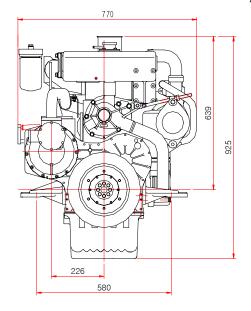


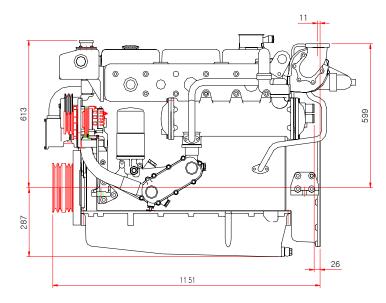
## **POWER RATING**

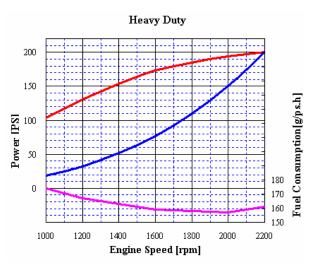
Production tolerance:  $\pm 3\%$ 

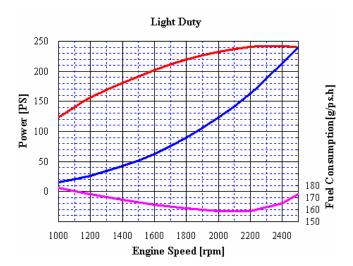
MODEL	CONDITIONS	POWER	rpm	Base Engine
L136T	HEAVY DUTY	200PS (147kW)	2200	D1146T
L136TL	LIGHT DUTY	240PS(177Kw)	2500	D11401

**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, Tug boat, Pushing vessel, Cargo boat, Freighter, Ferry)
- 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 ~ 2.5
   (Light weight fishing boat, Yacht, Coastguard boat, Fast boat, Fire pump)



## L136T/TL MARINE ENGINE



Engine Specification							
Model		Units	L136T	L136TL			
Engine type			4 cycle, In line, direct- injection, water cooled with turbo charger				
Rating output (B.H.P)		PS(kW)/rpm	200(147)/2200	240(177)/2500			
Displacement		cc	8,071				
Cylinder number - bore(\$\phi\$) x stroke		mm	6 - $\phi$ 111 x 139				
Valve clearance at cold	In / Ex	mm	0.3 / 0.3				
Low idling rpm		rpm	$725 \pm 25$				
No load max. rpm		rpm	below 2,400	below 2,750			
Mean effective pressure		kg/cm <sup>2</sup>	10.14	10.71			
Mean piston speed		m/sec.	10.19	11.58			
Compression ratio			16.7 : 1				
Firing order			1-5-3-6-2-4				
Compression pressure	at 200 rpm	kg/cm <sup>2</sup>	28 (Initial Condition)				
Governor type of injection	pump		Mechanical all speed (R.S.V)				
Fuel consumption		g/ps.h	155	167			
ruei consumption		lit / h	37	48			
Injection timing (B.T.D.C)		deg	18° ± 1°				
Fuel inj. nozzle opening pro	essure	kg/cm <sup>2</sup>	214+8				
Starting system			Electric Starting by starter motor				
Starter motor capacity		V- kW	24 - 4.5				
Alternator capacity		V- A	24 - 50				
Battery		V- Ah	24 - 100				
Cooling system			Indirect sea water cooling with heat exchanger				
Cooling water capacity	Max. / Min.	lit	27 / 25				
Fresh water pump type			Centrifugal type, driven by V- belt				
Sea water pump type			Rubber impeller type driven by gear				
* * * * *	pan capacity	lit	Max: 23 , Min: 17 (Engine total: 25)				
Lubricating Oil (Engine)	pressure	kg/cm <sup>2</sup>	Full: 3.5, Idle: 1.2				
Marine Gear	Model	_	DMT90A (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	without M/G	mm	1,182 x 770 x 925				
$(L \times W \times H)$	with M. gear	mm	1,542 x 770 x 963				
T. 1 . 1.1.	without M/G	kg	748				
Engine dry weight	with M. gear	kg	938				

psi = kg/cm<sup>2</sup> 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

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