**Series MG Standard**

**Duty class:**
- Pleasure craft: 17 kW – 2856 kW
- Light duty: 36 kW – 2743 kW
- Medium duty: 13 kW – 2728 kW
- Intermittent duty: 57 kW – 1973 kW
- Heavy/continuous duty: 9 kW – 2322 kW

**Speed ranges, type depending:**
- Pleasure craft: 1600 rpm – maximal 4500 rpm
- Light duty: 1600 rpm – maximal 4300 rpm
- Medium duty: 1600 rpm – maximal 5000 rpm
- Intermittent duty: 1200 rpm – maximal 4400 rpm
- Heavy/continuous duty: 1200 rpm – maximal 5000 rpm

**Features**
- Lightweight construction
- Mechanically or electrically controlled (12 V or 24 V)
- Smooth clutch engagement
- Additional components as option

**Fields of application**
- Ferries, container ships, passenger boats, police boats, survey vessels, fishing and pilot boats, tugs and official boats

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**Series MGX QUICKSHIFT®**

**Duty class:**
- Pleasure craft: 368 kW – 2147 kW
- Light duty: 351 kW – 1985 kW
- Medium duty: 254 kW – 1715 kW
- Intermittent duty: 208 kW – 2340 kW
- Heavy/continuous duty: 199 kW – 1720 kW

**Speed ranges, type depending:**
- Pleasure craft: 2100 rpm – 3500 rpm
- Light duty: 1800 rpm – 3500 rpm
- Medium duty: 1600 rpm – 3500 rpm
- Intermittent duty: 1600 rpm – 3500 rpm
- Heavy/continuous duty: 1600 rpm – 3500 rpm

**Features**
- Short response time
- Smooth clutch engagement
- System control by proportional valve

**Fields of application**
- Ferries, container ships, passenger boats, police boats, survey vessels, fishing and pilot boats, tugs and official boats
EC300

- Precise and prompt response on captain’s command
- No switching between cruise and troll, no preselection of the appropriate operating mode
- Full power is always available. Propeller control between 1 knot and maximum speed with a simple hand movement
- Technical data on demand

EJS

Express Joystick System®

- Instant control of engines, gears and thrusters at the same time
- Immediate response of the drive line system due to the proven Quickshift technology
- Docking without using the steering wheel and control lever and very smooth running with the complete system
- To be used only with Quickshift gear, electronically controlled engine and thruster hydraulically controlled by proportional valve
- Yachts, pleasure boats and other applications on demand

Example of an EJS system
CLUTCHES (INDUSTRIAL)

**HP**
Hydraulically operated clutch
TWIN DISC

<table>
<thead>
<tr>
<th>Size</th>
<th>HP300 – HP600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power</td>
<td>up to 8677 Nm</td>
</tr>
<tr>
<td>Speed</td>
<td>max. 2200 rpm</td>
</tr>
</tbody>
</table>

- No pilot bearing necessary
- Maximal radial load allowed
- Easy installation

For universal use in industrial applications

**CL**
Mechanically operated clutch
TWIN DISC

<table>
<thead>
<tr>
<th>Size</th>
<th>CL105 – CL311</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power</td>
<td>20 kW – 280 kW</td>
</tr>
<tr>
<td>Speed</td>
<td>max. 3500 rpm</td>
</tr>
</tbody>
</table>

- Trouble-free heat dissipation
- Low space requirement
- Extremely rugged construction made of high-duty grey cast iron

For universal use in industrial applications

**PO**
Pneumatically operated clutch
TWIN DISC

<table>
<thead>
<tr>
<th>Size</th>
<th>PO114 – PO342</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power</td>
<td>40 kW – 5300 kW</td>
</tr>
<tr>
<td>Speed</td>
<td>max. 2400 rpm</td>
</tr>
</tbody>
</table>

- Long lifetime
- No readjustment required
- Simple remote control

For universal use in industrial applications

---

**COMBINATION OPTIONS**

<table>
<thead>
<tr>
<th>MG gear</th>
<th>MGX gear</th>
<th>EC300</th>
<th>EJS system</th>
<th>HPTO</th>
<th>SB power take-off</th>
<th>IB power take-off</th>
<th>Pump drive unit</th>
<th>Pump adapter</th>
<th>PFI</th>
<th>UCD</th>
<th>HP clutch</th>
<th>PO clutch</th>
<th>CL clutch</th>
<th>Diesel engine elec. ctrl.</th>
<th>PFI</th>
<th>UCD</th>
<th>HP clutch</th>
<th>PO clutch</th>
<th>CL clutch</th>
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</tbody>
</table>

- impossible
  - possible

---

esco
### UCD
- Variable speed drive
- TWIN DISC

<table>
<thead>
<tr>
<th>Size</th>
<th>250-1 – 3000-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power</td>
<td>80 kW – 3000 kW</td>
</tr>
<tr>
<td>Speed</td>
<td>max. 3000 rpm</td>
</tr>
</tbody>
</table>

- High efficiency
- Use with low cost squirrel cage motor
- Wear resisting power transfer

- Drinking water supply and irrigation plants, pumps, fans, compressors

---

### HPTO
- Hydraulically operated take-off
- TWIN DISC

<table>
<thead>
<tr>
<th>Size</th>
<th>140 – 244 – 366</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power</td>
<td>up to 1150 kW</td>
</tr>
<tr>
<td>Speed</td>
<td>max. 3000 rpm</td>
</tr>
</tbody>
</table>

- Compact design
- Cost-effective
- No shaft displacement

- Stone crushers, ships and boats, pumps, blowers, shredders, etc.

---

### SP/IB PTO’s
- Mechanically operated take-off
- TWIN DISC

<table>
<thead>
<tr>
<th>Size</th>
<th>SP111 – SP321</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power</td>
<td>up to 1225 kW</td>
</tr>
<tr>
<td>Speed</td>
<td>up to 3500 rpm</td>
</tr>
</tbody>
</table>

- Simple construction
- Cost-effective
- For radial and axial applications

- Stone crushers, ships and boats, centrifugal pumps, blowers, shredders, etc.

---

### Pump Drive Units
- TECHNODRIVE

<table>
<thead>
<tr>
<th>Size</th>
<th>AM110 – AM480</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power</td>
<td>up to 800 kW</td>
</tr>
<tr>
<td>Speed</td>
<td>max. 3950 rpm</td>
</tr>
</tbody>
</table>

- Hardened and ground spur gears
- Individual adaptation to pumps
- With housing and coupling connection for diesel engines

- Marine applications, crushers, special vehicles, pumps

---

### Pump Adapters
- TECHNODRIVE

<table>
<thead>
<tr>
<th>Size</th>
<th>SAE5 – SAE0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power</td>
<td>on demand</td>
</tr>
<tr>
<td>Speed</td>
<td>–</td>
</tr>
</tbody>
</table>

- Pump directly flanged to the diesel engine
- Simple design for nearly all pumps
- Cost-effective

- For universal use in industrial and marine applications

---

### Power Take Off PFI
- TECHNODRIVE

<table>
<thead>
<tr>
<th>Size</th>
<th>PFI60 and PFI120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power</td>
<td>up to 420 kW</td>
</tr>
<tr>
<td>Speed</td>
<td>max. 3200 rpm</td>
</tr>
</tbody>
</table>

- Operated under load
- Hydraulically applied, electrically operated
- With input shaft or direct flanging of hydraulic pumps

- For universal use in industrial and marine applications
esco - Excellent service for excellent brands

By service, we – the esco team – mean far more than maintenance and repair. That’s why our service already starts with the first phone call. Our experienced experts advise you on choosing the appropriate components and offer technically and economically convincing solutions meeting your requirements. In constructive collaboration with you and our suppliers we realize the solution concepts efficiently and give you our support throughout the whole project phase until the start-up on site. Engineering and consulting service, products of leading manufacturers and first class support – esco offers optimum performance at an economical price.

Personal consultation

At the Troisdorf offices, our field experienced engineering team answers in detail all questions regarding conception of complete drives or customization to the requirements of the application. Close cooperation and personal consultation provide confidence – and this is now more important than ever.

Service activities

We know how cost-intensive production losses resulting from machine downtime are. So, we do our utmost to make your equipment ready for operation again as fast as possible. Short reaction times due to best organized service processes and an extensive stock at the Troisdorf location with 24/48 hours delivery of all important spare parts guarantee safe operation of your machines and minimum downtimes.

For more information on clever drive solutions from esco please refer to www.esco-antriebstechnik.de.
Or simply call us! Our sales team will be pleased to help you.