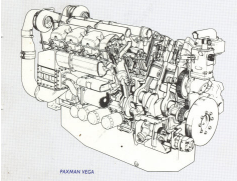
PAXMAN DIESEL POWER

DIESEL ENGINE RATINGS

MARINE PROPULSION AND MARINE POWER GENERATION



PAXMAN VEGA

CATEGORY DEFINITION

A — HIGH SPEED CRAFT

Fast patrol craft
High speed yachts
Fast pleasure craft
Short range ferries
and
similar applications

B — MEDIUM SPEED CRAFT

Ferries
Cruising yachts
Pleasure craft
Long range patrol craft
Some short range fishing vessels
and
similar applications

C — LONG RANGE VESSELS

Vessels with unlimited operating range and/or unrestricted continuous operation
Long range fishing vessels
Deep sea ferries
and
similar applications

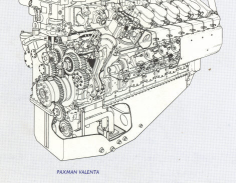
D — ALL VESSELS

Marine power generation

i) Catamarans, S.E.S., Hydrofoils and SWATH can all fall within the above categories and therefore reference should be made to the rating definition.
ii) CODAD, CODOG and CODLAG systems etc can also fall within the above categories and therefore reference should be made to the rating definition.

ENGINE DATA

ENGINE TYPE		CONFIG-URATION	BORE × STROKE mm	BMEP at max 'A' rating bar	MEAN PISTON SPEED AT 1600 rev/min m/s	LENGTH × WIDTH × HEIGHT mm	DRY WEIGHT kg
VEGA	12	12V	160 × 190	18.76	10.13	2350 × 1432 × 1700	4400
	16	16V	160 × 190	18.71	10.13	3155 × 1432 × 1850	5450
VALENTA	6	6L	197 × 216	19.20	11.52	2673 × 1219 × 1943	4635
	8	8V	197 × 216	21.33	11.52	2032 × 1460 × 2273	6967
	12	12V	197 × 216	22.68	11.52	2428 × 1530 × 2387	6671
	16	16V	197 × 216	22.68	11.52	2962 × 1530 × 2470	8963
	18	18V	197 × 216	22.66	11.52	3268 × 1460 × 2470	9271



PAXMAN VALENTA

RATING DEFINITION

MARINE PROPULSION – CATEGORY 'A'

The maximum rating is available for 30 minutes in each period of six hours operation at or below the continuous rating. If this time is exceeded it may be necessary to reduce the overhaul periods.

The intermittent rating is available for one hour in each period of six hours operation at or below the continuous rating. If this time is exceeded it may be necessary to reduce the overhaul periods.

The continuous rating is available for operating periods normally associated with high speed craft.

MARINE PROPULSION – CATEGORY 'B'

The intermittent rating is available for 6 hours in each 24 hours of operation at or below the continuous rating. If this time is exceeded it may be necessary to reduce the overhaul periods.

Total operating hours at the intermittent rating should not exceed 10 percent of total hours in the period up to major overhaul.

The continuous rating is unrestricted.

MARINE PROPULSION – CATEGORY 'C'

The continuous rating is unrestricted.

MARINE POWER GENERATION – CATEGORY 'D'

These ratings comply with Lloyds unrestricted service requirements and other classification societies for engines at sea water temperature up to 32°C and air temperature of 45°C.

Assumed generator efficiency at 95%.

16 APRIL 1984

RATING TO ISO 3046

ENGINE TYPE		MAXIMUM		INTERMITTENT		CONTINUOUS		CONTINUOUS	
		UNITS kWb bhp CV, PS	SPEED rev/min	UNITS kWb bhp CV, PS	SPEED rev/min	UNITS kWb bhp CV, PS	SPEED rev/min	UNITS kWb bhp CV, PS	SPEED rev/min
CATEGORY A								**CATEGORY C**	
VEGA	12	1290 1730 1754	1800	1182 1585 1607	1750	1074 1440 1460	1700	895 1200 1215	1250
	16	1716 2300 2332	1800	1575 2110 2140	1750	1432 1920 1947	1700	1195 1600 1620	1250
VALENTA	6	1007 1350 1370	1600	925 1240 1257	1550	835 1120 1135	1500	695 930 943	1400
	8	1492 2000 2030	1600	1363 1825 1850	1550	1250 1675 1700	1500	925 1240 1257	1400
	12	2640 3270 3315	1640	2215 2970 3010	1585	2015 2700 2735	1540	1640 2200 2230	1400
	16	3250 4360 4420	1640	2955 3960 4015	1585	2685 3600 3650	1540	2190 2935 2975	1400
	18	3655 4900 4965	1640	3325 4455 4516	1585	3020 4050 4105	1540	2460 3300 3345	1400
CATEGORY B								**CATEGORY D** kWe	
VEGA	12			1120 1500 1520	1650	1020 1365 1385	1600	930 930 750	1800 1500 1200
	16			1490 2000 2030	1650	1360 1820 1845	1600	1240 1240 930	1800 1500 1200
VALENTA	6			830 1115 1130	1510	755 1010 1025	1460	730 610	1500 1200
	8			1110 1490 1510	1510	1010 1350 1370	1460	970 810	1500 1200
	12			1970 2640 2675	1510	1790 2400 2435	1460	1600 1290	1500 1200
	16			2625 3520 3570	1510	2385 3200 3245	1460	2130 1720	1500 1200
	18			2955 3960 4015	1510	2685 3600 3650	1460	2390 1940	1500 1200

Environmental Conditions for Propulsion Engines
All ratings in the foregoing tables are based on an ambient air temperature and seawater temperature not exceeding 27°C. Barometric pressure 1 bar. Derating should be to ISO 3046.

Refer to rating definition – Category 'D' for marine power generation conditions.

Notes
1. It may be possible to increase speeds and outputs in some of the categories for example the continuous Category 'A' rating may be used for short range high speed ferries after full consideration of the operating profile.
2. Power raised in accordance with NMMA procedure.

Information in this publication must not be taken as binding until confirmed.
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