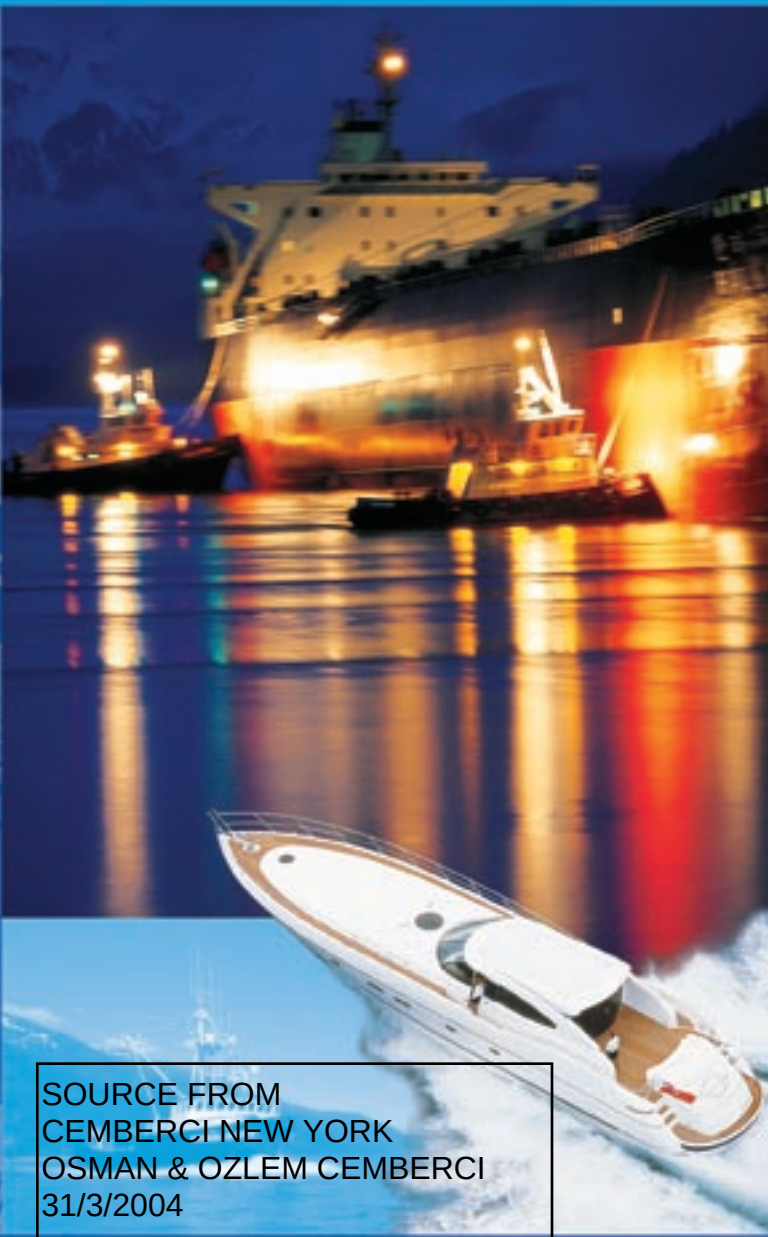
TWIN DISC®

MARINE TRANSMISSION CAPACITY TABLES

FEBRUARY 2004



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SERVICE CLASSIFICATION DEFINITIONS

Pleasure Craft

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

Relatively low hour usage (less than 1500 hours/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/customs boats. This rating is also applicable to some bow and stern thruster applications.

Intermediate Duty

Hour usage of up to 2000 hours/year (for models MG-5114 and smaller) and up to 3000 hours/year (for models larger than MG-5114) 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 APPLICATION INFORMATION

- Transmission ratings are based on use of the transmission in a torsionally compatible system utilizing a suitable input torsional coupling.
- Ratings are for diesel engines at the indicated speeds, unless otherwise indicated.
- Ratings are shown in SAE horsepower (HP).
- Consult factory for ratings applicable to gasoline engines, gas turbines, or other applications not conforming to the given service class definitions.
- Ratings apply to right hand engines (i.e., counter-clockwise flywheel rotation when viewing rear of engine).
- Ratings are full power forward or reverse except where specified by "F" (using forward gear train for forward).
- Transmission ratings should equal or exceed the engine's published ratings for the given application.
- Final marine transmission selections are to be confirmed prior to issuance of the purchase order. For unusual or unique applications, please contact Twin Disc, Inc. for product selection assistance.
- Marine transmission input couplings provided by Twin Disc are configured to interface with engine flywheels which conform to SAE J620 standards. Please consult Twin Disc when use of non-standard flywheels are contemplated.
- Most of the transmissions listed herein are to be mounted directly on the SAE flywheel housing of the engine. It is necessary that the engine crankshaft end-play be measured before the driven equipment is installed and rechecked after the driven equipment is installed. The endplay measurements, before and after transmission installation, should be the same. If not the same, the driven equipment should be removed and the problem source located and corrected before the engine is started. Engine crankshaft endplay measurement is considered mandatory.
- The given data is subject to modifications/corrections without prior notice.
- Use certified print for installation.

IMPORTANT NOTICE

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 equipment of Twin Disc Incorporated's supply.

NEW QUICKSHIFT™ MARINE TRANSMISSION SERIES OFFERS SUPERIOR MANEUVERING CONTROL

Twin Disc recently introduced a new line of marine transmissions that eliminate the traditional "clunky" shifting characteristics and low speed limitations of conventional marine transmissions.

Until now, large diesel-powered boats could not effectively maintain vessel control below five knots. Reducing engine RPMs that low would likely stall the engine.

Using a proprietary shifting technology, the new QuickShift™ marine transmission instantly applies power to the driveline at low torque when shifting from neutral to full ahead or full reverse. It senses the amount of power applied and the corresponding torque resistance. It then cushions driveline shock and optimizes the power to the driveshaft to smoothly overcome that resistance within milliseconds. The result is a steep but smooth power curve, whether you go full bore or just nudge the throttle.

The QuickShift offers pleasure craft and commercial boat operators a distinct advantage for docking and other low speed activities. The QuickShift's unique ability to regulate engine torque at extremely low speeds allows slowing props down to 50 RPMs or less. This affords controllable maneuvering at slower speeds than even conventional trolling-type transmissions.

Such low speed control in conjunction with extremely fast, jolt-free shifts – even from forward to reverse – greatly facilitates precision handling situations, saving time and improving vessel performance and productivity. In addition, the new QuickShift line, with its extraordinarily smooth shift characteristics, will reduce wear and tear on engine, drivetrain and crew. Check out the new and growing line of Twin Disc QuickShift marine transmissions. It will definitely exceed your expectations in marine transmission performance.

QUICKSHIFT™

You've got to feel it to believe it.

PLEASURE CRAFT RATINGS FOR QUICKSHIFT™ MARINE TRANSMISSIONS

QUICKSHIFT™ *You've got to feel it to believe it.*

Model	Drawing No.	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 2100 rpm	@ 2300 rpm	@ 2500 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MGX-5114 SC	PX-11790	1	0.93, 1.02, 1.12, 1.50, 1.74, 2.04 2.54 3.00	619 (830) 619 (830) 528 (708)	673 (900) 673 (900) 578 (775)	716 (960) 716 (960) 629 (843)	2800/.93:1 3000 for others	203 (447)
MGX-5114 A	PX-11730	1, 2	1.03, 1.20, 1.48, 1.75, 1.92 2.04, 2.50	619 (830)	673 (900)	701 (940)	3000	206 (455)
MGX-5114 RV	PX-11850	–	1.03, 1.20, 1.48, 1.75, 1.92 2.04, 2.50	619 (830)	673 (900)	701 (940)	3000	198 (435)
MGX-5114 IV	PX-11820	1, 2	1.05, 1.23, 1.52, 1.80, 1.97 2.57	619 (830) 599 (803)	673 (900) 649 (870)	701 (940) 677 (908)	3000	270 (595)
MGX-5135 SC *	PX-11840	1, 0	1.00, 1.28, 1.48, 1.73, 2.04 2.57 2.90	817 (1096) 734 (984) 668 (896)	895 (1200) 820 (1100) 746 (1000)	973 (1305) 890 (1149) 810 (1086)	2800	300 (661)
MGX-5135 A	PX-11740	1, 0	1.10, 1.25, 1.53, 1.79, 2.00 2.52	817 (1096) 734 (984)	895 (1200) 820 (1100)	973 (1305) 890 (1149)	2800	280 (617)
MGX-5135 RV	PX-11880	–	1.10, 1.25, 1.53, 1.79, 2.00 2.52	817 (1096) 734 (984)	895 (1200) 820 (1100)	973 (1305) 890 (1149)	2800	258 (568)
MGX-5145 SC	PX-11830	1, 0	1.20, 1.33, 1.48, 1.75, 1.96 2.50	949 (1273) 841 (1128)	1007 (1350) 916 (1228)	1064 (1427) 978 (1311)	2500	325 (716)
MGX-5145 A	PX-11755	1, 0	1.26, 1.48, 1.75, 1.96 2.50	949 (1273) 878 (1177)	1007 (1350) 956 (1282)	1064 (1427) 1020 (1368)	2500	333 (734)
MGX-5145 RV	PX-11860	–	1.26, 1.48, 1.75, 1.96 2.50	949 (1273) 878 (1177)	1007 (1350) 956 (1282)	1064 (1427) 1020 (1368)	2500	295 (650)
MGX-5147 SC *	PX-12010	1, 0	1.20, 1.33, 1.48, 1.75, 1.96	1049 (1407)	1120 (1502)	1190 (1596)	2500	325 (716)
MGX-5147 A *	PX-11925	1, 0	1.26, 1.48, 1.75, 1.96	1049 (1407)	1120 (1502)	1190 (1596)	2500	333 (734)
MGX-5147 RV *	PX-11930	–	1.26, 1.48, 1.75, 1.96	1049 (1407)	1120 (1502)	1190 (1596)	2500	295 (650)
				@ 1900 rpm	**@ 2100 rpm**	**@ 2300 rpm**		
MGX-6650 SC *	1020608	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	1293 (1734)	1430 (1918)	1566 (2100)	2300	954 (2100)
MGX-6690 SC *	1020674	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	1293 (1734)	1430 (1918)	1566 (2100)	2300	954 (2100)
MGX-6848 SC *	1020643	0, 00	1.51, 1.88, 2.03, 2.47 2.58, 2.93 3.21	1687 (2262) 1598 (2143) 1397 (1873)	1864 (2500) 1746 (2341) 1526 (2046)	2028 (2720) 1891 (2536) 1653 (2217)	2300	954 (2100)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

* Consult Twin Disc for availability of all new QuickShift™ Marine Transmission Models.

LIGHT DUTY RATINGS FOR QUICKSHIFT™ MARINE TRANSMISSIONS

QUICKSHIFT™
You've got to feel it to believe it.

Model	Drawing No.	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 2100 rpm	@ 2300 rpm	@ 2500 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MGX-5114 SC	PX-11790	1	0.93, 1.02, 1.12, 1.50, 1.74 2.04, 2.54 3.00	579 (776) 579 (776) 494 (662)	629 (843) 629 (843) 540 (724)	669 (897) 669 (897) 588 (789)	2800/.93:1 3000 for others	203 (447)
MGX-5114 A	PX-11730	1, 2	1.03, 1.20, 1.48, 1.75, 1.92 2.04, 2.50	580 (777)	629 (843)	655 (878)	3000	206 (455)
MGX-5114 RV	PX-11850	–	1.03, 1.20, 1.48, 1.75, 1.92 2.04, 2.50	580 (777)	629 (843)	655 (878)	3000	198 (435)
MGX-5114 IV	PX-11820	1, 2	1.05, 1.23, 1.52, 1.80, 1.97 2.57	580 (777) 560 (751)	629 (843) 607 (814)	655 (878) 632 (848)	3000	270 (595)
MGX-5135 SC *	PX-11840	1, 0	1.00, 1.28, 1.48, 1.73, 2.04 2.57 2.90	704 (944) 663 (889) 622 (834)	746 (1000) 716 (960) 671 (900)	788 (1057) 768 (1030) 720 (966)	2800	300 (661)
MGX-5135 A	PX-11740	1, 0	1.10, 1.25, 1.53, 1.79, 2.00 2.52	704 (944) 663 (889)	746 (1000) 716 (960)	788 (1057) 768 (1030)	2800	280 (617)
MGX-5135 RV	PX-11880	–	1.10, 1.25, 1.53, 1.79, 2.00 2.52	704 (944) 663 (889)	746 (1000) 716 (960)	788 (1057) 768 (1030)	2800	258 (568)
MGX-5145 SC	PX-11830	1, 0	1.20, 1.33, 1.48, 1.75, 1.96 2.50	808 (1084) 759 (1018)	857 (1150) 820 (1100)	906 (1215) 881 (1181)	2500	325 (716)
MGX-5145 A	PX-11755	1, 0	1.26, 1.48, 1.75, 1.96 2.50	808 (1084) 759 (1018)	857 (1150) 820 (1100)	906 (1215) 881 (1181)	2500	333 (734)
MGX-5145 RV	PX-11860	–	1.26, 1.48, 1.75, 1.96 2.50	808 (1084) 759 (1018)	857 (1150) 820 (1100)	906 (1215) 881 (1181)	2500	295 (650)
MGX-5147 SC *	PX-12010	1, 0	1.20, 1.33, 1.48, 1.75, 1.96	900 (1207)	955 (1281)	1009 (1353)	2500	325 (716)
MGX-5147 A *	PX-11925	1, 0	1.26, 1.48, 1.75, 1.96	900 (1207)	955 (1281)	1009 (1353)	2500	333 (734)
MGX-5147 RV *	PX-11930	–	1.26, 1.48, 1.75, 1.96	900 (1207)	955 (1281)	1009 (1353)	2500	295 (650)
				@ 1900 rpm	**@ 2100 rpm**	**@ 2300 rpm**		
MGX-6650 SC *	1020608	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	1289 (1729)	1417 (1900)	1464 (1963)	2300	954 (2100)
MGX-6690 SC *	1020674	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	1289 (1729)	1417 (1900)	1464 (1963)	2300	954 (2100)
MGX-6848 SC *	1020643	0, 00	1.51, 1.88, 2.03, 2.47 2.58, 2.93 3.21	1670 (2240) 1555 (2085) 1360 (1824)	1828 (2451) 1699 (2278) 1485 (1991)	1985 (2662) 1841 (2469) 1609 (2158)	2300	954 (2100)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

* Consult Twin Disc for availability of all new QuickShift™ Marine Transmission Models.

INTERMEDIATE DUTY RATINGS FOR QUICKSHIFT™ MARINE TRANSMISSIONS

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Model	Drawing No.	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1900 rpm	@ 2100 rpm	@ 2300 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MGX-5114 SC	PX-11790	1	0.93, 1.02, 1.12, 1.50, 1.74, 2.04 2.54 3.00	466 (625) 429 (575) 408 (547)	503 (675) 466 (625) 451 (605)	552 (740) 507 (680) 492 (660)	2800/.93:1 3000 for others	203 (447)
MGX-5114 A	PX-11730	1, 2	1.03, 1.20, 1.48, 1.75, 1.92, 2.04 2.50	424 (568) 367 (492)	466 (625) 400 (536)	503 (675) 433 (580)	3000	206 (455)
MGX-5114 RV	PX-11850	–	1.03, 1.20, 1.48, 1.75, 1.92, 2.04 2.50	424 (568) 367 (492)	466 (625) 400 (536)	503 (675) 433 (580)	3000	198 (435)
MGX-5114 IV	PX-11820	1, 2	1.05, 1.23, 1.52, 1.80, 1.97 2.57	424 (568) 367 (492)	466 (625) 400 (536)	503 (675) 433 (580)	3000	270 (595)
MGX-5135 SC *	PX-11840	1, 0	1.00, 1.28, 1.48, 1.73, 2.04, 2.57 2.90	540 (724) 504 (676)	560 (751) 522 (700)	600 (805) 560 (751)	2800	300 (661)
MGX-5135 A	PX-11740	1, 0	1.10, 1.25, 1.53, 1.79, 2.00, 2.52	540 (724)	560 (751)	600 (805)	2800	280 (617)
MGX-5135 RV	PX-11880	–	1.10, 1.25, 1.53, 1.79, 2.00, 2.52	540 (724)	560 (751)	600 (805)	2800	258 (568)
MGX-5145 SC	PX-11830	1, 0	1.20, 1.33, 1.48, 1.75, 1.96 2.50	726 (974) 614 (823)	746 (1000) 671 (900)	836 (1121) 726 (974)	2500	325 (716)
MGX-5145 A	PX-11755	1, 0	1.26, 1.48, 1.75, 1.96 2.50	726 (974) 614 (823)	746 (1000) 671 (900)	836 (1121) 726 (974)	2500	333 (734)
MGX-5145 RV	PX-11860	–	1.26, 1.48, 1.75, 1.96 2.50	726 (974) 614 (823)	746 (1000) 671 (900)	836 (1121) 726 (974)	2500	295 (650)
MGX-5147 SC *	PX-12010	1, 0	1.20, 1.33, 1.48, 1.75, 1.96	784 (1051)	806 (1081)	903 (1211)	2500	325 (716)
MGX-5147 A *	PX-11925	1, 0	1.26, 1.48, 1.75, 1.96	784 (1051)	806 (1081)	903 (1211)	2500	333 (734)
MGX-5147 RV *	PX-11930	–	1.26, 1.48, 1.75, 1.96	784 (1051)	806 (1081)	903 (1211)	2500	295 (650)
MGX-6650 SC *	1020608	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	1135 (1522)	1268 (1700)	1386 (1859)	2300	954 (2100)
MGX-6690 SC *	1020674	0, 00	1.51, 1.88, 2.03, 2.47 2.93 3.21	1261 (1691) 1240 (1663) 1227 (1646)	1380 (1851) 1318 (1767) 1280 (1716)	1438 (1928) 1386 (1859) 1386 (1859)	2300	954 (2100)
MGX-6848 SC *	1020643	0, 00	1.51, 1.88, 2.03, 2.47, 2.58, 2.93 3.21	1417 (1900) 1330 (1784)	1566 (2100) 1453 (1948)	1715 (2300) 1575 (2112)	2300	954 (2100)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

* Consult Twin Disc for availability of all new QuickShift™ Marine Transmission Models.

MEDIUM DUTY RATINGS FOR QUICKSHIFT™ MARINE TRANSMISSIONS

QUICKSHIFT™
You've got to feel it to believe it.

Model	Drawing No.	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1800 rpm	@ 2100 rpm	@ 2300 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MGX-5114 SC	PX-11790	1	0.93, 1.02, 1.12, 1.50, 1.74, 2.04, 2.54 3.00	394 (528) 394 (528) 361 (484)	451 (605) 451 (605) 410 (550)	489 (656) 489 (656) 443 (595)	2800/.93:1 3000 for others	203 (447)
MGX-5114 A	PX-11730	1, 2	1.03, 1.20, 1.48, 1.75, 1.92, 2.04 2.50	357 (479) 338 (453)	407 (546) 385 (516)	440 (590) 417 (559)	3000	206 (455)
				@ 1200 rpm	**@ 1600 rpm**	**@ 1800 rpm**		
MGX-5135 SC *	PX-11840	1, 0	1.00, 1.28, 1.48, 1.73, 2.04, 2.57 2.90	335 (449) 310 (416)	447 (599) 413 (554)	485 (650) 448 (601)	2800	300 (661)
MGX-5135 A	PX-11740	1, 0	1.10, 1.25, 1.53, 1.79, 2.00, 2.52	335 (449)	447 (599)	485 (650)	2800	280 (617)
MGX-5145 SC	PX-11830	1, 0	1.20, 1.33, 1.48, 1.75, 1.96 2.50	426 (571) 358 (480)	567 (760) 478 (641)	596 (800) 522 (700)	2500	325 (716)
MGX-5145 A	PX-11755	1, 0	1.26, 1.48, 1.75, 1.96 2.50	426 (571) 358 (480)	567 (760) 478 (641)	596 (800) 522 (700)	2500	333 (734)
MGX-5147 SC *	PX-12010	1, 0	1.20, 1.33, 1.48, 1.75, 1.96	479 (642)	623 (835)	671 (900)	2500	325 (716)
MGX-5147 A *	PX-11925	1, 0	1.26, 1.48, 1.75, 1.96	479 (642)	623 (835)	671 (900)	2500	333 (734)
MGX-6650 SC	1020608	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	696 (933)	928 (1245)	1044 (1400)	2300	954 (2100)
MGX-6690 SC *	1020674	0, 00	1.51, 1.88, 2.03, 2.47 2.93 3.21	815 (1093) 815 (1093) 815 (1093)	1054 (1414) 1034 (1387) 1018 (1365)	1174 (1574) 1144 (1534) 1119 (1501)	2300	954 (2100)
MGX-6848 SC *	1020643	0, 00	1.51, 1.88, 2.03, 2.47, 2.58, 2.93 3.21	876 (1175) 858 (1151)	1187 (1591) 1104 (1480)	1342 (1800) 1226 (1644)	2300	954 (2100)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

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CONTINUOUS DUTY RATINGS FOR QUICKSHIFT™ MARINE TRANSMISSIONS

QUICKSHIFT™ *You've got to feel it to believe it.*

Model	Drawing No.	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1800 rpm	@ 2100 rpm	@ 2400 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MGX-5114 SC	PX-11790	1	0.93, 1.02, 1.12, 1.50, 1.74 2.04, 2.54 3.00	358 (480) 358 (480) 328 (440)	410 (550) 410 (550) 372 (500)	460 (617) 460 (617) 418 (561)	2800/.93:1 3000 for others	203 (447)
MGX-5114 A	PX-11730	1, 2	1.03, 1.20, 1.48, 1.75, 1.92, 2.04 2.50	347 (465) 321 (430)	387 (519) 365 (490)	435 (583) 411 (551)	3000	206 (455)
				@ 1200 rpm	**@ 1600 rpm**	**@ 1800 rpm**		
MGX-5135 SC *	PX-11840	1, 0	1.00, 1.28, 1.48, 1.73, 2.04, 2.57 2.90	308 (413) 282 (378)	410 (550) 376 (504)	445 (597) 408 (547)	2800	300 (661)
MGX-5135 A	PX-11740	1, 0	1.10, 1.25, 1.53, 1.79, 2.00, 2.52	308 (413)	410 (550)	445 (597)	2800	280 (617)
MGX-5145 SC	PX-11830	1, 0	1.20, 1.33, 1.48, 1.75, 1.96 2.50	391 (524) 331 (444)	522 (700) 442 (593)	552 (740) 485 (650)	2500	325 (716)
MGX-5145 A	PX-11755	1, 0	1.26, 1.48, 1.75, 1.96 2.50	391 (524) 331 (444)	522 (700) 442 (593)	552 (740) 485 (650)	2500	333 (734)
MGX-5147 SC *	PX-12010	1, 0	1.20, 1.33, 1.48, 1.75, 1.96	362 (485)	565 (758)	612 (821)	2500	325 (716)
MGX-5147 A *	PX-11923	1, 0	1.26, 1.48, 1.75, 1.96	362 (485)	565 (758)	612 (821)	2500	333 (734)
MGX-6650 SC *	1020608	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	683 (916)	911 (1222)	1025 (1375)	2300	954 (2100)
MGX-6690 SC *	1020674	0, 00	1.51, 1.88, 2.03, 2.47 2.93 3.21	792 (1062) 792 (1062) 774 (1038)	1017 (1363) 977 (1310) 943 (1265)	1129 (1514) 1069 (1434) 1028 (1379)	2300	954 (2100)
MGX-6848 SC *	1020643	0, 00	1.51, 1.88, 2.03, 2.47, 2.58, 2.93 3.21	833 (1117) 833 (1117)	1111 (1490) 1074 (1440)	1250 (1676) 1194 (1601)	2300	954 (2100)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

* Consult Twin Disc for availability of all new QuickShiftTM Marine Transmission Models.

PLEASURE CRAFT MARINE TRANSMISSION RATINGS

Model	Drawing No.	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 2300 rpm	@ 2800 rpm	@ 3200 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-340*	IT40TD0002	5, BW	1.45	26 (35)	26 (35)	26 (35)	4500	9 (20)
			2.00	21 (28)	26 (35)	26 (35)		
			2.60	17 (23)	21 (28)	23 (31)		
MG-360*	IT60TD0002	5, BW	1.52	40 (54)	50 (67)	56 (75)	5000	14 (31)
			2.00	36 (48)	44 (59)	50 (67)		
			2.50	29 (39)	35 (47)	40 (54)		
			2.94	24 (32)	29 (39)	33 (44)		
MG-5005 A*	IT345ATD0001	3, 4, 5	1.54	83 (111)	101 (136)	110 (148)	4500	25 (55)
			2.00	67 (90)	82 (110)	93 (125)		
			2.47	50 (67)	60 (81)	70 (94)		
MG-5012 SC*	IT93TD0001	3, 4, BW	1.51	123 (165)	149 (200)	171 (229)	4500	53 (117)
			2.09	106 (142)	129 (173)	148 (198)		
			2.40	94 (126)	115 (154)	131 (176)		
			2.77	82 (110)	100 (134)	114 (153)		
MG-5015 A*	IT545ATD0002	3, 4, BW	1.51	131 (176)	160 (215)	182 (244)	4500	36 (79)
			2.09	108 (145)	132 (177)	150 (201)		
			2.40	94 (126)	114 (153)	131 (176)		
MG-5020 SC*	IT170TD0001	3, 4, BW	1.50, 2.04	181 (242)	220 (295)	251 (337)	4000	75 (165)
			2.50	145 (194)	176 (236)	201 (270)		
			2.94	123 (165)	150 (201)	171 (229)		
MG-5055 A*	IT880ATD0002	3, 4, BW	1.53, 2.08	214 (287)	261 (350)	298 (400)	4000	54 (119)
			2.60	144 (193)	176 (236)	201 (270)		
				@ 2300 rpm	**@ 2500 rpm**	**@ 2800 rpm**		
MG-5011 SC*	PX-10270	3, 4, BW	1.11, 1.50, 2.00	164 (220)	177 (237)	186 (250)	4400	49 (109)
			2.44	145 (195)	157 (210)	168 (225)		
MG-5011 A*	PX-9999	3, 4, BW	1.44, 1.90	164 (220)	177 (237)	186 (250)	4400	49 (109)
			2.39	145 (195)	157 (210)	168 (225)		
MG-5011 IV*	PX-10290	3, 4, BW	1.14, 1.54, 2.06	164 (220)	177 (237)	186 (250)	4400	77 (170)
			2.51	145 (195)	157 (210)	168 (225)		
MG-5050 SC*	PX-8575/A	1, 2, 3 SPEC. #3	1.00, 1.23, 1.53, 1.71, 2.04	226 (303)	245 (329)	272 (365)	3300	86 (189)
			2.45	226 (303)	233 (312)	261 (350)		
			3.00	200 (268)	213 (286)	231 (310)		
MG-5050 A*	PX-8580/A	1, 2, 3 SPEC. #3	1.12, 1.26, 1.50, 1.80, 2.04	226 (303)	245 (329)	272 (365)	3300	80 (176)
			2.50	200 (268)	219 (294)	239 (320)		
MG-5050 V*	PX-8760	–	1.12, 1.26, 1.50, 1.80, 2.04	226 (303)	245 (329)	272 (365)	3300	73 (160)
			2.50	200 (268)	219 (294)	239 (320)		
MG-506-1	XA-7022A	1, 2, 3	1.09, 1.50, 1.97	194 (260)**	211 (283)**	236 (317)**	3000	100 (220)
	XA-7048A	1, 2, 3	2.50, 2.96	172 (230)	186 (250)	209 (280)	3000	102 (224)
MG-5061 SC*	PX-11650/A	1, 2, 3 SPEC. #3	1.00, 1.15, 1.48, 1.77, 2.00	283 (380)	308 (413)	345 (463)		
			2.43	263 (353)	286 (384)	321 (430)	3300	98 (215)
			3.00	245 (329)	266 (357)	298 (400)		
MG-5061 A*	PX-11640/A	1, 2, 3 SPEC. #3	1.13, 1.54, 1.75, 2.00	283 (380)	308 (413)	345 (463)	3300	95 (210)
			2.47	263 (353)	286 (384)	321 (430)		
MG-5061 V*	PX-8735	–	1.13, 1.54, 1.75, 2.00	283 (380)	308 (413)	345 (463)	3300	86 (190)
			2.47	263 (353)	286 (384)	321 (430)		
MG-5062 V*	PX-11660/A	1, 2, 3 SPEC. #3	1.19, 1.53, 1.83	283 (380)	313 (420)	354 (475)	3300	142 (312)
			2.07, 2.51	263 (353)	286 (384)	321 (430)		
MG-5065 SC	PX-11480	1, 2, 3 SPEC. #3	1.08, 1.26, 1.47, 1.72, 2.04, 2.43	368 (493)	400 (536)	448 (601)	3300	111 (244)
MG-5065 A	PX-11165	1, 2, 3 SPEC. #3	1.08, 1.26, 1.47, 1.72, 2.04, 2.43	368 (493)	400 (536)	448 (601)	3300	111 (244)
MG-5075 SC	PX-11876	1, 2, 3 SPEC. #3	0.80, 1.01, 1.16	380 (510)	410 (550)	453 (607)	2800	122 (268)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

* Consult Twin Disc for gasoline engine ratings.
** Requires 350-370 psi control pressure.

PLEASURE CRAFT MARINE TRANSMISSION RATINGS (Continued)

Model	Drawing No.	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 2300 rpm	@ 2500 rpm	@ 2800 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-5075 SC	PX-10680/A	1, 2, 3 SPEC. #3	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	380 (510) 373 (500)	410 (550) 403 (540)	453 (607) 434 (582)	3300	122 (268)
MG-5075 A	PX-10700/A	1, 2, 3 SPEC. #3	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	380 (510) 373 (500)	410 (550) 403 (540)	453 (607) 434 (582)	3300	122 (268)
MG-5075 IV *	PX-11530	1, 2, 3 SPEC. #3	1.03, 1.30, 1.49, 1.72, 1.99, 2.46	392 (526)	423 (567)	468 (628)	3300	TBA
				@ 2100 rpm	**@ 2300 rpm**	**@ 2500 rpm**		
MG-5085 SC	PX-9260-B/C	1, 2, 3 SPEC. #3	1.05, 1.22, 1.42, 1.76 1.96 2.33	416 (558) 374 (502) 343 (460)	433 (580) 410 (550) 365 (490)	459 (615) 445 (597) 388 (520)	3200	120 (265)
MG-5085 A	PX-9360-B/C	1, 2, 3 SPEC. #3	1.05, 1.22, 1.47, 1.72 2.04 2.43	416 (558) 374 (502) 343 (460)	433 (580) 410 (550) 365 (490)	459 (615) 445 (597) 388 (520)	3200	123 (270)
MG-5082 SC	PX-11250-A	1, 2	1.06, 1.33, 1.53, 1.77, 2.05 2.53 2.88	477 (640) 462 (620) 428 (574)	522 (700) 492 (660) 447 (600)	567 (760) 521 (699) 465 (624)	3200	135 (298)
MG-5082 A	PX-11040-B	1, 2	1.06, 1.33, 1.53, 1.77, 2.05 2.53 2.88	477 (640) 462 (620) 428 (574)	522 (700) 492 (660) 447 (600)	567 (760) 521 (699) 465 (624)	3200	135 (298)
MG-5091 SC	PX-10016	1, 2	1.17, 1.45, 1.71, 2.04 2.45 2.95	480 (643) 433 (580) 409 (548)	522 (700) 474 (635) 447 (600)	539 (723) 500 (670) 470 (630)	3000	220 (485)
MG-5090 A	PX-10015	1, 2	1.45, 1.73, 1.96 2.43	480 (643) 433 (580)	522 (700) 474 (635)	539 (723) 500 (670)	3000	216 (475)
MG-5114 SC	PX-9785B	1	0.93, 1.02, 1.12, 1.50, 1.74, 2.04 2.54 3.00	619 (830) 619 (830) 528 (708)	673 (900) 673 (900) 578 (775)	716 (960) 716 (960) 629 (843)	2800/.93:1 3000 for others	203 (447)
MG-5114 DC	PX-10250A	1	3.28, 3.43, 4.17 4.59 4.86	619 (830) 579 (776) 567 (760)	673 (900) 634 (850) 604 (810)	701 (940) 679 (911) 634 (850)	3000	368 (810)
MG-5114 A	PX-11915	1, 2	1.03, 1.20, 1.48, 1.75, 1.92 2.04, 2.50	619 (830)	673 (900)	701 (940)	3000	206 (455)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

* Consult Twin Disc for availability of MG-5075 IV.

PLEASURE CRAFT MARINE TRANSMISSION RATINGS (Continued)

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 2100 rpm	@ 2300 rpm	@ 2500 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-5114 RV	PX-9830A	–	1.03, 1.20, 1.48, 1.75, 1.92 2.04, 2.50	619 (830)	673 (900)	701 (940)	3000	198 (435)
MG-5114 IV	PX-11920	1, 2	1.05, 1.23, 1.52, 1.80, 1.97 2.57	619 (830) 599 (803)	673 (900) 649 (870)	701 (940) 677 (908)	3000	270 (595)
MG-5135 SC *	PX-11590	1, 0	1.00, 1.28, 1.48, 1.73, 2.04 2.57 2.90	817 (1096) 734 (984) 668 (896)	895 (1200) 820 (1100) 746 (1000)	973 (1305) 890 (1149) 810 (1086)	2800	300 (661)
MG-5135 A	PX-11380	1, 0	1.10, 1.25, 1.53, 1.79, 2.00 2.52	817 (1096) 734 (984)	895 (1200) 820 (1100)	973 (1305) 890 (1149)	2800	280 (617)
MG-5135 RV	PX-11945	–	1.10, 1.25, 1.53, 1.79, 2.00 2.52	817 (1096) 734 (984)	895 (1200) 820 (1100)	973 (1305) 890 (1149)	2800	258 (568)
MG-5145 SC	PX-10885	1, 0	1.20, 1.33, 1.48, 1.75, 1.96 2.50	949 (1273) 841 (1128)	1007 (1350) 916 (1228)	1064 (1427) 978 (1311)	2500	325 (716)
MG-5145 A	PX-10830	1, 0	1.26, 1.48, 1.75, 1.96 2.50	949 (1273) 878 (1177)	1007 (1350) 956 (1282)	1064 (1427) 1020 (1368)	2500	333 (734)
MG-5145 RV	PX-10880	–	1.26, 1.48, 1.75, 1.96 2.50	949 (1273) 878 (1177)	1007 (1350) 956 (1282)	1064 (1427) 1020 (1368)	2500	295 (650)
MG-5202 SC	1016103-C	1, 0	1.17, 1.33, 1.53, 1.76, 2.03, 2.48, 2.92 3.48	886 (1188) 742 (995)	969 (1300) 800 (1073)	1035 (1388) 855 (1147)	2750 (2500-1.17:1)	587 (1292)
MG-5203 SC	1016249-A	1, 0	1.17, 1.33, 1.53, 1.76, 2.03, 2.48, 2.92 3.48	886 (1188) 742 (995)	969 (1300) 800 (1073)	1035 (1388) 855 (1147)	2750 (2500-1.17:1)	409 (900)
MG-5204 SC	1016250-B	1, 0	1.17, 1.33, 1.53, 1.76, 2.03, 2.48, 2.92 3.48	1029 (1380) 984 (1320)	1104 (1480) 1081 (1450)	1104 (1480) 1081 (1450)	2750 (2500-1.17:1)	409 (900)
				@ 1900 rpm	**@ 2100 rpm**	**@ 2300 rpm**		
MG-6449 A	7-37423	1, 0	1.51,. 1.73, 2.07, 2.44 2.95	912 (1223) 647 (867)	1007 (1350) 715 (959)	1104 (1480) 782 (1050)	2500	344 (757)
MG-6449 RV	7-37431-A	–	1.51,. 1.73, 2.07, 2.44 2.95	912 (1223) 647 (867)	1007 (1350) 715 (959)	1104 (1480) 782 (1050)	2500	325 (716)
MG-6557 SC	7-36626-A	1, 0	1.07, 1.30, 1.50, 1.66, 1.74, 1.97, 2.04 2.45, 2.82 2.93	1109 (1487) 912 (1223) 864 (1158)	1225 (1643) 1007 (1350) 955 (1280)	1342 (1800) 1104 (1480) 1045 (1401)	2500	438 (964)
MG-6557 DC	7-36891-A	1, 0	2.46, 3.03, 3.48 3.93, 4.48	1109 (1487) 912 (1223)	1225 (1643) 1007 (1350)	1342 (1800) 1104 (1480)	2500	512 (1126)
MG-6557 A	7-36628-A	1, 0	1.29, 1.51, 1.74, 2.03 2.48, 2.92	1109 (1487) 912 (1223)	1225 (1643) 1007 (1350)	1342 (1800) 1104 (1480)	2500	443 (975)
MG-6557 RV	7-36762-A	–	1.29, 1.51, 1.74, 2.03 2.48, 2.92	1109 (1487) 912 (1223)	1225 (1643) 1007 (1350)	1342 (1800) 1104 (1480)	2500	448 (986)
MG-6598 DC	7-39146	1, 0	2.46, 3.03, 3.48 3.93 4.29	1190 (1596) 1062 (1424) 955 (1281)	1315 (1763) 1173 (1573) 1055 (1415)	1440 (1931) 1285 (1723) 1156 (1550)	2500	512 (1126)
MG-6600 DC	7-36712-A	1, 0	3.30, 4.11 4.68, 4.72 5.21 6.05	1194 (1601) 1109 (1487) 998 (1338) 893 (1198)	1319 (1769) 1225 (1643) 1103 (1479) 987 (1324)	1445 (1938) 1342 (1800) 1208 (1620) 1081 (1450)	2500	794 (1747)
MG-6619 SC	7-36826-A	1, 0	1.06 1.33, 1.53, 1.73, 2.03, 2.44 2.72 2.93	1170 (1570) 1232 (1652) 1108 (1487) 942 (1264)	1294 (1735) 1361 (1826) 1225 (1643) 1042 (1397)	1417 (1900) 1491 (2000) 1342 (1800) 1141 (1530)	2500	534 (1175)
MG-6619 A	7-36781-A –	1, 0 –	1.55, 1.72, 2.09, 2.42 2.73 2.95	1232 (1652) 1108 (1487) 1016 (1363)	1361 (1826) 1225 (1643) 1123 (1507)	1491 (2000) 1342 (1800) 1230 (1650)	2500	544 (1197)
MG-6619 RV	7-36814-A –	– –	1.55, 1.72, 2.09, 2.42 2.73 2.95	1232 (1652) 1108 (1487) 1016 (1363)	1361 (1826) 1225 (1643) 1123 (1507)	1491 (2000) 1342 (1800) 1230 (1650)	2500	544 (1197)
MG-6620 A	7-38959	1, 0	1.55, 1.72, 2.09, 2.42 2.73	1294 (1735) 1201 (1611)	1431 (1919) 1328 (1781)	1567 (2101) 1454 (1950)	2500	544 (1197)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2. Ratings shown are in SAE Horsepower (HP).
Metric Horsepower equals SAE times 1.014. Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

* Consult Twin Disc for availability of MG-5135 SC.

PLEASURE CRAFT MARINE TRANSMISSION RATINGS (Continued)

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1900 rpm	@ 2100 rpm	@ 2300 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-6650 SC	1018375-E	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	1293 (1734)	1430 (1918)	1566 (2100)	2300	954 (2100)
MG-6690 SC	1020350-B	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	1293 (1734)	1430 (1918)	1566 (2100)	2300	954 (2100)
MG-6848 SC	1019086-A	0, 00	1.51, 2.03, 2.47 2.58, 2.93 3.21	1687 (2262) 1598 (2143) 1397 (1873)	1864 (2500) 1746 (2341) 1526 (2046)	2028 (2720) 1891 (2536) 1653 (2217)	2300	954 (2100)
MG-6984 SC	7-37008 7-37481 P-71034B	Ind. 0 00	1.18, 1.54, 2.06, 2.29, 2.52 2.92 3.25 3.43	2009 (2694) 1958 (2626) 1741 (2335) 1620 (2172)	2222 (2980) 2163 (2900) 1924 (2580) 1790 (2400)	– – – –	2100	1192 (2628)
MG-6984 A	7-37028 P-71093 P-71094	Ind. 0 00	1.48, 1.97, 2.50 2.79 2.93	2009 (2694) 1995 (2675) 1948 (2612)	2222 (2980) 2207 (2960) 2155 (2890)	– – –	2100	909 (2000)
MG-6984 RV	7-37042	–	1.48, 1.97, 2.50 2.79 2.93	2009 (2694) 1995 (2675) 1948 (2612)	2222 (2980) 2207 (2960) 2155 (2890)	– – –	2100	909 (2000)
MG-61242 SC	7-37017	Ind.	1.16, 1.52, 2.08, 2.47 2.96	2585 (3466) 2484 (3331)	2856 (3830) 2745 (3681)	– –	2100	1050 (2310)
MG-61242 A	7-37046	Ind.	1.42, 2.07, 2.44 2.93	2585 (3466) 2562 (3302)	2856 (3830) 2722 (3650)	– –	2100	1105 (2431)
MG-61242 RV	7-37049	–	1.42, 2.07, 2.44 2.93	2585 (3466) 2562 (3302)	2856 (3830) 2722 (3650)	– –	2100	1105 (2431)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2. Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE times 1.014. Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

LIGHT DUTY MARINE TRANSMISSION RATINGS

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 2300 rpm	@ 2500 rpm	@ 2800 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-5011 SC*	PX-10270	3, 4, BW	1.11, 1.50, 2.00 2.44	153 (205) 136 (182)	165 (221) 146 (196)	174 (233) 157 (211)	4400	49 (109)
MG-5011 A*	PX-9999	3, 4, BW	1.44, 1.90 2.39	153 (205) 136 (182)	165 (221) 146 (196)	174 (233) 157 (211)	4400	49 (109)
MG-5011 IV*	PX-10290	3, 4, BW	1.14, 1.54, 2.06 2.51	153 (205) 136 (182)	165 (221) 146 (196)	174 (233) 157 (211)	4400	77 (170)
MG-5050 SC*	PX-8575/A	1, 2, 3 SPEC. #3	1.00, 1.23, 1.53, 1.71, 2.04 2.45 3.00	211 (283) 211 (283) 187 (251)	228 (306) 216 (290) 198 (266)	254 (341) 223 (299) 216 (290)	3300	86 (189)
MG-5050 A*	PX-8580/A	1, 2, 3 SPEC. #3	1.12, 1.26, 1.50 1.80, 2.04 2.50	211 (283) 187 (251)	228 (306) 204 (274)	254 (341) 223 (299)	3300	80 (176)
MG-5050 RV*	PX-8760	–	1.12, 1.26, 1.50, 1.80, 2.04 2.50	211 (283) 187 (251)	228 (306) 204 (274)	254 (341) 223 (299)	3300	73 (160)
MG-5061 SC*	PX-11650/A	1, 2, 3 SPEC. #3	1.00, 1.15, 1.48, 1.77, 2.00 2.43 3.00	265 (355) 246 (330) 229 (307)	288 (386) 268 (360) 248 (333)	323 (433) 300 (402) 279 (374)	3300	98 (215)
MG-5061 A*	PX-11640/A	1, 2, 3 SPEC. #3	1.13, 1.54, 1.75 2.00, 2.47	257 (345) 246 (330)	281 (377) 268 (360)	313 (420) 300 (402)	3300	95 (210)
MG-5061 V*	PX-8735	–	1.13, 1.54, 1.75 2.00, 2.47	257 (345) 246 (330)	281 (377) 268 (360)	313 (420) 300 (402)	3300	86 (190)
MG-5062 V*	PX-11660/A	1, 2, 3 SPEC. #3	1.19, 1.53, 1.83 2.07, 2.51	265 (355) 246 (330)	292 (392) 268 (360)	331 (444) 300 (402)	3300	142 (312)
MG-5065 SC	PX-11480	1, 2, 3 SPEC. #3	1.08, 1.26, 1.47, 1.72, 2.04, 2.43	351 (471)	381 (511)	428 (574)	3300	111 (244)
MG-5065 A	PX-11165	1, 2, 3 SPEC. #3	1.08, 1.26, 1.47, 1.72, 2.04, 2.43	351 (471)	381 (511)	428 (574)	3300	111 (244)
MG-5075 SC	PX-11876	1, 2, 3 SPEC. #3	0.80, 1.01, 1.16	355 (476)	383 (514)	423 (567)	2800	122 (268)
MG-5075 SC	PX-10680/A	1, 2, 3 SPEC. #3	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	355 (476) 348 (467)	383 (514) 376 (504)	423 (567) 406 (544)	3300	122 (268)
MG-5075 A	PX-10700/A	1, 2, 3 SPEC. #3	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	355 (476) 348 (467)	383 (514) 376 (504)	423 (567) 406 (544)	3300	122 (268)
MG-5075 IV **	PX-11530	1, 2, 3 SPEC. #3	1.03, 1.30, 1.49, 1.72, 1.99, 2.46	355 (476)	383 (514)	423 (567)	3300	TBA
				@ 2100 rpm	**@ 2300 rpm**	**@ 2500 rpm**		
MG-5085 SC	PX-9260-B/C	1, 2, 3 SPEC. #3	1.05, 1.22, 1.42, 1.76 1.96 2.33	389 (522) 348 (467) 321 (430)	404 (542) 383 (514) 342 (459)	429 (575) 416 (558) 362 (485)	3200	120 (265)
MG-5085 A	PX-9360-B/C	1, 2, 3 SPEC. #3	1.05, 1.22, 1.47, 1.72 2.04 2.43	389 (522) 355 (476) 321 (430)	404 (542) 383 (514) 342 (459)	429 (575) 416 (558) 362 (485)	3200	123 (270)
MG-5082 SC	PX-11250-A	1, 2	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	432 (579) 400 (536)	460 (617) 418 (560)	487 (653) 434 (582)	3200	135 (298)
MG-5082 A	PX-11040-B	1, 2	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	432 (579) 400 (536)	460 (617) 418 (560)	487 (653) 434 (582)	3200	135 (298)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

* Consult Twin Disc for gasoline engine ratings.
** Consult Twin Disc for availability of MG-5075 IV.

LIGHT DUTY MARINE TRANSMISSION RATINGS (Continued)

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 2100 rpm	@ 2300 rpm	@ 2500 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-5091 SC	PX-10016	1, 2	1.17, 1.45, 1.71, 2.04 2.45 2.95	429 (575) 404 (542) 382 (512)	471 (632) 442 (593) 418 (561)	495 (664) 467 (626) 439 (589)	3000	220 (485)
MG-5090 A	PX-10015	1, 2	1.45, 1.73, 1.96 2.43	429 (575) 404 (542)	471 (632) 442 (593)	494 (662) 467 (626)	3000	216 (475)
MG-5114 SC	PX-9785B	1	0.93, 1.02, 1.12, 1.50, 1.74 2.04, 2.54 3.00	579 (776) 579 (776) 494 (662)	629 (843) 629 (843) 540 (724)	669 (897) 669 (897) 588 (789)	2800/.93:1 3000 for others	203 (447)
MG-5114 DC	PX-10250A	1	3.28, 3.43, 4.17 4.59 4.86	580 (777) 541 (725) 530 (711)	629 (843) 592 (794) 564 (756)	655 (878) 634 (850) 576 (772)	3000	368 (810)
MG-5114 A	PX-11915	1, 2	1.03, 1.20, 1.48, 1.75, 1.92 2.04, 2.50	580 (777)	629 (843)	655 (878)	3000	206 (455)
MG-5114 RV	PX-9830A	–	1.03, 1.20, 1.48, 1.75, 1.92 2.04, 2.50	580 (777)	629 (843)	655 (878)	3000	198 (435)
MG-5114 IV	PX-11920	1, 2	1.05, 1.23, 1.52, 1.80, 1.97 2.57	580 (777) 560 (751)	629 (843) 607 (814)	655 (878) 632 (848)	3000	270 (595)
MG-5135 SC *	PX-11590	1, 0	1.00, 1.28, 1.48, 1.73, 2.04 2.57 2.90	704 (944) 663 (889) 622 (834)	746 (1000) 716 (960) 671 (900)	788 (1057) 768 (1030) 720 (966)	2800	300 (661)
MG-5135 A	PX-11380	1, 0	1.10, 1.25, 1.53, 1.79, 2.00 2.52	704 (944) 663 (889)	746 (1000) 716 (960)	788 (1057) 768 (1030)	2800	280 (617)
MG-5135 RV	PX-11945	–	1.10, 1.25, 1.53, 1.79, 2.00 2.52	704 (944) 663 (889)	746 (1000) 716 (960)	788 (1057) 768 (1030)	2800	258 (568)
MG-5145 SC	PX-10885	1, 0	1.20, 1.33, 1.48, 1.75, 1.96 2.50	808 (1084) 759 (1018)	857 (1150) 820 (1100)	906 (1215) 881 (1181)	2500	325 (716)
MG-5145 A	PX-10830	1, 0	1.26, 1.48, 1.75, 1.96 2.50	808 (1084) 759 (1018)	857 (1150) 820 (1100)	906 (1215) 881 (1181)	2500	333 (734)
MG-5145 RV	PX-10880	–	1.26, 1.48, 1.75, 1.96 2.50	808 (1084) 759 (1018)	857 (1150) 820 (1100)	906 (1215) 881 (1181)	2500	295 (650)
				@ 1800 rpm	**@ 2100 rpm**	**@ 2300 rpm**		
MG-5202 SC	1016103-C	1, 0	1.17, 1.33, 1.53, 1.76, 2.03, 2.48, 2.92 3.48	742 (995) 641 (860)	852 (1142) 731 (980)	924 (1239) 789 (1059)	2750 (2500-1.17:1)	587 (1292)
MG-5203 SC	1016249-A	1, 0	1.17, 1.33, 1.53, 1.76, 2.03, 2.48, 2.92 3.48	742 (995) 641 (860)	852 (1142) 731 (980)	924 (1239) 789 (1059)	2750 (2500-1.17:1)	409 (900)
MG-5204 SC	1016250-B	1, 0	1.17, 1.33, 1.53, 1.76, 2.03, 2.48, 2.92 3.48	742 (995) 647 (868)	865 (1160) 764 (1025)	979 (1313) 837 (1122)	2750 (2500-1.17:1)	409 (900)
MG-6449 A	7-37423	1, 0	1.51, 1.73 2.07 2.44 2.95	840 (1126) 795 (1067) 711 (953) 545 (731)	978 (1312) 912 (1223) 805 (1080) 635 (852)	1072 (1437) 974 (1306) 861 (1154) 696 (933)	2500	344 (757)
MG-6449 RV	7-37431-A	–	1.51, 1.73 2.07 2.44 2.95	840 (1126) 795 (1067) 711 (953) 545 (731)	978 (1312) 912 (1223) 805 (1080) 635 (852)	1072 (1437) 974 (1306) 861 (1154) 696 (933)	2500	325 (716)
MG-6557 SC	7-36626-A	1, 0	1.07 1.30, 1.50, 1.66, 1.74 1.97, 2.04 2.45 2.93	1048 (1405) 1003 (1345) 965 (1294) 777 (1042) 704 (944)	1178 (1580) 1178 (1580) 1126 (1511) 905 (1214) 821 (1100)	1240 (1663) 1240 (1663) 1234 (1655) 992 (1330) 900 (1207)	2500	438 (964)
MG-6557 DC	7-36891-A	1, 0	2.46, 3.03, 3.48 3.93	953 (1278) 837 (1122)	1112 (1491) 975 (1308)	1218 (1633) 1069 (1433)	2500	512 (1126)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

Consult Twin Disc on light duty ratings for models MG-514C SC/DC, MG-516 DC, MG-5170 DC, MG-520-1HP, MG-5222 DC, MG-5225 DC, MG-5301, MG-540, MG-500 and other deep ratio units not listed.
* Consult Twin Disc for availability of MG-5135 SC.

LIGHT DUTY MARINE TRANSMISSION RATINGS (Continued)

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1800 rpm	@ 2100 rpm	@ 2300 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-6557 A	7-36628-A	1, 0	1.29, 1.51, 1.74, 2.03	938 (1258)	1095 (1468)	1200 (1608)		
			2.48	796 (1068)	929 (1245)	1017 (1364)	2500	443 (975)
			2.92	704 (944)	821 (1100)	900 (1207)		
MG-6557 RV	7-36762-A	–	1.29, 1.51, 1.74, 2.03	938 (1258)	1095 (1468)	1200 (1608)		
			2.48	796 (1068)	929 (1245)	1017 (1364)	2500	448 (986)
			2.92	704 (944)	821 (1100)	900 (1207)		
MG-6598 DC	7-39146	1, 0	2.46, 3.03, 3.48	979 (1313)	1139 (1527)	1241 (1664)		
			3.93	898 (1204)	1042 (1397)	1130 (1515)	2500	512 (1126)
			4.29	824 (1105)	962 (1290)	1053 (1412)		
MG-6600 DC	7-36712-A	1, 0	3.30, 4.11	1009 (1353)	1177 (1578)	1289 (1728)		
			4.68, 4.72	926 (1242)	1080 (1447)	1182 (1585)	2500	794 (1747)
			5.22	818 (1097)	953 (1278)	1044 (1400)		
			6.05	722 (968)	843 (1129)	923 (1237)		
MG-6619 SC	7-36826-A	1, 0	1.06	1031 (1383)	1202 (1611)	1316 (1764)		
			1.33, 1.53, 1.73, 2.03	1114 (1494)	1300 (1743)	1412 (1893)	2500	534 (1175)
			2.44	1056 (1416)	1232 (1652)	1349 (1809)		
			2.72	933 (1251)	1088 (1459)	1192 (1598)		
			2.93	832 (1116)	971 (1301)	1062 (1424)		
MG-6619 A	7-36781-A	1, 0	1.55, 1.72, 2.09, 2.42	1025 (1375)	1197 (1604)	1310 (1756)		
			2.73	939 (1259)	1095 (1468)	1200 (1608)	2500	544 (1197)
			2.95	856 (1148)	999 (1339)	1094 (1466)		
MG-6619 RV	7-36814-A	–	1.55, 1.72, 2.09, 2.42	1025 (1375)	1197 (1604)	1310 (1756)		
			2.73	939 (1259)	1095 (1468)	1200 (1608)	2500	544 (1197)
			2.95	856 (1148)	999 (1339)	1094 (1466)		
MG-6620 A	7-38959	1, 0	1.55, 1.72, 2.09	1155 (1545)	1285 (1723)	1370 (1837)		
			2.42	1123 (1506)	1252 (1679)	1334 (1789)	2500	544 (1197)
			2.73	1079 (1447)	1211 (1624)	1291 (1731)		
				@ 1900 rpm	**@ 2100 rpm**	**@ 2300 rpm**		
MG-6650 SC	1018375-E	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	1289 (1729)	1417 (1900)	1464 (1963)	2300	954 (2100)
MG-6690 SC	1020350-B	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	1289 (1729)	1417 (1900)	1464 (1963)	2300	954 (2100)
MG-6848 SC	1019086-B	0, 00	1.51, 1.88, 2.03, 2.47	1670 (2240)	1828 (2451)	1985 (2662)		
			2.58, 2.93	1555 (2085)	1699 (2278)	1841 (2469)	2300	954 (2100)
			3.21	1360 (1824)	1485 (1991)	1609 (2158)		
MG-6984 SC	7-37008	Ind.	1.18, 1.54, 2.06, 2.29, 2.52	1916 (2570)	2119 (2841)	–		
	7-37481	0	2.92	1815 (2434)	2006 (2690)	–	2100	1192 (2628)
	P-71034B	00	3.25	1506 (2020)	1665 (2233)	–		
			3.43	1401 (1879)	1549 (2077)	–		
MG-6984 A	7-37028	Ind.	1.48, 1.97	1902 (2550)	2102 (2819)	–		
	P-71093	0	2.50	1843 (2471)	2037 (2732)	–	2100	909 (2000)
	P-71094	00	2.79	1823 (2445)	2016 (2703)	–		
			2.93	1794 (2406)	1984 (2660)	–		
MG-6984 RV	7-37042	-	1.48, 1.97	1902 (2550)	2102 (2819)	–		
			2.50	1843 (2471)	2037 (2732)	–	2100	909 (2000)
			2.79	1823 (2445)	2016 (2703)	–		
			2.93	1794 (2406)	1984 (2660)	–		
MG-61242 SC	7-37017	Ind.	1.16, 1.52, 2.08	2451 (3287)	2709 (3633)	–	2100	1050 (2310)
			2.47	2383 (3196)	2634 (3532)	–		
			2.96	2315 (3105)	2559 (3431)	–		
MG-61242 A	7-37046	Ind.	1.42, 2.07	2482 (3329)	2743 (3679)	–		
			2.44	2383 (3196)	2634 (3532)	–	2100	1105 (2431)
			2.93	2315 (3105)	2559 (3431)	–		
MG-61242 RV	7-37049	–	1.42, 2.07	2482 (3329)	2743 (3679)	–		
			2.44	2383 (3196)	2634 (3532)	–	2100	1105 (2431)
			2.93	2315 (3105)	2559 (3431)	–		

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

INTERMEDIATE DUTY MARINE TRANSMISSION RATINGS

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 2100 rpm	@ 2500 rpm	@ 2800 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-340	IT40TD0002	5, BW	1.45	24 (32)	25 (34)	26 (35)	4500	9 (20)
			2.00	17 (23)	20 (27)	23 (31)		
			2.60	13 (17)	16 (21)	18 (24)		
MG-360	IT60TD0002	5, BW	1.52	31 (42)	36 (48)	41 (55)	5000	14 (31)
			2.00	28 (38)	33 (44)	37 (50)		
			2.50	23 (31)	29 (39)	31 (42)		
			2.94	19 (26)	22 (30)	25 (34)		
MG-5005 A	IT345ATD0001	3, 4, 5	1.54	47 (63)	56 (75)	63 (85)	4500	25 (55)
			2.00	47 (63)	56 (75)	63 (85)		
			2.47	35 (47)	41 (55)	47 (63)		
MG-5012 SC	IT93TD0001	3, 4, BW	1.51	93 (124)	110 (148)	124 (166)	4500	53 (117)
			2.09	81 (108)	96 (129)	108 (144)		
			2.40	72 (96)	85 (115)	96 (128)		
			2.77	62 (84)	74 (100)	83 (111)		
MG-5015 A	IT545ATD0002	3, 4, BW	1.51	92 (123)	109 (146)	122 (164)	4500	36 (79)
			2.09	76 (102)	90 (121)	101 (135)		
			2.40	65 (87)	77 (103)	86 (115)		
MG-5020 SC	IT170TD0001	3, 4, BW	1.50, 2.04	134 (179)	159 (214)	178 (239)	4000	75 (165)
			2.50	107 (144)	128 (171)	143 (192)		
			2.94	93 (124)	110 (148)	124 (166)		
MG-5055 A	IT880ATD0002	3, 4, BW	1.53, 2.08	147 (197)	175 (235)	198 (266)	4000	54 (119)
			2.60	99 (135)	118 (160)	132 (179)		
MG-5010 DC	PX-9400	3, 4, BW	3.00	87 (117)	104 (140)	112 (150)	4000	75 (165)
			3.52	77 (103)	92 (123)	103 (138)		
			4.00	67 (90)	80 (107)	89 (120)		
MG-5011 SC	PX-10270	3, 4, BW	1.11, 1.50, 2.00	112 (150)	123 (165)	130 (175)	4400	49 (109)
			2.44	92 (124)	112 (150)	119 (160)		
MG-5011 A	PX-9999	3, 4, BW	1.44, 1.90	112 (150)	123 (165)	130 (175)	4400	49 (109)
			2.39	103 (138)	112 (150)	123 (165)		
MG-5011 IV	PX-10290	3, 4, BW	1.14, 1.54, 2.06	112 (150)	123 (165)	130 (175)	4400	77 (170)
			2.51	92 (124)	112 (150)	119 (160)		
MG-5050 SC	PX-8575/A	1, 2, 3 SPEC. #3	1.00, 1.23, 1.53, 1.71, 2.04, 2.45	157 (211)	187 (251)	209 (280)	3300	86 (189)
			3.00	142 (190)	170 (228)	194 (260)		
MG-5050 A	PX-8580/A	1, 2, 3 SPEC. #3	1.12, 1.26, 1.50, 1.80, 2.04, 2.50	157 (211)	187 (251)	209 (280)	3300	80 (176)
MG-5050 RV	PX-8760	–	1.12, 1.26, 1.50, 1.80, 2.04, 2.50	157 (211)	187 (251)	209 (280)	3300	73 (160)
MG-506-1	XA7022A	1, 2, 3	1.09, 1.50, 1.97	121 (162)	144 (193)	160 (215)	3000	100 (220)
	XA7048A	1, 2, 3	2.50, 2.96	121 (162)	144 (193)	160 (215)	3000	102 (224)
MG-5061 SC	PX-11650/A	1, 2, 3 SPEC. #3	1.00, 1.15, 1.48, 1.77, 2.00, 2.43, 3.00	201 (270)	239 (320)	261 (350)	3300	98 (215)
MG-5061 A	PX-11640/A	1, 2, 3 SPEC. #3	1.13, 1.54, 1.75, 2.00, 2.47	201 (270)	239 (320)	261 (350)	3300	95 (210)
MG-5061 V	PX-8735	–	1.13, 1.54, 1.75, 2.00, 2.47	201 (270)	239 (320)	261 (350)	3300	95 (210)
MG-5062 V	PX-11660/A	1, 2, 3 SPEC. #3	1.19, 1.53, 1.83, 2.07, 2.51	201 (270)	239 (320)	261 (350)	3300	142 (312)
MG-5065 SC	PX-11480	1, 2, 3 SPEC. #3	1.08, 1.26, 1.47, 1.72, 2.04, 2.43	254 (341)	302 (405)	338 (453)	3300	111 (244)
MG-5065 A	PX-11165	1, 2, 3 SPEC. #3	1.08, 1.26, 1.47, 1.72, 2.04, 2.43	254 (341)	302 (405)	338 (453)	3300	111 (244)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

INTERMEDIATE DUTY MARINE TRANSMISSION RATINGS (Continued)

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 2100 rpm	@ 2500 rpm	@ 2800 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-5075 SC	PX-11876	1, 2, 3 SPEC. #3	0.80, 1.01, 1.16	268 (360)	298 (400)	313 (420)	2800	122 (268)
MG-5075 SC	PX-10680/A	1, 2, 3 SPEC. #3	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	268 (360) 261 (350)	298 (400) 287 (385)	313 (420) 306 (410)	3300	122 (268)
MG-5075 A	PX-10700/A	1, 2, 3 SPEC. #3	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	268 (360) 261 (350)	298 (400) 287 (385)	313 (420) 306 (410)	3300	122 (268)
MG-5075 IV	PX-11530	1, 2, 3 SPEC. #3	1.03, 1.30, 1.49, 1.72, 1.99, 2.46	268 (360)	298 (400)	313 (420)	3300	TBA
MG-509	X9816F	1, 2	1.45, 2.00 2.48 2.95	235 (315) 235 (315) 216 (290)	273 (366)* 273 (366)* 244 (327)*	300 (400)* 300 (400)* 265 (355)*	3000*	259 (572)
	X9835	1, 2	3.39 3.83, 4.50 4.95	165 (220) 235 (315) 180 (242)	190 (255)* 279 (374)* 213 (285)*	210 (280)* 311 (417)* 235 (315)*	3000*	323 (712)
MG-5085 SC	PX-9260-B/C	1, 2, 3 SPEC. #3	1.05, 1.22, 1.42, 1.76, 1.96 2.33	287 (385) 268 (360)	332 (445) 302 (405)	365 (490) 328 (440)	3200	120 (265)
MG-5085 A	PX-9360-B/C	1, 2, 3 SPEC. #3	1.05, 1.22, 1.47, 1.72, 2.04 2.43	287 (385) 268 (360)	332 (445) 302 (405)	365 (490) 328 (440)	3200	123 (270)
MG-5082 SC	PX-11250-A	1, 2	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	351 (471) 340 (456)	396 (531) 384 (515)	428 (574) 415 (557)	3200	135 (298)
MG-5082 A	PX-11040-B	1, 2	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	351 (471) 340 (456)	396 (531) 384 (515)	428 (574) 415 (557)	3200	135 (298)
MG-5091 SC	PX-10016	1	1.17, 1.45, 1.71, 2.04 2.45, 2.95 3.33	354 (475) 336 (450) 268 (360)	403 (540) 374 (501) 309 (415)	425 (570) 403 (540) 346 (464)	3000	220 (485)
MG-5091 DC	1002155	1	3.82 4.50 5.05	321 (431) 298 (400) 251 (336)	377 (506) 350 (470) 298 (400)	420 (563) 384 (515) 334 (448)	3000	297 (655)
MG-5090 A	PX-10015	1, 2	1.45, 1.73, 1.96 2.43	343 (460) 321 (430)	365 (490) 343 (460)	382 (512) 359 (481)	3000	216 (475)
				@ 1900 rpm	**@ 2100 rpm**	**@ 2300 rpm**		
MG-5114 SC	PX-9785B	1	0.93, 1.02, 1.12, 1.50, 1.74, 2.04 2.54 3.00	466 (625) 429 (575) 408 (547)	503 (675) 466 (625) 451 (605)	552 (740) 507 (680) 492 (660)	2800/.93:1 3000 for others	203 (447)
MG-5114 SC-HD	PX-11962	1	0.93, 1.02, 1.12, 1.50, 1.74, 2.04 2.54 3.00	466 (625) 429 (575) 408 (547)	503 (675) 466 (625) 451 (605)	552 (740) 507 (680) 492 (660)	2800/.93:1 3000 for others	270 (595)
MG-5114 DC	PX-10250A	1	3.28, 3.43, 4.17 4.59 4.86	455 (610) 408 (547) 393 (527)	503 (675) 447 (600) 429 (575)	537 (720) 477 (640) 463 (620)	3000	368 (810)
MG-5114 A	PX-11915	1, 2	1.03, 1.20, 1.48, 1.75, 1.92, 2.04 2.50	424 (568) 367 (492)	466 (625) 400 (536)	503 (675) 433 (580)	3000	206 (455)
MG-5114 RV	PX-9830A	–	1.03, 1.20, 1.48, 1.75, 1.92, 2.04 2.50	424 (568) 367 (492)	466 (625) 400 (536)	503 (675) 433 (580)	3000	198 (435)
MG-5114 IV	PX-11920	1, 2	1.05, 1.23, 1.52, 1.80, 1.97 2.57	424 (568) 367 (492)	466 (625) 400 (536)	503 (675) 433 (580)	3000	270 (595)
MG-514C SC	X9784C	1, 0 (14" only)	1.51, 2.00, 2.50, 3.00 3.50	346 (464) 304 (407)	380 (510) 336 (450)	418 (560) 365 (490)	2500	524 (1155)
MG-514C DC	X9786C	1, 0 (14" only)	4.13, 4.50, 5.16 6.00	F346 (464) R338 (453) 298 (400)	F380 (510) R358 (480) 330 (442)	F418 (560) R378 (507) 359 (481)	2500	658 (1450)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

* SAE-14" A6911 driving ring has a 2150 rpm maximum speed.

INTERMEDIATE DUTY MARINE TRANSMISSION RATINGS (Continued)

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1900 rpm	@ 2100 rpm	@ 2300 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-5135 SC *	PX-11590	1, 0	1.00, 1.28, 1.48, 1.73, 2.04, 2.57 2.90	540 (724) 504 (676)	560 (751) 522 (700)	600 (805) 560 (751)	2800	300 (661)
MG-5135 A	PX-11380	1, 0	1.10, 1.25, 1.53, 1.79, 2.00, 2.52	540 (724)	560 (751)	600 (805)	2800	280 (617)
MG-5135 RV	PX-11945	–	1.10, 1.25, 1.53, 1.79, 2.00, 2.52	540 (724)	560 (751)	600 (805)	2800	258 (568)
MG-5145 SC	PX-10885	1, 0	1.20, 1.33, 1.48, 1.75, 1.96 2.50	726 (974) 614 (823)	746 (1000) 671 (900)	836 (1121) 726 (974)	2500	325 (716)
MG-5145 A	PX-10830	1, 0	1.26, 1.48, 1.75, 1.96 2.50	726 (974) 614 (823)	746 (1000) 671 (900)	836 (1121) 726 (974)	2500	333 (734)
MG-5145 RV	PX-10880	–	1.26, 1.48, 1.75, 1.96 2.50	726 (974) 614 (823)	746 (1000) 671 (900)	836 (1121) 726 (974)	2500	295 (650)
MG-516 DC	XA-7470-H	1, 0 (14" only)	3.06 3.50 4.04 4.52 5.05 6.00	544 (730) 528 (708) 503 (675) 493 (661) 476 (638) 436 (585)	573 (768) 549 (736) 521 (699) 510 (684) 492 (660) 470 (630)	594 (797) 569 (763) 540 (724) 526 (705) 508 (681) 498 (668)	2500	717 (1580)
MG-5170 DC	1017463-A	1, 0	4.06, 4.50, 5.03, 5.95 6.53, 6.95	552 (740) 493 (661)	578 (775) 545 (731)	578 (775) 561 (752)	2500	759 (1670)
MG-520-1HP	XA-7255-B	0	4.49, 5.00, 6,11 7.00 7.42	758 (1016) 699 (937) 653 (876)	837 (1122) 764 (1025) 714 (957)	917 (1230) 828 (1110) 774 (1038)	2500	1559 (3436)
MG-5202 SC	1016103-C	1, 0	1.17, 1.33, 1.53, 1.76, 2.03, 2.48, 2.92 3.48	660 (885)	720 (965)	783 (1050)	2750 (2500-1.17:1)	587 (1292)
MG-5222 DC	1020391	1, 0	4.03, 4.59, 5.04, 6.10, 6.55, 6.96	660 (885)	720 (965)	783 (1050)	2500	1050 (2313)
MG-5203 SC	1016249-A	1, 0	1.17, 1.33, 1.53, 1.76, 2.03, 2.48, 2.92 3.48	660 (885)	720 (965)	783 (1050)	2750 (2500-1.17:1)	409 (900)
MG-5204 SC	1016250-B	1, 0	1.17, 1.33, 1.53, 1.76, 2.03, 2.48, 2.92 3.48	771 (1034) 660 (885)	858 (1151) 720 (966)	969 (1300) 783 (1050)	2750 (2500-1.17:1)	409 (900)
MG-5225 DC	1020390	1, 0	4.03, 4.59, 5.04, 6.10	771 (1034)	858 (1151)	869 (1165)	2500	1050 (2313)
MG-5301 DC	1017020-B	0, 00 Ind.	3.35, 4.06, 4.42, 4.96 5.96 6.39	1101 (1476) 1032 (1384) 892 (1196)	1166 (1564) 1127 (1511) 975 (1307)	1175 (1576) 1142 (1531) 1056 (1416)	2400	1510 (3320)
MG-540	X-9882-C	0	1.93, 2.58, 2.90 3.26 3.91 4.60 5.17	1141 (1530) 1055 (1415) 967 (1297) 1126 (1510) 1037 (1390)	– 1156 (1550) 1040 (1395) – 1119 (1501)	– – 1064 (1427) – –	1900 2100 2400 1900 2100	2105 (4640)
MG-5506	7-39150	0, 00 Ind.	4.03, 4.55, 4.96, 5.44 6.00	987 (1324) 900 (1207)	– –	– –	2000	2200 (4846)
MG-5600	1015239-A	0, 00 Ind.	2.53, 2.98, 3.51, 4.03 5.04 6.04	1905 (2555) 1905 (2555) 1574 (2111)	2105 (2823) 2095 (2809) 1717 (2303)	– – –	2100	3132 (6890)
MG-6449 A	7-37423	1, 0	1.51, 1.73 2.07 2.44 2.95	822 (1102) 695 (932) 600 (805) 530 (711)	896 (1202) 746 (1000) 647 (868) 577 (774)	958 (1285) 794 (1065) 692 (928) 617 (828)	2500	344 (757)
MG-6449 RV	7-37431-A	–	1.51, 1.73 2.07 2.44 2.95	822 (1102) 695 (932) 600 (805) 530 (711)	896 (1202) 746 (1000) 647 (868) 577 (774)	958 (1285) 794 (1065) 692 (928) 617 (828)	2500	325 (716)
MG-6557 SC	7-36626-A	1, 0	1.07, 1.30, 1.50, 1.66, 1.74, 1.97, 2.04 2.45 2.93	867 (1163) 817 (1096) 685 (918)	937 (1256) 904 (1212) 756 (1014)	1007 (1350) 990 (1327) 828 (1111)	2500	438 (964)
MG-6557 DC	7-36891-A	1, 0	2.46, 3.03, 3.48 3.93 4.48	881 (1182) 796 (1068) 718 (963)	946 (1268) 854 (1145) 770 (1033)	1007 (1351) 911 (1221) 821 (1101)	2500	512 (1126)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

* Consult Twin Disc for availability of MG-5135 SC.

INTERMEDIATE DUTY MARINE TRANSMISSION RATINGS (Continued)

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1900 rpm	@ 2100 rpm	@ 2300 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-6557 A	7-36628-A	1, 0	1.29, 1.51, 1.74, 2.03	882 (1183)	945 (1267)	1008 (1350)	2500	443 (975)
			2.48	780 (1046)	863 (1157)	945 (1267)		
			2.92	676 (907)	748 (1003)	819 (1098)		
MG-6557 RV	7-36762-A	–	1.29, 1.51, 1.74	912 (1223)	1008 (1352)	1104 (1480)	2500	448 (986)
			2.03	912 (1223)	1008 (1352)	1073 (1439)		
			2.48	780 (1046)	863 (1157)	945 (1267)		
			2.92	676 (907)	748 (1003)	819 (1098)		
MG-6598 DC	7-39146	1, 0	2.46, 3.03, 3.48	882 (1183)	945 (1267)	1008 (1352)		
			3.93	803 (1077)	860 (1153)	917 (1230)	2500	512 (1126)
			4.29	750 (1006)	804 (1078)	857 (1149)		
MG-6600 DC	7-36712-A	1, 0	3.30	864 (1158)	955 (1280)	1046 (1402)	2500	794 (1747)
			4.11	864 (1158)	955 (1280)	1018 (1365)		
			4.68, 4.72	820 (1100)	906 (1215)	966 (1294)		
			5.21	732 (982)	809 (1085)	886 (1188)		
			6.05	651 (872)	719 (964)	788 (1056)		
MG-6619 SC	7-36826-A	1, 0	1.06	1007 (1350)	1113 (1492)	1188 (1592)	2500	534 (1175)
			1.33, 1.53, 1.73, 2.03, 2.44	1007 (1350)	1078 (1445)	1155 (1548)		
			2.72	912 (1222)	1008 (1351)	1104 (1480)		
			2.93	812 (1089)	989 (1204)	984 (1319)		
MG-6619 A	7-36781-A	1, 0	1.55, 1.72, 2.09, 2.42	976 (1308)	1078 (1445)	1155 (1548)		
			2.73	919 (1232)	1015 (1360)	1104 (1480)	2500	544 (1197)
			2.95	836 (1121)	924 (1239)	1012 (1357)		
MG-6619 RV	7-36814-A	–	1.55, 1.72, 2.09, 2.42	976 (1308)	1078 (1445)	1155 (1548)		
			2.73	919 (1232)	1015 (1360)	1104 (1480)	2500	544 (1197)
			2.95	836 (1121)	924 (1239)	1012 (1357)		
MG-6620 A	7-38959	1, 0	1.55, 1.72, 2.09, 2.42	976 (1309)	1078 (1446)	1155 (1549)	2500	544 (1197)
			2.73	919 (1232)	1015 (1361)	1104 (1480)		
MG-6650 SC	1018375-E	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	1135 (1522)	1268 (1700)	1386 (1859)	2300	954 (2100)
MG-6690 SC	1020350-B	0, 00	1.51, 1.88, 2.03, 2.47	1261 (1691)	1380 (1851)	1438 (1928)	2300	954 (2100)
			2.93	1240 (1663)	1318 (1767)	1386 (1859)		
			3.21	1227 (1646)	1280 (1716)	1386 (1859)		
MG-6848 SC	1019086-B	0, 00	1.51, 1.88, 2.03, 2.47, 2.58, 2.93	1417 (1900)	1566 (2100)	1715 (2300)	2300	954 (2100)
			3.21	1330 (1784)	1453 (1948)	1575 (2112)		
MG-6984 SC	7-37008	Ind.	1.18, 1.54, 2.06, 2.29, 2.52, 2.92	1746 (2341)	1929 (2587)	–		
	7-37481	0	3.25	1477 (1980)	1632 (2189)	–	2100	1192 (2628)
	P-71034B	00	3.43	1188 (1593)	1313 (1761)	–		
MG-6984 A	7-37028	Ind.	1.48, 1.97, 2.50, 2.79	1786 (2395)	1974 (2647)	–		
	P-71093	0	2.93	1736 (2328)	1919 (2573)	–	2100	909 (2000)
	P-71094	00						
MG-6984 RV	7-37042	–	1.48, 1.97, 2.50, 2.79	1786 (2395)	1974 (2647)	–	2100	909 (2000)
			2.93	1736 (2328)	1919 (2573)	–		
MG-61242 SC	7-37017	Ind.	1.16, 1.52, 2.08	2376 (3186)	2626 (3522)	–	2100	1050 (2310)
			2.47	2327 (3120)	2571 (3448)	–		
			2.96	2315 (3105)	2559 (3431)	–		
MG-61242 A	7-37046	Ind.	1.42, 2.07	2468 (3310)	2728 (3658)	–	2100	1105 (2431)
			2.44, 2.93	2315 (3105)	2559 (3431)	–		
MG-61242 RV	7-37049	–	1.42, 2.07	2468 (3310)	2728 (3658)	–	2100	1105 (2431)
			2.44, 2.93	2315 (3105)	2559 (3431)	–		

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

MEDIUM DUTY MARINE TRANSMISSION RATINGS

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1800 rpm	@ 2100 rpm	@ 2300 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-5011 SC	PX-10270	3, 4, BW	1.11, 1.50, 2.00 2.44	74 (99) 57 (77)	82 (110) 74 (99)	90 (121) 82 (110)	4400	49 (109)
MG-5011 A	PX-9999	3, 4, BW	1.44, 1.90 2.39	74 (99) 66 (89)	82 (110) 74 (99)	90 (121) 82 (110)	4400	49 (109)
MG-5050 SC	PX-8575/A	1, 2, 3 SPEC. #3	1.00, 1.23, 1.53, 1.71, 2.04, 2.45 3.00	115 (154) 102 (137)	128 (172) 119 (160)	140 (188) 133 (178)	3300	86 (189)
MG-5050 A	PX-8580/A	1, 2, 3 SPEC. #3	1.12, 1.26, 1.50, 1.80, 2.04, 2.50	115 (154)	128 (172)	140 (188)	3300	80 (176)
MG-5061 SC	PX-11650/A	1, 2, 3 SPEC. #3	1.00, 1.15, 1.48, 1.77, 2.00, 2.43 3.00	135 (181) 126 (169)	157 (211) 147 (197)	171 (229) 160 (215)	3300	98 (215)
MG-5061 A	PX-11640/A	1, 2, 3 SPEC. #3	1.13, 1.54, 1.75, 2.00 2.47	135 (181) 126 (169)	157 (211) 147 (197)	171 (229) 160 (215)	3300	95 (210)
MG-5065 SC	PX-11480	1, 2, 3 SPEC. #3	1.08, 1.26, 1.47, 1.72, 2.04, 2.43	208 (279)	243 (326)	266 (357)	3300	111 (244)
MG-5065 A	PX-11165	1, 2, 3 SPEC. #3	1.08, 1.26, 1.47, 1.72, 2.04, 2.43	208 (279)	243 (326)	266 (357)	3300	111 (244)
MG-5075 SC	PX-10680/A	1, 2, 3 SPEC. #3	1.06, 1.33, 1.53, 1.77, 2.05 2.53, 2.88	205 (275)	230 (308)	246 (330)	3300	122 (268)
MG-5075 A	PX-10700/A	1, 2, 3 SPEC. #3	1.06, 1.33, 1.53, 1.77, 2.05 2.53, 2.88	205 (275)	230 (308)	246 (330)	3300	122 (268)
MG-5085 SC	PX-9260-B/C	1, 2, 3 SPEC. #3	1.05, 1.22, 1.42, 1.76, 1.96 2.33	250 (335) 225 (302)	279 (375) 254 (341)	295 (396) 271 (363)	3200	120 (265)
MG-5085 A	PX-9360-B/C	1, 2, 3 SPEC. #3	1.05, 1.22, 1.47, 1.72, 2.04 2.43	250 (335) 217 (291)	279 (375) 248 (333)	295 (396) 268 (360)	3200	123 (270)
MG-5082 SC	PX-11250-A	1, 2	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	301 (404) 273 (366)	336 (451) 313 (420)	350 (469) 331 (444)	3200	135 (298)
MG-5082 A	PX-11040-B	1, 2	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	301 (404) 273 (366)	336 (451) 313 (420)	350 (469) 331 (444)	3200	135 (298)
MG-5091 SC	PX-10016	1, 2	1.17, 1.45, 1.71, 2.04 2.45, 2.95 3.33	274 (368) 265 (355) 219 (293)	317 (425) 308 (413) 254 (340)	347 (465) 330 (443) 274 (368)	3000	220 (485)
MG-5091 DC	1002155	1, 2	3.83, 4.50 5.05	262 (351) 225 (302)	303 (406) 262 (351)	330 (443) 287 (385)	3000	297 (655)
MG-5090 A	PX-10015	1, 2	1.45, 1.73, 1.96, 2.43	267 (358)	309 (415)	321 (430)	3000	216 (475)
MG-5114 SC	PX-9785B	1	0.93, 1.02, 1.12, 1.50, 1.74, 2.04, 2.54 3.00	394 (528) 394 (528) 361 (484)	451 (605) 451 (605) 410 (550)	489 (656) 489 (656) 443 (595)	2800/.93:1 3000 for others	203 (447)
MG-5114 SC-HD	PX-11962	1	0.93, 1.02, 1.12, 1.50, 1.74, 2.04 2.54 3.00	394 (528) 394 (528) 361 (484)	451 (605) 451 (605) 410 (550)	489 (656) 489 (656) 443 (595)	2800/.93:1 3000 for others	270 (595)
MG-5114 DC	PX-10250A	1	3.28, 3.43, 4.17, 4.59, 4.86	361 (484)	419 (562)	437 (586)	3000	368 (810)
MG-5114 A	PX-11915	1, 2	1.03, 1.20, 1.48, 1.75, 1.92, 2.04 2.50	357 (479) 338 (453)	407 (546) 385 (516)	440 (590) 417 (559)	3000	206 (455)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

MEDIUM DUTY MARINE TRANSMISSION RATINGS (Continued)

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1200 rpm	@ 1600 rpm	@ 1800 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-514C SC	X9784C	1, 0 (14" only)	1.51, 2.00, 2.50 3.00 3.50	* 224 (300) 194 (260) 190 (255)	* 295 (395) 269 (360) 254 (340)	* 328 (440) 305 (410) 283 (380)	2500	524 (1155)
MG-514C DC	X9786C	1, 4 (14" only)	4.13, 4.50, 5.12 6.04	190 (255) 181 (243)	261 (350) 242 (325)	298 (400) 272 (365)	2500	658 (1450)
MG-5135 SC **	PX-11590	1, 0	1.00, 1.28, 1.48, 1.73, 2.04, 2.57 2.90	335 (449) 310 (416)	447 (599) 413 (554)	485 (650) 448 (601)	2800	300 (661)
MG-5135 A	PX-11380	1, 0	1.10, 1.25, 1.53, 1.79, 2.00, 2.52	335 (449)	447 (599)	485 (650)	2800	280 (617)
MG-5145 SC	PX-10885	1, 0	1.20, 1.33, 1.48, 1.75, 1.96 2.50	426 (571) 358 (480)	567 (760) 478 (641)	596 (800) 522 (700)	2500	325 (716)
MG-5145 A	PX-10830	1, 0	1.26, 1.48, 1.75, 1.96 2.50	426 (571) 358 (480)	567 (760) 478 (641)	596 (800) 522 (700)	2500	333 (734)
MG-516 DC	XA-7470-H	1, 0 (14" only)	3.07, 3.50, 4.04, 4.52, 5.05 6.00	298 (400) 283 (380)	397 (532) 365 (490)	447 (600) 406 (544)	2500	717 (1580)
MG-5170 DC	1017463-A	1, 0	4.06, 4.50, 5.03, 5.95 6.53, 6.95	350 (470) 306 (410)	475 (637) 408 (547)	537 (720) 459 (615)	2500	759 (1670)
MG-520-1HP	XA-7255-B	0	4.49, 5.00, 6,11 7.00 7.42	457 (613) 451 (605) 421 (565)	609 (817) 580 (778) 542 (727)	685 (918) 645 (865) 603 (809)	2500	1559 (3436)
MG-5202 SC	1016103-C	1, 0	1.17, 1.33, 1.53, 1.76, 2.03 2.48, 2.92, 3.48	420 (563)	540 (724)	600 (805)	2500	587 (1292)
MG-5222 DC	1020391	1, 0	4.03, 4.59, 5.04, 6.10 6.55, 6.96	420 (563)	540 (724)	600 (805)	2500	1050 (2313)
MG-5203 SC	1016249-A	1, 0	1.17, 1.33, 1.53, 1.76, 2.03 2.48, 2.92, 3.48	420 (563)	540 (724)	600 (805)	2500	409 (900)
MG-5204 SC	1016250-B	1, 0	1.17, 1.33, 1.53, 1.76, 2.03, 2.48, 2.92 3.48	468 (628) 420 (563)	633 (849) 540 (724)	716 (960) 600 (805)	2750 (2500-1.17:1)	409 (900)
MG-5225 DC	1020390	1, 0	4.03, 4.59, 5.04, 6.10	477 (640)	645 (863)	727 (975)	2500	1050 (2313)
MG-5301 DC	1017020-B	0, 00	3.35, 4.06, 4.42, 4.96 5.96 6.39	683 (916) 648 (869) 561 (752)	882 (1183) 812 (1089) 722 (968)	982 (1317) 895 (1200) 802 (1075)	2400	1510 (3320)
MG-540****	X-9882-C	0 00, Ind.	1.71, 1.93, 2.58, 2.90 3.26 3.91 4.60 5.17 6.18 7.00 7.47	746 (1000) 666 (893) 597 (800) 732 (982) 662 (888) 636 (853) 519 (696) 492 (660)	924 (1239) 855 (1147) 776 (1041) 917 (1230) 847 (1136) 820 (1100) 681 (913) 651 (873)	999 (1340) 950 (1274)*** 866 (1161)*** 990 (1328)*** 941 (1262)*** 913 (1225)*** 762 (1022)*** 740 (992)***	1900 2100*** 2400*** 1900*** 2100*** 2400*** 2400*** 2400***	2019 (4450) 2105 (4640)
MG-5506	7-39150	0, 00 Ind.	4.03, 4.55, 4.96, 5.44 6.00	960 (1287) 867 (1163)	1280 (1716) 1156 (1550)	1440 (1931) 1300 (1743)	2000	2200 (4846)
MG-5600	1015239-A	0, 00 Ind.	2.53, 2.98, 3.51, 4.03, 5.04 6.04	1200 (1609) 1016 (1362)	1600 (2146) 1309 (1755)	1760 (2360) 1451 (1946)	2100	3132 (6890)
MG-6449 A	7-37423	1, 0	1.51, 1.73 2.07 2.44 2.95	519 (696) 462 (620) 404 (542) 326 (437)	680 (912) 565 (758) 494 (663) 435 (583)	741 (994) 617 (828) 537 (720) 489 (656)	2500	344 (757)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

* Requires 230 PSI coontrol pressure.
** Consult Twin Disc for availability of MG-5135 SC.
*** The max. speed is 1650 rpm if MG-540 - X9942A , SAE '00' is used with 21" rubber block drive.
**** Consult Twin Disc for MG-540 ratings when equipped with torsional input coupling.

MEDIUM DUTY MARINE TRANSMISSION RATINGS (Continued)

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1200 rpm	@ 1600 rpm	@ 1800 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-6557 SC	7-36626-A	1, 0	1.07, 1.30, 1.50, 1.66, 1.74, 1.97, 2.04	588 (789)	705 (946)	774 (1038)	2500	438 (964)
			2.45	516 (692)	688 (923)	774 (1038)		
			2.93	432 (580)	576 (773)	649 (870)		
MG-6557 DC	7-36891-A	1, 0	2.46, 3.03, 3.48	538 (721)	717 (961)	779 (1044)	2500	512 (1126)
			3.93	486 (652)	648 (869)	703 (943)		
			4.48	439 (589)	585 (785)	635 (851)		
MG-6557 A	7-36628-A	1, 0	1.29, 1.51, 1.74, 2.03	576 (772)	719 (964)	779 (1045)	2500	443 (975)
			2.48	493 (661)	657 (881)	739 (991)		
			2.92	427 (573)	570 (764)	641 (860)		
MG-6598 DC	7-39146	1, 0	2.46, 3.03, 3.48	575 (771)	717 (961)	779 (1045)	2500	512 (1126)
			3.93	534 (716)	652 (874)	709 (951)		
			4.29	498 (668)	609 (817)	662 (888)		
MG-6600 DC	7-36712-A	1, 0	3.30, 4.11	510 (684)	680 (912)	765 (1026)		
			4.68, 4.72	492 (660)	656 (880)	739 (990)	2500	794 (1747)
			5.22	430 (576)	573 (768)	645 (864)		
			6.05	380 (510)	507 (680)	571 (765)		
MG-6619 SC	7-36826-A	1, 0	1.06	615 (825)	818 (1096)	919 (1232)		
	7-37481	0	1.33, 1.53, 1.73, 2.03, 2.44	615 (825)	812 (1089)	883 (1183)	2500	534 (1175)
	P-71034B	00	2.72	557 (747)	744 (997)	836 (1121)		
			2.93	497 (666)	662 (888)	746 (1000)		
MG-6619 A	7-36781-A	1, 0	1.55, 1.72, 2.09, 2.42	575 (771)	767 (1028)	862 (1156)		
			2.73	554 (743)	739 (991)	831 (1115)	2500	544 (1197)
			2.95	512 (686)	682 (914)	768 (1029)		
MG-6620 A	7-38959	1, 0	1.55, 1.72, 2.09	618 (829)	792 (1062)	862 (1156)	2500	544 (1197)
			2.42	603 (809)	771 (1034)	862 (1156)		
			2.73	583 (782)	746 (1000)	832 (1116)		
MG-6650 SC	1018375-E	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	696 (933)	928 (1245)	1044 (1400)	2300	954 (2100)
MG-6690 SC	1020350-B	0, 00	1.51, 1.88, 2.03, 2.47	815 (1093)	1054 (1414)	1174 (1574)	2300	954 (2100)
			2.93	815 (1093)	1034 (1387)	1144 (1534)		
			3.21	815 (1093)	1018 (1365)	1119 (1501)		
MG-6848 SC	1019086-B	0, 00	1.51, 1.88, 2.03, 2.47, 2.58, 2.93	876 (1175)	1187 (1591)	1342 (1800)	2300	954 (2100)
			3.21	858 (1151)	1104 (1480)	1226 (1644)		
MG-6984 SC	7-37008	Ind.	1.18, 1.54, 2.06, 2.29, 2.52, 2.92	902 (1210)	1203 (1613)	1354 (1816)		
	7-37481	0	3.25	818 (1097)	1090 (1462)	1227 (1645)	2100	1192 (2628)
	P-71034B	00	3.43	616 (826)	821 (1101)	924 (1239)		
MG-6984 A	7-37028	Ind.	1.48, 1.97, 2.50, 2.79	923 (1238)	1230 (1650)	1384 (1856)		
	P-71093	0	2.93	887 (1189)	1182 (1585)	1330 (1783)	2100	909 (2000)
	P-71094	00						
MG-61242 SC	7-37017	Ind.	1.16, 1.52, 2.08, 2.47	1315 (1764)	1754 (2352)	1973 (2646)	2100	1050 (2310)
			2.96	1268 (1700)	1691 (2267)	1902 (2551)		
MG-61242 A	7-37046	Ind.	1.42, 2.07, 2.44	1315 (1764)	1754 (2352)	1973 (2646)	2100	1105 (2431)
			2.93	1263 (1694)	1685 (2259)	1896 (2542)		

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

CONTINUOUS DUTY MARINE TRANSMISSION RATINGS

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1800 rpm	@ 2100 rpm	@ 2400 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-340	IT40TD0002	5, BW	1.45	18 (24)	21 (28)	24 (32)	4500	9 (20)
			2.00	13 (17)	15 (20)	18 (24)		
			2.60	9 (12)	11 (15)	13 (17)		
MG-360	IT60TD0002	5, BW	1.52	23 (31)	26 (35)	30 (40)	5000	14 (31)
			2.00	21 (28)	24 (32)	28 (38)		
			2.50	17 (23)	20 (27)	23 (31)		
			2.94	14 (19)	16 (22)	19 (26)		
MG-5005 A	IT345ATD0001	3, 4, 5	1.54	35 (47)	41 (55)	47 (63)	4500	25 (55)
			2.00	35 (47)	41 (55)	47 (63)		
			2.47	26 (35)	30 (40)	34 (46)		
MG-5012 SC	IT93TD0001	3, 4, BW	1.51	74 (99)	86 (115)	98 (131)	4500	53 (117)
			2.09	64 (86)	75 (100)	85 (115)		
			2.40	58 (77)	67 (90)	77 (103)		
			2.77	50 (67)	58 (78)	67 (89)		
MG-5015 A	IT545ATD0002	3, 4, BW	1.51	67 (90)	72 (97)	89 (119)	4500	36 (79)
			2.09	55 (74)	65 (87)	74 (99)		
			2.40	48 (64)	56 (75)	64 (86)		
MG-5020 SC	IT170TD0001	3, 4, BW	1.50, 2.04	104 (139)	121 (162)	138 (185)	4000	75 (165)
			2.50	83 (111)	97 (130)	111 (148)		
			2.94	72 (96)	84 (112)	96 (128)		
MG-5055 A	IT880ATD0002	3, 4, BW	1.53, 2.08	105 (141)	123 (165)	140 (188)	4000	54 (119)
			2.60	60 (82)	70 (95)	80 (109)		
MG-5010 DC	PX-9400	3, 4, BW	3.00	70 (94)	82 (110)	93 (125)	4000	75 (165)
			3.52	61 (82)	72 (96)	82 (110)		
			4.00	55 (74)	65 (87)	74 (100)		
MG-5011 SC	PX-10270	3, 4, BW	1.11, 1.50, 2.00	67 (90)	75 (100)	84 (112)	4400	49 (109)
			2.44	52 (70)	67 (90)	76 (102)		
MG-5011 A	PX-9999	3, 4, BW	1.44, 1.90	67 (90)	75 (100)	84 (112)	4400	49 (109)
			2.39	60 (81)	67 (90)	76 (102)		
MG-5011 IV	PX-10290	3, 4, BW	1.14, 1.54, 2.06	67 (90)	75 (100)	84 (112)	4400	77 (170)
			2.51	59 (80)	67 (90)	76 (102)		
MG-5050 SC	PX-8575/A	1, 2, 3 SPEC. #3	1.00, 1.23, 1.53, 1.71, 2.04, 2.45	104 (140)	116 (156)	129 (173)	3300	86 (189)
			3.00	93 (125)	108 (145)	124 (166)		
MG-5050 A	PX-8580/A	1, 2, 3 SPEC. #3	1.12, 1.26, 1.50, 1.80, 2.04, 2.50	104 (140)	116 (156)	129 (173)	3300	80 (176)
MG-506-1	XA7022A	1, 2, 3	1.09, 1.50, 1.97	94 (126)	104 (140)	112 (150)	3000	100 (220)
	XA7048A	1, 2, 3	2.50, 2.96	94 (126)	104 (140)	112 (150)	3000	102 (224)
MG-5061 SC	PX-11650/A	1, 2, 3 SPEC. #3	1.00, 1.15, 1.48, 1.77, 2.00, 2.43	123 (165)	142 (190)	162 (217)	3300	98 (215)
			3.00	115 (154)	134 (179)	153 (205)		
MG-5061 A	PX-11640/A	1, 2, 3 SPEC. #3	1.13, 1.54, 1.75, 2.00	123 (165)	142 (190)	162 (217)	3300	95 (210)
			2.47	115 (154)	134 (179)	153 (205)		
MG-5065 SC	PX-11480	1, 2, 3 SPEC. #3	1.08, 1.26, 1.47, 1.72, 2.04, 2.43	199 (267)	232 (311)	265 (355)	3300	111 (244)
MG-5065 A	PX-11165	1, 2, 3 SPEC. #3	1.08, 1.26, 1.47, 1.72, 2.04, 2.43	199 (267)	232 (311)	265 (355)	3300	111 (244)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

CONTINUOUS DUTY MARINE TRANSMISSION RATINGS (Continued)

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1800 rpm	@ 2100 rpm	@ 2400 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-5075 SC	PX-10680/A	1, 2, 3 SPEC. #3	1.06, 1.33, 1.53, 1.77, 2.05 2.53, 2.88	186 (250)	209 (280)	227 (305)	3200	122 (268)
MG-5075 A	PX-10700/A	1, 2, 3 SPEC. #3	1.06, 1.33, 1.53, 1.77, 2.05 2.53, 2.88	186 (250)	209 (280)	227 (305)	3200	122 (268)
MG-5085 SC	PX-9260-B/C	1, 2, 3 SPEC. #3	1.05, 1.22, 1.42, 1.76, 1.96 2.33	227 (305) 205 (275)	254 (340) 231 (310)	276 (370) 254 (340)	3200	120 (265)
MG-5085 A	PX-9360-B/C	1, 2, 3 SPEC. #3	1.05, 1.22, 1.47, 1.72, 2.04 2.43	227 (305) 205 (275)	254 (340) 231 (310)	276 (370) 254 (340)	3200	123 (270)
MG-5082 SC	PX-11250-A	1, 2	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	262 (351)	292 (392)	320 (429)	3200	135 (298)
MG-5082 A	PX-11040-B	1, 2	1.06, 1.33, 1.53, 1.77, 2.05, 2.53 2.88	262 (351)	292 (392)	320 (429)	3200	135 (298)
MG-509	X9816F	1, 2	1.45, 2.00 2.48 2.95 3.39	175 (235) 170 (228) 170 (228) 125 (170)	204 (273) 193 (260) 186 (250) 148 (198)	230 (310)* 220 (295)* 213 (285)* 165 (220)*	3000*	259 (572)
	X9835	1, 2	3.83, 4.50 4.95	175 (235) 134 (180)	204 (273) 157 (210)	230 (310)* 179 (240)*	3000*	323 (712)
MG-5091 SC	PX-10016	1, 2	1.17, 1.45, 1.71, 2.04, 2.45, 2.95 3.33	242 (325) 205 (275)	280 (375) 239 (320)	315 (422) 271 (364)	3000	220 (485)
MG-5091 DC	1002155	1, 2	3.83, 4.50 5.05	242 (325) 205 (275)	280 (375) 239 (320)	315 (422) 271 (364)	3000	297 (655)
MG-5090 A	PX-10015	1, 2	1.45, 1.73, 1.96, 2.43	239 (320)	276 (370)	313 (420)	3000	216 (475)
MG-5114 SC	PX-9785B	1	0.93, 1.02, 1.12, 1.50, 1.74 2.04, 2.54 3.00	358 (480) 358 (480) 328 (440)	410 (550) 410 (550) 372 (500)	460 (617) 460 (617) 418 (561)	2800/.93:1 3000 for others	203 (447)
MG-5114 SC-HD	PX-11962	1	0.93, 1.02, 1.12, 1.50, 1.74, 2.04 2.54 3.00	358 (480) 358 (480) 328 (440)	410 (550) 410 (550) 372 (500)	460 (617) 460 (617) 418 (561)	2800/.93:1 3000 for others	270 (595)
MG-5114 DC	PX-10250A	1	3.28, 3.43, 4.17, 4.59, 4.86	347 (465)	403 (540)	427 (573)	3000	368 (810)
MG-5114 A	PX-11915	1, 2	1.03, 1.20, 1.48, 1.75, 1.92, 2.04 2.50	347 (465) 321 (430)	387 (519) 365 (490)	435 (583) 411 (551)	3000	206 (455)
				@ 1200 rpm	**@ 1600 rpm**	**@ 1800 rpm**		
MG-514C SC	X9784C	1, 0 (14" only)	1.51, 2.00, 2.50, 3.00, 3.50	190 (255)	254 (340)	283 (380)	2500	524 (1155)
MG-514C DC	X9786C	1, 0 (14" only)	4.13, 4.50, 5.16 6.00	190 (255) 181 (243)	254 (340) 242 (325)	283 (380) 272 (365)	2500	658 (1450)
MG-5135 SC **	PX-11590	1, 0	1.00, 1.28, 1.48, 1.73, 2.04, 2.57 2.90	308 (413) 282 (378)	410 (550) 376 (504)	445 (597) 408 (547)	2800	300 (661)
MG-5135 A	PX-11380	1, 0	1.10, 1.25, 1.53, 1.79, 2.00, 2.52	308 (413)	410 (550)	445 (597)	2800	280 (617)
MG-5145 SC	PX-10885	1, 0	1.20, 1.33, 1.48, 1.75, 1.96 2.50	391 (524) 331 (444)	522 (700) 442 (593)	552 (740) 485 (650)	2500	325 (716)
MG-5145 A	PX-10830	1, 0	1.26, 1.48, 1.75, 1.96 2.50	391 (524) 331 (444)	522 (700) 442 (593)	552 (740) 485 (650)	2500	333 (734)
MG-516 DC	XA-7470-H	1, 0 (14" only)	3.07, 3.50, 4.04, 4.52, 5.05 6.00	298 (400) 283 (380)	397 (532) 365 (490)	447 (600) 406 (544)	2500	717 (1580)
MG-5170 DC	1017463-A	1, 0	4.06, 4.50, 5.03, 5.95 6.53, 6.95	336 (450) 306 (410)	447 (600) 408 (547)	507 (680) 459 (615)	2500	759 (1670)

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

* A6911 driving ring has 2150 rpm maximum speed.
** Consult Twin Disc for availability of MG-5135 SC.

CONTINUOUS DUTY MARINE TRANSMISSION RATINGS (Continued)

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1200 rpm	@ 1600 rpm	@ 1800 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-520-1HP	XA-7255-B	0	4.49, 5.00, 6,11, 7.00	426 (571)	567 (760)	639 (857)	2500	1559 (3436)
			7.42	417 (559)	537 (720)	597 (801)		
MG-5202 SC	1016103-C	1, 0	1.17, 1.33, 1.53, 1.76, 2.03, 2.48, 2.92	420 (563)	540 (724)	600 (805)	2500	587 (1292
			3.48					
MG-5222 DC	1020391	1, 0	4.03, 4.59, 5.04, 6.10	420 (563)	540 (724)	600 (805)	2500	1050 (2313)
			6.55, 6.96					
MG-5203 SC	1016249-A	1, 0	1.17, 1.33, 1.53, 1.76, 2.03, 2.48, 2.92	420 (563)	540 (724)	600 (805)	2500	409 (900)
			3.48					
MG-5204 SC	1016250-B	1, 0	1.17, 1.33, 1.53, 1.76, 2.03, 2.48, 2.92	468 (628)	633 (849)	716 (960)	2750	409 (900)
			3.48	420 (563)	540 (724)	600 (805)	(2500-1.17:1)	
MG-5225 DC	1020390	1, 0	4.03, 4.59, 5.04, 6.10	468 (628)	633 (849)	716 (960)	2500	1050 (2313)
MG-5301 DC	1017020-B	0, 00	3.35, 4.06, 4.42, 4.96	683 (916)	882 (1183)	982 (1317)	2400	1510 (3320)
			5.96	648 (869)	812 (1089)	895 (1200)		
			6.39	561 (752)	722 (968)	802 (1075)		
MG-540**	X-9882-C	0	1.71, 1.93, 2.58, 2.90	708 (950)	865 (1160)	940 (1260)	1900	2019 (4450)
		00, Ind.	3.26	634 (850)	805 (1080)	895 (1200)	2100*	2105 (4640)
			3.91	556 (745)	720 (965)	802 (1075)	2400*	
			4.60	679 (910)	850 (1140)	932 (1250)	1900*	
			5.17	634 (850)	794 (1065)	895 (1200)	2100*	
			6.18	634 (850)	794 (1065)	895 (1200)	2400*	
			7.00	496 (665)	664 (890)	746 (1000)	2400*	
			7.47	468 (627)	634 (850)	738 (990)	2400*	
MG-5506	7-39150	0, 00	4.03, 4.55, 4.96, 5.44	940 (1261)	1250 (1676)	1406 (1885)	2000	2200 (4846)
		Ind.	6.00	850 (1140)	1125 (1509)	1270 (1703)		
MG-5600	1015239-A	0, 00	2.53, 2.98, 3.51, 4.03, 5.04	1200 (1608)	1600 (2146)	1760 (2360)	2100	3132 (6890)
		Ind.	6.04	985 (1321)	1275 (1710)	1415 (1898)		
MG-5600DR	1018100	Ind.	6.02	1151 (1543)	1564 (2097)	1760 (2360)		
			6.56	1038 (1392)	1458 (1955)	1641 (2200)	2100	3175 (7000)
			7.01	964 (1293)	1352 (1813)	1566 (2100)		
MG-6449 A	7-37423	1, 0	1.51, 1.73	512 (686)	640 (858)	695 (932)		
			2.07	433 (580)	530 (710)	574 (770)	2500	344 (757)
			2.44	378 (507)	462 (620)	502 (673)		
			2.95	317 (425)	413 (554)	448 (601)		
MG-6557 SC	7-36626-A	1, 0	1.07, 1.30, 1.50, 1.66, 1.74 , 1.97	547 (734)	660 (885)	717 (961)	2500	438 (964)
			2.04, 2.45	547 (734)	660 (885)	717 (961)		
			2.93	423 (567)	564 (756)	635 (851)		
MG-6557 DC	7-36891-A	1, 0	2.46, 3.03, 3.48	503 (674)	670 (899)	728 (976)	2500	512 (1126)
			3.93	454 (609)	606 (812)	657 (881)		
			4.48	411 (551)	547 (734)	594 (796)		
MG-6557 A	7-36628-A	1, 0	1.29, 1.51, 1.74, 2.03	547 (734)	676 (907)	728 (976)	2500	443 (975)
			2.48	493 (661)	657 (881)	728 (976)		
			2.92	427 (573)	570 (764)	641 (860)		
MG-6598 DC	7-39146	1, 0	2.46, 3.03, 3.48	549 (736)	670 (898)	729 (978)	2500	512 (1126)
			3.93	499 (669)	610 (818)	663 (889)		
			4.29	466 (625)	570 (764)	619 (830)		
MG-6600 DC	7-36712-A	1, 0	3.30, 4.11	477 (640)	636 (853)	716 (960)	2500	794 (1747)
			4.68, 4.72	467 (627)	623 (836)	701 (940)		
			5.22	400 (537)	533 (716)	600 (805)		
			6.05	355 (475)	473 (634)	532 (713)		

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
Ratings shown are in SAE Horsepower (HP). Metric Horsepower equals SAE Horsepower (HP) times 1.014.
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

* The max. speed is 1650 rpm if MG-540 - X9942A, SAE '00' is used with 21" rubber block drive.
** Consult Twin Disc for MG-540 ratings when equipped with torsional input coupling.

CONTINUOUS DUTY MARINE TRANSMISSION RATINGS (Continued)

Model	Drawing Number	SAE Hsg.	Ratios	KILOWATTS (HORSEPOWER) @ 1200 rpm	@ 1600 rpm	@ 1800 rpm	Maximum Speed (rpm)	Dry Weight kg (lb)
MG-6619 SC	7-36826-A	1, 0	1.06	597 (800)	796 (1067)	895 (1200)	2500	534 (1175)
			1.33, 1.53, 1.73, 2.03, 2.44	597 (800)	753 (1010)	820 (1100)		
			2.72	544 (729)	725 (972)	815 (1093)		
			2.93	485 (650)	646 (866)	727 (974)		
MG-6619 A	7-36781-A	1, 0	1.55, 1.72, 2.09, 2.42	547 (733)	729 (978)	820 (1100)		
			2.73	524 (702)	698 (936)	786 (1053)	2500	544 (1197)
			2.95	499 (669)	665 (891)	748 (1003)		
MG-6620 A	7-38959	1, 0	1.55, 1.72, 2.09	578 (775)	741 (994)	821 (1101)		
			2.42	562 (754)	730 (979)	821 (1101)	2500	544 (1197)
			2.73	545 (731)	698 (936)	786 (1054)		
MG-6650 SC	1018375-E	0, 00	1.51, 1.88, 2.03, 2.47, 2.93, 3.21	683 (916)	911 (1222)	1025 (1375)	2300	954 (2100)
MG-6690 SC	1020350-B	0, 00	1.51, 1.88, 2.03, 2.47	792 (1062)	1017 (1363)	1129 (1514)	2300	954 (2100)
			2.93	792 (1062)	977 (1310)	1069 (1434)		
			3.21	774 (1038)	943 (1265)	1028 (1379)		
MG-6848 SC	1019086-B	0, 00	1.51, 1.88, 2.03, 2.47, 2.58, 2.93	833 (1117)	1111 (1490)	1250 (1676)	2300	954 (2100)
			3.21	833 (1117)	1074 (1440)	1194 (1601)		
MG-6984 SC	7-37008	Ind.	1.18, 1.54, 2.06, 2.29, 2.52, 2.92	884 (1185)	1178 (1580)	1327 (1780)		
	7-37481	0	3.25	800 (1073)	1066 (1430)	1200 (1610)	2100	1192 (2628)
	P-71034B	00	3.43	602 (807)	802 (1076)	902 (1210)		
MG-6984 A	7-37028	Ind.	1.48, 1.97, 2.50, 2.79	905 (1213)	1206 (1617)	1357 (1820)		
	P-71093	0	2.93	867 (1163)	1157 (1551)	1305 (1750)	2100	909 (2000)
	P-71094	00						
MG-61242 SC	7-37017	Ind.	1.16, 1.52	1250 (1676)	1667 (2235)	1875 (2515)	2100	1050 (2310)
			2.08, 2.47, 2.96	1173 (1573)	1512 (2028)	1760 (2360)		
MG-61242 A	7-37046	Ind.	1.42, 2.07	1239 (1661)	1651 (2214)	1858 (2491)		
			2.44	1189 (1594)	1585 (2125)	1782 (2390)	2100	1105 (2431)
			2.93	1173 (1573)	1565 (2098)	1760 (2360)		

Important - See rating definitions, application information, and torsional compatibility notices on pages 1 and 2.
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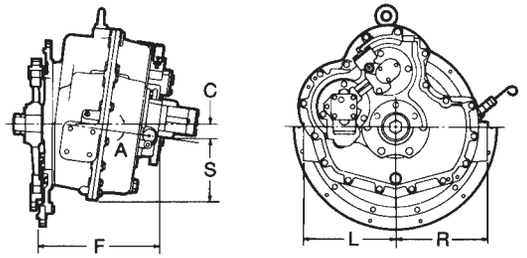
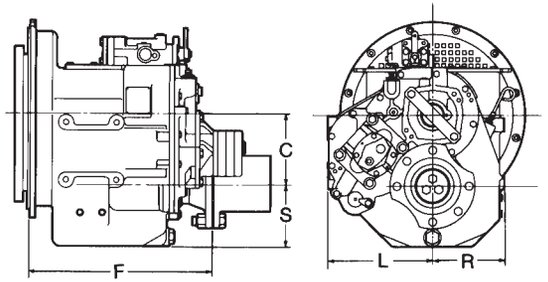
Dry weights are approximate and include flywheel housing adapter and flexible input coupling.

TWIN DISC MG-300, MG-500, MG-5000 and MGX-5000 SERIES CONFIGURATIONS

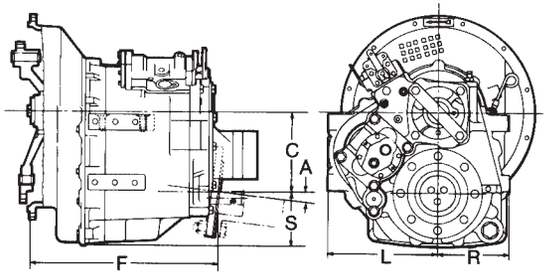
Ⓐ **Coaxial**



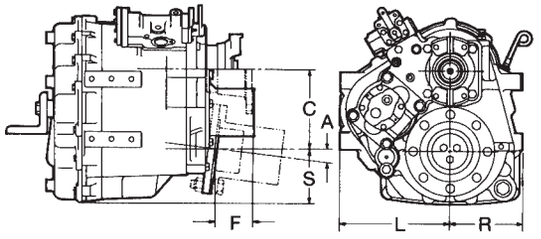
Ⓑ **Vertical Offset**



Ⓒ **Down Angle**



Ⓓ **Remote V-drive**



TWIN DISC MGX-5000 (QuickShift™) SERIES DIMENSIONAL DATA

Model	Assembly	Config.	C (offset) in	(mm)	S (sump) in	(mm)	F (length) in	(mm)	L (mtg. pad) in	(mm)	R (mtg. pad) in	(mm)	A deg.	W (weight) lb	(kg)
MGX-5114 SC	PX-11790	B	7.47	(190)	6.33	(161)	19.00	(483)	11.00	(279)	7.50	(191)	–	447	(203)
MGX-5114 A	PX-11730	C	8.00	(203)	5.30	(135)	18.80	(479)	11.00	(279)	8.00	(203)	7	455	(206)
MGX-5114 RV	PX-11850	D	8.00	(203)	5.25	(133)	2.51	(64)	11.00	(279)	8.00	(203)	7	435	(198)
MGX-5114 IV	PX-11820	D*	16.26	(413)	5.75	(146)	2.43	(62)	7.50	(191)	11.50	(292)	14	595	(270)
MGX-5135 SC **	PX-11840	B	7.87	(200)	7.48	(190)	21.06	(535)	12.01	(305)	12.01	(305)	–	661	(300)
MGX-5135 A	PX-11740	C	9.09	(231)	6.28	(160)	20.48	(520)	12.01	(305)	12.01	(305)	10	617	(280)
MGX-5135 RV	PX-11945	D	9.09	(231)	6.28	(160)	3.70	(94)	12.01	(305)	12.01	(305)	10	568	(258)
MGX-5145 SC	PX-11830	B	8.12	(206)	7.04	(179)	21.05	(535)	12.01	(305)	12.01	(305)	–	716	(325)
MGX-5145 A	PX-11755	C	10.40	(264)	6.13	(156)	20.33	(516)	12.01	(305)	12.01	(305)	10	734	(333)
MGX-5145 RV	PX-11860	D	10.40	(264)	6.13	(156)	4.93	(125)	12.01	(305)	12.01	(305)	10	650	(295)
MGX-5147 SC	PX-12010	B	8.12	(206)	7.04	(179)	21.05	(535)	12.01	(305)	12.01	(305)	–	716	(325)
MGX-5147 A	PX-11925	C	10.40	(264)	6.13	(156)	20.33	(516)	12.01	(305)	12.01	(305)	10	734	(333)
MGX-5147 RV	PX-11930	D	10.40	(264)	6.13	(156)	4.93	(125)	12.01	(305)	12.01	(305)	10	650	(295)

TWIN DISC MG-300, MG-500, MG-5000 SERIES CONFIGURATIONS

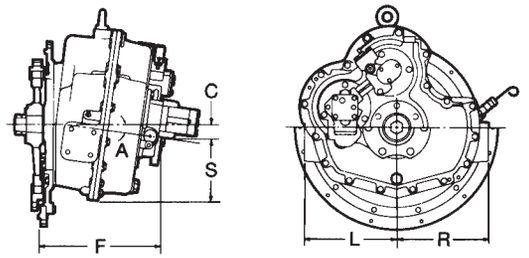
Model	Assembly	Config.	C (offset) in	(mm)	S (sump) in	(mm)	F (length) in	(mm)	L (mtg. pad) in	(mm)	R (mtg. pad) in	(mm)	A deg.	W (weight) lb	(kg)
MG-340	IT40TD0002	B	2.66	(68)	2.46	(63)	7.17	(182)	–	–	2.95	(75)	–	20	(9)
MG-360	IT60TD0002	B	3.10	(79)	3.56	(83)	9.65	(245)	–	–	–	–	–	31	(14)
MG-5005 A	IT345ATD0001	C	4.37	(111)	3.19	(81)	8.82	(224)	–	–	–	–	8	55	(25)
MG-5012 SC	IT93TD0001	B	4.35	(110)	4.92	(125)	10.14	(258)	6.61	(168)	6.61	(168)	–	117	(53)
MG-5015 A	IT545ATD0002	C	4.96	(126)	4.33	(110)	10.31	(262)	6.61	(168)	6.61	(168)	8	79	(36)
MG-5020 SC	IT170TD0001	B	5.18	(132)	5.17	(131)	10.53	(268)	7.60	(193)	7.60	(193)	–	165	(75)
MG-5055 A	IT880ATD0002	C	6.10	(155)	4.25	(108)	10.51	(267)	7.60	(193)	7.60	(193)	10	119	(54)
MG-5010 DC	PX-9400	B	6.56	(167)	6.39	(162)	9.80	(249)	7.25	(184)	6.95	(177)	–	165	(75)
MG-5011 SC	PX-10270	B	4.10	(104)	3.50	(89)	8.59	(218)	6.75	(171)	5.00	(127)	–	109	(49)
MG-5011 A	PX-9999	C	4.65	(118)	3.66	(93)	7.62	(194)	6.75	(171)	5.00	(127)	10	104	(47)
MG-5011 IV	PX-10290	D*	10.09	(256)	–	–	–	–	6.75	(171)	5.00	(127)	15	170	(77)
MG-5050 SC	PX-8575/A	B	5.28	(134)	4.69	(119)	12.78	(325)	8.13	(207)	5.85	(149)	–	189	(86)
MG-5050 A	PX-8580/A	C	5.52	(140)	3.68	(93)	12.10	(307)	8.13	(207)	5.85	(149)	10	176	(80)
MG-5050 V	PX-8760	D	5.52	(140)	3.68	(93)	4.61	(117)	8.13	(207)	5.85	(149)	10	160	(73)
MG-506-1	XA7022A	A	coax	(0)	7.90	(201)	10.03	(255)	7.12	(181)	7.12	(181)	–	220	(100)
MG-506-1	XA7048A	A	coax	(0)	7.90	(201)	10.42	(265)	7.12	(181)	7.12	(181)	–	227	(103)
MG-5061 SC	PX-11650/A	B	5.66	(144)	4.84	(123)	13.18	(335)	8.40	(213)	6.15	(156)	–	215	(98)
MG-5061 A	PX-11640/A	C	5.75	(146)	4.21	(107)	12.53	(318)	8.40	(213)	6.16	(156)	7	210	(95)
MG-5061 V	PX-8735	D	5.75	(146)	4.21	(107)	2.78	(71)	8.40	(213)	6.16	(156)	7	190	(86)
MG-5062 V	PX-11660/A	D*	13.03	(331)	3.97	(101)	4.00	(102)	8.40	(213)	6.15	(156)	15	312	(142)
MG-5065 SC	PX-11480	B	6.00	(152)	5.22	(133)	13.30	(338)	10.00	(254)	6.50	(165)	-	244	(111)
MG-5065 A	PX-11165	C	6.69	(170)	4.84	(123)	12.97	(329)	10.00	(254)	6.50	(165)	7	244	(111)
MG-5075 SC	PX-11876	A	0.59	(15)	7.00	(178)	14.11	(358)	10.00	(254)	10.00	(254)	–	268	(122)
MG-5075 SC	PX-10680/A	A	0.59	(15)	7.00	(178)	14.11	(358)	10.00	(254)	10.00	(254)	–	268	(122)
MG-5075 A	PX-10700/A	A	1.91	(48)	7.00	(178)	13.80	(350)	10.00	(254)	10.00	(254)	7	268	(122)
MG-5075 IV **	PX-11530	D*	14.70	(373)	3.93	(100)	2.34	(59)	10.00	(254)	10.00	(254)	15	TBA	
MG-5082 SC	PX-11250-A	A	0.59	(15)	7.00	(178)	15.16	(385)	10.00	(254)	10.00	(254)	–	298	(135)
MG-5082 A	PX-11040-B	A	2.12	(54)	7.00	(178)	15.48	(393)	10.00	(254)	10.00	(254)	7	298	(135)
MG-5085 SC	PX-9260-B/C	B	6.00	(152)	5.25	(133)	14.67	(373)	10.00	(254)	6.50	(165)	–	265	(120)
MG-5085 A	PX-9360-B/C	C	6.69	(170)	4.84	(123)	14.69	(373)	10.00	(254)	6.50	(165)	7	270	(123)
MG-509	X9816F	B	6.82	(173)	5.85	(149)	15.62	(397)	10.25	(260)	10.25	(260)	–	572	(259)
MG-509	X9835	B	9.49	(241)	9.40	(240)	17.38	(441)	11.12	(282)	11.12	(282)	–	712	(323)
MG-5091 SC	PX-10016	B	6.82	(173)	6.22	(158)	16.59	(421)	10.25	(260)	6.94	(176)	–	485	(220)
MG-5091 DC	1002155	B	9.49	(241)	9.60	(244)	18.09	(459)	11.12	(282)	11.12	(282)	–	655	(297)
MG-5090 A	PX-10015	C	7.30	(185)	5.05	(128)	17.07	(434)	10.25	(260)	7.00	(178)	7	475	(215)

*Integral V-Drive is closed coupled to engine housing/flywheel.
** Consult Twin Disc for availability of new models.
— Dimensions may vary with housing adapter or output flange.

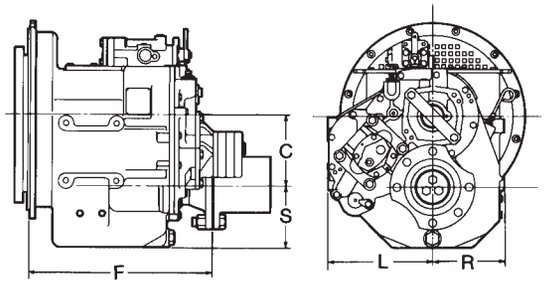
— Use certified drawings for installation.
— Dry weights are approximate and vary by input and ratio.
— Specifications are subject to change without notice.

TWIN DISC MG-300, MG-500 and MG-5000 SERIES CONFIGURATIONS (Continued)

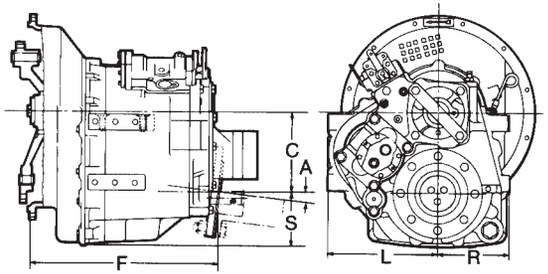
Ⓐ **Coaxial**



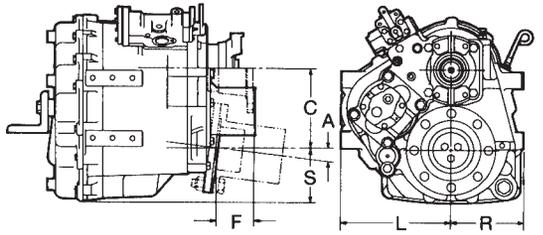
Ⓑ **Vertical Offset**



Ⓒ **Down Angle**



Ⓓ **Remote V-drive**



TWIN DISC MG-300, MG-500, MG-5000 SERIES CONFIGURATIONS (Continued)

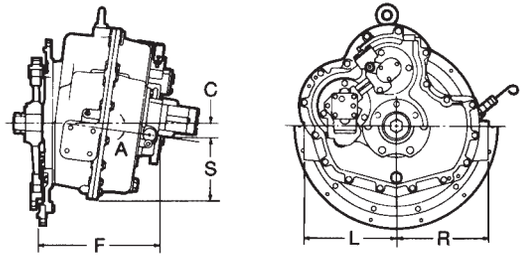
Model	Assembly	Config.	C (offset) in	C (offset) (mm)	S (sump) in	S (sump) (mm)	F (length) in	F (length) (mm)	L (mtg. pad) in	L (mtg. pad) (mm)	R (mtg. pad) in	R (mtg. pad) (mm)	A deg.	W (weight) lb	W (weight) (kg)
MG-5114 SC	PX-9785B	B	7.47	(190)	6.33	(161)	19.00	(483)	11.00	(279)	7.50	(191)	–	447	(203)
MG-5114 SC-HD	PX-11962	B	7.47	(190)	6.33	(161)	19.00	(483)	11.00	(279)	11.00	(279)	–	595	(270)
MG-5114 DC	PX-10250A	B	10.90	(277)	9.85	(250)	19.03	(483)	11.25	(286)	11.25	(286)	–	800	(364)
MG-5114 A	PX-11915	C	8.00	(203)	5.30	(133)	18.80	(479)	11.00	(279)	8.00	(203)	7	455	(206)
MG-5114 RV	PX-9830A	D	8.00	(203)	5.25	(133)	2.51	(64)	11.00	(279)	8.00	(203)	7	435	(198)
MG-5114 IV	PX-11920	D*	16.26	(413)	5.75	(146)	2.43	(62)	7.50	(191)	11.50	(292)	14	595	(270)
MG-514C SC	X9784C	B	9.32	(237)	9.77	(248)	19.51	(496)	14.75	(375)	12.75	(324)	–	1155	(524)
MG-514C DC	X9786C	B	13.29	(338)	12.77	(324)	22.14	(562)	14.00	(356)	14.00	(356)	–	1450	(658)
MG-5135 SC **	PX-11590	B	7.87	(200)	7.48	(190)	21.06	(535)	12.01	(305)	12.01	(305)	–	661	(300)
MG-5135 A	PX-11380	C	9.09	(231)	6.28	(160)	20.48	(520)	12.01	(305)	12.01	(305)	10	617	(280)
MG-5135 RV	PX-11945	D	9.09	(231)	6.28	(160)	3.70	(94)	12.01	(305)	12.01	(305)	10	568	(258)
MG-5145 SC	PX-10885	B	8.12	(206)	7.04	(179)	21.05	(535)	12.01	(305)	12.01	(305)	–	716	(325)
MG-5145 A	PX-10830	C	10.40	(264)	6.13	(156)	20.33	(516)	12.01	(305)	12.01	(305)	10	734	(333)
MG-5145 RV	PX-10880	D	10.40	(264)	6.13	(156)	4.93	(125)	12.01	(305)	12.01	(305)	10	650	(295)
MG-516 DC	XA-7470-H	B	13.29	(338)	12.77	(324)	20.59	(523)	14.00	(356)	14.00	(356)	–	1580	(717)
MG-5170 DC	1017463-A	B	15.15	(385)	14.23	(361)	22.55	(573)	15.00	(381)	15.00	(381)	–	1670	(759)
MG-520-1HP	XA-7255-B	B	16.44	(418)	16.55	(420)	30.86	(784)	16.00	(406)	16.00	(406)	–	3436	(1560)
MG-5202 SC	1016103-C	B	9.75	(248)	8.75	(222)	23.45	(595)	14.75	(375)	10.50	(267)	–	1275	(580)
MG-5222 DC	1020391	B	15.75	(400)	15.13	(384)	25.08	(637)	16.00	(406)	16.00	(406)	–	2313	(1050)
MG-5203 SC	1016249-A	B	9.75	(248)	8.75	(222)	23.43	(595)	14.75	(375)	10.50	(267)	–	900	(409)
MG-5204 SC	1016250-B	B	9.75	(248)	8.75	(222)	23.43	(595)	14.75	(375)	10.50	(267)	–	900	(409)
MG-5225 DC	1020390	B	15.75	(400)	15.13	(384)	25.08	(637)	16.00	(406)	16.00	(406)	–	2313	(1050)
MG-5301 DC	1017020-B	B	17.32	(440)	16.54	(420)	29.83	(758)	17.32	(440)	17.32	(440)	–	3320	(1510)
MG-540	X9882-C	B	8.08	(205)	13.45	(342)	36.47	(926)	16.00	(406)	16.00	(406)	–	4450	(2019)
MG-5506	7-39150	B	19.29	(490)	19.29	(490)	39.17	(995)	20.08	(510)	20.08	(510)	–	4846	(2200)
MG-5600	1015239-A	B	21.65	(550)	20.67	(525)	40.39	(1026)	20.67	(525)	20.67	(525)	–	6890	(3132)
MG-5600DR	1018100	B	8.85	(225)	20.67	(525)	50.59	(1285)	20.67	(525)	20.67	(525)	–	7000	(3175)

*Integral V-Drive is closed coupled to engine housing/flywheel.
** Consult Twin Disc for availability of new models.
— Dimensions may vary with housing adapter or output flange.

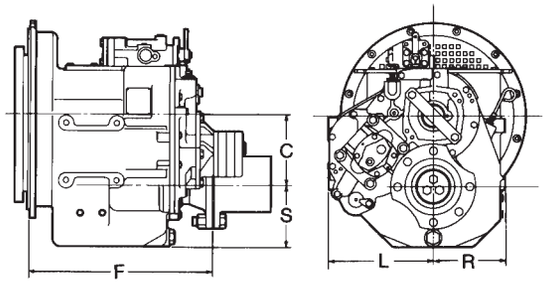
— Use certified drawings for installation.
— Dry weights are approximate and vary by input and ratio.
— Specifications are subject to change without notice.

TWIN DISC MG-6000 and MGX-6000 SERIES CONFIGURATIONS

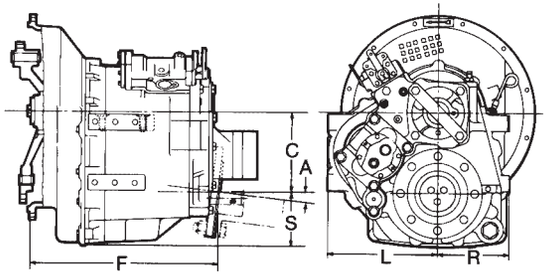
Ⓐ **Coaxial**



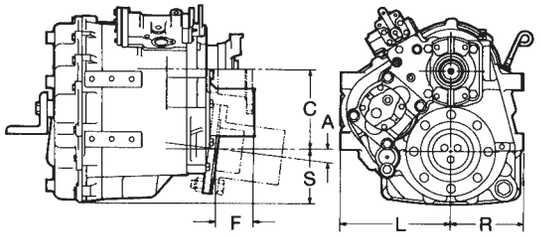
Ⓑ **Vertical Offset**



Ⓒ **Down Angle**



Ⓓ **Remote V-drive**



TWIN DISC MGX-6000 (Quickshift™) SERIES DIMENSIONAL DATA

Model	Assembly	Config.	C (offset) in	(mm)	S (sump) in	(mm)	F (length) in	(mm)	L (mtg. pad) in	(mm)	R (mtg. pad) in	(mm)	A deg.	W (weight) lb	(kg)
MGX-6650 SC *	1020608	B	12.21	(310)	11.81	(300)	30.13	(765)	17.32	(440)	17.32	(440)	–	2100	(954)
MGX-6690 SC *	1020674	B	12.21	(310)	11.81	(300)	30.13	(765)	17.32	(440)	17.32	(440)	–	2100	(954)
MGX-6848 SC *	1020643	B	12.21	(310)	11.81	(300)	30.13	(765)	17.32	(440)	17.32	(440)	–	2100	(954)

TWIN DISC MG-6000 SERIES DIMENSIONAL DATA

Model	Assembly	Config.	C (offset) in	(mm)	S (sump) in	(mm)	F (length) in	(mm)	L (mtg. pad) in	(mm)	R (mtg. pad) in	(mm)	A deg.	W (weight) lb	(kg)
MG-6449 A	7-37423	C	10.83	(275)	4.92	(125)	20.83	(529)	12.01	(305)	12.01	(305)	10	757	(344)
MG-6449 RV	7-37431-A	D	10.88	(276)	6.44	(1.64)	6.32	(161)	12.01	(305)	12.01	(305)	10	782	(355)
MG-6557 SC	7-36626-A	B	8.66	(220)	9.29	(236)	22.30	(567)	13.39	(340)	13.39	(340)	–	964	(438)
MG-6557 DC	7-36891-A	B	12.20	(310)	10.83	(275)	23.17	(589)	14.17	(360)	14.17	(360)	–	1126	(512)
MG-6557 A	7-36628-A	C	11.60	(295)	6.34	(161)	22.07	(561)	13.39	(340)	13.39	(340)	10	975	(443)
MG-6557 RV	7-36762-A	D	11.60	(295)	6.34	(161)	8.39	(213)	13.39	(340)	13.39	(340)	10	986	(448)
MG-6598 DC	7-39146	B	12.20	(310)	10.83	(275)	23.17	(589)	14.17	(360)	14.17	(360)	–	1126	(512)
MG-6600 DC	7-36712-A	B	14.17	(360)	14.96	(380)	30.87	(784)	14.76	(375)	14.76	(375)	–	1747	(794)
MG-6619 SC	7-36826-A	B	9.25	(235)	9.25	(235)	27.48	(698)	13.39	(340)	13.39	(340)	–	1175	(534)
MG-6619 A	7-36781-A	C	11.48	(292)	8.20	(208)	25.71	(653)	13.39	(340)	13.39	(340)	10	1197	(544)
MG-6619 RV	7-36814-A	D	11.48	(292)	8.20	(208)	6.57	(167)	13.39	(340)	13.39	(340)	10	1197	(544)
MG-6620 A	7-38959	B	11.58	(294)	8.10	(206)	26.27	(667)	13.39	(340)	13.39	(340)	10	1197	(544)
MG-6650 SC	1018375 C	B	12.21	(310)	11.81	(300)	30.13	(765)	17.32	(440)	17.32	(440)	–	2100	(954)
MG-6690 SC	1020350	B	12.21	(310)	11.81	(300)	30.13	(765)	17.32	(440)	17.32	(440)	–	2100	(954)
MG-6848 SC	1019086 A	B	12.21	(310)	11.81	(300)	30.13	(765)	17.32	(440)	17.32	(440)	–	2100	(954)
MG-6984 SC	7-37008	B	12.21	(310)	11.30	(287)	27.20	(691)	17.52	(445)	17.52	(445)	–	2628	(1192)
MG-6984 A	7-37028	C	15.04	(382)	8.50	(216)	26.93	(684)	17.52	(445)	17.52	(445)	10	1991	(905)
MG-6984 RV	7-37042	D	15.04	(382)	8.50	(216)	11.82	(300)	17.52	(445)	17.52	(445)	10	2002	(910)
MG-61242 SC	7-37017	B	13.39	(340)	12.17	(309)	29.80	(757)	19.69	(500)	19.69	(500)	–	2310	(1050)
MG-61242 A	7-37046	C	17.52	(445)	9.49	(241)	30.35	(771)	19.69	(500)	19.69	(500)	10	2431	(1105)
MG-61242 RV	7-37049	D	17.52	(445)	9.49	(241)	11.34	(288)	19.69	(500)	19.69	(500)	10	2475	(1125)

* Consult Twin Disc for availability of new models.

– Dimensions may vary with adapter or output flange.
– Dry weights are approximate and vary by input and ratio.
– Use certified drawings for installation.

– Specifications are subject to change without notice.

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TWIN DISC
POWER TRANSMISSION EQUIPMENT

ISO 9001

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TWIN DISC INTERNATIONAL S.A.

NIVELLES, BELGIUM

TWIN DISC
POWER TRANSMISSION EQUIPMENT

ISO 9001

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QUICKSHIFT™

You've got to feel it to believe it.

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WWW.TWINDISC.COM

TWIN DISC
POWER TRANSMISSION EQUIPMENT

319-A-QSBEU 200-1-03


YOU'VE NOW GOT YOUR HANDS ON
THE BEST MARINE TRANSMISSION
IN THE WORLD
QUICKSHIFT™
You've got to feel it to believe it.

SMOOTH, SEAMLESS SHIFTS AND INSTANT POWER TO THE PR

For years, transmission manufacturers have been trying to come up with a marine transmission with the characteristics of an automatic transmission – smooth, seamless shifts and instant power to the propeller.

From the beginning, engine powered boats have had an inherent, predictable shift characteristic. The transmission of power from the engine to the propeller has involved a delay, a hard connection, a sudden jolt, and then excessive engine loading through the low speed power range until the boat has enough momentum to efficiently climb the power curve.

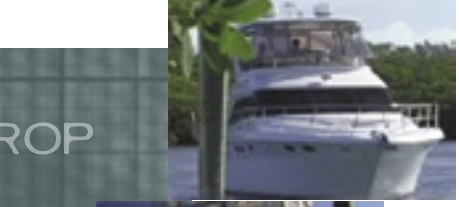
WHY FASTER SHIFTS ARE IMPORTANT:

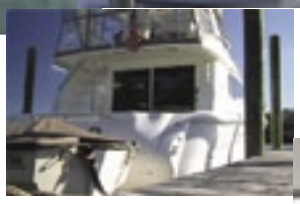
- SMOOTH, RESPONSIVE THRUST
- MORE RESPONSIVE MANOEUVRING (SUCH AS SLOW SPEED/IDLE ZONES)
- INSTANT VESSEL CONTROL

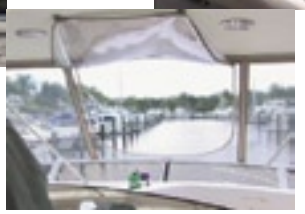
Until now, all that torque, all those mechanical linkages, all that resistance of water against the propeller created hard, abrupt shifts and delayed actuation of the propeller. So precise boat control was difficult to attain. And the bigger the boat, the bigger the problem.

For more than half a century, boat operators have adjusted to this shift characteristic; they've had no choice. They've learned to compensate for the transmission's less than precise performance, especially during critical manoeuvres such as docking. Add some wind and chop, and docking can be downright challenging. And where you need the most control, at low speed, is where you least had it.

TWIN DISC HAS SOLVED THE PROBLEM OF SLOW, ABRUPT SHIFTS AND DELAYED ACTUATION WITH THE INTRODUCTION OF ITS QUICKSHIFT™ SERIES OF MARINE TRANSMISSIONS







The popularity of boating and demand for bigger and larger horsepower boats has raised the stakes. Marinas are becoming crowded with large, expensive craft. Now docking consists of threading a needle between million dollar neighbours. With QuickShift™, both seasoned skippers and the less experienced operators can handle their boats with ease.

Better control, smoother boat operation – especially at low speed – is not only desirable, it's becoming essential. And that control begins and ends with the transmission.

Twin Disc has solved the problem of slow, abrupt shifts and delayed actuation with the introduction of its QuickShift™ series of marine transmissions.

WHY SMOOTHER SHIFTS ARE IMPORTANT:

- MORE PRECISE CONTROL UNDER ALL CONDITIONS
- REDUCED STRESS ON DRIVELINE
- REDUCED STRESS ON PASSENGERS AND CREW

QUICKSHIFT™

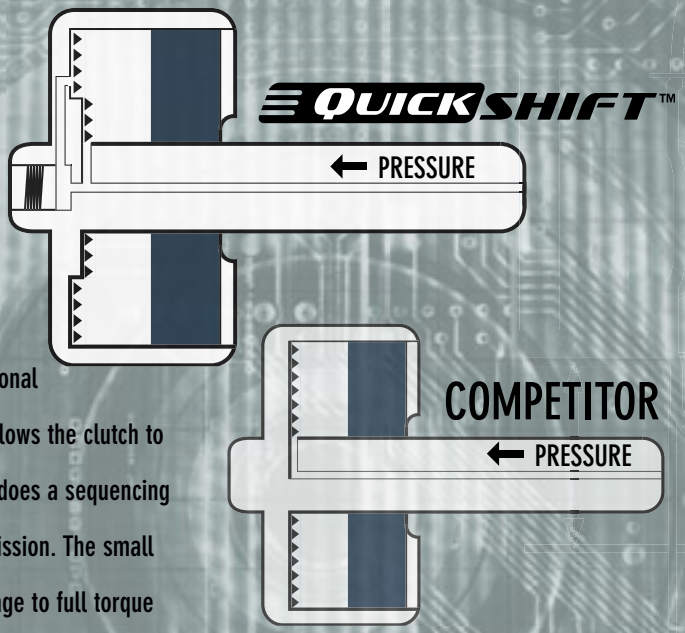
You've got to feel it to believe it.

Now you have incredibly fast smooth shifts and instant thrust even at low rpm, providing unparalleled and previously unavailable precision boat control. That's what the new Twin Disc QuickShift™ line of marine transmissions offers.

TWIN DISC
POWER TRANSMISSION EQUIPMENT

HOW WE PUT THE PRESSURE ON THE COMPETITION

It's a matter of clutch technology. To shift better you've got to have better clutch technology. Twin Disc has been designing and manufacturing rugged and reliable clutches and transmissions for more than 80 years, for all types of applications – pleasure craft and commercial marine, industrial transmissions and power-shift transmissions for critical applications such as crash-fire-rescue vehicles. So QuickShift™, while it is new technology to the marine industry, is built on proven, well-used Twin Disc clutch technology.



To accomplish a faster and smoother clutch engagement, QuickShift™ utilizes a sequenced engagement that operates automatically by design and does not need any adjustment. In the first stage of the engagement it makes up to 80% of the maximum oil pressure available to 20% of the clutch piston area, where conventional clutches have to get filled completely at four to five times lower pressure. This allows the clutch to fill much faster, thereby reducing the shift response time dramatically. Only then does a sequencing valve allow oil flow to the complete clutch piston area to fully engage the transmission. The small difference between the already high torque transfer capability achieved at this stage to full torque provides for a very smooth and seamless engagement. Think how much more propulsion control that gives you. There's never been anything like it.

HOW MUCH FASTER?

The patented Twin Disc QuickShift™ design offers in excess of 15 times faster clutch response and in excess of 10 times faster to full torque. The Twin Disc QuickShift™ with its patented GP-Valve engages in 0.05 seconds, compared to a standard marine transmission's 0.75 seconds, due to clutch fill time. QuickShift™ achieves full torque in .2 seconds, compared to a standard transmission requiring 2.0 seconds.

COMPETITIVE SYSTEMS PROVIDE ONLY A HYDRAULIC/MECHANICAL RATE OF RISE, WHERE CLUTCH PRESSURE CAN ONLY BE ADJUSTED BY SHIMS AND SPRINGS.

THE QUICKSHIFT™ OFFERS 15 TIMES FASTER CLUTCH RESPONSE AND 10 TIMES FASTER TO FULL TORQUE.

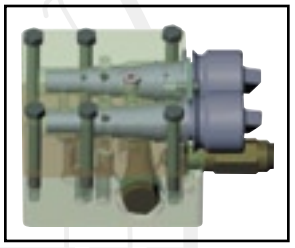
The captain of a large recreational vessel who has the new QuickShift™ marine transmission said, "Docking is where you really appreciate how smooth this transmission is. I can shift from forward to reverse and back again without the usual jarring and jostling. It's more comfortable for the passengers, and it gives me better control of the craft."

NOW, FACTOR IN TROLLING

A Twin Disc QuickShift™ transmission with e-Troll has a clutch response after approximately 0.05 seconds, even when operating in trolling mode. This is in excess of 100 times faster than any conventional transmission with a conventional trolling valve.

WHERE THE DELAY WENT.

The Twin Disc-developed GP-Valve combines advanced hydraulics with electronic technology, forming an actuation system consisting of two proportional solenoids and electronic profile generator (rate of rise). This simple, "bulletproof" design comprises just 21 off-the-shelf parts. While the system offers remarkably fast, precise engagement, the engineering used does not require any adjustment due to extreme tolerances required by delicate components. It's robust, reliable, and effective.



Competitive systems use a hydraulic/mechanical rate of rise, where clutch pressures are ever changing due to environmental conditions, and can only be adjusted by shims and springs.

BUT WAIT. THERE'S MORE (AND LESS).

The QuickShift™ system also gives you less than competitive products. You don't need to buy an extra trolling valve to get trolling performance. Just add the Twin Disc e-Troll controller and you've got superior trolling capability.

And for an extra measure of reliability, the Twin Disc QuickShift™ system comes equipped with a mechanical override.

Since the GP-Valve fits all Twin Disc transmissions MG-5090 and larger, you've got a vast selection of QuickShift™ transmission models available.

TRULY THE ONLY SLOW SPEED SYSTEM THAT CAN BE USED FOR DOCKING AND MANOEUVRING

NO MARINE TRANSMISSION IN THE WORLD SHIFTS AS SMOOTH AND FAST, AND ALLOWS SUCH LOW SPEED CONTROL.

Tom Ellswoth of Ellsworth Marine in California: "The QuickShift™ system will challenge every skipper's notion of how a game boat should perform. The QuickShift™ system obliterates the shackles of traditional conservative boat handling by putting unlimited control and power back into the hands of the captain."

INTEGRATED, NOT ADDED ON

Unlike competitive systems, the Twin Disc QuickShift™ is a completely integrated transmission system, not merely an externally added-on valve. There's simply more technology, more performance, more reliability to the QuickShift™.

QuickShift™ requires virtually no setup for the boat builder or boat operator – no shims, springs, orifices. And if service is ever needed, it can be done outside the valve by adjusting main pressure or by replacing the controller. This dramatically reduces labor hours for service work.

RIGHT THE FIRST TIME. RIGHT OUT OF THE BOX.

HOW TO MAKE A FAST BOAT GO SLOW

It's difficult for a powerful diesel vessel to go very slowly with a conventional transmission. Reducing the engine rpms to get the vessel speed below five knots may stall the engine. But, with QuickShift™, Twin Disc has managed to regulate engine torque at extremely low speeds to slow propeller speed down to approximately 100 rpms. This means boat operators have controllable manoeuvring in the previously unattainable range of zero boat speeds – an incredible advantage in docking.

Even docking under calm conditions can be a challenge. In the time it takes to shift from forward to reverse with a conventional transmission, a boat traveling five knots can drift up to 13 feet! Continual manoeuvring compensation is needed to buffer the vessel's direction and momentum. QuickShift's immediate thrust and slow speed control "contains" the movement of the vessel more precisely and easily.

QuickShift™ is truly the only slow speed system that can be effectively used for docking and manoeuvring.

THE VALUE OF QUICKSHIFT™ PERFORMANCE

Fast, smooth shifts combined with slow speed capability mean better vessel control and safer operation under all conditions. In addition, smooth, seamless shifts virtually eliminate damaging driveline shock that can be transferred to engine components. This should enhance the service life of your vessel's drive train components.

And, there's the enjoyment factor. Graceful, efficient docking or departing is more comfortable on passengers and crew and reflects operator competence. It's a pleasure to drive and ride a QuickShift™ equipped boat.

QuickShift™ offers far more technology and significantly better performance than any other marine transmission, at comparable or lower cost.

QUICKSHIFT™

THERE'S FAST,
AND THEN THERE'S
REALLY FAST.

TWIN DISC
POWER TRANSMISSION EQUIPMENT

MAXIMUM 673 KW (900 HP) @ 2300 RPM [PLEASURE CRAFT]

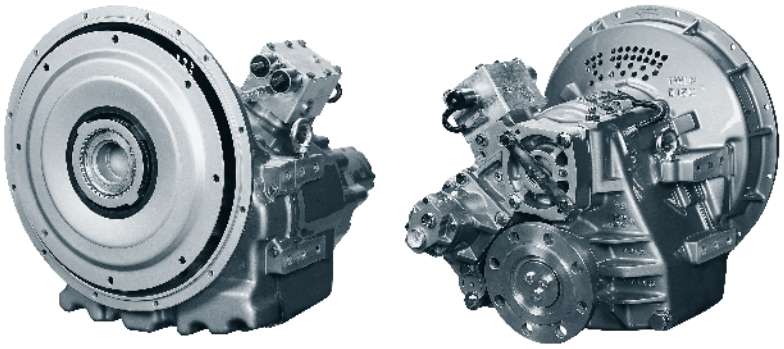
STANDARD EQUIPMENT

MGX-5114 SC, MGX-5114 A & MGX-5114 IV

SAE J617 housing no. 1
Flexible coupling for 14" flywheel (SAE J620 size 355)
Electric GP–valve with manual override
Profile module – interface for engagement signals
Oil strainer and oil filter

MGX-5114 RV

Input flange size GWB 587.35
Electric GP–valve with manual override
Profile module – interface for engagement signals
Oil strainer and oil filter
Aluminum cast mounting bracket with fasteners



QUICKSHIFT™
You've got to feel it to believe it.

OPTIONS	MGX-5114 SC	MGX-5114 A	MGX-5114 RV	MGX-5114 IV
SAE J617 housing no. 2		x		x
Flexible coupling for 11.5" flywheel (SAE J620 size 290)	x	x		x
E-Troll module – interface for engagement & trolling signals	x	x	x	x
Oil cooler with thermostatic bypass valve	x	x	x	x
Companion flange/bolt set	x	x	x	x
Monitoring devices to customer's specification	x	x	x	x
Mounting brackets	x	x		x
Live PTO – max. 592 Nm				
SAE J744 size 127-4, 32-4 (SAE "C", 4-bolt)	x	x		x
Hydraulic Clutchable PTO – max. 415 Nm				
SAE J744 size 127-4, 32-4 (SAE "C", 4-bolt)	x	x		x
Hydraulic Clutchable PTO – max. 415 Nm				
Shaft with key	x	x		x
Weight (dry weight with Standard Equipment)	**203 kg**	**206 kg**	**205 kg**	**273 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-5114 SC

Reduction Ratios :1	Pleasure Craft @2300 RPM	Light Duty @2300 RPM	Intermediate @2100 RPM	Medium Duty @1800 RPM	Continuous duty @1800 RPM	Input speed limits RPM
0.93, 1.02, 1.12, 1.50, 1.74, 2.04	673 kW (900 hp)	629 kW (843 hp)	503 kW (675 hp)	394 kW (528 hp)	358 kW (480 hp)	450 MIN./3000 MAX.
2.54			466 kW (625 hp)			
3.00	578 kW (775 hp)	540 kW (724 hp)	451 kW (605 hp)	361 kW (484 hp)	328 kW (440 hp)	

MG-5114 A & MGX-5114 RV

Reduction Ratios :1	Pleasure Craft @2300 RPM	Light Duty @2300 RPM	Intermediate @2100 RPM	Medium Duty @1800 RPM	Continuous duty @1800 RPM	Input speed limits RPM
1.03, 1.20, 1.48, 1.75, 1.92, 2.04	673 kW (900 hp)	629 kW (843 hp)	466 kW (625 hp)	357 kW (479 hp)	347 kW (465 hp)	450 MIN./3000 MAX.
2.50			400 kW (536 hp)	338 kW (453 hp)	321 kW (430 hp)	

MGX-5114 IV

Reduction Ratios :1	Pleasure Craft @2300 RPM	Light Duty @2300 RPM	Intermediate @2100 RPM	Medium Duty @1800 RPM	Continuous duty @1800 RPM	Input speed limits RPM
1.05, 1.23, 1.52, 1.80, 1.97	673 kW (900 hp)	629 kW (843 hp)	466 kW (625 hp)	357 kW (479 hp)	347 kW (465 hp)	450 MIN./3000 MAX.
2.57	649 kW (870 hp)	607 kW (814 hp)	400 kW (536 hp)	338 kW (453 hp)	321 kW (430 hp)	

** 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 planning 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 Planning 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 planning 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.

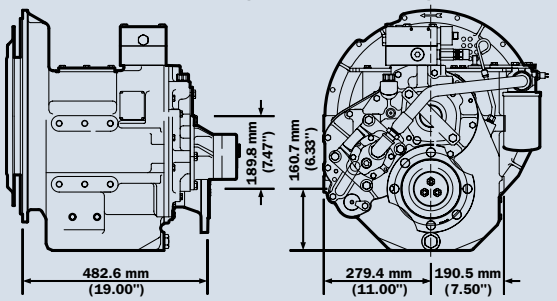
Important Notice: Torsional Vibration: Disregarding propulsion system torsional compatibility could cause damage to components in the drive train resulting in loss of mobility. At minimum, system incompatibility could result in gear clatter at low speeds.

The responsibility for ensuring that the torsional compatibility of the propulsion system is satisfactory rests with the assembler of the drive and driven equipment.

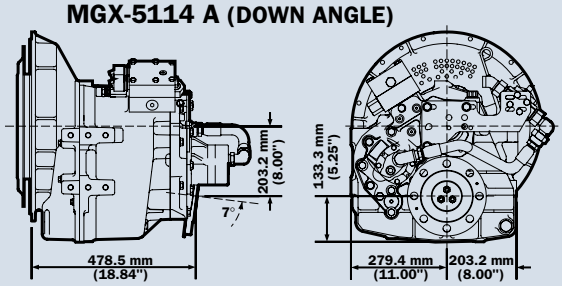
Torsional vibration analysis can be made by the engine builder, marine survey societies, independent consultants and others. Twin Disc is prepared to assist in finding solutions to potential torsional problems that relate to the marine transmission.

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.

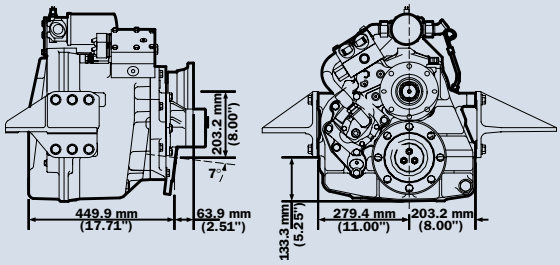
MGX-5114 SC (SHALLOW CASE)



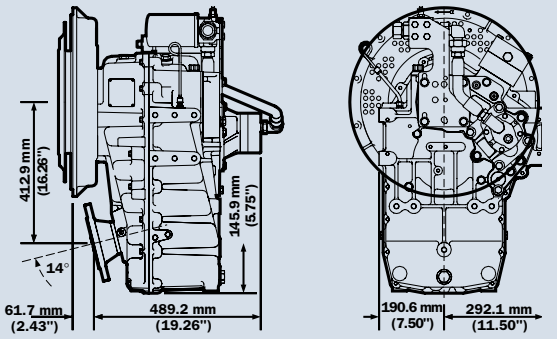
MGX-5114 A (DOWN ANGLE)



MGX-5114 RV (REMOTE V-DRIVE)



MGX-5114 IV (INTEGRAL V-DRIVE)



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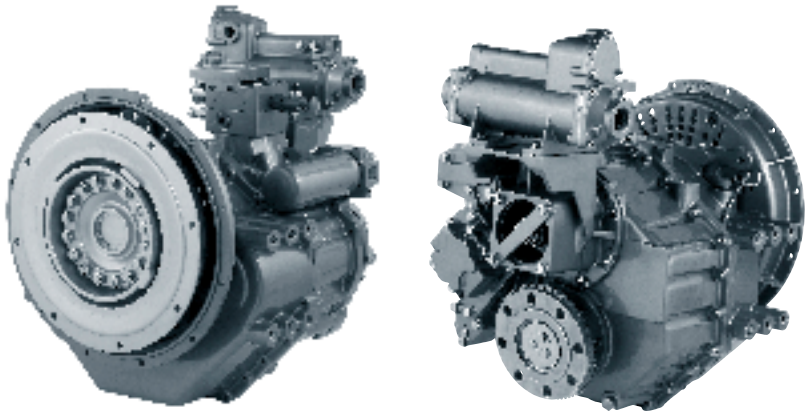
TD-Bulletin-MGX-5114 Series – 11/2002

MAXIMUM 895 KW (1200 HP) @ 2300 RPM [PLEASURE CRAFT]

STANDARD EQUIPMENT

MGX-5135 SC & MGX-5135 A

SAE J617 housing no. 1
Flexible coupling for 14" flywheel (SAE J620 size 355)
Electric GP-valve with manual override
Profile module – interface for engagement signals
Oil strainer and oil filter



QUICKSHIFT™
You've got to feel it to believe it.

OPTIONS	MGX-5135 SC	MGX-5135 A
SAE J617 housing no. 0	x	x
Flexible coupling for 18" flywheel (SAE J620 size 460)	x	x
E-Troll module – interface for engagement & trolling signals	x	x
Oil cooler with thermostatic bypass valve	x	x
Companion flange/bolt set	x	x
Monitoring devices to customer's specification	x	x
Mounting brackets	x	x
Live PTO – max. 593 Nm		
SAE J744 size 127-4, 32-4 (SAE "C", 4-bolt)	x	x
Hydraulic Clutchable PTO – max. 641 Nm		
SAE J744 size 127-4, 32-4 (SAE "C", 4-bolt)	x	x
Hydraulic Clutchable PTO – max. 641 Nm		
Shaft with key	x	x
Weight (dry weight with Standard Equipment)	**300 kg**	**280 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-5135 SC

Reduction Ratios :1	Pleasure Craft @2300 RPM	Light Duty @2300 RPM	Intermediate @2100 RPM	Medium Duty @1800 RPM	Continuous duty @1800 RPM	Input speed limits RPM
1.00, 1.28, 1.48, 1.73, 2.04	895 kW (1200 hp)	746 kW (1000 hp)	560 kW (751 hp)	485 kW (650 hp)	445 kW (597 hp)	450 MIN./2800 MAX.
2.57	820 kW (1100 hp)	716 kW (960 hp)				
3.00	746 kW (1000 hp)	671 kW (900 hp)	522 kW (700 hp)	448 kW (601 hp)	408 kW (547 hp)	

MGX-5135 A

Reduction Ratios :1	Pleasure Craft @2300 RPM	Light Duty @2300 RPM	Intermediate @2100 RPM	Medium Duty @1800 RPM	Continuous duty @1800 RPM	Input speed limits RPM
1.10, 1.25, 1.53 1.79, 2.00	895 kW (1200 hp)	746 kW (1000 hp)	560 kW (751 hp)	485 kW (650 hp)	445 kW (597 hp)	450 MIN./2800 MAX.
2.52	820 kW (1100 hp)	716 kW (960 hp)				

** 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 planning 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 Planning 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 planning 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.

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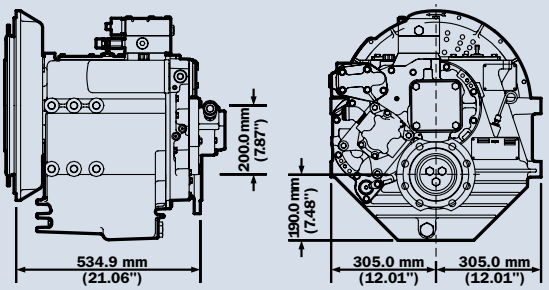
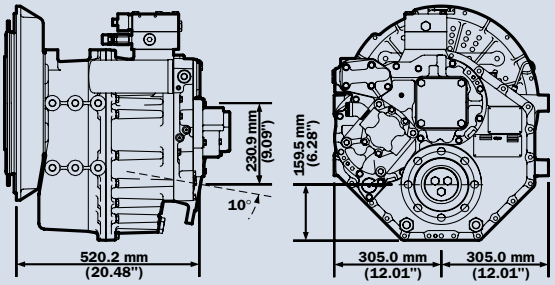
MGX-5135 SC (SHALLOW CASE)



MGX-5135 A (DOWN ANGLE)



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TD-Bulletin-MGX-5135 Series – 11/2002

MAXIMUM 1007 KW (1350 HP) @ 2300 RPM [PLEASURE CRAFT]

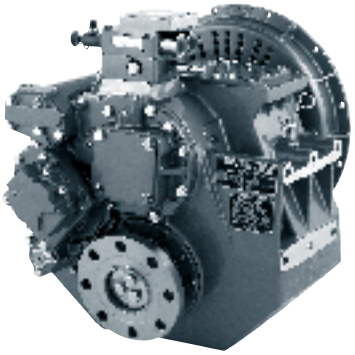
STANDARD EQUIPMENT

MGX-5145 SC & MGX-5145 A

SAE J617 housing no. 1
Flexible coupling for 14" flywheel (SAE J620 size 355)
Electric GP-valve with manual override
Profile module – interface for engagement signals
Oil strainer and oil filter

MGX-5145 RV

Input flange size GWB 587.50
Electric GP-valve with manual override
Profile module – interface for engagement signals
Oil strainer and oil filter



QUICKSHIFT™
You've got to feel it to believe it.

OPTIONS	MGX-5145 SC	MGX-5145 A	MGX-5145 RV
SAE J617 housing no. 0	x	x	
Flexible coupling for 18" flywheel (SAE J620 size 460)	x	x	
E-Troll module – interface for engagement & trolling signals	x	x	x
Oil cooler with thermostatic bypass valve	x	x	x
Companion flange/bolt set	x	x	x
Monitoring devices to customer's specification	x	x	x
Mounting brackets	x	x	
Aluminum cast mounting bracket with fasteners			x
Live PTO – max. 593 Nm			
SAE J744 size 127-4, 32-4 (SAE "C", 4-bolt)	x	x	x
Hydraulic Clutchable PTO – max. 641 Nm			
SAE J744 size 127-4, 32-4 (SAE "C", 4-bolt)	x	x	
Hydraulic Clutchable PTO – max. 641 Nm			
Shaft with key	x	x	
Weight (dry weight with Standard Equipment)	**325 kg**	**333 kg**	**295 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-5145 SC

Reduction Ratios :1	Pleasure Craft @2300 RPM	Light Duty @2300 RPM	Intermediate @2100 RPM	Medium Duty @1800 RPM	Continuous duty @1800 RPM	Input speed limits RPM
1.20, 1.33, 1.48, 1.75, 1.96	1007 kW (1350 hp)	857 kW (1150 hp)	746 kW (1000 hp)	596 kW (800 hp)	552 kW (740 hp)	450 MIN./2500 MAX.
2.50	916 kW (1228 hp)	820 kW (1100 hp)	671 kW (900 hp)	522 kW (700 hp)	485 kW (650 hp)	

MGX-5145 A & MGX-5145 RV

Reduction Ratios :1	Pleasure Craft @2300 RPM	Light Duty @2300 RPM	Intermediate @2100 RPM	Medium Duty @1800 RPM	Continuous duty @1800 RPM	Input speed limits RPM
1.26, 1.48, 1.75, 1.96	1007 kW (1350 hp)	857 kW (1150 hp)	746 kW (1000 hp)	596 kW (800 hp)	552 kW (740 hp)	450 MIN./2500 MAX.
2.50	956 kW (1282 hp)	820 kW (1100 hp)	671 kW (900 hp)	522 kW (700 hp)	485 kW (650 hp)	

** 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 planning 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 Planning 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 planning 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.

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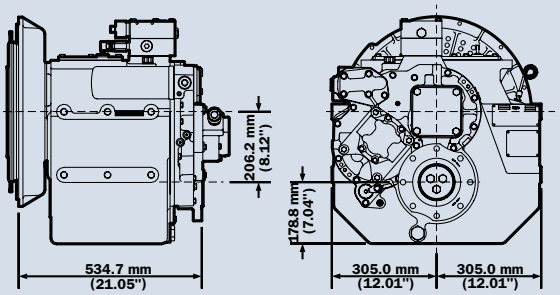
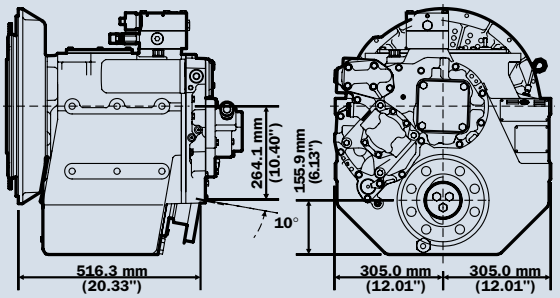
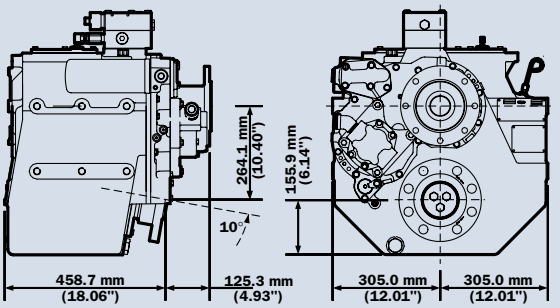
MGX-5145 SC (SHALLOW CASE)



MGX-5145 A (DOWN ANGLE)



MGX-5145 RV (REMOTE V-DRIVE)



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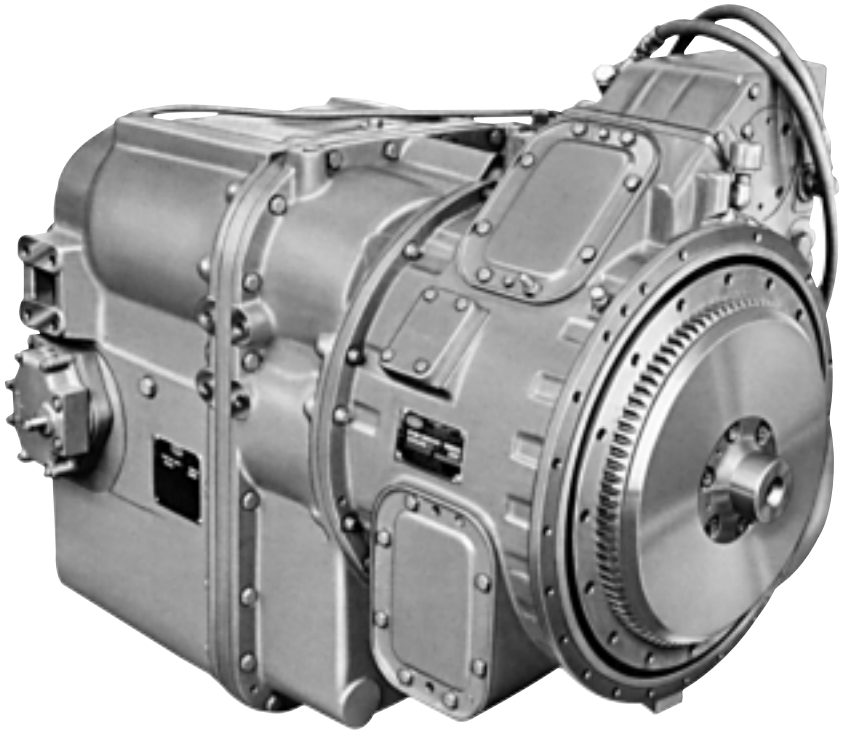
TD-Bulletin-MGX-5145 Series – 11/2002

Printed in the United States of America

TA 51-2401
TAC 51-2401
Up to 710 hp
530 kW



TAC 51-2401 shown with standard equipment

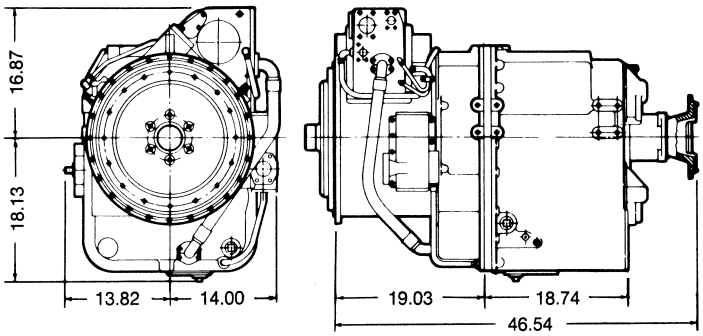
The 2400 Series transmission consists of an integral engine mounted converter/transmission assembly or an engine mounted converter with a remote mounted transmission and the advanced TDEC 400 electronic control system.

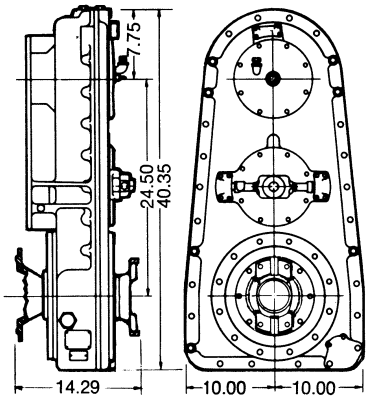
Applications

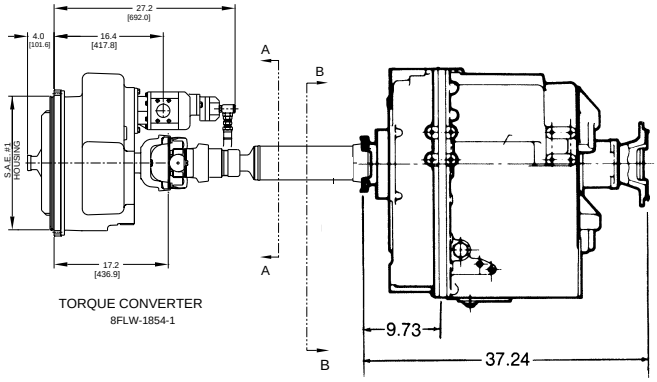
- Oil field workover and servicing rigs
- Oil field cementing rigs
- Oil field fracturing rigs
- Logging yarders
- Heavy haul trucks

Features and Benefits

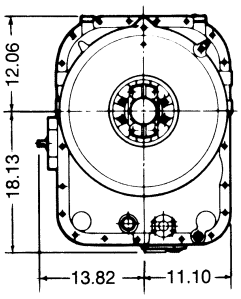
- Increased performance: efficient gear train combined with electronic controls tailored to the needs of the specific application to optimize machine performance.
- Ease of operation: available automatic shifting or manual power shift combined with shift inhibits and interlocks simplify the operator's job and allows for concentration on the job rather than the powertrain.
- Reduced downtime: durable heavy-duty components combined with electronic controls which prevent overspeed, shift shocks and reduce the effects of operator's error, result in increased machine availability and less wear and tear on other machine components.
- Safety: the control system looks after the transmission so the operator can focus on the operation of the machine. Speeds and interlocks can be programmed to meet the needs of the specific machine.







TORQUE CONVERTER
8FLW-1854-1



Specifications

Maximum gross input power	710 hp (530 kW) at 2300 RPM
Maximum gross input torque	2680 lb-ft (3634 N•m)
Maximum input speed	2300 RPM

Torque Converter

Models

8FLW-1801 Up to 710 hp (530 kW)

Mounting

The hydraulic torque converter is mounted to the engine. The transmission can be either integral with the torque converter or remotely-mounted in the machine frame. Optional transfer case available. Sub-frame type mounting required in the case of an integral unit.

PTOs

2 SAE 8-bolt (TAC)
2 SAE C-pad (TA)

Weight, dry
800 lbs. (363 kg)

Transmission

Models

TA 51-2401
TAC 51-2401

Sump capacity 25 USG (95 liters)

Weight, dry
1300 lbs. (590 kg)

Consult factory for optional dry housing converter for use with TA 51-2401.

Cooling pump capacity 46 GPM @ 2000 RPM
Maximum oil temperature at converter outlet: 250˚ F
Cooling required 20 to 30% of GHP depending on application

Consult Twin Disc regarding availability and specifications for optional hydraulic retarder.

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Singapore, Australia, Italy
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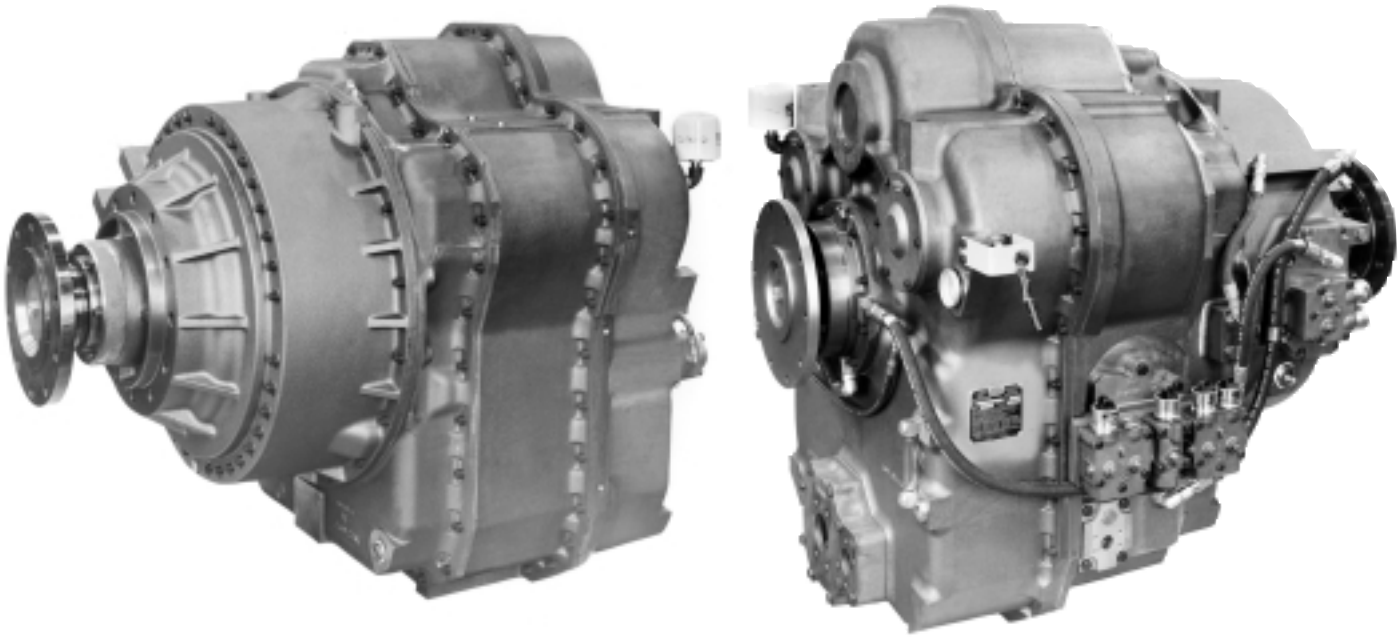
Bulletin TA51-A-2400 05/01

Twin Disc Automatic Transmission Systems

TA90-8501
TA91-8501
Up to 3000hp
2300kW



TA91-8501 shown with standard equipment

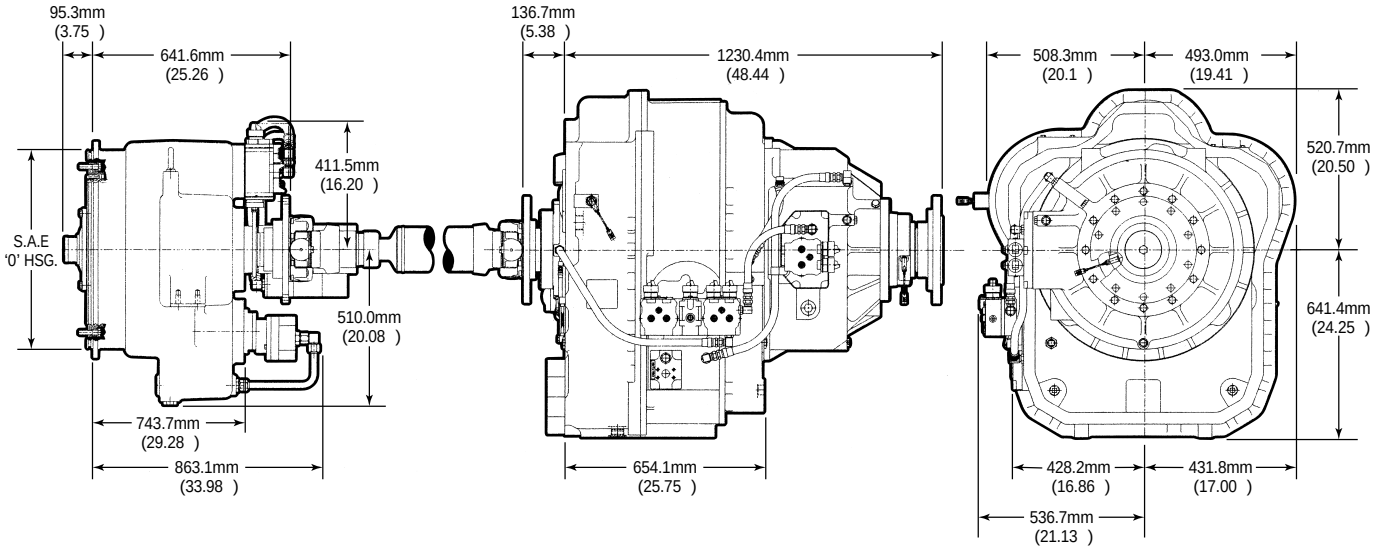
The 8501 Series transmission system consists of an engine mounted 21 or 23 inch type 8 torque converter, a 9 speed coaxial power-shift transmission and an advanced electronic control system.

Applications

- Oil Field Fracturing Rigs
- Mine Haul Trucks
- Anchor Hoists
- Large Cranes
- Special Purpose Equipment

Features and Benefits

- Increased performance: efficient gear train combined with electronic controls tailored to the needs of the specific application to optimize machine performance.
- Ease of operation: available automatic shifting or manual power shift combined with shift inhibits and interlocks simplify the operator's job and allows for concentration on the job rather than the powertrain.
- Reduced downtime: durable heavy-duty components combined with electronic controls which prevent overspeed, shift shocks and reduce the effects of operator's error, result in increased machine availability and less wear and tear on other machine components.
- Safety: the control system looks after the transmission so the operator can focus on the operation of the machine. Speeds and interlocks can be programmed to meet the needs of the specific machine.



Specifications

Maximum gross input power	3000 hp (2300 kW) at 2100 RPM
Maximum gross input torque	9500 lb-ft (12 880 N•m)
Maximum input speed	2100 RPM

Torque Converter

Models

8FLW-2106	Up to 1300 hp (969 kW)
8FLW-2302	1300 to 3000 hp (969 kW to 2238 kW)

Mounting

SAE 0 wet flywheel housing

PTOs

1 Engine driven SAE "C" pump drive
1.0:1 ratio

Weight, dry
1600 lbs. (726 kg)

Transmission

Models

TA90-8501 9 forward speeds, no reverse
TA91-8501 9 forward speeds and 1 reverse

Mounting

Remote mounted using "trunion" style mounts.
Sump capacity 35 USG (132 liters)

Weight, dry
5020 lbs. (2288 kg)

Ratios

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	Rev	Overall
4.47	3.57	2.85	2.41	1.92	1.54	1.25	1.0	.80	4.12	5.60

Cooling pump capacity 100 GPM @ 1900 RPM
Maximum oil temperature at converter outlet: 250° F
Cooling required 20 to 30% of GHP depending on application

Consult Twin Disc regarding availability and specifications for optional hydraulic retarder.

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Singapore, Australia, Italy
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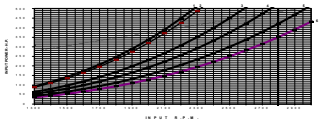
1400 Nivelles, Belgium

Bulletin TA91-8501 03/00

W E P U T H O R S E P O W E R T O W O R K

Today's leader
in
tomorrow technology

TWIN DISC WATERJETS



CONTENTS

TWIN DISC WATER JETS

JET SELECTION GUIDE

ISSUE DATE: 01/02/01

TWIN DISC JETS CURRENT RANGE

The "TWIN DISC JETS" series of Waterjets is the culmination of over **25 years** design and manufacturing experience in marine propulsion systems.

The Waterjets feature the latest in Waterjet Propulsion technology with a complete range of models from the DJ60 to the DJ200 Series matching engines from 30HP to 3750HP diesels.

Case study examples of **TWIN DISC** Waterjets are available worldwide.

Range of DOEN "AQUAPEL SERIES" Waterjets	
Model No.	***Max. Rec. Power Input***
DJ60 (152mm)	100HP / 75kw – 5500RPM
DJ80 (203mm)	302HP / 225kw – 4500RPM
DJ85 (216mm)	402HP / 300kw – 4200RPM
DJ100 (254mm)	302HP / 225kw – 3600RPM
DJ105 (267mm)	335HP / 250kw – 3400RPM
DJ110 (280mm)	402HP / 300kw – 3200RPM
DJ130 (330mm)	503HP / 375kw – 2800RPM
DJ140 (356mm)	805HP / 600kw – 2600RPM
DJ142 (356mm) (2 Stage)	1073HP / 800kw – 2400RPM
DJ160 (406mm)	1073HP / 800kw – 2250RPM
DJ170 (432mm)	1670HP / 1250kw – 2100RPM
DJ200 SERIES INCLUDING	
DJ200 (508mm)	1950HP / 1450kw – 1800RPM
DJ220 (559mm)	2346HP / 1750kw – 1600RPM
DJ260 (660mm)	3285HP / 2450kw – 1350RPM
DJ280 (711mm)	3750HP / 2800kw – 1250RPM
TWIN DISC WATERJETS TO MATCH ENGINES larger than 1450kw are made to order and to individual intake specifications.	

NOTE: BOOSTER JETS CAN BE PROVIDED TO ORDER FROM THE DJ130 AND UPWARDS.

Twin Disc srl
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Tel:+39 0584 969696, Fax:+39 0584 969692
E–mail Address: info@twindiscpropulsion.com

TWIN DISC WATER JETS

MODEL RANGE

The Twin Disc series of waterjets is a range of 12 axial flow models representing the latest technology and matching gasoline and marine diesel engines from 30HP to 3750HP. The range includes the DJ142 two stage unit specifically designed for the growing demand for high speed craft operating at 45+ knots.

The Principal of waterjet propulsion simply utilises Newton's Third Law of Motion:
"Every action has an equal and opposite reaction".

Water is drawn into the intake body of the Jet, and is discharged at the steering nozzle. The axial flow impeller, driven by the engine, pumps high volumes of water flowing through the Jet and discharging at the steering nozzle thus creating a forward thrust, which propels the vessel.

All TWIN DISC JETS jet models are supported by a comprehensive range of high thrust impellers ensuring correct selection and accurate matching of Jet and engine combination.

The large range of jet models, each with comprehensive range of impeller designs gives optimised matching and high propulsive efficiencies, at least equivalent to the best propeller systems at planing speeds.

All Jets are designed and manufactured in corrosion resistant aluminium castings and stainless steel fittings with sacrificial anodes for cathodic protection. The mounting face of the Jet is close to the transom, with part of the intake tunnel moulded (for fiberglass vessels) or fabricated (for aluminium/steel vessels).

This installation method allows the entire Jet to be quickly mounted to the vessel. It also has the added advantage of allowing for some flexibility in placement of the Jet, allowing the Jet to be mounted as far aft as possible. This simple mounting system eliminates the need for two holes, one in the transom and the other in the bottom of the boat. It also simplifies the sealing of the waterjet to the hull and eliminated the need for a complex bolting of flanges at the keel line.

All TWIN DISC JETS jet models feature a unique Teflon sealed Steering System which minimizes discharge flow disturbance and channels 100% of thrust into turning effort. Steering is actuated via an inboard mounted tiller and from the DJ100 upwards, controlled by a manual hydraulic system.

The high thrust, split ducted, reverse bucket provides full thrust at any steering nozzle angle, resulting in excellent maneuverability and provides an infinite range of ahead, zero, or astern speeds. There are several hydraulic reverse bucket control systems available to suit every application.

The repairs and maintenance of all TWIN DISC JETS Jet models is simple. There is a separate stator assembly and impeller casing/wear ring, which allows easy access to rotating points for periodic inspection and service. The Bearing Housing Assembly is designed as a separate entity, which can be removed without dismantling the unit or removing the main shaft.

Not all hull forms are suitable for Jet applications.

The design of the vessel should be optimised to suit the specific criteria required of the vessel and the hull shape and size are suitable for the displacement.

PLANING MONOHEDRAN VESSELS HIGH SPEEDS 25 KNOTS PLUS

1. Design for a minimum speed of 25 knots at laden displacement. This should be at cruise mode.
2. The propulsive efficiency of direct coupled waterjets increases as the boat speed increases over 25 knots.
3. Constant deadrise (monohedran hulls) are preferred lines in vessels operating in the 25 knot plus speed region. These shapes give better directional stability, handling and performance.
4. The Deadrise angle of the boat should generally be between 8° and 25° to stop aerated water entering the Jet intake and causing cavitation.
5. The hull should be true and without hooks.
6. There should be no obstructions to the water flow in front of the intake tunnel. Keels or planing strakes should be eliminated for 2 metres in front of the intake tunnel. These items are generally acceptable outside the intake areas. The intake ramp leading from the keel line to the intake tunnel must be even and less than 15°. (Single installations in monohulls or catamarans).
7. An easy rising bow stem is ideal for planing vessels. A deep fine forefoot should be avoided as this leads to poor handling and bow steer.
8. Monohedran hulls (constant deadrise from a point approximately midship to the transom) are excellent for high speed applications and the trim angle remains constant during planing as speed increases.

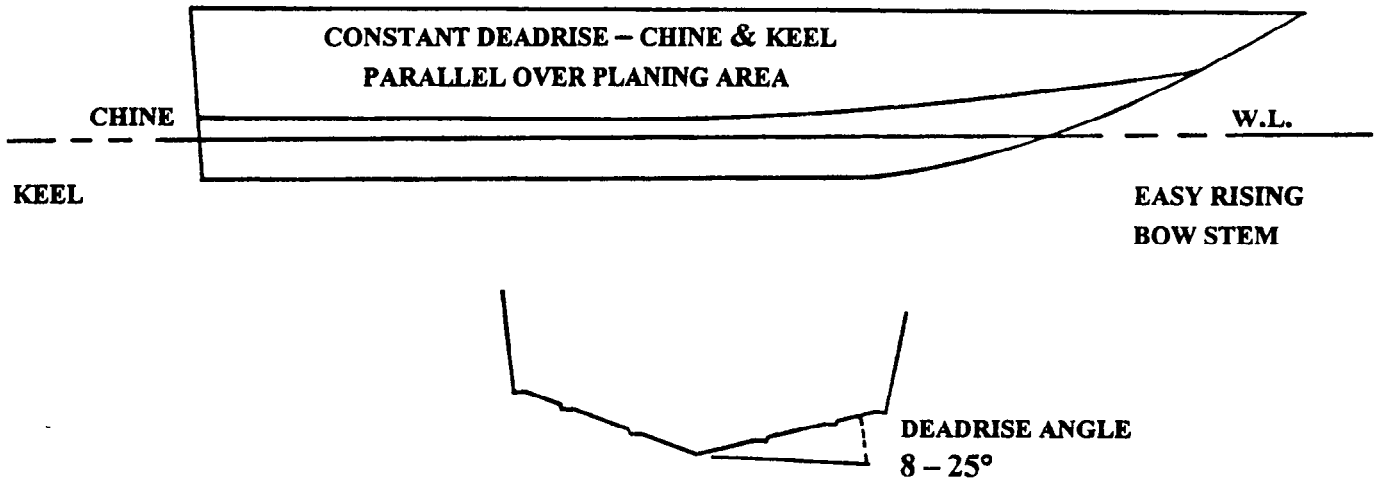
Refer Diagram 1 — Page 3

MULTI HULLS
HIGH SPEEDS 25 KNOTS PLUS

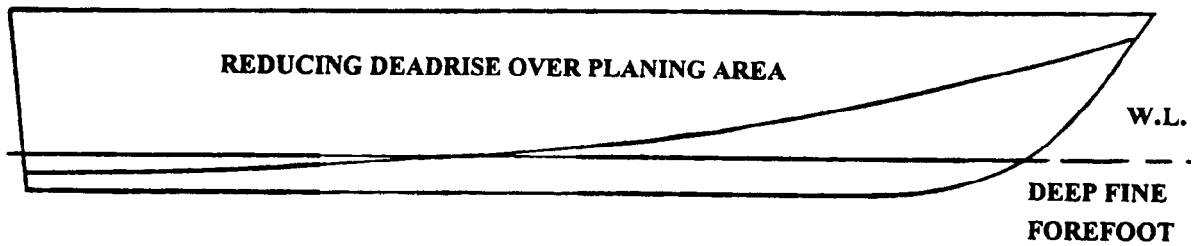
Waterjets are suitable for most multi–hull vessels. The resistance of some of these vessels can be higher than monohedran hulls. Consult Pacific Jets on all applications.

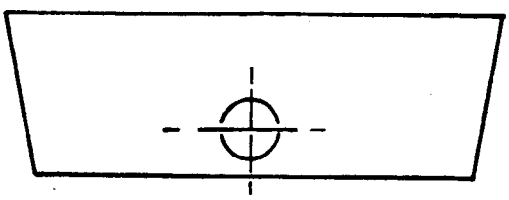
DIAGRAM 1

GOOD PLANING WATERJET HULL



POOR PLANING WATERJET HULL





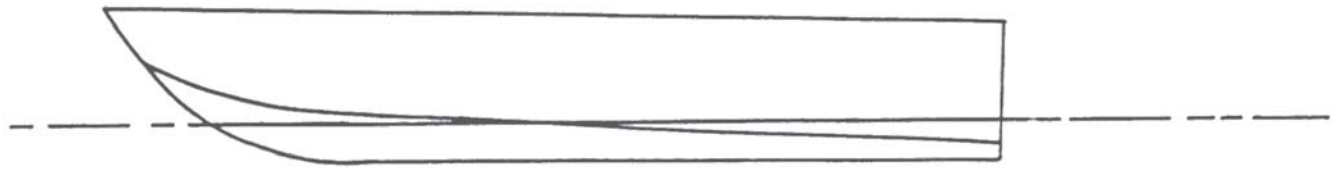
SEMI-PLANING VESSELS
10-25 KNOTS

1. Warped Hulls

These hulls have a chine that drops continually from the bow to the stern – so they have a constantly dropping deadrise angle over the planing area to often quite flat sections at the transom.

This hull shape produces a flat planing attitude and is very good for load carrying craft. With relatively lower power inputs, warped hull will plane quickly and give good ride characteristics due to the flatter trim angle.

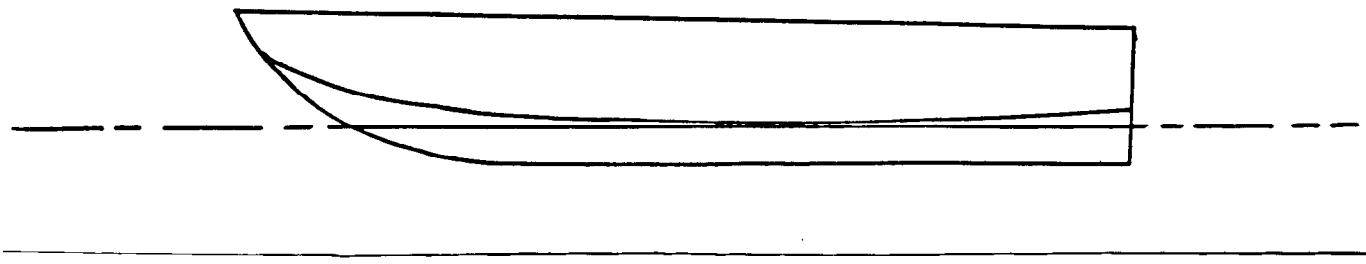
NOTE: The hull resistance for some vessels can be high in the semi planing speed range.



2. Rocker

This hull form has a chine that drops continuously from the bow to amidships and then increases as it approaches the transom.

This hull shape is ideal for or vessels operating in a semi–planing condition or Displacement Applications.



DISPLACEMENT HULLS
SLOW SPEEDS 0-10 KNOTS

Pure displacement hulls have a **NATURAL DISPLACEMENT SPEED** (NDS) which directly relates to the WLL and the resistance of their hull shape.

The **NATURAL DISPLACEMENT Speed Guide Table** can be used as a guide in determining appropriate boat speed depending on whether the hull has a **LOW** or **HIGH** hull resistance.

The Natural Displacement Speeds of a pure displacement hull shape should not be exceeded.

Displacement craft require moderate power inputs to achieve their NDS. The power to weight ratio (HP/tonne) to achieve NDS varies from approximately 5 HP/tonne for low resistance hulls to 15 HP/tonne for high resistance hulls.

Total Power (HP) = **Power to weight ratio** (HP/tonne) **x All Up Weight** (tonne)

For multiple Jet applications divide the total power by the number of Jets to get the power required per Jet. Select an engine at least equal to or of greater power than required, within the RPM band of the selected Jet model (Refer RPM –V's– HP curves – Impeller performance curves)

Model No.	MAX. HP/RPM	Model No.	MAX. HP/RPM
DJ85	120 @ 3000	DJ130	300 @ 2000
DJ100	150 @ 2600	DJ140	350 @ 1850
DJ105	210 @ 2400	DJ160	480 @ 1600
DJ110	240 @ 2300	DJ170	550 @ 1500

NOTE:

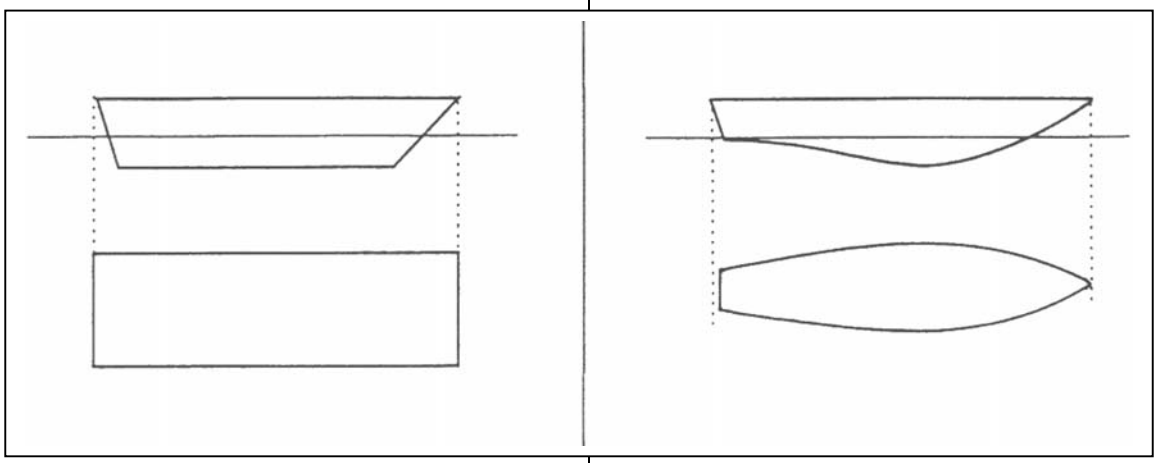
The natural displacement Speed Guide Table makes several assumptions when determining whether a vessel has a LOW or HIGH hull resistance and MUST be used as a GUIDE only. It does not take into consideration variables in the hull such as beam, deadrise, longitudinal, vertical, horizontal centre of gravity etc. which will affect hull resistance

FOR ACCURATE SPEED ESTIMATES HULL RESISTANCE DATA
is required to superimpose on the Dynamic Thrust Curves of the various Jet Models.

DISPLACEMENT VESSELS
0-10 KNOTS

These vessels have a **NATURAL DISPLACING SPEED** (N.D.S.)which is a function of their length and efficiency or resistance of their hull shape, rather than the power input, or their displacement.

High Resistance	Low Resistance
– Low length to beam Ratio. (Less than 3:1) – Flat bow shape. (landing crafts / barges) – Large areas of submerged transom. – Heavy displacement.	– High length to beam Ratio. (Greater than 3:1) – Conventional Vee bow. – Minimum area of submerged transom. – Light displacement



NOTE:
- The Jet must be submerged at least up to the Jet driveshaft to prime when the vessel is stationary. For vessels with low transom emerson, modifications to the hull may be necessary.
- A deadrise of a minimum of 8° is recommended at the transom to avoid air entering the Jet intake.
- Appendages such as keels/strakes should be kept clear in front of the Jet intake, in order to stop possible cavitation. (Refer Pacific Jets for the correct distance as this distance will vary depending on Jet Model selected).

The basic information required to select a TWIN DISC JETS Jet to match an engine and vessel is contained in the APPLICATION CHECKLIST.

Once this information is available it is possible to select an appropriate Jet Model (or multiple of Jets).

Each Jet Model has maximum recommended displacements at maximum power inputs. This is summarized in the JET SELECTION – BY DISPLACEMENT table.

NOTE:

1. THESE SELECTION TABLES are a guide only and utilize only one factor in the selection process (**DISPLACEMENT**). Other factors including waterline length, engine selection, hull shape and intended usage influence the final Jet selection for optimum propulsive efficiencies.
2. Tables assume that the hull shape selected is suitable for the intended use and speed. The Jet is installed correctly and there are no keels, appendages or aeration.
3. Laden displacements listed in the table are **MAXIMUM**. Displacements well below the maximum All Up Weight (A.U.W.) are required for best propulsive efficiency.
4. A.U.W, in the grey area will generally result in reduced propulsive efficiency and may have application restrictions.
5. Table assumes that the trim of the vessel is optimised for the intended use and speed.

ALL APPLICATIONS MUST BE CHECKED BY TWIN DISC APPLICATION DEPARTMENTS PRIOR TO ORDER OR CONSTRUCTION, ESPECIALLY APPLICATIONS WHICH FALL IN THE SHADED DISPLACEMENT AREAS

HIGH SPEED VESSELS
PLANING MONOHEDRAN HULLS

Maximum All Up Weight (A.U.W.) tonnes @ Maximum R.P.M.

TWIN DISC JETS	Jet Model		10 20 30 40 50
DJ85	Single Jet	2.5 T max	
	Twin Jet	5.5 T max	
	Triple Jet	9.0 T max	
DJ100	Single Jet	3.5 T max	
	Twin Jet	8.0 T max	
	Triple Jet	12.0 T max	
DJ105	Single Jet	4.0 T max	
	Twin Jet	9.0 T max	
	Triple Jet	14.0 T max	
DJ110	Single Jet	5.0 T max	
	Twin Jet	10.0 T max	
	Triple Jet	17.0 T max	
DJ130	Single Jet	7.0 T max	
	Twin Jet	17.0 T max	
	Triple Jet	22.0 T max	
DJ140	Single Jet	9.0 T max	
	Twin Jet	20.0 T max	
	Triple Jet	33.0 T max	
DJ142	Single Jet	7.0 T max	
	Twin Jet	18.0 T max	
	Triple Jet	28.0 T max	
DJ160	Single Jet	12.0 T max	
	Twin Jet	26.0 T max	
	Triple Jet	43.0 T max	
DJ170	Single Jet	12.0 T max	
	Twin Jet	26.0 T max	
	Triple Jet	43.0 T max	
DJ200	Single Jet	17.0 T max	
	Twin Jet	38.0 T max	
	Triple Jet	60.0 T max	
DJ220	Single Jet	22.0 T max	
	Twin Jet	49.0 T max	
	Triple Jet	78.0 T max	

DISPLACEMENT HULLS

Maximum All Up Weight (A.U.W.) tonnes @ Maximum R.P.M.

TWIN DISC JETS	Jet Model		10	20	30	40	50
DJ85	Single Jet	6 T					
	Twin Jet	13 T					
	Triple Jet	22 T					
DJ100	Single Jet	8 T					
	Twin Jet	17 T					
	Triple Jet	28 T					
DJ105	Single Jet	9 T					
	Twin Jet	20 T					
	Triple Jet	30 T					
DJ110	Single Jet	10 T					
	Twin Jet	22 T					
	Triple Jet	38 T					
DJ130	Single Jet	15 T					
	Twin Jet	33 T					
	Triple Jet	60 T					
DJ140	Single Jet	20 T					
	Twin Jet	45 T					
	Triple Jet	90 T					
DJ160	Single Jet	26 T					
	Twin Jet	60 T					
	Triple Jet	95 T					
DJ170	Single Jet	30 T					
	Twin Jet	66 T					
	Triple Jet	108 T					
DJ200	Single Jet	36 T					
	Twin Jet	80 T					
	Triple Jet	130 T					
DJ220	Single Jet	42 T					
	Twin Jet	90 T					
	Triple Jet	142 T					

The Speed Guide Table relates power to weight ratios (HP/Tonne) for a given **WATERLINE LENGTH** (W.L.L.) to boat speed.

With a known engine HP, the A.U.W. of the vessel and the W.L.L., plot a vertical line from the W.L.L. to the HP/tonne curve and draw a horizontal line to read off the boat speed (knots).

If the engine power is not selected, but W.L.L. and expected boat speed are known, plot a horizontal and vertical line, and their intersection will give the required power to weight ratio (HP/tonne).

Once the required power to weight ratio (HP/tonne) is established from the Speed Guide Table, the total power requirement is obtained by:

Total Power = Power/Weight Ratio (HP/Tonne) **x** **All Up Weight** (A.U.W.) (Tonnes)

For multiple Jet installations divide total power by the number of Jets to give the power output required per engine.

Select an engine HP, at least equal to or greater than that required from the Speed Guide Table.

The selected engine must have an RPM range within the impeller band of the selected Jet. (Refer to the **POWER/RPM PERFORMANCE CURVES** for the various TWIN DISC JETS Jet models).

If the hull resistance information of the vessel is known, this can be superimposed over the Jet's **Dynamic Thrust Curves** to obtain more accurate speed estimates.

In the absence of hull resistance data, the information on the application checklist is required.

Dynamic Thrust Curves are typical for a given Jet. Different impeller/nozzle combinations will deviate slightly from stated curves.

Steps For Using Hull Resistance Data And Dynamic Thrust Curves

1. Obtain vessel hull resistance data. This may be represented as a force versus speed or can be represented as effective power versus speed.

2. In order to plot the vessel resistance onto the Dynamic Thrust curves, resistance information must be converted to the correct units. Please find typical conversion factors:

Newtons to lbfs	→	Newton x 02248	=	lbsf
Km/h to knots	→	Km/h x 0.5399	=	knots
mph to knots	→	mph x 0.8689	=	knots

effective power to resistance (lbsf)

$$\text{Resistance (lbsf)} = \frac{\text{Power effective (kW)} \times 437}{\text{Velocity (knots)}}$$

3. If it is a multiple installation then the resistance data must be divided by the number of units. For example: In a twin installation only half the resistance is plotted onto the dynamic thrust curves etc.

4. With the vessel resistance now superimposed onto the Dynamic Thrust curves we can now use this information to determine:

   a) If an engine is already selected, then maximum speed can be predicted. Where the resistance curve crosses the rated horsepower contour, plot down vertically to the horizontal axis and read off speed.

   b) If a certain speed is required, then horse power required can be determined. From the horizontal axis at required speed, plot up vertically until you cut the resistance curve. Read off at this point the corresponding horsepower contour.

   c) Procedure (b) can be applied all along the resistance curve to determine horsepower required to do a range of speeds. These horsepower figures can then be related to the applicable impeller performance curve and the engine RPM, at the various speeds.

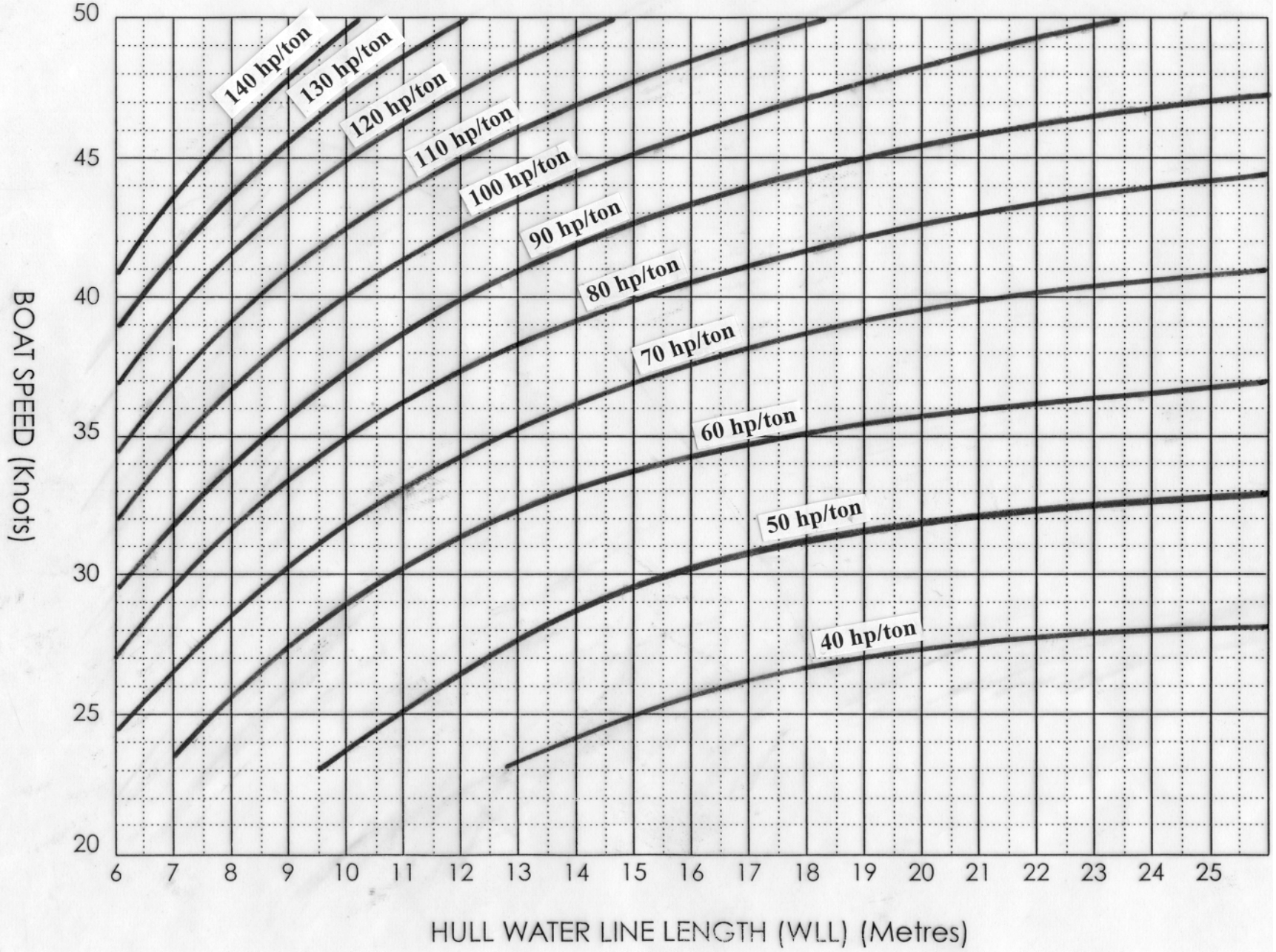
POWER / WEIGHT PERFORMANCE CURVES

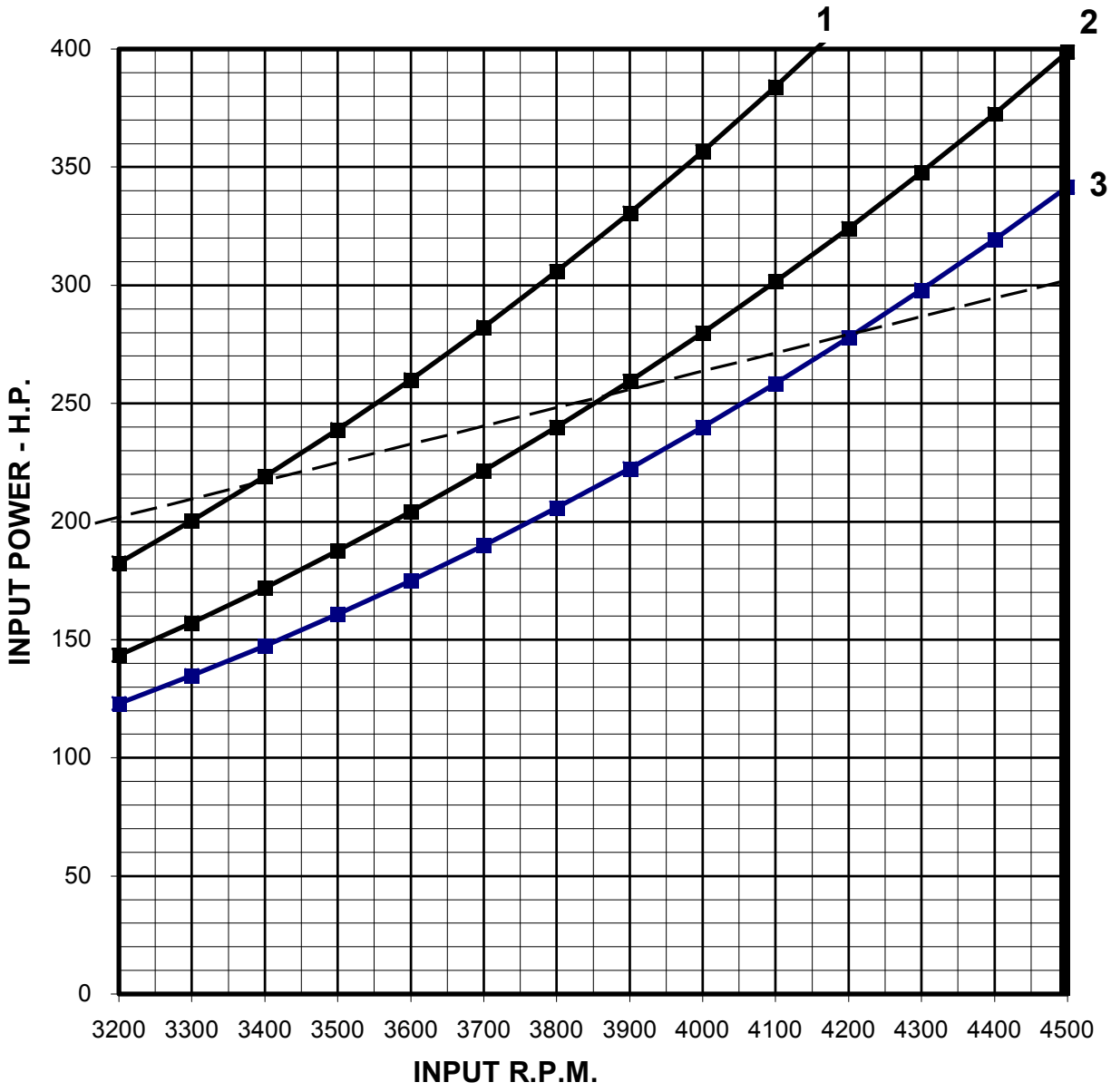
- Using the "Speed Guide Table" plot a vertical line corresponding to the waterline length of the craft (m).
- For best propulsive efficiency, plan for a minimum speed of 25 knots.
- At the point where the vertical line intersects the nominated boat speed on the horizontal axis, read off the required power/weight ratio (HP/tonne).

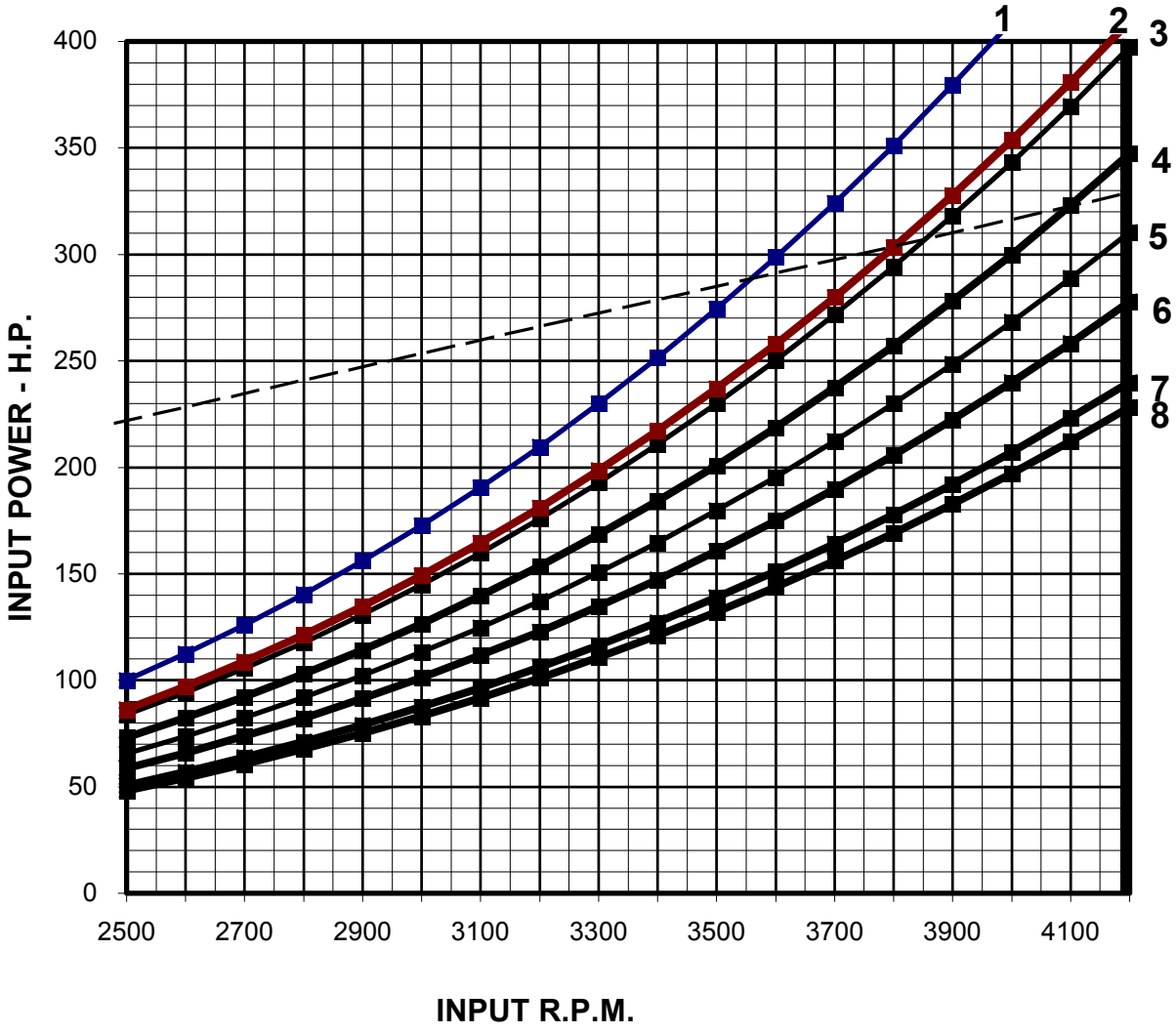
OR

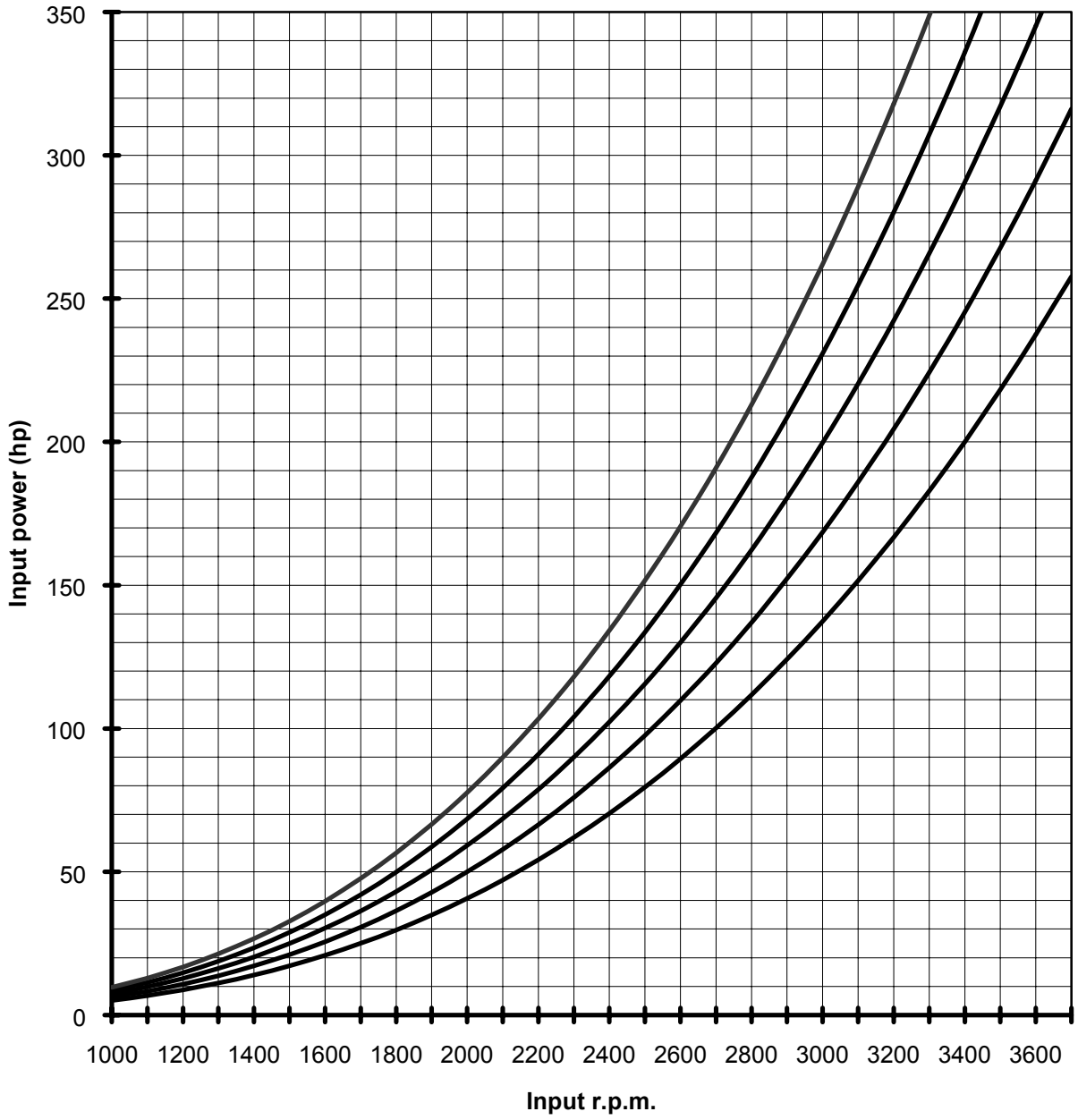
- Where the vertical line intersects the HP/tonne curve, read off the boat speed in knots.
- Speeds predicted from this table are approximate only, eg. deep vee hulls may be 2–3 knots slower.
- Short waterline vessels (5–9 metres) may also be slower than curve estimates. The curves also assume an efficient hull shape and the trim of the vessel is optimised.
- Should an accurate speed estimate be required, hull resistance data can be superimposed over the Jet Dynamic Thrust Curves.

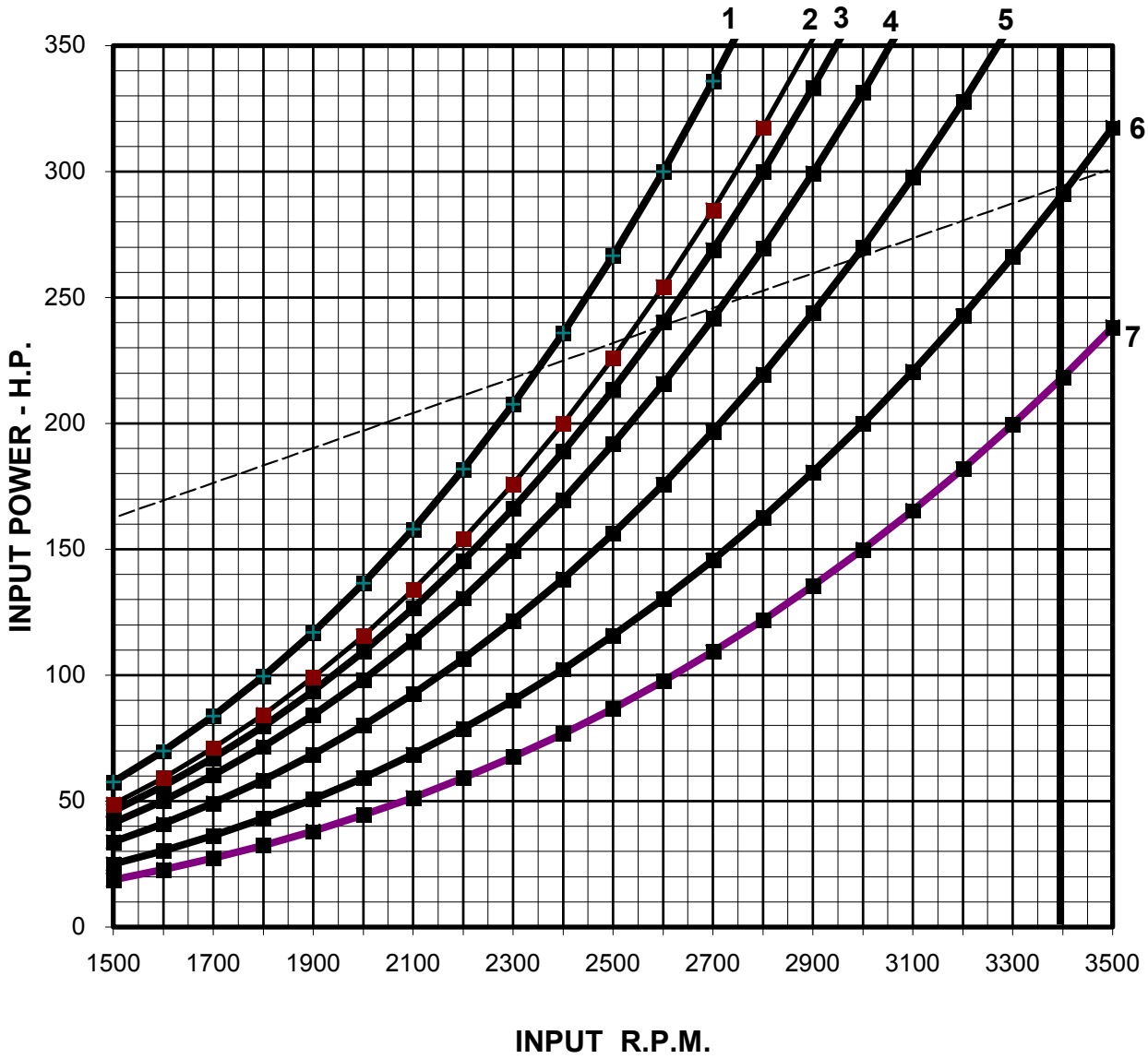
SPEED GUIDE TABLE




1
2
3
400
350
300
250
200
150
100
50
0
INPUT POWER - H.P.
3200 3300 3400 3500 3600 3700 3800 3900 4000 4100 4200 4300 4400 4500
INPUT R.P.M.

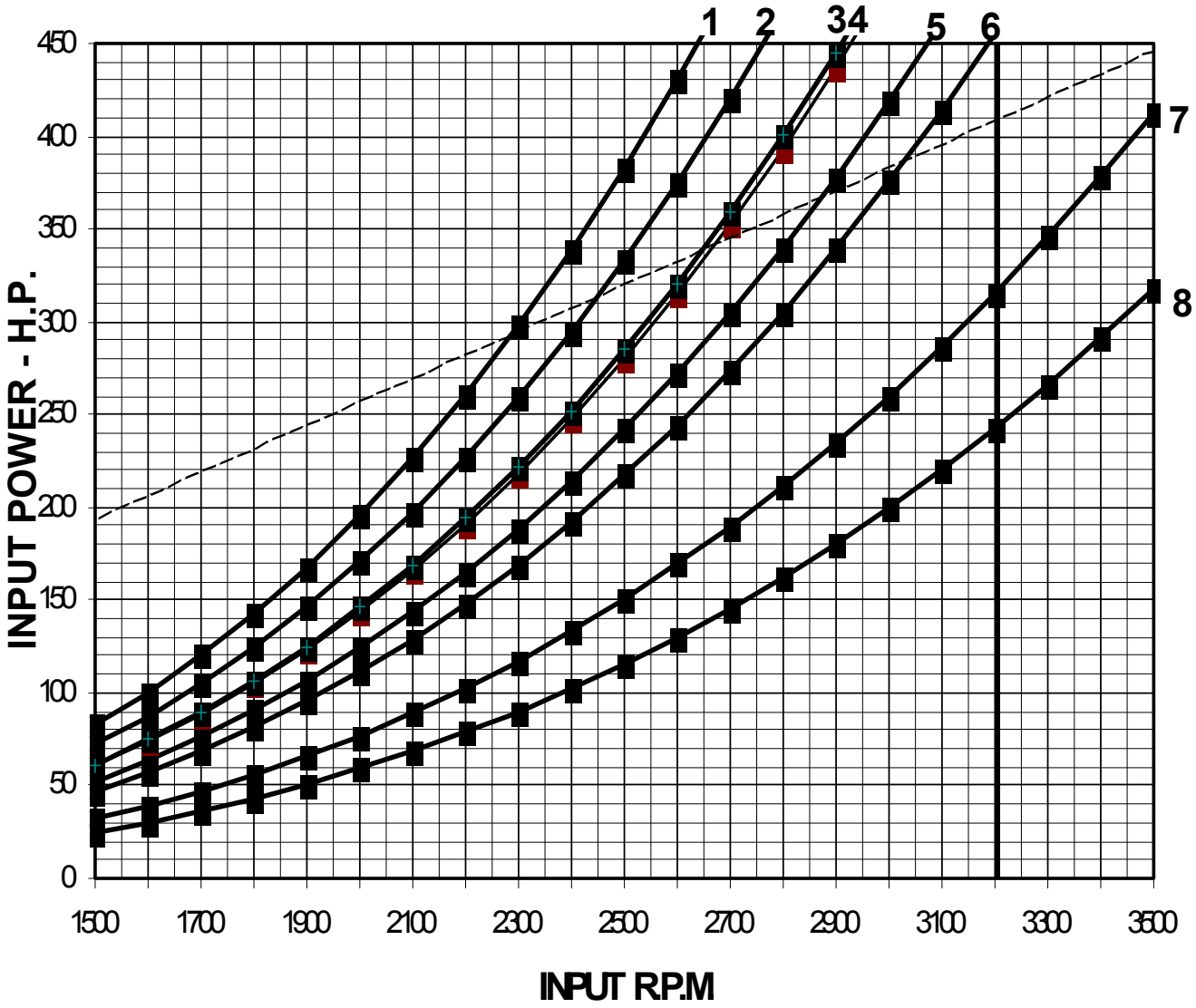

1
2
3
4
5
6
7
8
400
350
300
250
200
150
100
50
0
2500
2700
2900
3100
3300
3500
3700
3900
4100
INPUT POWER - H.P.
INPUT R.P.M.


350
300
250
200
150
100
50
0
Input power (hp)
1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000 3200 3400 3600
Input r.p.m.


1
2
3
4
5
6
7
350
300
250
200
150
100
50
0
INPUT POWER - H.P.
1500
1700
1900
2100
2300
2500
2700
2900
3100
3300
3500
INPUT R.P.M.

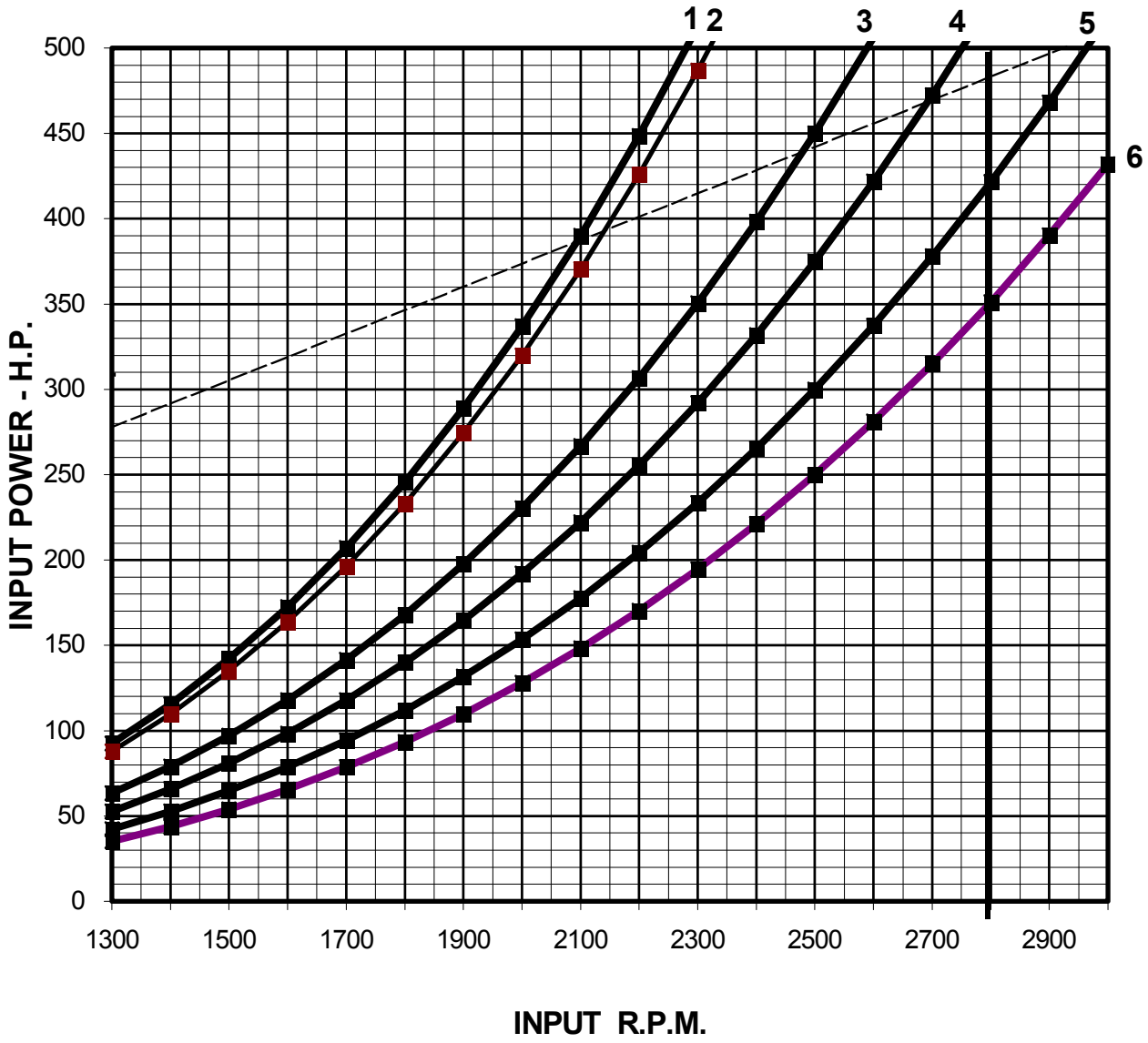
Performance Curve

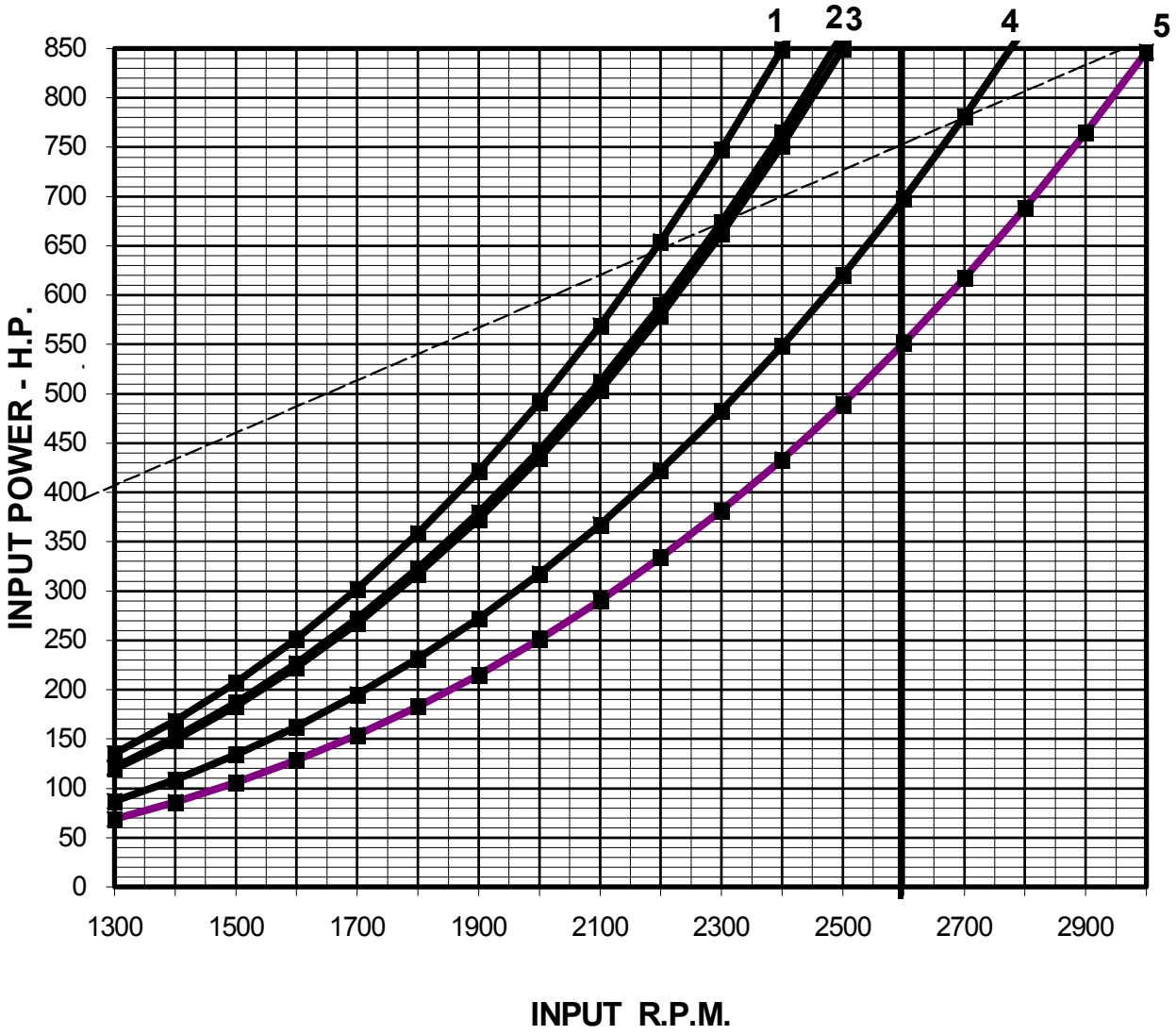
MODEL NO
DJ110

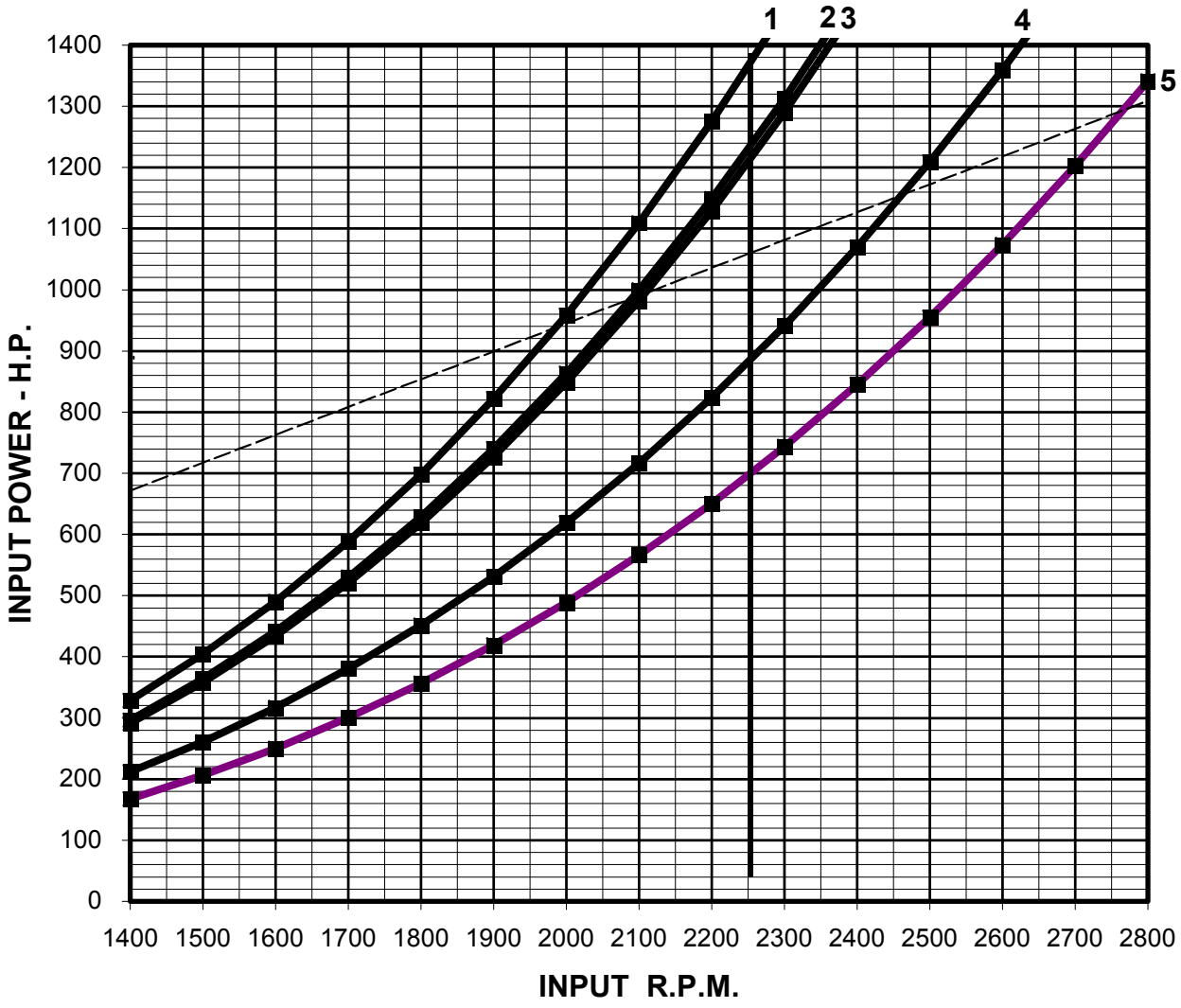


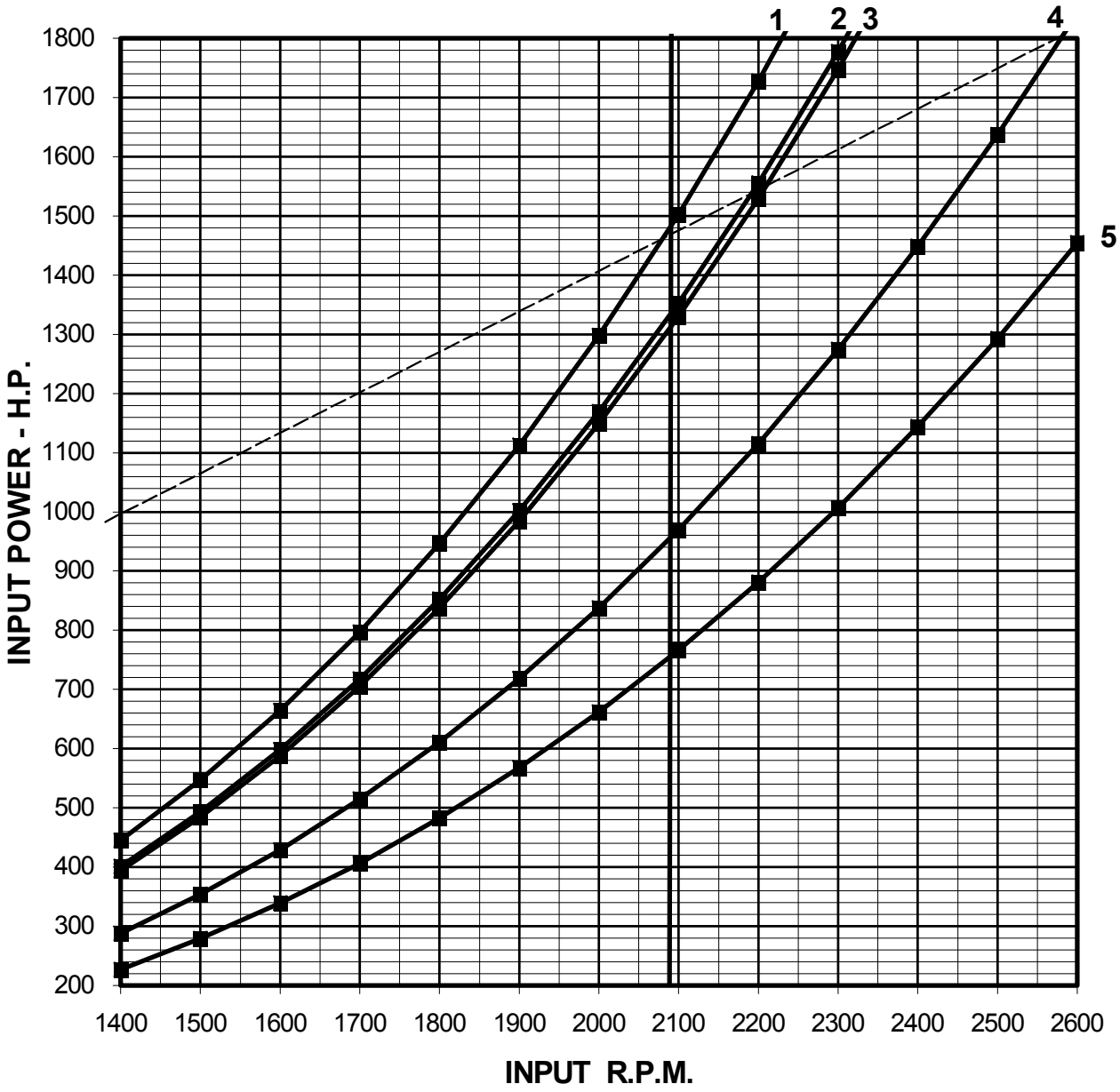
Performance Curve

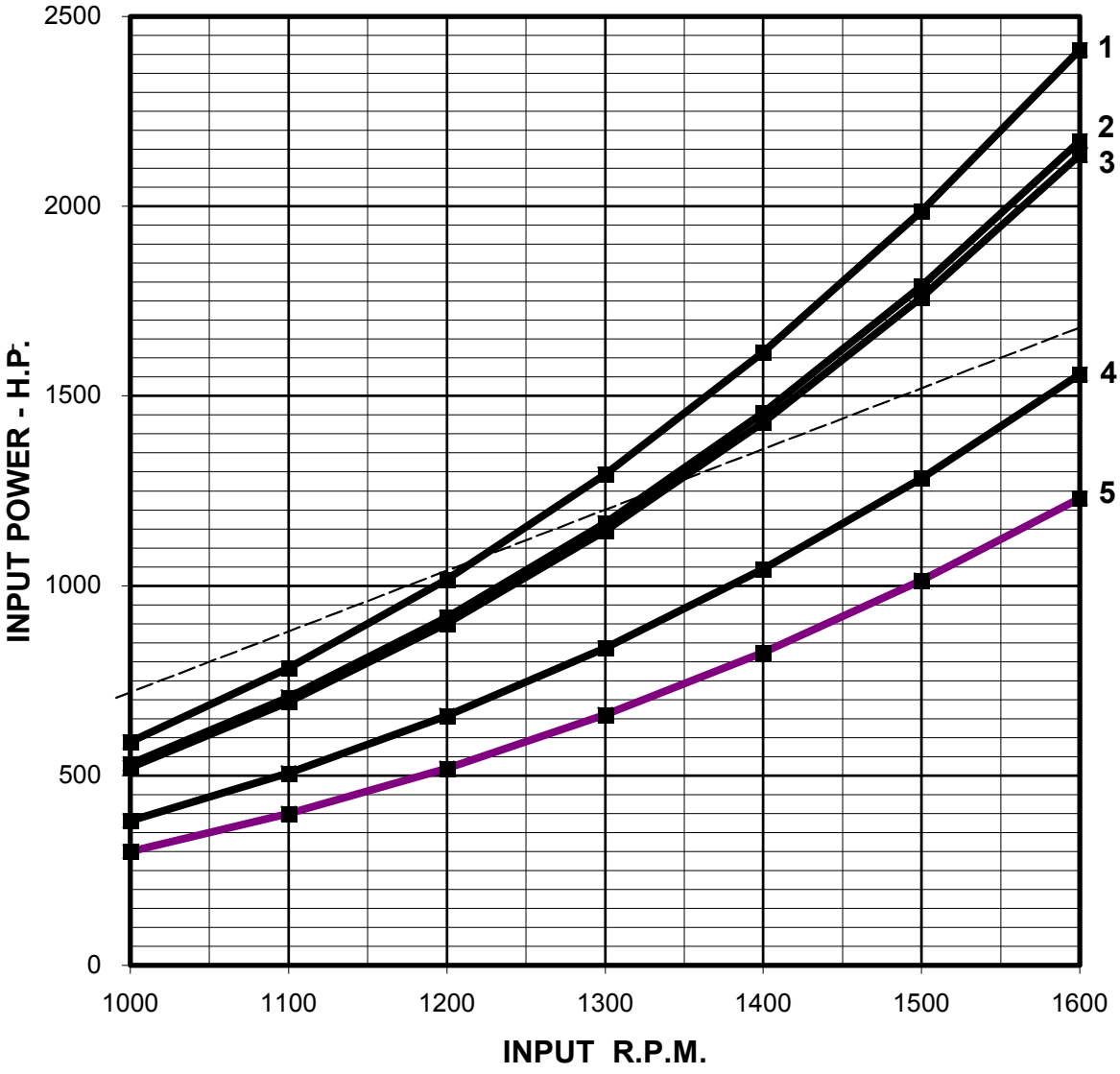
MODEL NO
DJ130

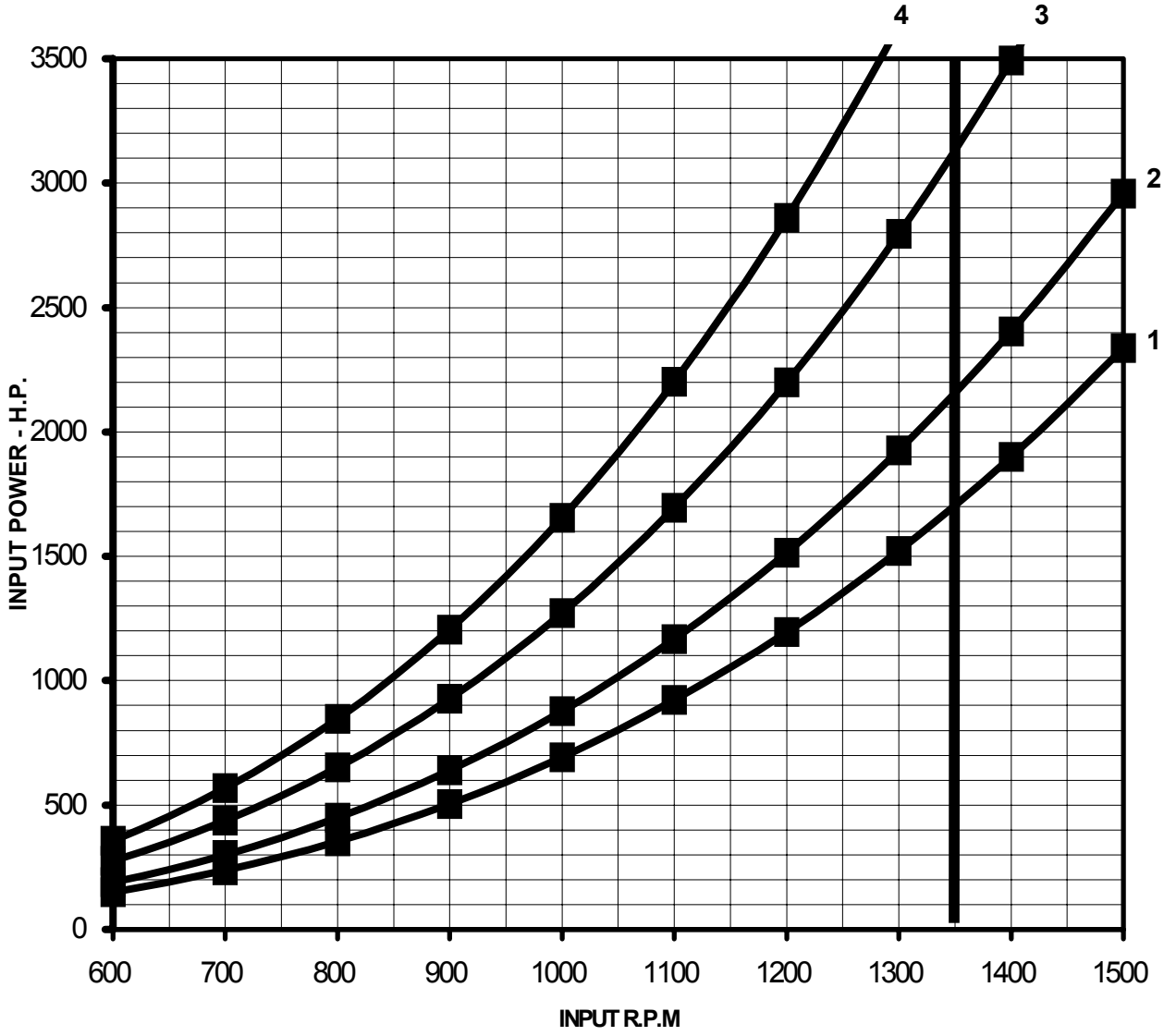


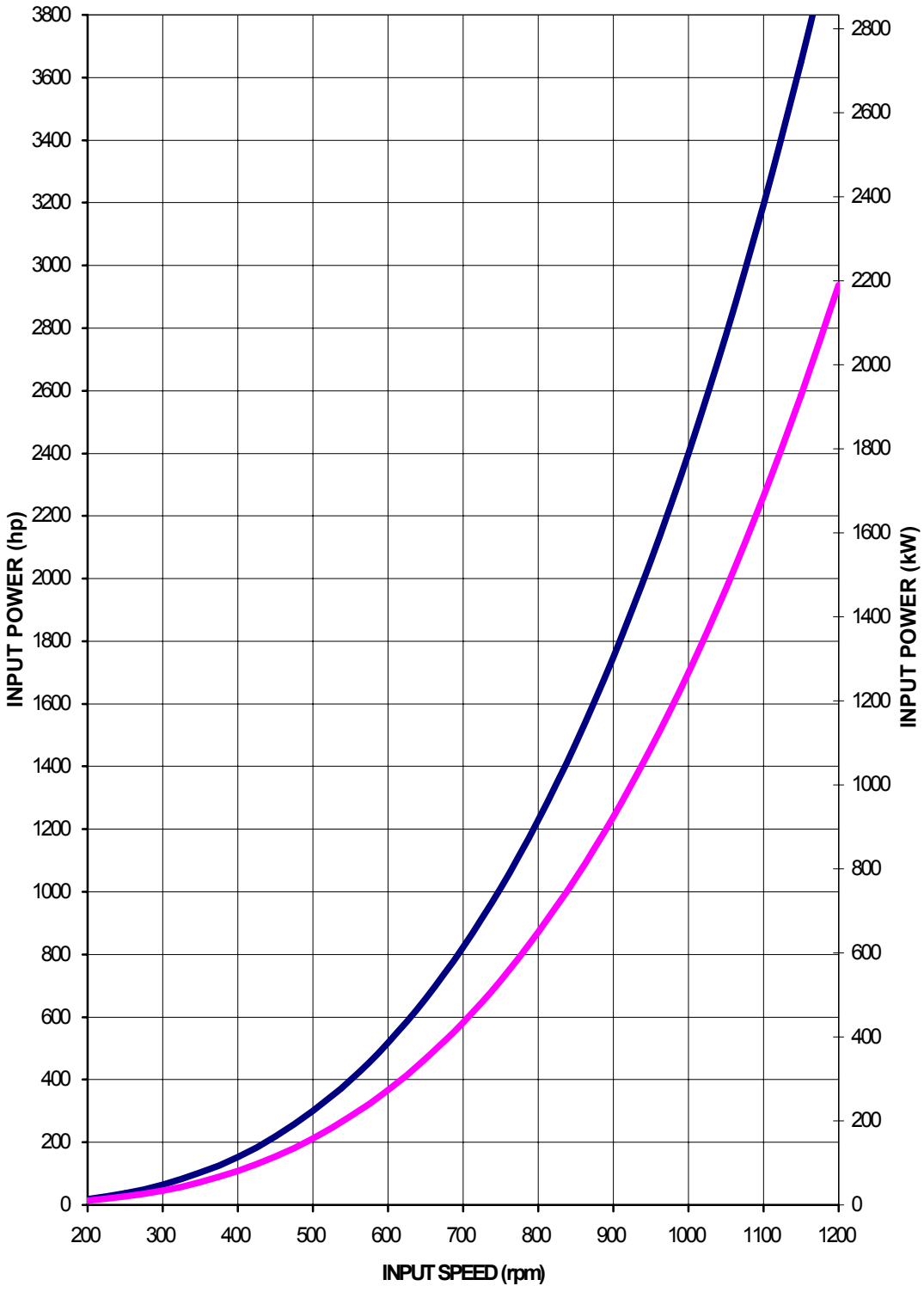

1
23
4
5
850
800
750
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
INPUT POWER - H.P.
1300
1500
1700
1900
2100
2300
2500
2700
2900
INPUT R.P.M.


1
2 3
4
5
INPUT POWER - H.P.
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800
INPUT R.P.M.


1
2
3
4
5
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
INPUT POWER - H.P.
1400
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
2600
INPUT R.P.M.


2500
2000
1500
1000
500
0
INPUT POWER - H.P.
1000
1100
1200
1300
1400
1500
1600
INPUT R.P.M.
1
2
3
4
5


4
3
2
1
3500
3000
2500
2000
1500
1000
500
0
INPUT POWER - H.P.
600
700
800
900
1000
1100
1200
1300
1400
1500
INPUT R.P.M


INPUT POWER (hp)
INPUT POWER (kW)
INPUT SPEED (rpm)
3800
3600
3400
3200
3000
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
2800
2600
2400
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
200
300
400
500
600
700
800
900
1000
1100
1200