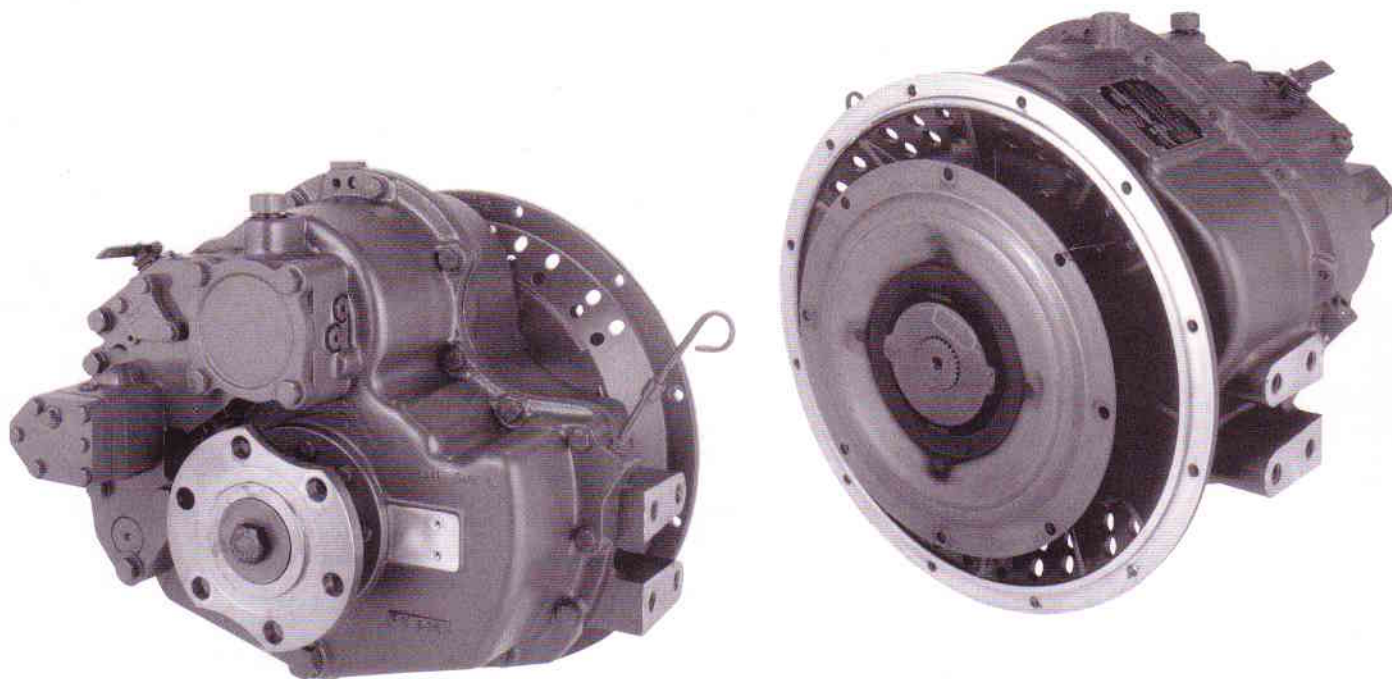


# Down Angle Marine Transmission

## 262 to 492 kW 351 to 660 hp



The MG-5082SC Marine Transmission was expressly designed for use with today's high output diesel engines in a broad range of marine applications utilizing conventional propeller, surface piercing drives and water jets.

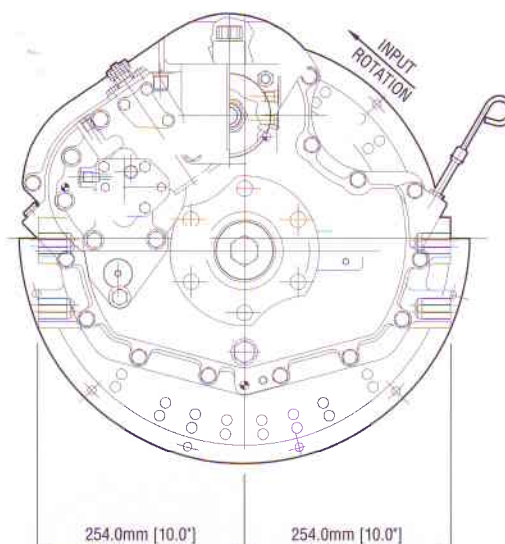
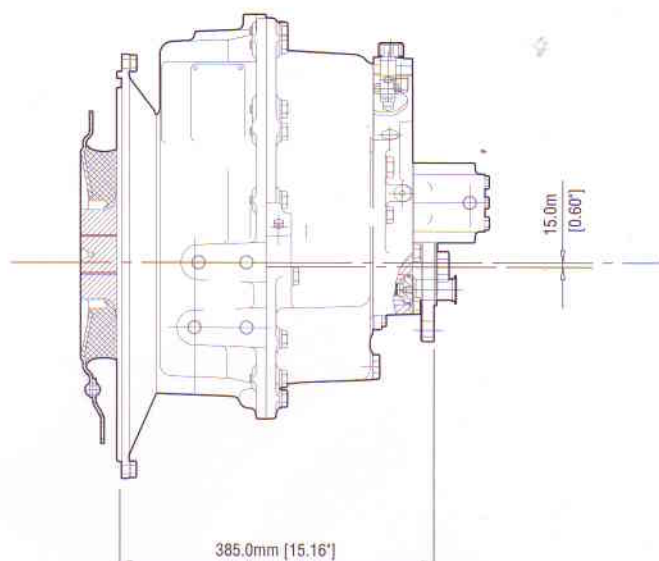
This transmission has a new coaxial design and is very compact, offering a good selection of reduction ratios, standard equipment and optional equipment. Identical rating capacity and ratios in forward or reverse drive trains of the

MG-5082SC eliminate the need for opposite rotation engines.

MODEL ASSY. DWG.	REDUCTION RATIOS	*INPUT RATINGS – KILOWATTS (HORSEPOWER)				
		PLEASURE CRAFT 2300 RPM	LIGHT DUTY 2300 RPM	INTERMEDIATE DUTY 2100 RPM	MEDIUM DUTY 1800 RPM	CONTINUOUS DUTY 1800 RPM
PX-11250	1.06, 1.33 1.53, 1.77 2.05, 2.53	492 (660)	413 (554)	393 (531)	273 (366)	262 (351)
	2.88	447 (600)	383 (514)	384 (515)	273 (366)	262 (351)

Please refer to back cover for service classification definitions.

\*Ratings shown for use with standard right-hand rotation engines. RPM Limits: 450 min./3200 max.



### Specifications—MG-5082SC:

- Dry weight – 135 kg (298 lbs) – light alloy housing
- SAE #1, 2 or #3 housings
- 14" or 11½" torsional input couplings
- Oil strainer
- Mechanical selector valve with clutch fill rate-of-rise

### Options:

- 12V or 24V Electric selector valves
- Raw water heat exchanger
- Companion flange/bolt set
- Mounting brackets
- Trolling valve
- Live PTO size SAE "B" - 4 bolt max. torque 197 N-m (145 lb-ft)
- Turns opposite direction to engine rotation at 0.943 times engine speed
- Monitoring devices to customer's specifications
- Contact Twin Disc, Inc. for Survey Society approvals

Specifications subject to change without prior notice in the interest of continual product improvement.

### 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 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.

#### Medium Duty

Hours 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

For use in continuous operation with little or no variation in engine speed/power settings.

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 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.



Twin Disc, Incorporated  
Racine, Wisconsin 53403, U.S.A.  
262-638-4000/262-638-4482 (fax)  
<http://www.twindisc.com>  
Singapore, Australia, Italy  
Twin Disc International S.A.  
1400 Nivelles, Belgium

Bulletin 319-A-5082SC 08/01  
©2001, Twin Disc, Incorporated  
Printed in United States of America