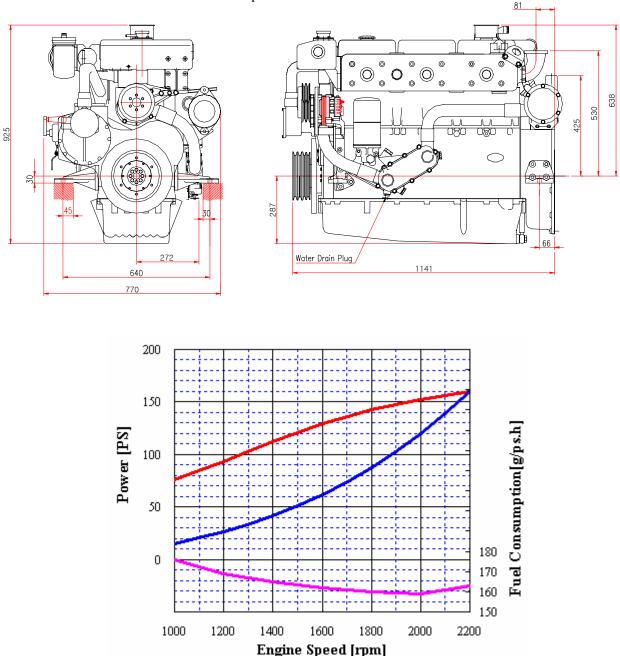


L136 MARINE ENGINE



POWER RATING Production tolerance : ± 3%					
MODEL	CONDITIONS	POWER	rpm	Base Engine	
L136	HEAVY DUTY	160PS (118kW)	2200	D1146	

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)





Engine Specification

Model		Units	L136	
Engine type			4 cycle, In line, direct- injection, water cooled, aspirated naturally	
Rating output (B.H.P)		PS(kW)/rpm	160(118)/2200	
Displacement		сс	8,071	
Cylinder number - bore(ϕ) x stroke		mm	6 - \$111 x 139	
Valve clearance at cold In / Ex		mm	0.3 / 0.3	
Low idling rpm		rpm	725 ± 25	
No load max. rpm		rpm	below 2,420	
Mean effective pressure		kg/cm ²	8.07	
Mean piston speed		m/sec.	10.19	
Compression ratio			17.6 : 1	
Firing order			1 - 5 - 3 - 6 - 2 - 4	
Compression pressure	at 200 rpm	kg/cm ²	28 (Initial Condition)	
Governor type of injection pump			Mechanical all speed (R.S.V)	
Fuel consumption		g/ps.h	165	
		lit / h	32	
Injection timing (B.T.D.C)		Deg	$22^{\circ} \pm 1^{\circ}$	
Fuel inj. nozzle opening pressure		kg/cm ²	224	
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	25 / 23	
Fresh water pump type			Centrifugal type, driven by V- belt	
Sea water pump type			Rubber impeller type driven by gear	
Lubricating Oil	pan capacity	lit	Max : 23 , Min : 17 (Engine total : 25)	
(Engine)	pressure	kg/cm ²	Full: 3.5 , Idle: 1.5	
Marine gear	Model		DMT90AF (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 x W x H)	with M. gear	mm	1,542 x 770 x 963	
Engine dry weight	without M/G	kg	743	
Engine dry weight	with M. gear	kg	928	

psi = kg/cm² x 14.22 lb/ft. = N.m x 0.737 kW = 0.2388 kcal/s

 $\label{eq:lb} \begin{array}{l} lb=kg \; x \; 2.205 \\ lb/PS.h=g/kW.h \; x \; 0.00162 \\ cfm=m^3/min \; x \; 35.3 \end{array}$

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. **TEL : 82-2-3398-8521~8536** FAX : 82-2-3398-8509

TEL : 82-2-3398-8521~8536 FAX : 82-2-3398-8509 Web site : www.doosaninfracore.com

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