

**MAXIMUM 600 kW (805 HP) @ 1800 RPM [CONTINUOUS DUTY]****STANDARD EQUIPMENT**

Vertical offset, nodular iron housing  
 Electric GP-valve with manual override  
 EC050 profile module – interface for engagement signals  
 Oil strainer and oil filter

**OPTIONS**

Input hub for freestanding installation  
 SAE J617 housing no. 1 or no. 0  
 Flexible coupling for 14" or 18" flywheel (SAE J620 size 355 or 460)  
 EC050 E-Troll module – interface for engagement and trolling signals  
 Mechanical control valve  
 Companion flange/bolts set  
 Monitoring devices to customer's specification  
 Remote mounted electric trailing pump  
 Mounted oil cooler for raw or fresh water cooling  
 Mounting brackets  
 Live PTO  
   SAE J744 size 127-2/4, 32-4 (SAE "C", 2/4-bolt) – max. 592 Nm  
   SAE J744 size 127-2/4, 38-4 (SAE "C-C", 2/4-bolt) – max. 1187 Nm  
 Hydraulic clutchable pump mount PTO  
   SAE J744 size 127-2/4, 32-4 (SAE "C", 2/4-bolt) – max. 592 Nm  
   SAE J744 size 127-2/4, 38-4 (SAE "C-C", 2/4-bolt) – max. 1187 Nm  
 Weight (dry weight with standard equipment): 1046 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])\***

MGX-5222 DC	Reduction Ratios :1	Intermediate Duty		Medium Duty		Continuous Duty	
		@ 1800 RPM	@ 2100 RPM	@ 1600 RPM	@ 1800 RPM	@ 1600 RPM	@ 1800 RPM
	4.03, 4.59 5.04, 6.10 6.55, 6.96	630 kW (845 hp)	720 kW (966 hp)	540 kW (724 hp)	600 kW (805 hp)	540 kW (724 hp)	600 kW (805 hp)

\* Input speed limits: min. 450 rpm/max. 2500 rpm. 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.

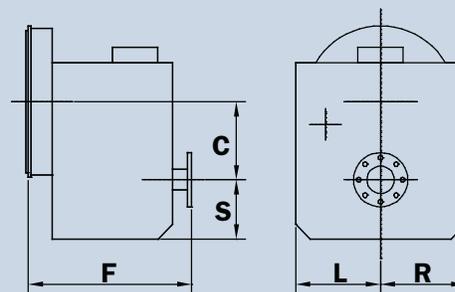
**Important Notice:** Torsional Vibration: Disregarding propulsion system torsional compatibility could cause damage to components in the drive train resulting in loss of mobility. At minimum, system incompatibility could result in gear clatter at low speeds.

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.

MGX-5222 DC



C	400.0 mm (15.75 in)
S	384.2 mm (15.13 in)
F	637.0 mm (25.08 in)
L	406.4 mm (16.00 in)
R	406.4 mm (16.00 in)

