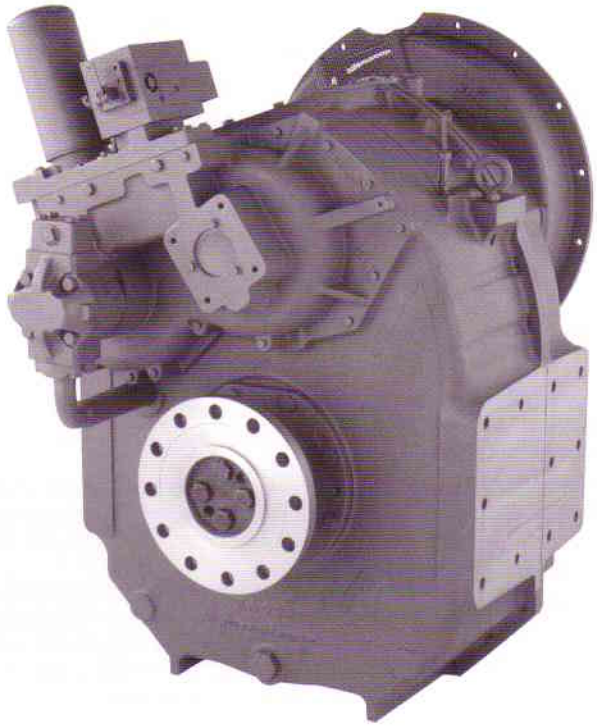
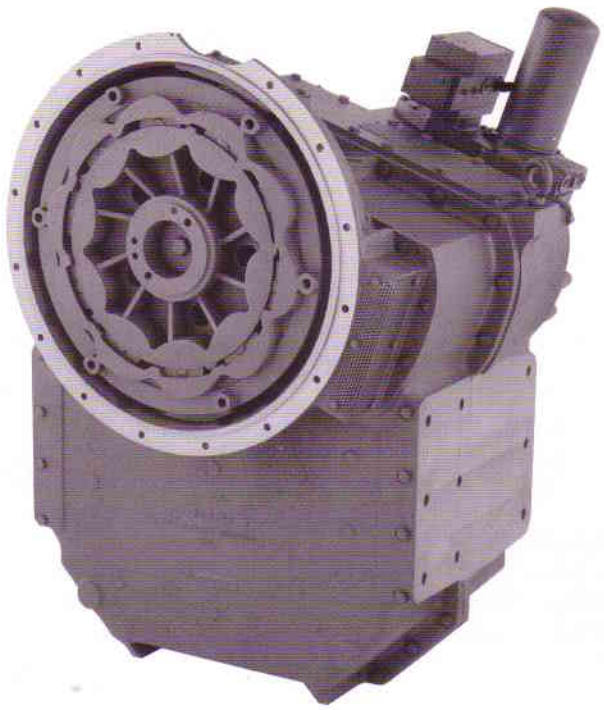
Twin Disc Reverse Reduction Deep Case Marine Transmission 531 to 718 kW 712 to 962 hp





MG-520-HP shown with standard equipment.

The MG-520-1HP Marine Transmission is an updated/uprated version of the ruggedly built MG-520-1 deep case model plus offering a new 7.42:1 reduction ratio.

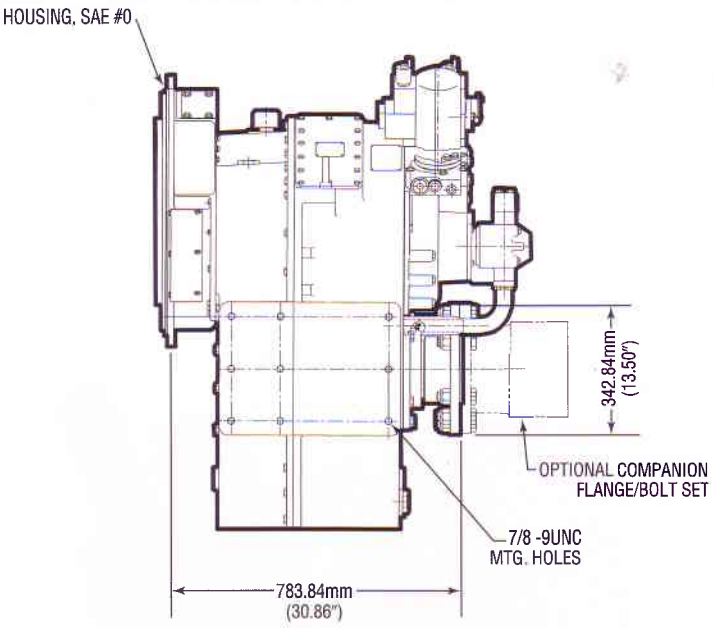
This transmission is a vertical offset type, single reduction with single helical gearing, conservatively rated anti-friction bearings, oil-controlled hydraulic clutches with priority lube and rate-of-rise feature. The two-piece main housing is made of high grade cast iron.

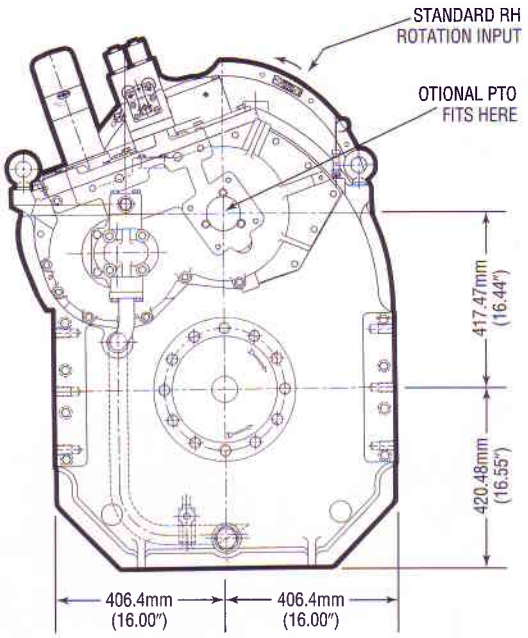
Operation at full rated power capacity in either forward for forward or reverse for forward and same reduction ratio is permissible. Provided space aft of the transmission is allowed, the MG-520-1HP clutches can be serviced with the transmission attached to the engine.

A good offering of optional equipment is also available.

MODEL ASSY. DWG.	REDUCTION RATIOS :1	*INPUT RATINGS – KILOWATTS (HORSEPOWER)					MAX./MIN. INPUT SPEED
		INTERMEDIATE DUTY	MEDIUM DUTY		CONTINUOUS DUTY		
		1800 RPM	1600 RPM	1800 RPM	1600 RPM	1800 RPM	
XA7255B	4.49, 5.00, 6.11	718 (962)	608 (815)	685 (918)	568 (761)	639 (857)	500 RPM low idle
	7.00	667 (894)	573 (768)	645 (865)	559 (750)	629 (843)	2500 RPM max.
	7.42	623 (835)	536 (719)	603 (809)	531 (712)	597 (801)	

Please refer to back cover for service classification definitions.
*Ratings shown for use with standard right-hand rotation engines only.





Specifications MG-520-1HP:

- Dry weight – 1562 kg (3436 lbs)
- SAE '0' housings
- SAE 18" torsional coupling
- Oil strainer/filter – standard
- Mechanical selector valve

Options:

- 12V or 24V electric selector valves
- Manual or electric trolling valves
- Electric trailing oil pump assembly
- Fresh or raw water heat exchangers
- Companion flange/bolt set
- Live PTO SAEJ744 – hydraulic pump drive
  Size 127-4, 32-4 (SAE 4 bolt 'C')
  Torque rating – 592 N-m (436 lb-ft)
  Note: PTO runs @ engine speed and engine direction
- Oil pressure/oil temperature gauges

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

Service Classification Definitions

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

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

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 provisions.

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