描述
- 非 reversing 减速机油浸式多片离合器
- 非 Clutchable NC 版本也可用
- 强大的设计也承受连续的水线应用
- 完全测试，可靠且易于安装
- 兼容各种类型的发动机和推进系统
- 设计、制造和质量控制标准符合 ISO 9001 和 APQP
- 简单的船板维护

特性
- 强韧，抗扭力的外壳（铸铁）
- 案头硬化和精密磨削的齿轮，使用寿命长，运行顺畅
- 输出轴推力轴承可承受最大桨叶推力的后退和前进
- 独立
- 紧凑，节省空间的设计，带冷却器、泵和全流量滤器
- 平滑和可靠的液压换挡（电控，机械超控）带有压力调节
- 适合双发动机安装
- 紧急“回家”能力
- 冷却器带接头
- 机座夹具
- 在大多数情况下，标准规格被主要的分类局接受。适用范围不适用于冰的规格。

选项
- 发动机匹配的扭力联轴器
- 气动离合器
- 标准监控系统
- 分类认证，从所有主要的分类机构可获得要求
- 特殊监控（根据分类要求）
- PTO（带或不带离合器）
- PTI（第二输入设备）
- PTH（主设备）
- 备用液压泵
- 引导泵
- 端口用于 CPP 或转向泵
- 更高的转速可以评估
- 外部和内部刹车
- Engine Wise 版本可以评估
Continuous Duty

<table>
<thead>
<tr>
<th>RATIOS</th>
<th>MAX. TORQUE</th>
<th>POWER/RPM</th>
<th>INPUT POWER CAPACITY</th>
<th>MAX. RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nm</td>
<td>ftlb</td>
<td>kW</td>
<td>hp</td>
</tr>
<tr>
<td>3.967, 4.556*</td>
<td>23627</td>
<td>17426</td>
<td>2.4740</td>
<td>3.3177</td>
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<tr>
<td>5.000</td>
<td>22920</td>
<td>16905</td>
<td>2.4000</td>
<td>3.2185</td>
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<tr>
<td>5.250</td>
<td>21965</td>
<td>16201</td>
<td>2.3000</td>
<td>3.0844</td>
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</table>

* Special Order Ratio.

Higher engine speeds can be evaluated on request.

Ratings shown for the ZF W17000, and larger gearboxes, are valid for applications without ice classification and comply with BV (Bureau Veritas) rules.
Dimensions

Output Coupling Dimensions

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>No.</th>
<th>Diameter (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>in</td>
<td>mm</td>
<td>in</td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>500</td>
<td>19.7</td>
<td>410</td>
<td>16.1</td>
<td>250</td>
<td>9.84</td>
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</tbody>
</table>
PTO Configurations

Front PTO23 (NR* Version)

Front PTO81 (NR* Version)

Front PTO83 (NR* Version)

Front PT124 (NR* Version)

Top PTO71 (R++NR* Version)

Top PTO72 (R++NR*Version)

Top PTO73 (R++NR* Version)

Top PTO74 (R++NR*Version)

Front PTO73 (aux. pump) with SAE A to CC* (NR* Version)

Brake (NR* Version)

* R= Reversing  * NR= Non-Reversing

Last Updated: 11:58 AM GMT - 15-Dec-11

Refer to the Installation Drawing for detail.
Duty Definitions

CONTINUOUS DUTY DEFINITION
Continuous operation with little or no variations in engine speed and power

| Average engine operating hours limit: | Unlimited |
| Typical hull forms: | Displacement. |
| Typical applications: | Heavy duty commercial vessels, tugs, fishing boats. |

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.