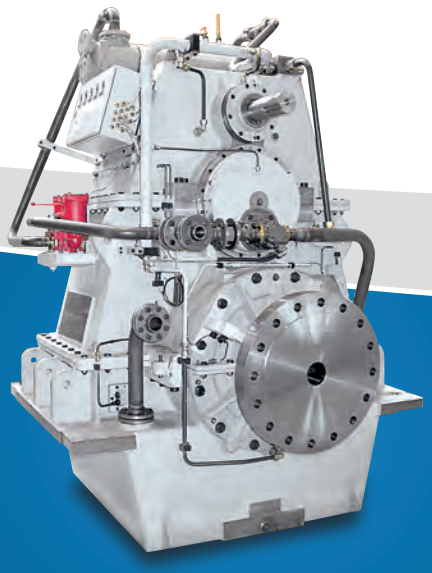
REINTJES
POWERTRAIN SOLUTIONS

Gearboxes for
Work Boats

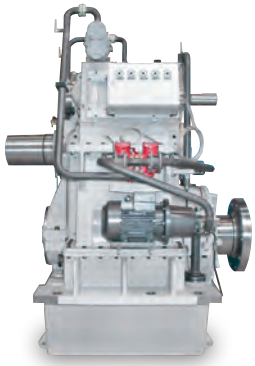
SVA/SVAL 630 – 1400 | 3,000 – 20,000 kW



QUALITY
MADE IN
GERMANY

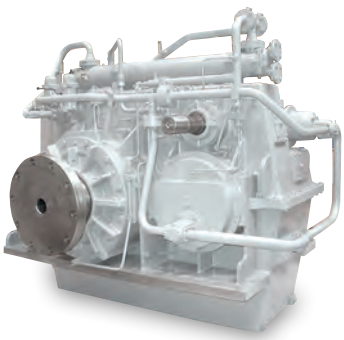
Applications for Work Boats

SVA/SVAL 630 – 1400



Reduction gearbox with PTO, vertically offset

Reduction gearbox with built-in clutch and PTO/PTH, vertically offset



Reduction gearbox with PTO, horizontally offset

Reduction gearbox with built-in clutch and PTO/PTH, vertically offset

Advantages

Gearboxes of the SVA and SVAL series have been specially developed for work boats such as tugs, container vessels, freighter, tanker 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 computation tools and production technologies.

Owing to their design for specific areas of deployment, the reduction gearboxes of the SVA series, as well as the reduction gearboxes of the SVAL series with built-in clutch offer various special advantages:

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

Gearbox selection

The selection diagram opposite gives an overview of the performance ratings of the basic SVA and SVAL types.

For the final selection of gearboxes please contact REINTJES.

D E S I G N E D F O R H E A V Y D U T Y A P P L I C A T I O N S

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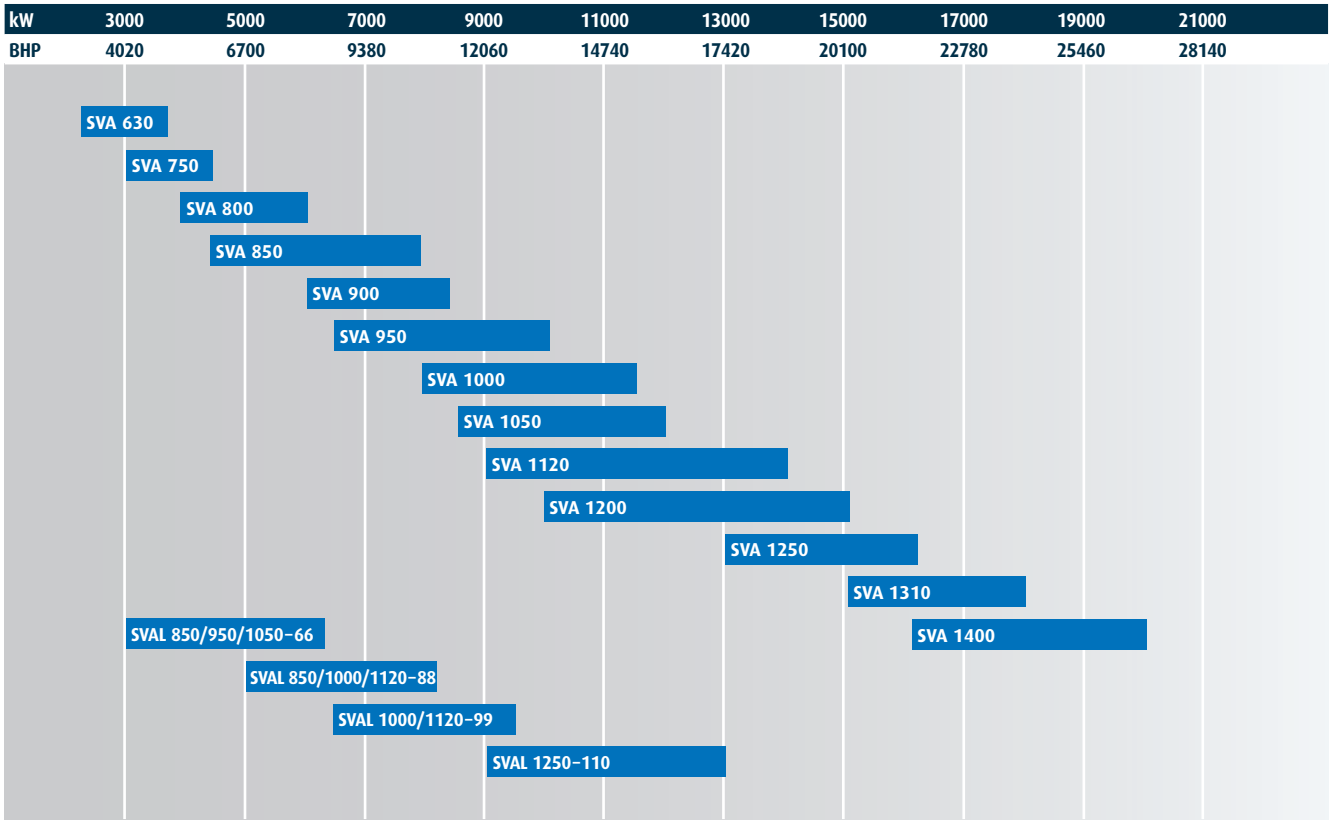
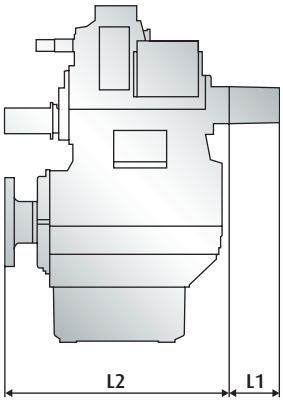
Engine power

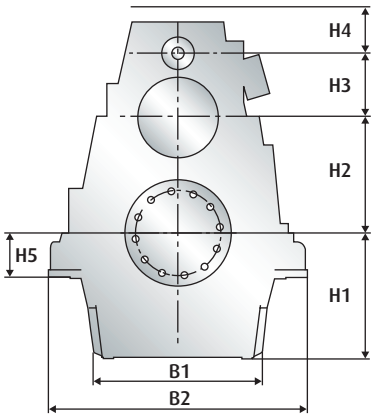


Marine Gearboxes
SVA 630 – 1400

SVA 630 – 1400

Reduction gearbox
Vertically offset*



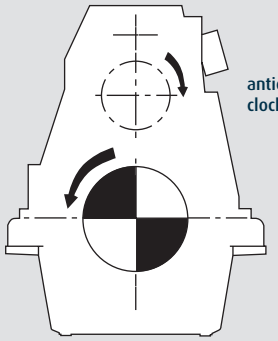


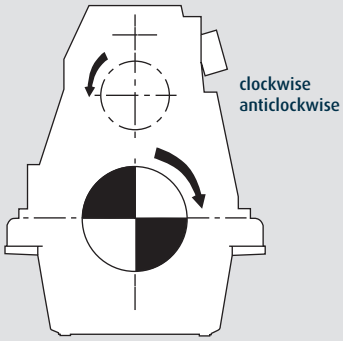
Gearbox SVA	Main Dimensions (mm) B1	B2	H1	H2	H3	H4	H5	L1	L2	Weight kg 1)
630	1000	1810	790	630	455	550	250	-	1550	7700
750	1198	1870	870	750	500	550	280	-	1663	8900
800	1198	1870	870	800	500	550	280	-	1850	10500
850	1410	2240	1020	850	500	620	390	-	1977	16000
900	1410	2240	1020	900	570	750	390	-	2066	17000
950	1730	2340	1060	950	570	600	350	-	2250	17500
1000	1630	2440	1100	1000	570	650	380	-	2180	19500
1050	1730	2550	1100	1050	570	650	380	-	2180	21000
1120	1730	2560	1150	1120	650	730	380	-	2300	22500
1200	2112	3100	1245	1200	650	750	70	-	2260	31000
1250	1725	3100	1400	1250	650	490	80	-	2504	34000
1310	on request									
1400	on request									

*Dimensions of horizontally offset SVA on request.
1) Gearbox standard design (dry). Dimensions and weights not strictly binding. Subject to change.

Direction of rotation SVA/SVAL

Seen from propeller onto engine flywheel in direction of travel ahead





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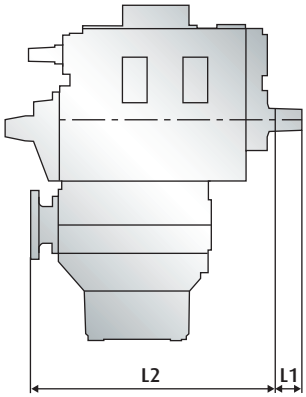
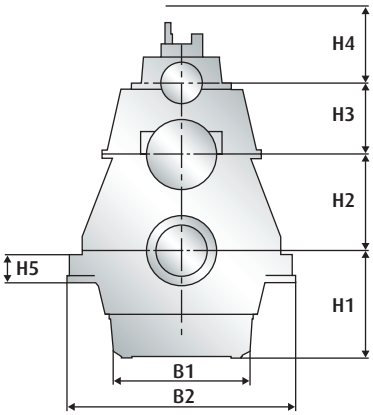
POWERTRAIN SOLUTIONS

SVAL 850 – 1250

Reduction gearbox with hydraulically operated clutch.
Vertically offset*



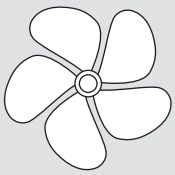


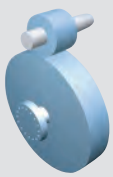
Gearbox SVAL	Main Dimensions (mm) B1	B2	H1	H2	H3	H4	H5	L1	L2	Weight kg 1)
850–66	-	-	-	850	570	-	-	-	-	-
950–66	1350	2250	1060	950	570	800	320	-	2400	21000
1060–66	-	-	-	1060	570	-	-	-	-	-
850–88	1410	2240	1020	850	630	-	390	-	-	-
1000–88	-	2440	1100	1000	630	-	-	-	-	-
1120–88	1730	2550	1200	1120	630	800	280	-	2800	28000
1000–99	-	2440	1100	1000	690	850	-	-	-	-
1120–99	1720	2550	1300	1120	690	850	280	-	3050	33000
1250–110	1900	3000	1200	1250	750	850	80	-	3325	45000

*Dimensions of horizontally offset SVAL on request.
1) Gearbox standard design (dry). Dimensions and weights not strictly binding. Subject to change.

SVA series

Reduction gearbox for propulsion with controllable pitch propeller

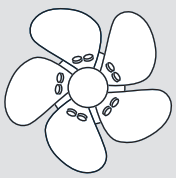


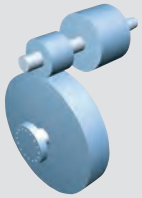


Counter rotation of input and output

SVAL series

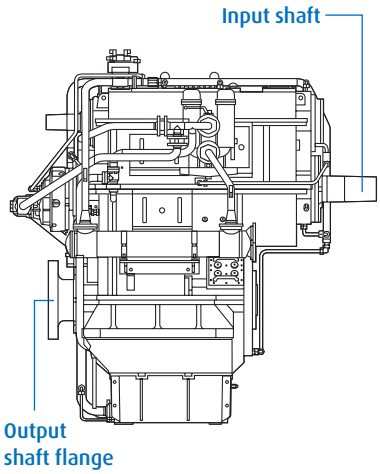
Reduction gearbox with built in clutch for propulsion with controllable pitch propeller

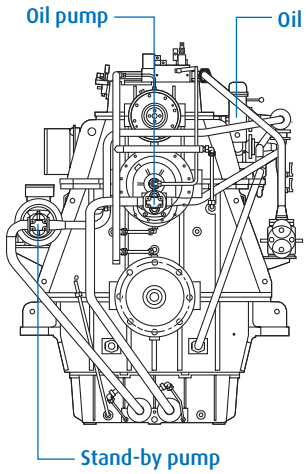


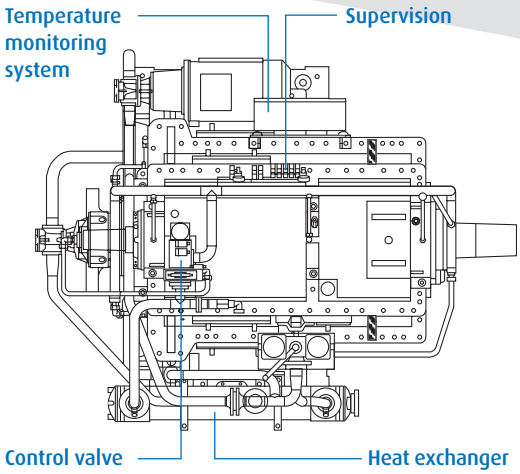


Counter rotation of input and output

Standards
SVA/SVAL 630 – 1400







Basic equipment

- Housing made from grey cast iron or steel in torsion stiff design, rigid mounting
- Spur wheels helically toothed, case hardened and tooth flank ground
- Built-in hydraulically operated disc clutch with steel/sinter friction surface (SVAL only)
- Smooth engagement by adapted pressure increase during shifting (SVAL only)
- The pinion and output shaft are supported in slide bearings. The input shaft with clutch and the PTO shaft are supported in roller bearings

Scope of supply

STANDARD

- Integrated oil sump. Common circuit for operating pressure and lube oil. Oil pump and oil filter accessible form the outside
- Fitted heat exchanger for cooling water inlet temperature of max. 38° C, seawater resistant
- Built-on control valve, electrically operated (SVAL only)
- Emergency control: in case of failure of operating pressure mechanical force locking of the disc clutch is possible (SVAL only)
- Input: free shaft end with taper 1:30
- Output: forged-on-flange
- Supervision

1. Pressure switch – operating pressure too low pressure switch clutch „on“ „off“ (SVAL only)
2. Temperature sensor (2xPT100) – oil temperature behind heat exchanger
3. Temperature supervision system of slide bearings
4. Filter contamination – electrical signal for “filter contaminated”
5. Thermometer – oil temperature before and behind heat exchanger
6. Pressure gauge for operating oil pressure

- Paint coating with synthetic resin varnish in all RAL colours.

EXTRAS

- Supervision instruments as per classification rules
- Special PTO executions
- Spare part kit as per classification rules
- Heat exchanger for cooling water temperature higher than 38° C
- Special reduction ratios
- Stand-by pump

Subject to change

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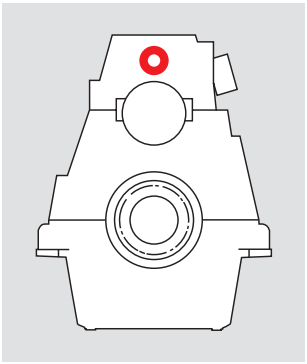
OPTIONS AND FEATURES

Options

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

If required, the gearboxes can be fitted with additional Power Take Off (PTO) and Power Take In (PTI).

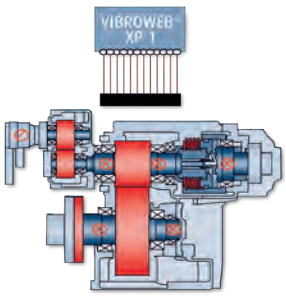


UNATTENDED MACHINERY SPACE

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.

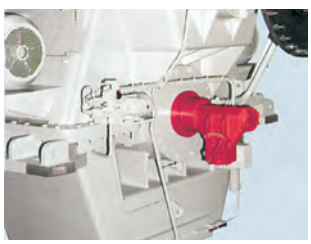
CONDITION MONITORING

Monitoring for all key data for proactive maintenance and management available.



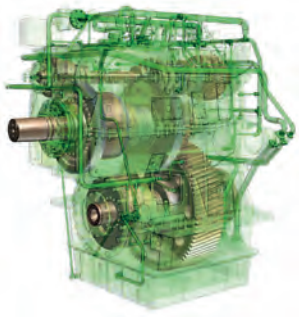
OD-BOX

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



POWER TAKE OFF (PTO)-/ POWER TAKE HOME (PTH)-COMBINATION

Primarily driven PTO in combination with secondary PTH. Different propeller speed for PTH-operation or for operation with main engine possible.



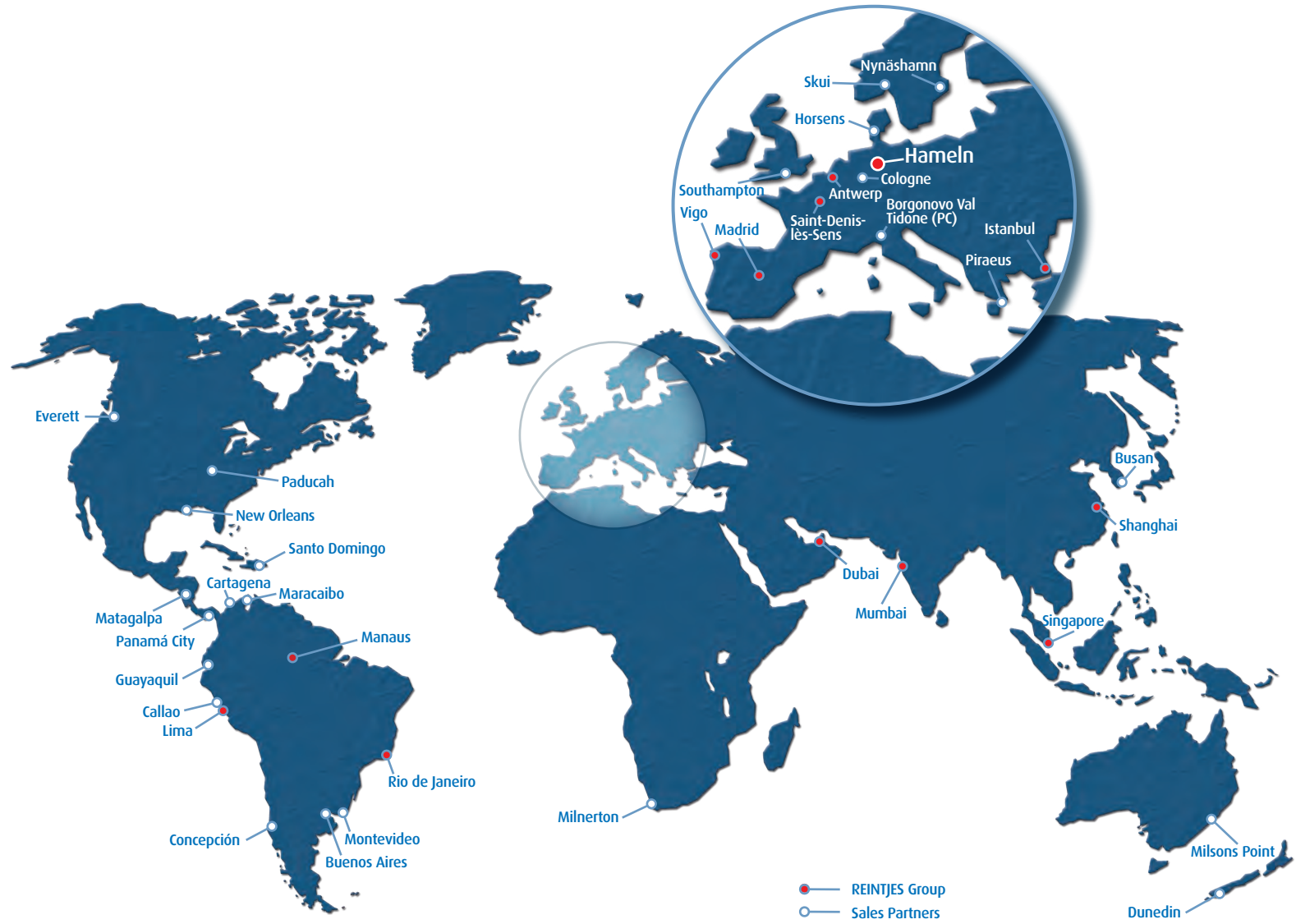
C Duty cycle classification

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
POWERTRAIN SOLUTIONS

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Kessler Werbung GmbH • 09.2015 • **Subject to change**