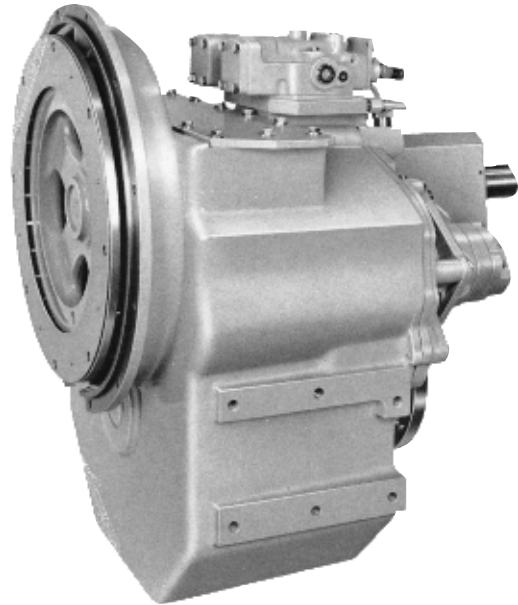
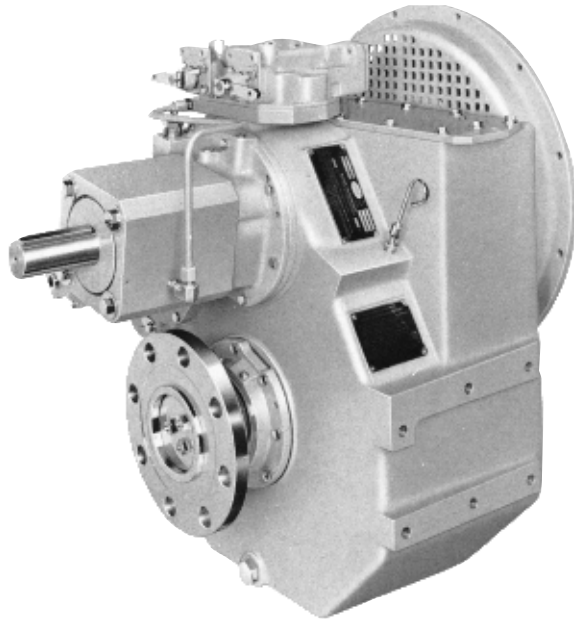


**Deep Case
Marine Transmission
216 to 671 kW
290 to 900 hp**

From the family of Twin Disc critical performance products



Model MG-5114DC Shown with Optional XA7554 Hydraulic Clutch PTO.

The MG-5114DC is designed for use with today's high output propulsion diesel engines for applications ranging from commercial work boats through pleasure crafts. This rugged high capacity transmission can be operated in either forward or reverse at its full rated horsepower when

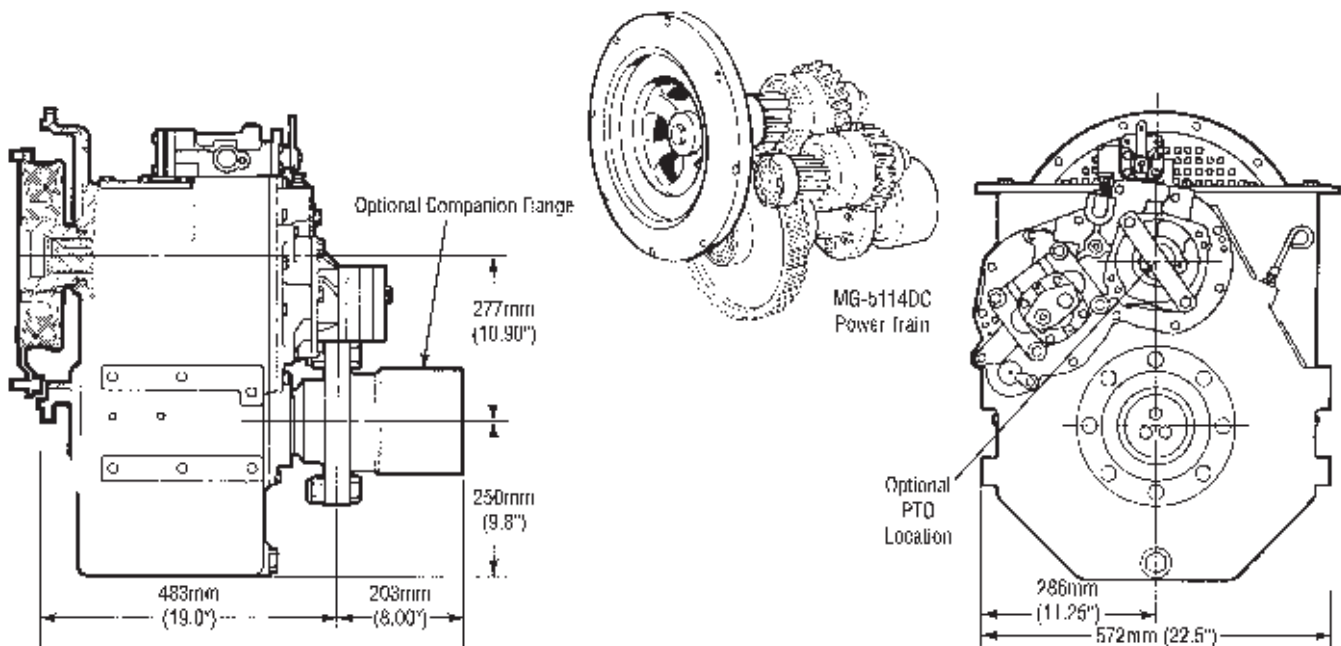
installed on standard right-hand rotation engines.

Since the MG-5114DC encloses all plumbing except that required for the heat exchanger and connections to monitoring devices, there are no external hoses. Furthermore, in-boat maintenance accessibility is another

remarkable feature of the MG-5114DC. Removing the transmission or disturbing the alignment is not necessary for most service functions, provided sufficient space exists aft of the transmission.

MODEL ASSY. DWG.	REDUCTION RATIOS :1	INPUT RATINGS - KILOWATTS (HORSEPOWER)						MIN./MAX. INPUT SPEEDS RPM
		CONTINUOUS DUTY		INTERMEDIATE DUTY		PLEASURE CRAFT DUTY		
		1200 RPM	1800 RPM	2100 RPM	2300 RPM	2100 RPM	2300 RPM	
MG-5114DC	3.28, 3.43, 4.17	216 (290)	328 (440)	503 (675)	557 (739)	613 (822)	671 (900)	500/3000
DWG.	4.59	216 (290)	328 (440)	447 (600)	440 (657)	579 (776)	634 (850)	
PX10250	4.86	— —	328 (440)	428 (575)	490 (630)	551 (739)	604 (810)	

Please refer to back cover for service classification definitions and other MG-5114DC product specifications.



Specifications:

- Dry weight – 368 kg (810 lbs.)
- SAE housings – #2 and #1
- Input couplings – 11½” /14” single stage and dual stage torsional type
- Metric design (except for some power transmitting components)

Options:

- Companion flange/bolt set – XA6988B
- Raw water heat exchanger – with or without thermostatic by-pass
- Oil pressure gauge – B1703D
- Oil temperature gauge/switch – B3424
- Trolling valve, mechanical type
- 12V/24V electric selector valve – PX10285M
- PTO's:
 - Live SAE 'C' 4-bolt pump drive – rated 112 kW (150 hp) @ 1800 rpm – Assy. PX9768
 - With hydraulic clutch SAE 'C' 4-bolt pump drive or with shaft output – PTO's rated 78 kW (104 hp) @ 1800 rpm
 - Assy. XA7554 (shaft)
 - Assy. XA7554A (pump drive)
- SAE 'C' to 'B' adaptor – XB2403
- Mounting brackets
- Metric to NPTF adapter kit

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 around-the-clock service.

Most displacement hull vessels are powered for Continuous Duty service. However, the actual engine (and marine transmission) power loading depends on:

- The propeller used
- The vessel's work assignment
- 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

Pleasure or Commercial usage of planing or 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 long-range pleasure cruisers, sportfish charters or any commercial service should not be selected according to Pleasure Craft Service Classification.

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 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-14DC 2/01
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