

SERVICE CLASSIFICATION DEFINITIONS

Pleasure Craft

Maximum power capacity is intended only for personal use, planing hull pleasure craft where full engine throttle operation will be less than 5% of total time with balance of time at 87% of full throttle engine RPM or less. Marine Gears used in long range pleasure cruisers, sportfish charters or any commercial service should not be selected according to Pleasure Craft Service Classification.

Intermediate Duty

pleasure or Commercial usage of planing or semi-displacement hull craft can qualify for Intermediate Duty Service Classification if full throttle operation will average only a few hours per day with major portion of usage at partial throttle and total annual usage will be 2000 hours or less.

Examples: Long Range Pleasure Cruisers

portfish Charter Boats

Party Fishing Boats

Some Crew Boats, Lobster Boats

Harbor and Coastal Patrol Boats

Search and Rescue Boats

Fire Boats

Continuous Duty

Commonly called "Workboat Duty," these Marine Gear applications are expected to operate continuously at full engine governed speed. The propulsion engine power setting must be known and must be within the Marine Gear's allowable input rating for continuous daylong or around-the-clock service.

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

- a. The propeller used
- b. The vessel's work assignment
- c. The captain's choice of throttle setting during continuous service

Hitachi Nico Transmission Co., Ltd. (HNT) recommends that all displacement and semidisplacement hull commercial applications be classed as Continuous Duty usage of the Marine Gear.

Examples: Fishing trawlers, Purse seiners
Lobster boats and crab boats
Tugs, Tow boats, Buoy tenders
Offshore crew/supply boats, Ferries
Research vessels, Ocean freighters

IMPORTANT APPLICATION INFORMATION

- Transmission ratings are based on use of the transmission in a torsionally compatible system utilizing suitable input torsional coupling.
- Ratings are for diesel engines at the indicated speeds unless otherwise limited.
- Consult factory for ratings applicable to gasoline engines or gas turbines or for all other applications not conforming to the given service classification definitions.
- Ratings apply to right hand engines, i.e., counterclockwise flywheel rotation when viewing rear of engine.
- The power transmission capacity of the forward and reverse components is the same. However, helical directions of gear for starboard and port unit on some models will be changed.

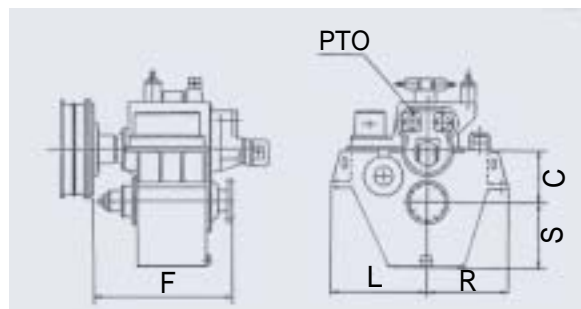
IMPORTANT NOTICE : Torsional vibration analysis is required and can be made by the engine manufacturer and independent consultants. HNT is prepared to assist the analysis in relation to the transmissions. Hitachi Nico Transmission Co., Ltd. advises users of these products that their safe operation depends on use in compliance with technical information provided in the product manuals. Proper installation, operation and periodical inspection and maintenance are prerequisite for safe operation of these products. It is the responsibility of users to provide and install safety devices, which may be required by recognized safety standards.

Hitachi Nico Transmission Co., Ltd.

Continuous Duty Marine Reduction Gear for Water Jet
RGN-K / RGC-K Series (Vertical Offset Type)

Model	SAE Hsg.	Standard Ratios	Input Rating						Max.
			1200 min ⁻¹		1800 min ⁻¹		2200 min ⁻¹		Speed
			kW	HP	kW	HP	kW	HP	min ⁻¹
RGN 130K / RGC 130K	---	1.11 - 2.05	951	1275	1426	1912	1743	2336	2200
RGN 140K / RGC 140K	---	1.19 - 1.94	1245	1669	1867	2503	2282	3059	2200
RGN 160K / RGC 160K	---	1.21 - 1.91	1639	2197	2459	3296	3005	4028	2200
RGN 180K / RGC 180K	---	1.44 - 2.06	2184	2928	3277	4393	4005	5369	2200
RGN 200K / RGC 200K	---	1.08 - 1.72	3569	4784	5353	7176	6542	8770	2000
			900 min ⁻¹		1200 min ⁻¹		1800 min ⁻¹		
RGN 220K / RGC 220K	---	1.14 - 1.82	3569	4784	4758	6378	7137	9567	1800
RGN 250K / RGC 250K	---	1.23 - 1.56	5176	6938	6901	9251	---	---	1300
RGN 280K / RGC 280K	---	1.38 - 1.74	6908	9260	9210	12346	---	---	1200

RGN-K / RGC-K Series
 (Vertical Offset Type)
Dimensional Data



Model	F:	L:mtg.	R:mtg.	C:	S:	Mass (approx.dry) kg
	length mm	pad mm	pad mm	offset mm	sump mm	
RGN 130K / RGC 130K	800	490	430	300	300	650
RGN 140K / RGC 140K	900	550	475	310	380	860
RGN 160K / RGC 160K	900	625	525	335	430	1080
RGN 180K / RGC 180K	900	670	550	395	405	1420
RGN 200K / RGC 200K	1170	750	600	410	460	2000
RGN 220K / RGC 220K	1250	850	650	490	500	2680
RGN 250K / RGC 250K	1300	850	650	530	500	3390
RGN 280K / RGC 280K	1400	850	700	650	600	4740

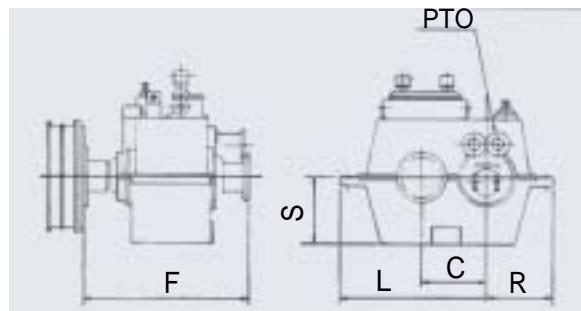
Comments • Dimensions may vary with housing adapter or output flange size.
 • Dry mass is approximate and does not include companion flange.
 • Specifications subject to change.

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Continuous Duty Marine Reduction Gear for Water Jet
RGC-H Series (Horizontal Offset Type)

Model	SAE Hsg.	Standard Ratios	Input Rating						Max.
			1200 min ⁻¹		1800 min ⁻¹		2200 min ⁻¹		Speed
			kW	HP	kW	HP	kW	HP	min ⁻¹
RGC 200H	---	1.08 - 1.72	3569	4784	5353	7176	6543	8771	2000
			900 min ⁻¹		1200 min ⁻¹		1800 min ⁻¹		
RGC 220H	---	1.14 - 1.82	3569	4784	4758	6378	7137	9567	1800
RGC 250H	---	1.23 - 2.09	4030	5402	5373	7203	---	---	1300
RGC 280H	---	1.38 - 1.74	6908	9260	9210	12346	---	---	1200
			800 min ⁻¹						
RGC 320H	---	1.21 - 1.67	10286	13788	---	---	---	---	800
RGC 360H	---	1.16 - 1.49	13714	18384	---	---	---	---	800

RGC-H Series
(Horizontal Offset Type)
Dimensional Data



Model	F:	L:mtg.	R:mtg.	C:	S:	Mass (approx.dry) kg
	length mm	pad mm	pad mm	offset mm	sump mm	
RGC 200H	1170	870	400	410	430	1800
RGC 220H	1250	1000	410	490	460	2430
RGC 250H	1300	1080	440	530	500	3090
RGC 280H	1400	1250	420	650	560	4340
RGC 320H	1620	1350	450	750	500	6300
RGC 360H	1830	1400	500	800	500	7500

Comments • Dimensions may vary with housing adapter or output flange size.
• Dry mass is approximate and does not include companion flange.
• Specifications subject to change.