MGX-5086 Series

Twin Disc[®] Marine Transmission

MAXIMUM 543 KW (728 HP) @ 2500 RPM [PLEASURE CRAFT DUTY]



STANDARD EQUIPMENT

MGX-5086 SC & MGX-5086 A SAE J617 housing no. 1 Flexible coupling for 14" flywheel (SAE J620 size 355) Electric GP-valve with manual override EC050 profile module - interface for engagement signals Oil strainer and oil filter



OPTIONS	MGX-5086 SC	MGX-5086 A
SAE J617 housing no. 2	x	x
Special input housings	x	x
Flexible coupling for 11.5" flywheel (SAE J620 size 290)	x	x
EC050 E-Troll module – interface for engagement and trolling signals	x	x
Oil cooler with thermostatic bypass valve	x	x
Companion flange/bolts set	x	x
Monitoring devices to customer's specification	x	x
Mounting brackets	х	x
Live PTO – max. 197 Nm		
SAE J744 size 101-2, 22-4 (SAE "B", 2-bolt)	x	x
SAE J744 size 101-4, 22-4 (SAE "B", 4-bolt)	x	x
Live PTO – max. 337 Nm		
SAE J744 size 101-2/4, 25-4 (SAE "B-B", 2/4-bolt)	х	x
Weight (dry weight with standard equipment)	135 kg	135 kg

Contact Twin Disc for Survey Society Approvals and Classifications. Specifications subject to change without prior notice in the interest of continual product improvement.

INPUT RATINGS – KILOWATTS (KW) (HORSEPOWER [HP])*										
c	Reduction Ratios :1	Pleasure Craft @2300 RPM	Light Duty @2300 RPM	Intermediate Duty @2100 RPM	Medium Duty @1800 RPM	Continuous Duty @1800 RPM	Input Speed Limits RPM			
GX-5086 SC	1.08, 1.33 1.53, 1.77 2.05	522 kW (700 hp)	460 kW (617 hp)	351 kW (471 hp)	301 kW (404 hp)	262 kW (351 hp)	3200 MAX.			
	2.53	492 kW (660 hp)				· · · ·				
Σ	2.88	447 kW (600 hp)	418 kW (560 hp)	340 kW (456 hp)	273 kW (366 hp)					

	Reduction Ratios :1	Pleasure Craft @2300 RPM	Light Duty @2300 RPM	Intermediate Duty @2100 RPM	Medium Duty @1800 RPM	Continuous Duty @1800 RPM	Input Speed Limits RPM
-5086 A	1.08, 1.33 1.53, 1.77 2.05	530 kW (710 hp)	460 kW (617 hp)	351 kW (471 hp)	301 kW (404 hp)	262 kW (351 hp)	3200 MAX.
2 E X	2.53	492 kW (660 hp)				(p)	
2	2.88	447 kW (600 hp)	418 kW (560 hp)	340 kW (456 hp)	273 kW (366 hp)		

* Ratings shown are for use with standard right hand rotation engines.

SERVICE CLASSIFICATION DEFINITIONS

Pleasure Craft [PC]: Up to 500 hours/year, low load factor usage planing hull vessels where typical full engine throttle operation is less than 10% of total time. The balance of operation at 80% of full engine throttle or less. Marine transmissions for use in long-range pleasure cruisers, sportfish charter boats/ patrol boats do not qualify for Pleasure Craft Service.

Note: Some revenue producing applications such as Planing Hull Bristol Bay Gillnetter do qualify under Pleasure Craft rating definition.

Light Duty [LD]: Relatively low hour usage (less than 1500 hours per year) where full throttle operation is 2 hours out of 12.

Typical applications include planing hull vessels such as fire boats, sportfish charter boats, and patrol/custom boats. This rating is also applicable to some bow and stern thruster applications.

Intermediate Duty [ID]: Hour usage of up to 2000 hours/year (for models MG-5114 Series and smaller) and up to 3000 hours/year (for models larger than MG-5114 Series) with 50% of the operating time at full engine rating.

Typical applications include planing hull vessels such as ferries, fishing boats, some crew boats, and some displacement hull yachts as well as some bow and stern thruster applications.

Medium Duty [**MD**]: Hour usage of up to 4000 hours/year with up to 80% of operating time at full engine power. This duty classification is for usage where some variations in engine speed/power occur as part of normal vessel operation.

Typical vessels include mid-water trawlers, crew/supply boats, ferries and some inland water tow boats.

Continuous Duty [CD]: For use in continuous operation with little or no variation in engine speed/power setting.

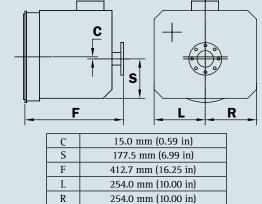
Typical vessels include fishing trawlers, tow/tug boats and ocean going vessels.

Important Notice: Torsional Vibration: Disregarding propulsion system torsional compatibility could cause damage to components in the drive train resulting in loss of mobility. At minimum, system incompatibility could result in gear clatter at low speeds.

The responsibility for ensuring that the torsional compatibility of the propulsion system is satisfactory rests with the assembler of the drive and driven equipment.

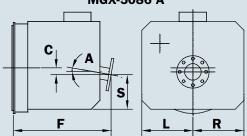
Torsional vibration analysis can be made by the engine builder, marine survey societies, independent consultants and others. Twin Disc is prepared to assist in finding solutions to potential torsional problems that relate to the marine transmission.

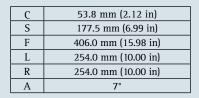
Twin Disc, Incorporated reminds users of these products that their safe operation depends on use in compliance with engineering information provided in this bulletin. Users are also reminded that safe operation depends on proper installation, operation and routine maintenance and inspection under prevailing conditions. It is the responsibility of the user (and not Twin Disc, Incorporated) to provide and install guards or safety devices which may be required by recognized safety standards or by the Occupational Safety and Health Act of 1970 and its subsequent provision.



MGX-5086 SC









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