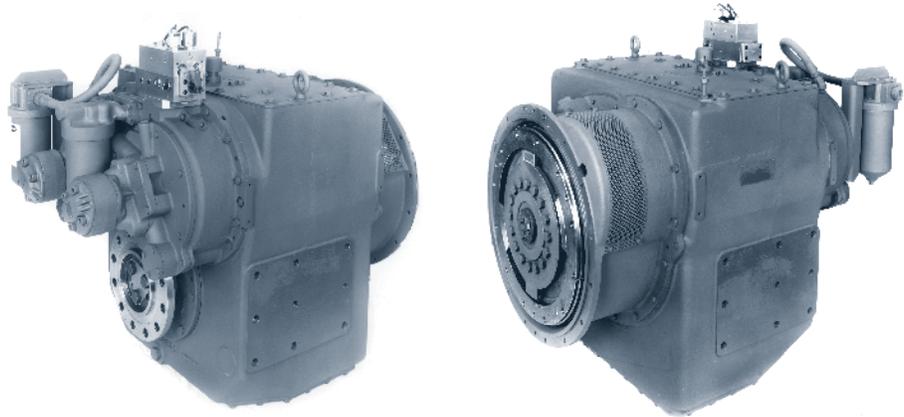


**MAXIMUM 1245 KW (1670 HP) @ 1900 RPM [INTERMEDIATE DUTY]****STANDARD EQUIPMENT****MG-540**

- Companion flange/bolt set
- Input couplings
  - Non-torsional type – 18”/21”RBD
  - Torsional type – 18”/21”
- Low oil pressure cooling circuit
- Mechanical selector valve
- Oil pressure/oil temperature gauges
- Oil strainer and oil filter assemblies

**OPTIONS**

- 12V or 24V electric selector valve
- Free-standing arrangement
- Heat exchangers – raw (K-109) and fresh water (165 degrees F max, K-110)
- Mounting brackets
- Trolling valves
- Use with LH, non-standard rotation engines
- Weight (dry weight – alloy housing)

**MG-540****X****X****X****X****X****X****2105 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])\***

Reduction Ratios :1	Intermediate Duty	Medium Duty		Continuous Duty		Maximum rated input speed and minimum engine low idle speed RPM
	@ 1900 RPM	@ 1200 RPM	@ 1800 RPM	@ 1200 RPM	@ 1800 RPM	
1.93, 2.58 2.90	1245 kW (1670 hp)	787 kW (1056 hp)	1180 kW (1583 hp)	787 kW (1056 hp)	1180 kW (1583 hp)	Minimum: 575 RPM
3.26		776 kW (1040 hp)	1163 kW (1560 hp)	776 kW (1040 hp)	1163 kW (1560 hp)	
3.91	1063kW (1425 hp)	648 kW (869 hp)	972 kW (1303 hp)	648 kW (869 hp)	972 kW (1303 hp)	Maximum: 1900 RPM – 1.93, 2.58, 2.90, 4.60
4.60	1245 kW (1670 hp)	787 kW (1056 hp)	1180 kW (1583 hp)	787 kW (1056 hp)	1180 kW (1583 hp)	
5.17	1230 kW (1650 hp)	774 kW (1038 hp)	1161 kW (1557 hp)	774 kW (1038 hp)	1161 kW (1557 hp)	2100 RPM – all other ratios
6.18	1029 kW (1380 hp)	–	966 kW (1295 hp)	–	966 kW (1295 hp)	
7.0	–	–	857 kW (1149 hp)	–	1857 kW (1150 hp)	
7.47	–	–	804 kW (1078 hp)	–	804 kW (1078 hp)	

MG-540 SAE 0 housing

**INPUT RATINGS – KILOWATTS (KW) (HORSEPOWER [HP])\***

Reduction Ratios :1	Intermediate Duty	Medium Duty		Continuous Duty		Maximum rated input speed and minimum engine low idle speed RPM
	@ 1900 RPM	@ 1200 RPM	@ 1800 RPM	@ 1200 RPM	@ 1800 RPM	
1.71, 1.93, 2.59, 2.90	1245 kW (1670 hp)	787 kW (1056 hp)	1180 kW (1583 hp)	787 kW (1056 hp)	1050 kW (1408 hp)	Minimum: 575 RPM
3.26			1163 kW (1560 hp)	776 kW (1040 hp)	1034 kW (1386 hp)	
4.10			1180 kW (1583 hp)	787 kW (1056 hp)	1050 kW (1408 hp)	Maximum: 1650 RPM – 1.71, 2.59, 4.10
4.60	774 kW (1038 hp)	1180 kW (1583 hp)	787 kW (1056 hp)	1050 kW (1408 hp)		
5.17	1230 kW (1650 hp)	–	1161 kW (1557 hp)	774 kW (1038 hp)	1033 kW (1385 hp)	1900 RPM – all other ratios
6.18	1029 kW (1380 hp)	–	966 kW (1295 hp)	–	859 kW (1152 hp)	

MG-540 SAE 00 housing

\* Ratings shown 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.

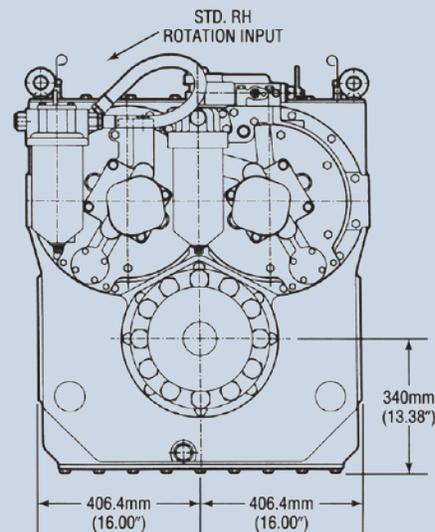
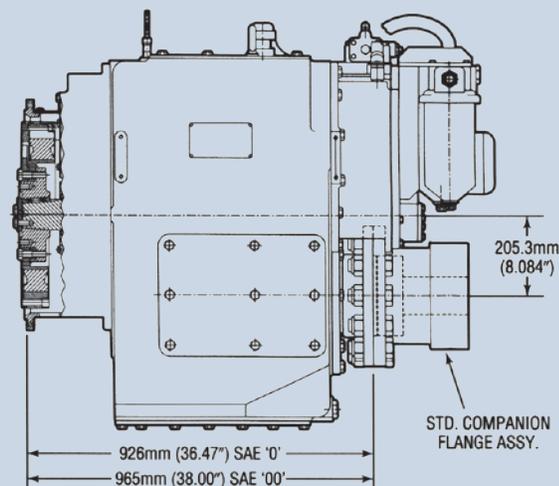
**Important Notice:** Torsional Vibration: Disregarding propulsion system torsional compatibility could cause damage to components in the drive train resulting in loss of mobility. At minimum, system incompatibility could result in gear clatter at low speeds.

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.

## MG-540



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