

ZF 53600 NR2H

Horizontal offset, remote mount marine transmission.

Description

- 2 shaft non reverse reduction transmission with hydraulic clutch mounted on the input shaft.
- Suitable for high performance applications in all types of fast craft, luxury motoryachts, patrol vessels, etc .
- Horizontal offset .
- Compatible with all types of engines.
- Fully works tested, reliable and simple to install .
- Design, manufacture and quality control standards comply with ISO 9001 .
- Output shaft rotating in the opposite direction to that of the input shaft.
- Propeller thrust bearing installed for ahead and astern operation. .
- Easy onboard maintenance .

Features

- Robust, torsion - resistant housing (cast iron/welded steel) .
- Case hardened and precisely ground gear teeth for long life and smooth running .
- Output shaft thrust bearing designed to take maximum propeller thrust astern and ahead .
- Free standing .
- Smooth and reliable hydraulic shifting (electrically activated with mechanical override) with pressure modulation for controlled engagement .
- Suitable for multi engine installations.
- Emergency "get home" capability .
- Cast-on brackets .
- Oil cooler complete with fittings .

Options

- Engine-matched torsional coupling .
- Standard monitoring system .
- Special monitoring (acc. Classification Society requirements) .
- Propeller shaft flange and coupling bolt sets .
- PTO (live) .
- Standby oil pump .
- Classification by all major Classification Societies on request .

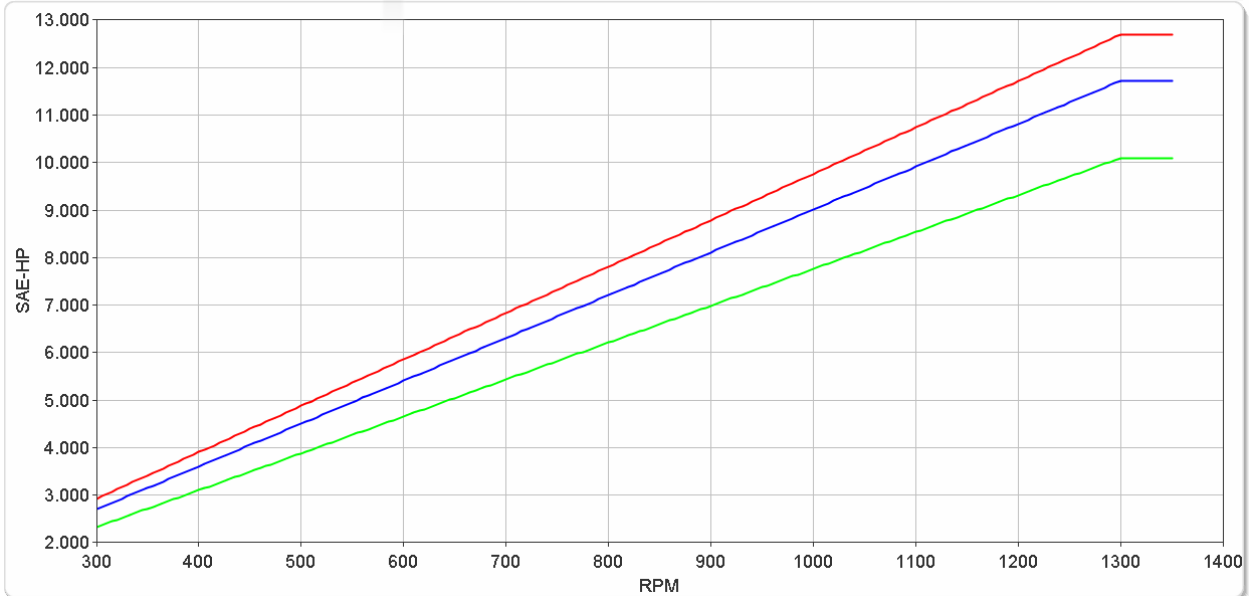
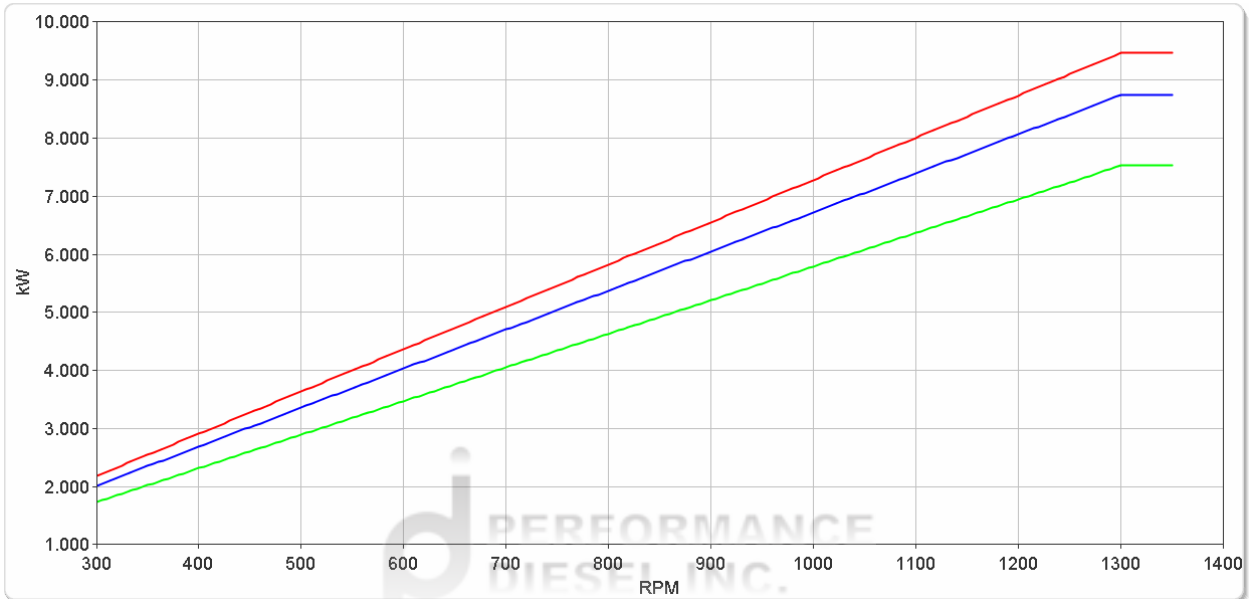
ZF 53600 NR2H

Ratings

Medium Duty

RATIOS	MAX. TORQUE		POWER/RPM		INPUT POWER CAPACITY						MAX. RPM
	Nm	ftlb	kW	hp	1000 rpm		1200 rpm		1300 rpm		
					kW	hp	kW	hp	kW	hp	
■ 2.481, 2.917, 3.476, 3.700 ■ 4.000 ■ 4.500	69524	51278	7.2800	9.7626	7280	9763	8736	11715	9464	12691	1350
	64185	47340	6.7209	9.0129	6721	9013	8065	10816	8737	11717	1350
	55284	40775	5.7889	7.7630	5789	7763	6947	9316	7526	10092	1350

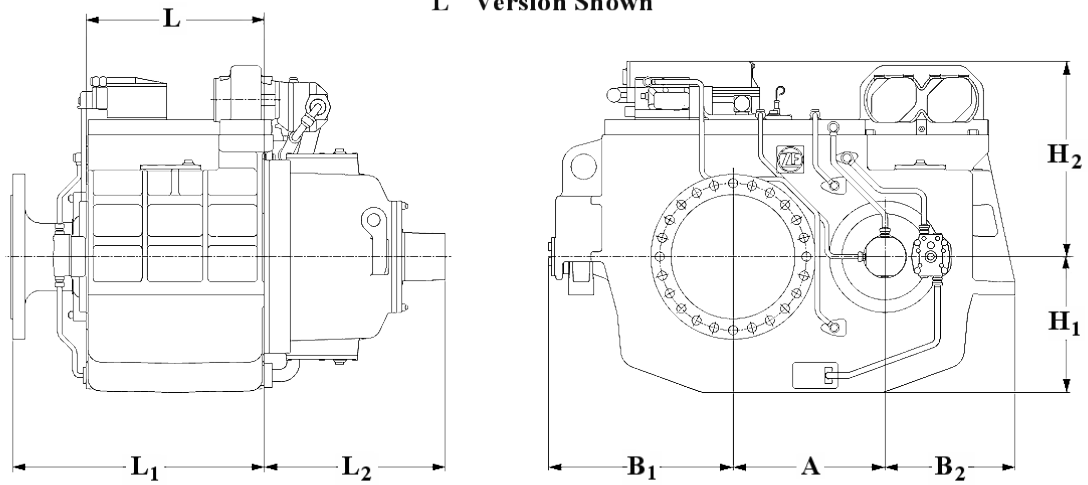
* Special Order Ratio.



ZF 53600 NR2H

Dimensions

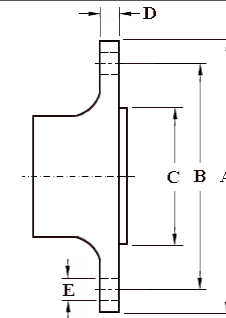
"L" Version Shown



mm (inches)							
A	B ₁	B ₂	H ₁	H ₂	L	L ₁	L ₂
670 (26.4)	948 (37.3)	772 (30.4)	770 (30.3)	1,146 (45.1)	759 (29.9)	996 (39.2)	1,136 (44.7)
Weight kg (lb)				Oil Capacity Litre (US qt)			
9,900 (21,780)				300 (318)			

Output Coupling Dimensions

A		B		C		D		Bolt Holes		
mm	in	mm	in	mm	in	mm	in	No.	Diameter (E)	
									mm	in
670	26.4	590	23.2	230	9.06	63.0	2.48	8	45.0	1.77



Duty Definitions

MEDIUM DUTY DEFINITION Intermittent operation with some variations in engine speed and power

Average engine operating 4000 hours/year.
hours limit: 3500 hours/year for gearboxes smaller than ZF 2000 series and workboat ZF W2700 series.

Typical hull forms: Semi-displacement and displacement

Typical applications: Charter and commercial craft (example: crew boats and fast ferries), and naval and police activities.

Duty Ratings

Ratings apply to marine diesel engines at the indicated speeds. At other engine speeds, the respective power capacity (kW) of the transmission can be obtained by multiplying the Power/Speed ratio by the speed.

Approximate conversion factors:

1 kW = 1.36 metric hp

1 kW = 1.34 U.S. hp (SAE)

1 U.S. hp = 1.014 metric hp

1 Nm = 0.74 lb.ft.

Ratings apply to right hand turning engines, i.e. engines having counterclockwise rotating flywheels when viewing the flywheel end of the engine. These ratings allow full power through forward and reverse gear trains, unless otherwise stated.

Contact your nearest ZF Sales and Service office for ratings applicable to gas turbines, gasoline (petrol) engines, as well as left hand turning engines, and marine transmissions for large horsepower capacity engines.

Ratings apply to marine transmissions currently in production or in development and are subject to change without prior notice.

NOTE: THE MAXIMUM RATED INPUT POWER MUST NOT BE EXCEEDED (SEE RESPECTIVE RATINGS IN THE TECHNICAL DATA SHEETS)

Safe Operating Notice

The safe operation of ZF products depends upon adherence to technical data presented in our brochures. Safe operation also depends upon proper installation, operation and routine maintenance and inspection under prevailing conditions and recommendations set forth by ZF. Damage to transmission caused by repeated or continuous emergency manoeuvres or abnormal operation is not covered under warranty. It is the responsibility of users and not ZF to provide and install guards and safety devices, which may be required by recognized safety standards of the respective country (e.g. for U.S.A. the Occupational Safety Act of 1970 and its subsequent provisions).

Monitoring Notice

The safe operation of ZF products depends upon adherence to ZF monitoring recommendations presented in our operating manuals, etc. It is the responsibility of users and not ZF to provide and install monitoring devices and safety interlock systems as may be deemed prudent by ZF. Consult ZF for details and recommendations.

Torsional Responsibility and Torsional Couplings

The responsibility for ensuring torsional compatibility rests with the assembler of the drive and driven equipment. ZF can accept no liability for gearbox noise caused by vibrations or for damage to the gearbox, the flexible coupling or to other parts of the drive unit caused by this kind of vibration. Contact ZF for further information and assistance. ZF recommends the use of a torsional limit stop for single engine powered boats, wherein loss of propulsion power can result in loss of control. It is the buyer's responsibility to specify this option, which can result in additional cost and a possible increase in installation length.

ZF can accept no liability for personal injury, loss of life, or damage or loss of property due to the failure of the buyer to specify a torsional limit stop. ZF selects torsional couplings on the basis of nominal input torque ratings and commonly accepted rated engine governed speeds. Consult ZF for details concerning speed limits of standard offering torsional couplings, which can be less than the transmission limit. Special torsional couplings may be required for Survey Society Ice Classification requirements.

