REINTJES
POWER TRAIN SOLUTIONS

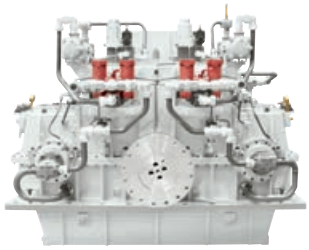
Gearboxes for

Work Boats

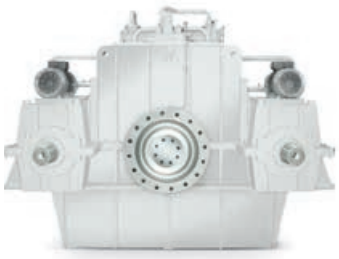
DLG 1113 – 110131 | 1,400 – 30,000 kW

Applications for Work Boats

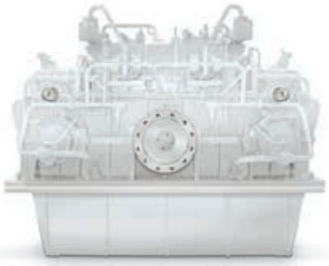
DLG 1113–110131



Twin input/single output reduction gearbox, horizontally offset



Twin input/single output reduction gearbox U-Drive design, horizontally offset



Twin input/single output reduction gearbox with PTO, horizontally offset

Twin input/single output reduction gearbox with PTO, horizontally offset

Advantages

Gearboxes of the DLG series have been specially designed for work boats such as tugs, container-vessels, ferries and special-purpose ships with similarly high performance demands.
We have the backing of over 80 years of experience in marine gearbox production and use state-of-the-art computationtools and production technologies.

Owing to their design for specific areas of application, the hydraulically operated twin in/single-out reduction gearboxes of the DLG series offer various special advantages:

- High operating reliability
- Simple operation and maintenance
- Compact dimensions
- Low operating noise

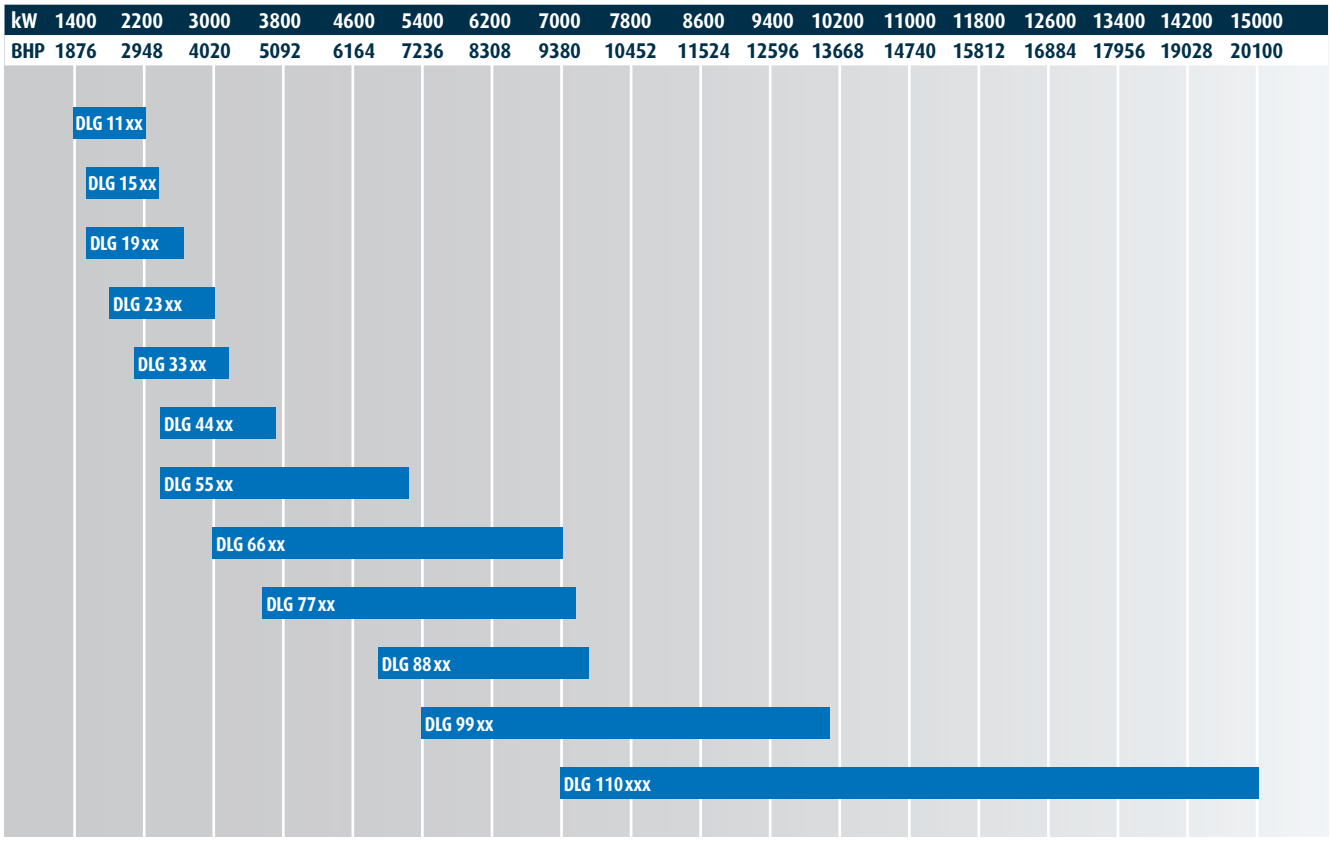
Gearbox selection

The diagram opposite gives an overview of the performance ratings of the basic DLG types.

However, for the final selection of gearboxes please contact REINTJES.

DESIGNED FOR HEAVY DUTY APPLICATIONS

Engine power

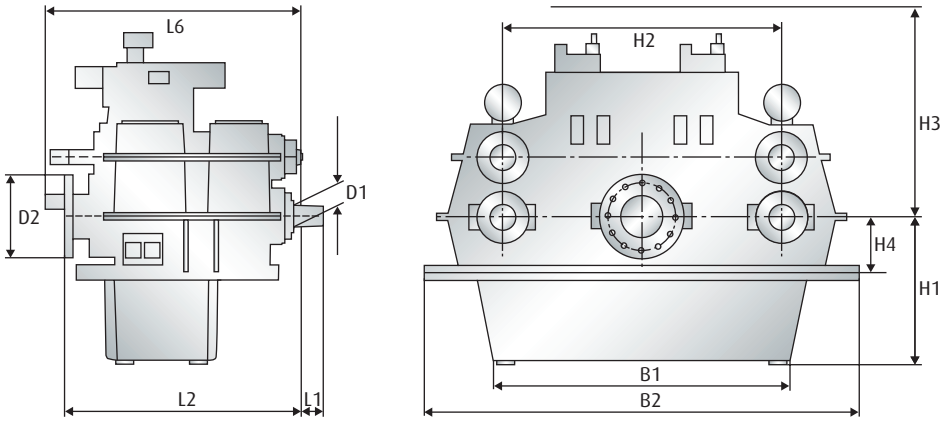


* Gearbox designation e.g. DLG 19xx: 19 => size of clutch, xx => variations of output shaft-sizes (13,16,31, ... 131)

Marine Gearboxes
DLG 1113 – 110131

DLG 1113 – 3331

Twin input/single output reduction gearbox with hydraulically operated clutches
Horizontally offset

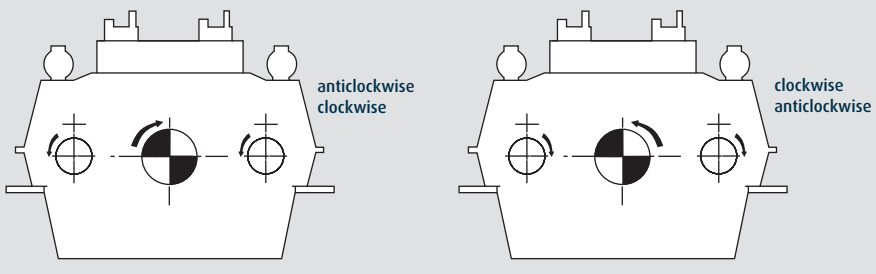


Gearbox	Main Dimensions (mm)											Weight kg[1]
DLG	B1	B2	D1	D2	H1	H2	H3	H4	L1	L2	L6	
1113	2040	3050	107	620	1000	2000	1255	350	142	1240	1430	9500
1116	1900	3000	107	560	1000	2000	1350	350	142	1450	1640	12000
1120	1400	2400	107	650	815	1600	1200	380	142	1235	1450	8400
1513	2040	3050	117	510	1000	2000	1250	350	154	1510	1730	9500
1516	2400	3330	117	600	750	2250	1800	400	154	1398	1650	13500
1525	2200	3250	117	650	1090	2200	1550	380	154	1480	1720	13800
1913	2100	2780	127	550	1000	2000	1650	400	162	1440	1750	10500
1916	2880	3400	127	600	1150	2500	1800	360	162	1450	1750	15000
1925	2700	3500	127	670	1310	2500	1800	460	162	1440	1750	16000
1931	2700	3900	127	710	1210	2300	1640	540	162	1735	2000	22500
2316	2000	2800	162	600	1030	2300	1580	390	198	1620	2000	19000
3325	2250	3060	167	770	1250	2500	1500	440	198	1715	1920	19000
3331	2080	3060	167	915	1250	2500	1500	440	198	1765	1900	20000

Above list only shows an extract of gearboxes available. Additional sizes and variations are available on request.
1) Gearbox standard design (dry). Dimensions and weights not strictly binding. Subject to change.

Direction of rotation DLG

Seen from propeller onto engine flywheel in direction of travel ahead



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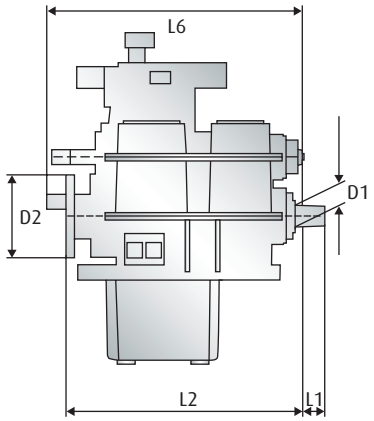
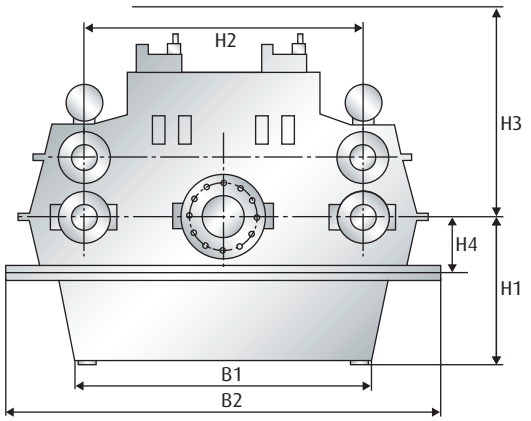
DLG 4431 – 110131

Twin input/single output reduction gearbox with hydraulically operated clutches
Horizontally offset



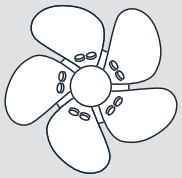


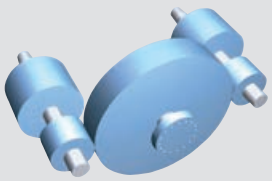
Gearbox	Main Dimensions (mm)											Weight kg[1)]
DLG	B1	B2	D1	D2	H1	H2	H3	H4	L1	L2	L6	
4431	2700	3200	187	710	1260	2500	1750	450	237	1920	2210	24000
4447	2800	3900	187	820	1300	2500	1730	500	237	2090	2300	26000
5520	2800	3580	197	650	1250	2500	1800	500	251	1870	2115	28000
5539	2100	3460	197	705	1315	2800	1700	640	251	1995	2115	31000
5547	2800	3580	197	800	1250	2500	1800	640	251	2030	2400	28000
5573	3300	4180	197	860	1410	2800	2050	800	251	2300	2400	32000
6673	2900	4250	217	860	1400	2800	1850	675	263	2540	2350	37000
7747	3300	4300	217	737	1250	2800	1770	550	306	2255	2560	31000
7773	3200	4300	217	750	1250	2800	1800	550	306	2255	2560	31500
8890	3250	4100	247	900	1425	2800	1750	500	321	2370	2700	42000
9990	3000	5220	247	900	1550	3400	2050	750	321	2800	3000	51000
110131	3000	5450	315	950	1550	3400	2050	750	405	2435	3600	61000

Above list only shows an extract of gearboxes available. Additional sizes and variations are available on request.
1) Gearbox standard design (dry). Dimensions and weights not strictly binding. Subject to change.

DLG series

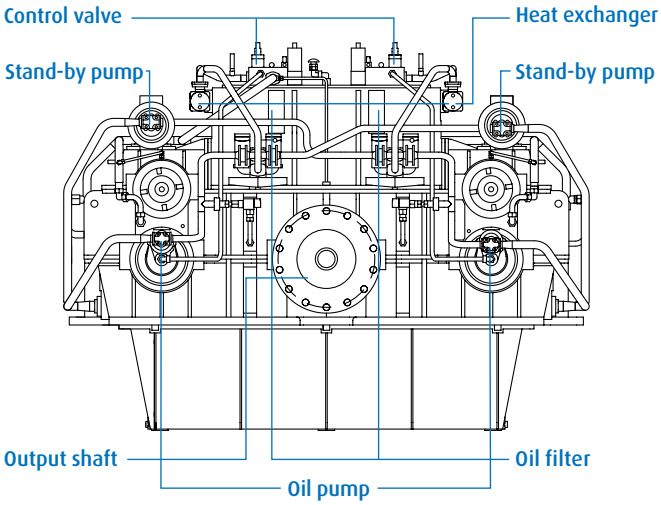
Twin input/single output reduction gearbox for propulsion with controllable pitch propeller

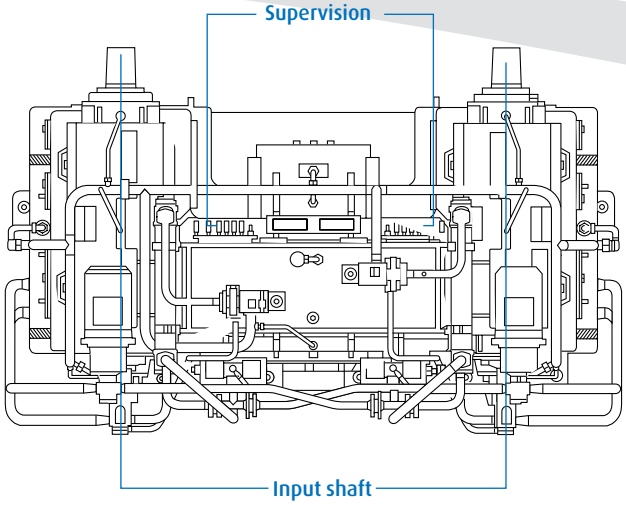




Counter rotation of input and output

Standards
DLG 1113 – 110131





Basic equipment

- Housing made from grey cast iron or steel housing in torsion stiff design, rigid mounting
- Spur wheels helically toothed and tooth flank ground
- Built-in hydraulically operated-disc clutches with steel/sinter friction surface
- Smooth engagement by adapted pressure increase during shifting
- Gearbox either completely equipped with anti-friction bearings, including thrust bearing or for higher ratings all shafts, except the integrated clutches, are supported with slide bearings on request.

Scope of supply

STANDARDS

- Integrated oil sump. Common circuit for operating pressure and lube oil. Oil pump and oil filter accessible from the outside
- Fitted heat exchanger for cooling water inlet temperature of max. 38 °C, seawater resistant
- Connection facility for remote supervision of pressure and temperature
- Built-on control valve, electrically or pneumatically operated
- Emergency control: in case of failure of operating pressure mechanical force locking of the disc clutch is possible
- Input: free shaft end with taper 1:30
- Output: forged-on-flange
- Supervision
  1. Pressure switch – operating pressure too low
  2. Pressure switch – clutch engaged
  3. Temperature sensor (2 x PT100) – oil temperature behind heat exchanger
  4. Filter contamination – electrical signal for "filter contaminated"
  5. Thermometer – oil temperature behind heat exchanger
  6. Pressure gauge for operating oil pressure
  7. Temperature supervision for all slide bearings
- Paint coating with synthetic resin varnish. Colour: RAL 7023 concrete grey

EXTRAS

- Output counter flange
- Output shaft with cylindrical shaft end
- Flexible coupling
- Supervision instruments
- Special PTO executions
- Spare part kit as per classification rules
- Paint coating with synthetic resin varnish in all RAL-colours
- Heat exchanger for cooling water temperature higher than 38 °C
- Special reduction ratios
- Connection facility for electrical stand-by or trailing pumps
- Built-in propeller shaft brake, hydraulically operated

Subject to change

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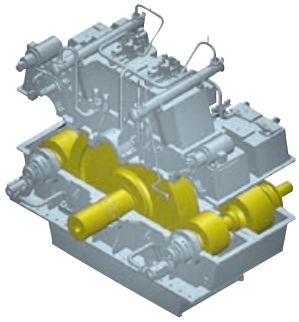
POWER TRAIN SOLUTIONS

OPTIONS AND FEATURES

Options

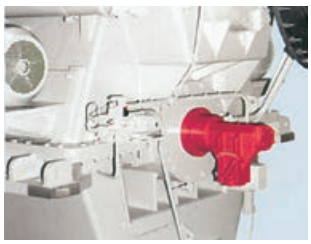
POWER TAKE OFF (PTO)
POWER TAKE IN (PTI)

If required, the gearboxes can be fitted with additional Power Take Off (PTO; application: Hydraulic pumps and generators) and Power Take In (PTI).



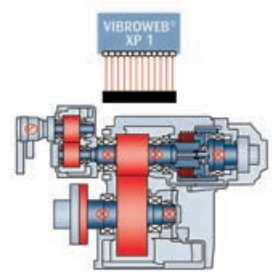
OD-BOX

For all customary CPP systems, the output shaft can be provided with a centre bore and a connection for the oil distributor box.



CONDITION MONITORING

Monitoring for all key data for proactive maintenance and management.



UNATTENDED MACHINERY SPACE

All gearboxes can be supplied with additional supervision instruments, according to classification society rules, enabling the operator to take all necessary information from the bridge.

C Duty cycle classification

CONTINUOUS DUTY

- Continuous operation with little or no variations in engine speed and power
- Average engine operating hours: unlimited
- Allowable hull forms: semi-displacement, displacement
- Allowable applications: commercial vessels

Approved quality

Several renowned classification societies have granted REINTJES permission to conduct inspection and approval procedures themselves. In the same way many gearbox types come with a drawing approval or full classification for the main classification societies (IACS members). Since 1990 REINTJES has been certified to DIN ISO 9001/EN 29001.

REINTJES
POWER TRAIN SOLUTIONS

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