MAXIMUM 447 kW (600 HP) @ 1800 RPM [CONTINUOUS DUTY]

STANDARD EQUIPMENT

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







OPTIONS

| Mechanical control valve | | | | |
|--|--|--|--|--|
| SAE J617 input housing no. 1 | | | | |
| SAE no. 1 to SAE no. 0 housing adaptors | | | | |
| Flexible coupling for 14" flywheel (SAE J620 size 355) | | | | |
| Input hub for freestanding installation | | | | |
| EC050 E-Troll module – interface for engagement and trolling signals | | | | |
| Companion flange/bolts set | | | | |
| Special output flange | | | | |
| Monitoring devices to customer's specification | | | | |
| Electric trailing pump remote mounted | | | | |
| 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): 720 kg | | | | |
| | | | | |

Contact Twin Disc for Survey Society Approvals and Classifications. Specifications subject to change without prior notice in the interest of continual product improvement.

| MGX-516 | Reduction Ratios :1 | Intermediate Duty | | Medium Duty | | Continuous Duty | | | |
|---------|----------------------------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|--|
| | | @ 1800 RPM | @ 2100 RPM | @ 1600 RPM | @ 1800 RPM | @ 1600 RPM | @ 1800 RPM | | |
| | 3.06, 3.50 4.04, 4.52 5.05 | 530 kW (711 hp) | 573 kW (768 hp) | 397 kW (532 hp) | 447kW (600 hp) | 397 kW (532 hp) | 447 kW (600 hp) | | |
| | | 518 kW (695 hp) | 549 kW (736 hp) | | | | | | |
| | | 494 kW (662 hp) | 521 kW (699 hp) | | | | | | |
| | | 484 kW (649 hp) | 510 kW (684 hp) | | | | | | |
| | | 468 kW (628 hp) | 492 kW (660 hp) | | | | | | |
| | 6.00 | 419 kW (562 hp) | 470 kW (630 hp) | 365 kW (489 hp) | 406 kW (544 hp) | 365 kW (489 hp) | 406 kW (544 hp) | | |

INPUT RATINGS - KILOWATTS (kW) (HORSEPOWER [HP])*

* Input speed limits: min. 450 rpm/max. 2500 rpm. Ratings shown for use with standard right hand rotation engines.

MGX-516

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.

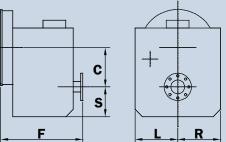
Important Notice: Torsional Vibration: Disregarding propulsion system torsional compatibility could cause damage to components in the drive train resulting in loss of mobility. At minimum, system incompatibility could result in gear clatter at low speeds.

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.





| C | 337.5 mm (13.29 in) |
|---|---------------------|
| S | 324.4 mm (12.77 in) |
| F | 523.0 mm (20.59 in) |
| I | 355.6 mm (14.00 in) |
| | . , , |
| R | 355.6 mm (14.00 in) |



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