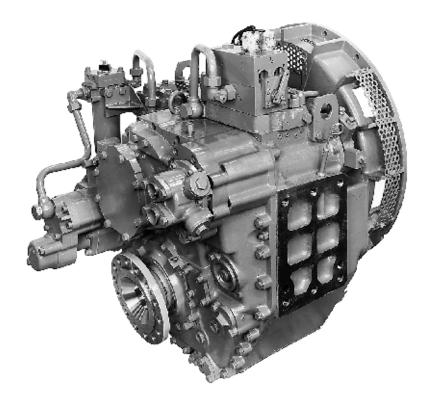


From the Family of Twin Disc Critical Performance Products

Twin Disc Reverse Reduction Marine Transmission 716 to 1491 kW 960 to 2000 hp



MG-6619-00-A shown with standard electric shift valve and heat exchanger

The lightweight, high horsepower capacity MG-6619-00-A marine transmission, with excellent reduction-ratio coverage, is designed for propulsion systems with high performance diesel engines to obtain optimum vessel performance.

The 10° down angle design provides for near level engine installation and for

optimizing engine room space.

Like all Twin Disc marine transmissions, the MG-6619-00-A has been designed and manufactured to give boat owners many hours of reliable, troublefree operation.

The ratings/ratios are the same thru forward or thru reverse for ahead propul-

sion when used with standard right-hand rotation engines.

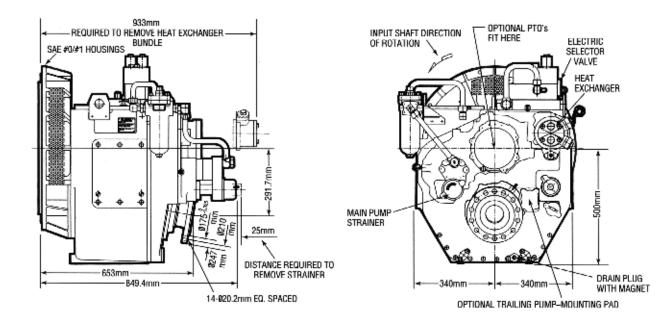
Single precision helical ground gearing with oil-controlled/oil-cooled clutches, clutch engagement rate-of-rise feature and a robust light alloy main housing with conservatively rated anti-friction bearings are utilized in the MG-6619-00-A.

REDUCTION RATIOS	*INPUT RATINGS – KILOWATTS (HORSEPOWER)			MAX. RATED INPUT
	PLEASURE CRAFT DUTY	INTERMEDIATE DUTY	CONTINUOUS DUTY	SPEED AND MIN. Engine Low Idle
:1	2300 RPM	2100 RPM	1800 RPM	SPEED RPM
1.55, 2.09, 2.42	1491 (2000)	1077 (1445)	820 (1100)	2500 max.
2.73	1342 (1800)	1014 (1360)	820 (1100)	450 min.
2.95	1230 (1650)	858 (1150)	716 (960)	

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 544 kg (1197 lbs.) alloy housing
- 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 valve operable from control station standard
- Integral raw water heat exchanger

Options:

- Companion Flange/Bolt Set
- Trailing pump
- Mounting brackets
- · Electric 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 optional

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

Service Classification Definitions

Continuous Duty

Commonly called "Workboat Duty," these marine transmission applications are expected to operate continuously at full engine governed speed. The propulsion engine power setting must be known and must be within the marine transmission's allowable input rating for continuous daylong or aroundthe-clock service.

Most displacement hull vessels are pow-

ered for Continuous Duty service. However, the actual engine (and marine transmission) power loading depends on:

- a. The propeller used
- b. The vessel's work assignment
- c. The captain's choice of throttle setting during continuous service

Twin Disc recommends that all displacement and semi-displacement hull commercial applications be classed as Continuous Duty usage of the marine transmission.

Examples: Fishing Trawlers, Purse Seiners Lobster Boats and Crab Boats, Tugs, Tow Boats, Buoy Tenders, Offshore Supply Boats, Ferries, Research Vessels, Ocean Freighters

Intermediate Duty

Commercial usage of semi-displacement hull craft can qualify for Intermediate Duty Service Classification if full throttle operation will average only a few hours per day with major portion of usage at partial throttle and total annual usage will be 2000 hours or less.

Examples: Long Range Pleasure Cruisers, Sportfish Charter Boats, Party Fishing Boats, Crew Boats, Harbor and Coastal Patrol Boats, Search and Rescue Boats, Fire Boats

Pleasure Craft

Maximum power capacity is intended only for personal use, planing hull pleasure craft where full engine throttle operation will be less than 5% of total time with balance of time at 87% of full throttle engine rpm or less. Marine transmissions used in longrange pleasure cruisers, sportfish charters or any commercial service should not be selected according to Pleasure Craft Service Classification. *Important Notice:* <u>Torsional Vibration</u> 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 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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