PRM260C Gearbox

Full hydraulic operation, lightweight, compact & rugged.

The PRM260C is supplied in an in-line configuration.

The PRM260C marine gearbox is purpose built for use in both pleasure craft and commercial boats; its twin countershaft design provides separate oil-operated multi-disc clutches (which need no adjustment) for ahead and astern drive allowing full rated power to be transmitted continuously in either direction.

A choice of 1.96:1 and 2.94:1 reduction ratios is available; each will provide left-hand or right-hand propeller rotation in "ahead", making the PRM260C particularly well suited to twin engine installations.

The gearcase is constructed of high grade cast iron, internally ribbed for rigidity and strength, and consists of two separate halves to facilitate servicing, the oil pump and hydraulic control valves being externally mounted for easy accessibility.

The PRM260C input shaft, spline, adaptor flange and mounting pads are as used on Borg Warner (Velvet Drive) 71C and Paragon P23 & P25 gearboxes.

The hydraulic operating system functions on normal lubricating oil of the same viscosity as that used in the engine, avoiding the need to use automatic transmission fluid, and ensures rapid response to movements of the operating lever for good boat handling. The operating lever has a positive neutral detent and is suitable for use with proprietary single lever remote control operating systems.

Robust and reliable, the hydraulic system is nevertheless provided with a mechanical lock-up device for added security, so that in the unlikely event of hydraulic failure the boat can be brought safely back to port. Access to this device is via a detachable cover located on top of the main gearcase.

A trolling valve can be fitted. This is electronically operated which allows variable speed of the propeller to zero whilst allowing a maximum engine speed of up to 1200 rpm.

Nominal Power Ratings, PRM260C Marine Gearbox

Model	Ahead Ratio	Pleasure		Light Commercial		Heavy Commercial	
		kW	BHP	kW	BHP	kW	BHP
260C2	1.96:1	2.72	3.65	2.51	3.36	2.31	3.08
260C3	2.94:1	2.72	3.65	2.51	3.36	2.31	3.08

Maximum operating speeds: 4500 rev/min intermittent, 4000 rev/min continuous

Note: These powers have been measured at the engine flywheel. Ratings have been established to ensure the long trouble free life of the gearbox which should not, therefore be used at powers in excess of those shown.

Operating Pressure

Minimum – 18.27 bar (265 lb./in^2), Maximum – 22.06 bar (320 lb./in^2). Two tapped holes 1/8" BSP on the top, and M18 on the side of the valve block are provided so that the pressure gauge can be fitted if 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. An oil cooler is necessary to ensure that correct operating temperatures are maintained, and the valve block is provided with two 3/8" BSP connectors to allow it to be fitted.

Propeller Thrust

Both ahead and astern thrust is carried by the output shaft bearings which are of adequate capacity for all factory approved ratings.

Propeller Free Wheeling

The PRM260C output shaft can be rotated continuously with the gearbox in neutral. It is therefore not necessary to fit a propshaft brake in such applications.

Approximate Weight & Oil Capacity

Approximate dry weight	63kg (138lb) excluding adaptor, drive coupling and oil cooler
Oil capacity	1.7 litres (3.0 pints) plus the amount require to fill the cooling circuit

Flexible Input Couplings for PRM260C

Part Number	Outside Diameter		Mounting Hole Pattern					Remarks
	mm.	in.	No.	Diameter		Pitch Circle Dia.		
				mm	in	mm	in	
MT1224	241.3	9.500	8	8.74	0.344	222.3	8.750	SAE 7 ½ in
MT1222	314.3	12.375	6	Multi Punched, Dimensions on application				
			8	9.53	0.375	295.3	11.625	SAE 10 in
MT1162	352.4	13.875	8	10.99	0.433	333.4	13.125	SAE 11 ½ in
MT1213	362.0	14.250	6	8.13	0.320	295.3	11.625	Perkins 4-236
			6	Multi Punched, Dimensions on application				
MT4911	352.4	13.875	8	10.99	0.433	333.4	13.125	SAE 11 ½ in High Deflection
MT4912	362.0	14.250	6	8.13	0.320	295.3	11.625	Perkins 4-236
			6	Multi Punched, Dimensions on application				High Deflection
MT4913	314.3	12.375	6	Multi Punched, Dimensions on application				
			8	9.53	0.375	295.3	11.625	SAE 10 in High Deflection
MT4914	241.3	9.500	8	8.74	0.344	222.3	8.750	SAE 7 ½ in High Deflection
MT1468	362.0	14.250	6	Multi Punched, Dimensions on application				(For 260C)

Adaptor Flanges for PRM260C

Part Number	Description	Weight	
		kg	lb
MT8074S/A	SAE2 adaptor flange	13.0	28.7
MT854S/A	SAE3 adaptor flange	11.0	24.3
MT1210S/A	SAE4 adaptor flange	10.0	22.0
MT1209S/A	SAE5 adaptor flange	7.0	15.4
MT1426S/A	B/W (Velvet Drive) adaptor flange	4.3	9.5

Other Accessories for PRM260C

Part Number	Description	Weight	
		kg	lb
MT913S/A	Oil cooler	1.2	2.6
MT915	Oil pipes (pair)	0.5	1.1
MT784	Oil cooler mounting bracket	0.2	0.4
MT771	Tail shaft half coupling (pilot bored)	2.5	5.5
MT1104	Tail shaft flexible coupling	1.5	3.3
MT0214	Neutral safety start switch	0.04	0.1
MT5036	Oil pressure gauge (direct mounting)	0.1	0.2

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