

PRM DELTA MARINE GEARBOX BY NEWAGE

FULL OPERABLE OPERATION - LOWWEIGHT, COMPACT, SILENT

The PRM Delta marine gearbox is purpose built for all industrial, commercial and recreational boats. Its low maintenance design provides exceptional operating life. The gearbox is built to meet the demands of the most demanding marine environments. The gearbox is built to meet the demands of the most demanding marine environments. The gearbox is built to meet the demands of the most demanding marine environments.

Maximum shaft output of up to 1500 HP, 2000 RPM and 2000 ft lbs of torque for both inboard and outboard engines. The gearbox is built to meet the demands of the most demanding marine environments. The gearbox is built to meet the demands of the most demanding marine environments.

Marine duty stainless steel gears are normally used for rigidity and strength and coated with a special marine grade zinc plating.

Hydraulic operating system functions on remote operation (R/O) PRM, giving the user total remote transmission control and secure rapid emergency disengagement of the operating lever for gear shifting. The operating lever has positive tactile detent and is suitable for conventional emergency stop lever remote control systems.



Full remote hydraulic system is available provided with mechanical lock up device for added security, installed in the remote area of a hydraulic line that can be brought safely back to port. Access to this device via the electronic starting system of the engine will also raise the hydraulic control valve.

NEWAGE
NEWAGE TRANSMISSIONS p.l.c.

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WARNING: POWER TAKEOFF, PTO, USE FOR MOUNTING DEVICES

Power	21.1 kW / 28.5 HP (at 1000/min operating speed)
Transmission	1.8 kW / 2.4 HP (at 1000/min operating speed)
Maximum Total Speed	4000 rpm (no-load), 3000 rpm (with load)

Note: These ratings refer to rated engine, do not being measured. The engine has not been designed to ensure the long trouble-free life of the gearbox which should not, therefore, be used in excess of its rated life.

WARNING: CLASSIFICATION OF THE PTO

RESIDENTIAL: limited to use and exclusively for pleasure boating, operation at full engine throttle should not exceed 5% of total time, with a maximum of 50% of full throttle engine speed or less. Maximum operator 500 hours per year. The selection of PPM Drive according to this classification for any commercial boat is not approved by Sanyo Transmissions.

COMMERCIAL: Usage Transmissions are recommended that when considering the use of the PPM Drive in boats of whatever hull form used in commercial applications, and in displacement and semi-displacement hull boats for pleasure applications, these boats should be classed as commercial boats and the operator advised accordingly.

IMPORTANT NOTE

(1) It is important that the engine, transmission model, reduction ratio and propeller size should be correctly matched so that the engine can attain its rated speed (superior to the relevant service classification) without stalling.

(2) It is also very important to ensure the correct compatibility of the complete propulsion system from engine through to propeller, since disregarding this may result in gear noise, particularly at low speed operation, and may even result in damage to the engine as well as transmission components.

Sanyo Transmissions can still provide all possible information and assistance to help find solutions to potential technical problems, but it is the ultimate responsibility of the person assembling the drive and drive equipment to ensure that they are correctly compatible.

Sanyo Transmissions has a proud tradition of quality mechanical engineering the lasting back over 50 years today, at its modern, fully equipped factory in Scotland at the English Harbour and product not only having performance but also cost and performance for other boats daily operations.

With over 2000 components in production at any one time, plans and methods have been carefully chosen to ensure optimum manufacturing efficiency and product quality, reliability, rigidity, response and quality control.

OPERATING PRESSURE: 200 kPa (300 psi). A maximum 100° C oil temperature should be maintained (per ISO 15001) required.

OIL COOLING: The normal operating temperature of the oil should be in the 50°C - 80°C range and should not be permitted to exceed 90°C. In all cases a necessary temperature monitoring temperature environment, and the gearbox is provided with two 5 inch BSP connections to allow it to be fitted. The use of lower dependent number of factors including the transmission development, operation, and the water inlet water temperature ambient temperature.

PROPELLER FREE PRELOAD: The PPM Drive output shaft can be rotated continuously with the gearbox in neutral. In some instances necessary to find propeller leaks when running with bearings that drain, e.g. in multi-engine installations when sailing.

Approximate Dry Weight	21 to 28 kg, including drive coupling, adapter flange and screws
Oil Capacity	1.3 litre (2.8 pints), plus the amount necessary to fill the cooling circuit

FEASIBLE INPUT EQUIPMENT FOR THE CELLS

PART NO.	OUTSIDE DIMENSIONS	INTERNAL GRID PATTERNS		REMARKS	
		NO.	DIAMETER		PITCH OR GRID DIA.
WT001	250x150x100 mm	4	Ø 200x Ø 200mm	7.875x 200 200mm	Grid 1/8in
WT002	250x150x100 mm	4	Ø 200x Ø 200mm	8.750x 200 200mm	Grid 1/8in
WT003	11.75in 1200x600mm	4	Ø 200x Ø 200mm	19.75in 1200x600mm	
		4	Ø 200x Ø 200mm	19.75in 1200x600mm	
		4	Ø 200x Ø 200mm	19.75in 1200x600mm	
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WT004	Ø 100x 150 200mm	1	Ø 200x Ø 200mm	3.000x 150 200mm	
WT005	Ø 200x 150 200mm	1	Ø 200x Ø 200mm	3.070x 150 200mm	Master Station, Marine
WT006	Ø 100x 150 200mm	1	Ø 200x Ø 200mm	3.000x 150 200mm	Spring drive gear

ADAPTOR PLATES FOR PART NO. 14

PART NUMBER	DESCRIPTION	WEIGHT	
		kg	lb
WT007 S/A	S/A11 adaptor	11.0	24.2
WT008 S/A	Spacer S/A11 adaptor, Master Parts 2000series	10.0	22.0
WT009 S/A	S/A11 adaptor	1.0	2.2
WT010 S/A	Spacer S/A11 adaptor, Master Parts 2000series	0.7	1.5
WT011 S/A	S/A11 adaptor	1.4	3.1

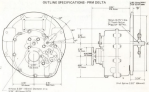
OTHER ACCESSORIES FOR THE CELLS

PART NUMBER	DESCRIPTION	WEIGHT	
		kg	lb
WT110	Cell cover, complete with gage and bracket	1.5	3.3
WT111	Terminal short-circuiting, gage bracket	1.0	2.2
WT112	Terminal short-circuiting	0.7	1.5
WT113	Cell pressure gage, alarm mounting	0.1	0.2
WT114	Hydrochloric acid bucket	0.24	0.5



Information given by this office is considered authoritative only if accompanied by the signature of the responsible engineer. The design and construction of the equipment should not be based on this information.

OUTLINE SPECIFICATIONS - PWR DELTA



Dimension	W		W Internal	
	mm	inches	mm	inches
MAX W	204.2	8.04	191	7.52
MIN W	203.0	8.00	190.25	7.50

Installation

The maximum core and cell installation requirements are as follows:



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