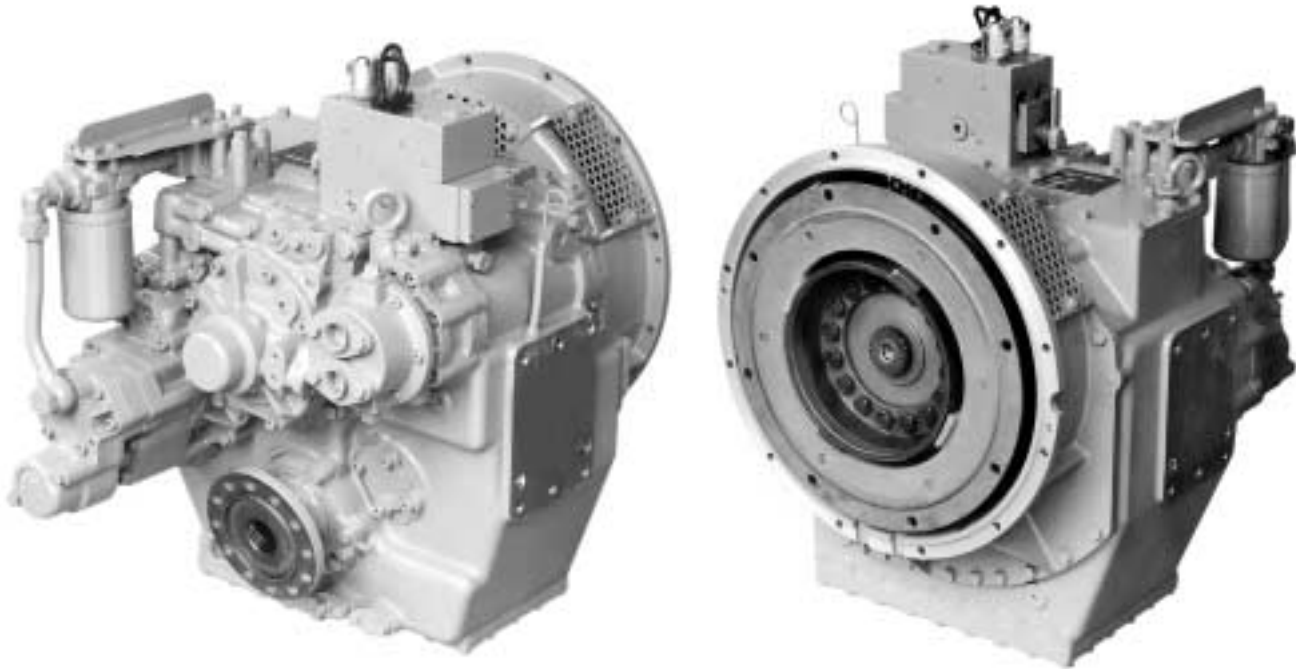


Twin Disc Down Angle Reverse Reduction Marine Transmission 448 to 1081 kW 601 to 1450 hp



MG-6449-00-A shown with standard input coupling and electric selector valve

The lightweight high horsepower capacity MG-6449-00-A marine transmission is designed for propulsion systems with high performance diesel engines to obtain optimum vessel performance.

Like all Twin Disc marine transmissions, the MG-6449-00-A has been designed and manufactured to give boat owners many hours of reliable, trouble free operation.

The ratings/ratios are the same thru forward or reverse for ahead propulsion when used with standard right-hand rotation engines.

Single precision helical gearing with oil-actuated/oil-cooled clutches, clutch engagement rate-of-rise feature and a robust light alloy main housing with anti-friction bearings are utilized in the MG-6449-00-A.

In boat maintenance accessibility is another feature of the MG-6449-00-A. It is not required to remove the transmission or disturb alignment for most service functions, provided there is sufficient room aft of the transmission.

REDUCTION RATIOS	*INPUT RATINGS – KILOWATTS (HORSEPOWER)					MIN. AND MAX. INPUT SPEED-RPM
	PLEASURE CRAFT DUTY	LIGHT DUTY	INTERMEDIATE DUTY	MEDIUM DUTY	CONTINUOUS DUTY	
	2300 RPM	2300 RPM	2100 RPM	1800 RPM	1800 RPM	
1.51, 1.73	1081 (1450)	1072 (1437)	896 (1202)	741 (994)	695 (932)	450 min. 2500 max.
2.07	1081 (1450)	945 (1267)	746 (1000)	614 (823)	574 (770)	
2.44	1081 (1450)	827 (1109)	647 (868)	537 (720)	502 (673)	
2.95	782 (1050)	696 (933)	577 (774)	489 (656)	448 (601)	

Please refer to back cover for service classification definitions.

*Ratings shown for use with standard rotation engines. Consult Twin Disc for use with non-standard rotation engines.

Specifications:

- Dry Weight 344 kg (757 lb.) - alloy hsg.
- SAE #1/SAE #0 housings (alloy)
- 14"/18" torsional input couplings
- Oil strainer/oil filter standard
- 12V or 24V electric selector valve with mechanical backup operable from control station
- Integral raw water heat exchanger

Options:

- Companion flange/bolt set
- Trailing pump
- Mounting brackets
- Trolling valve
- PTOs
 - Live SAE 'C' 4-bolt pump 112 kW (150 hp) @ 1800 rpm
 - With disconnect clutch (hydraulic type) 112 kW (150 hp) @ 1800 rpm

NOTE: PTOs run at engine speed and in engine direction of rotation.

- Oil temperature gauges with electric high temperature alarm contacts
- Society approvals

NOTE: Specifications subject to change without prior notice in the interest of continual product improvements.

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 operation time, with 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 may qualify under Pleasure Craft Service.

Light Intermediate Duty

Relatively low hours usage 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/police boats and some bow and stern thruster applications. Average operation hours limit: 1500 hours/year.

Intermediate Duty

For applications where usage and engine throttle settings do not exceed the following limits:

Up to 50% of time at 100% engine rating and 2000 hours/year for model MG-5114 and smaller and up to 3000 hours/year for MG-5141 and larger models.

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

For usage where some variation in engine speed/power occurs as part of the normal vessel operation.

Other limits: 4000 hours/year and up to 80% of time at 100% engine rating. Typical vessels include: mid-water trawlers, crew/supply boats, ferries, and some inland tow boats.

Continuous Duty

For use in continuous operation with little or no variations in engine speed/power settings. Typical applications 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 rattle 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 users (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 provisions.



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Bulletin 319-A-6449A 1/99
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