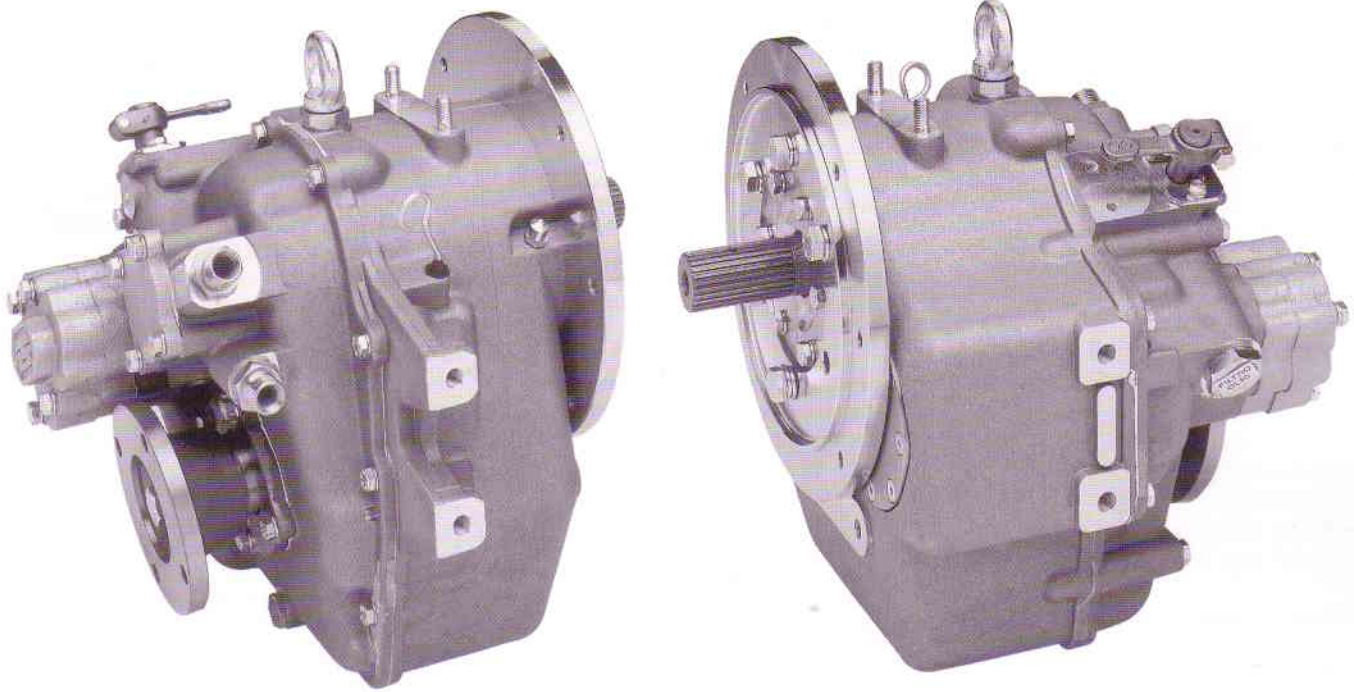


From the Family of Twin Disc Critical Performance Products

Down Angle Marine Transmission

87 to 210 kW
117 to 282 hp



Model MG-5015A

The Twin Disc MG-5015A marine transmission is built with aluminum alloy housing and equipped with multiple-disc clutches hydraulically operated.

Clutches and gears are properly constructed to transmit the full power, with the same ratio, both in forward and reverse running.

An 8° down angle on output shaft

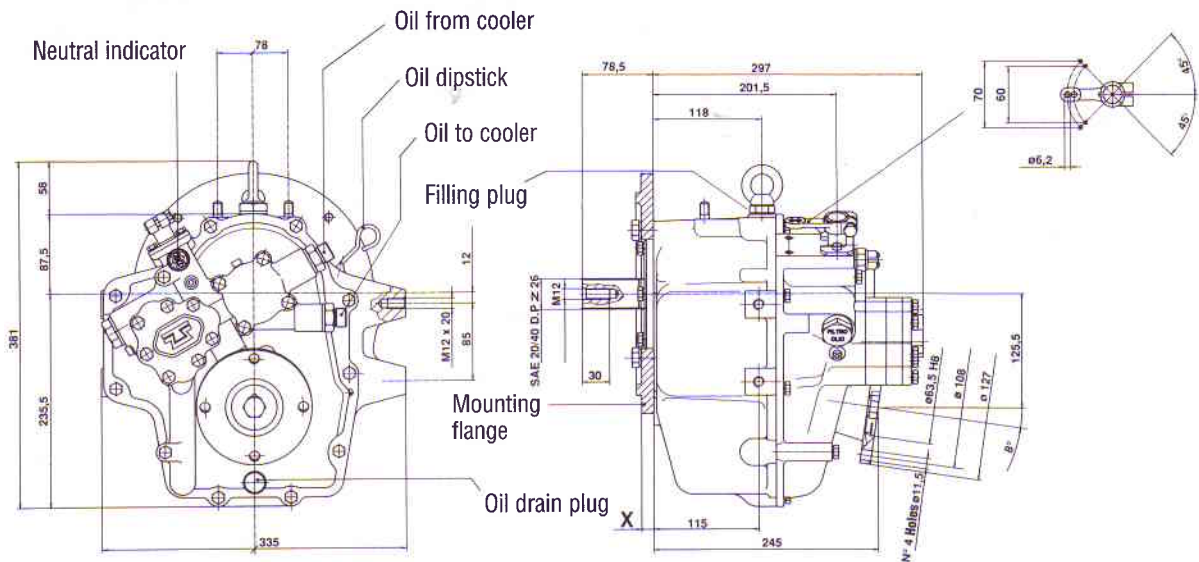
provides a proper engine-marine gearbox group installation on planing or semi-displacement type hulls.

SAE 3, SAE 4 and special housings are available.

REDUCTION RATIOS	*INPUT RATINGS – KILOWATTS (HORSEPOWER)				MAX. INPUT SPEED-RPM
	PLEASURE CRAFT DUTY	LIGHT DUTY	INTERMEDIATE DUTY		
	3500 RPM	3500 RPM	2800 RPM		
1.5:1	210 (282)	205 (275)	125 (167)		
2.09:1	175 (235)	160 (215)	102 (137)		4500 max.
2.40:1	150 (201)	138 (185)	87 (117)		

Please refer to back cover for service classification definitions.

*Ratings shown for use with standard rotation engines only.



Specifications—MG-5015A:

- Weight without oil 36 kg (79 lbs)

Options:

- SAE 3 bell housing (H=12, 5 mm) (H=33 mm)
- SAE 4 bell housing (H=12, 5 mm) (H=33 mm)
- BW bell housing (H=13, 5 mm) (H=30 mm)
- 111/2" Dual stage coupling (Centa CFDS25)
- Propeller shaft flange
- Heat exchange kit
- Cable bracket
- Trolling valve—factory fitted
- Trolling valve kit—field adaptation

Service Classification Definitions

Pleasure Craft

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 Intermediate Duty

Relatively low hour usage (less than 1500 hours/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/customs boats. This rating is also applicable to some bow and stern thruster applications.

Intermediate Duty

Hour usage of up to 2000 hours/year (for models MG-5114 and smaller) and up to 3000 hours/year (for models MG-5141 and larger) 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 also some displacement hull yachts as well as some bow and stern thruster applications.

Important Application Information

- Transmission ratings are based on use of the transmission in a torsionally compatible system utilizing a suitable input torsional coupling.
- Ratings are for diesel engines at the indicated speeds, unless otherwise indicated.
- Ratings are shown in SAE horsepower (HP).
- Consult factory for ratings applicable to gasoline engines, gas turbines, or other applications not conforming to the given service class definitions.
- Ratings apply to right hand engines (i.e., counter-clockwise flywheel rotation when viewing rear of engine).
- Ratings are full power forward or reverse except where specified by "F" (using forward gear train for forward).
- Transmission ratings should equal or exceed the engine's published ratings for the given application.
- Final marine transmission selections are to be confirmed prior to issuance of the purchase order. For unusual or unique applications, please contact Twin Disc, Inc. for product selection assistance.
- Marine transmission input couplings provided by Twin Disc are configured to interface with engine flywheels which conform to SAE J620 standards. Please consult Twin Disc when use of non-standard flywheels are contemplated.
- Most of the transmissions listed herein are to be mounted directly on the SAE flywheel housing of the engine. It is necessary that the engine crankshaft endplay be measured before the driven equipment is installed. The endplay measurements, before and after transmission installation, should be the same. If not the same, the driven equipment

should be removed and the problem source located and corrected before the engine is started. Engine crankshaft endplay measurement is considered mandatory.

- The given data is subject to modifications/ corrections without prior notice.
- Use certified print for installation.

Important Notice:

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 chatter 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 equipment of Twin Disc Incorporated's supply.



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