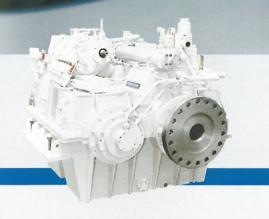
Applications for:
Fast Vessels WVS/WLS
Engine Rating up to 1,400 kW
Fast Vessels WVS/WLS
Engine Rating up to 5,000 kW
Work Boats WAF/LAF
Engine Rating up to 1,000 kW
Work Boats WAF/LAF
Engine Rating up to 3,500 kW
Work Boats WAF/LAF
Engine Rating up to 8,500 kW

Fast Ferries 600 - 13,200 kW

VLJ 430 - 9731

Work Boats VA
Engine Rating up to 6,000 kW
Work Boats DLG/DLGF
Engine Rating up to 15,000 kW
Work Boats SVA¹/SVAL²
Engine Rating¹ up to 20,000 kW
Engine Rating² up to 13,000 kW



YOUR PARTNER FOR THE FUTURE



Applications for Fast Ferries

VLJ 430 - 9731



VLJ horizontally offset



VLJ horizontally offset



VLJ vertically offset



VLJ vertically offset, special solution

Advantages

VLJ gears have been specially designed for installation in fast ferries and other vessels with similarly high performance demands.

We have the backing of over 75 years of experience in marine gears production as well as more than 25 years with fast ferry application with waterjet drives and deploy state-of-the-art computation tools and production technologies.

Owing to their design for specific areas of deployment, the reduction gearboxes of the VLJ series offer various special advantages:

- Low performance weight due to weight-optimized design
- Compact dimensions
- Integrated hydraulic clutch with smooth engagement
- Low operating noise

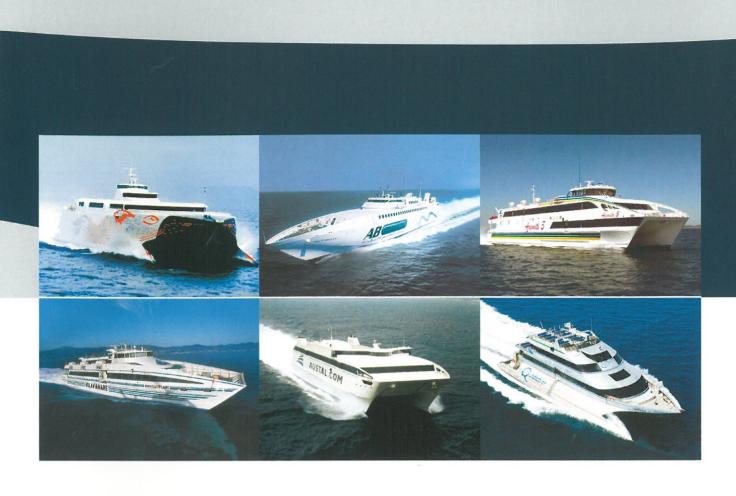
Gearbox Selection

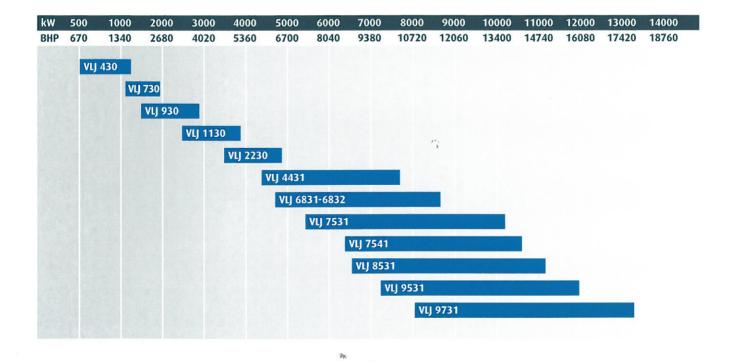
The selection diagram opposite gives an overview of the performance ratings of the basic VLJ types.

However, for the final selection of gears only the ratings of the applicable gears selection table are binding.

DESIGNED FOR HIGH DEMANDS



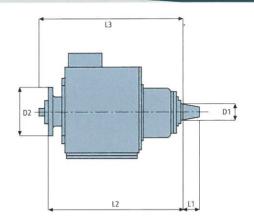


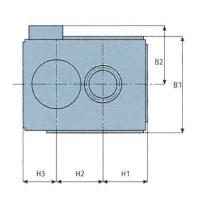


Marine gearboxes VLJ 430 - 9731

VLJ 430 - 2230

Reduction gears with hydraulically operated clutch Horizontally offset



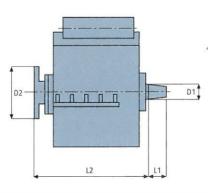


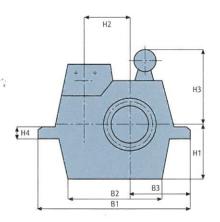
540	550	75	220	270	235	185	97	686	952	360
640	600	92	260	325	310	220	110	795	1000	560
720	680	102	280	350	340	240	120	870	1125	740
850	720	116,9	350	425	425	270	154	1095	1240	1300
920	760	126,8	390	460	460	300	162	1150	1300	1600
	540 640 720 850	540 550 640 600 720 680 850 720	540 550 75 640 600 92 720 680 102 850 720 116,9	B1 B2 D1 D2 540 550 75 220 640 600 92 260 720 680 102 280 850 720 116,9 350	B1 B2 D1 D2 H1 540 550 75 220 270 640 600 92 260 325 720 680 102 280 350 850 720 116,9 350 425	540 550 75 220 270 235 640 600 92 260 325 310 720 680 102 280 350 340 850 720 116,9 350 425 425	B1 B2 D1 D2 H1 H2 H3 540 550 75 220 270 235 185 640 600 92 260 325 310 220 720 680 102 280 350 340 240 850 720 116,9 350 425 425 270	B1 B2 D1 D2 H1 H2 H3 L1 540 550 75 220 270 235 185 97 640 600 92 260 325 310 220 110 720 680 102 280 350 340 240 120 850 720 116,9 350 425 425 270 154	B1 B2 D1 D2 H1 H2 H3 L1 L2 540 550 75 220 270 235 185 97 686 640 600 92 260 325 310 220 110 795 720 680 102 280 350 340 240 120 870 850 720 116,9 350 425 425 270 154 1095	B1 B2 D1 D2 H1 H2 H3 L1 L2 L3 540 550 75 220 270 235 185 97 686 952 640 600 92 260 325 310 220 110 795 1000 720 680 102 280 350 340 240 120 870 1125 850 720 116,9 350 425 425 270 154 1095 1240

¹⁾Gearbox standard design (dry). Dimensions and weights not strictly binding. Subject to changes.

VLJ 4431 -9**7**31

Reduction gears with hydraulically operated clutch Horizontally offset





4431	1750	1050	660	186,8	550	550	560	800	180	237	1600	3500
6831	1690	1170	600	186,8	600	≈ 565	600	900	180	237	1500	3600
7531	1850	1310	680	196,8	650	600	630	990	180	251	1700	4300
7541	1920	1320	700	196,8	650	630	665	950	50	251	1550	4550
8531	Main dimensions	according to cus	stomers requir	ements.								
9531	Main dimensions	according to cus	stomers require	ements.								
9731	Main dimensions	according to cus	stomers require	ements.								

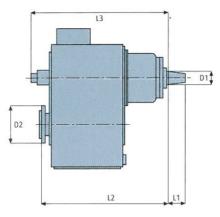
[&]quot;Gearbox standard design (dry). Dimensions and weights not strictly binding. Subject to changes.

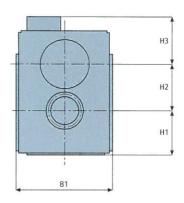




VLJ 430 -2230

Reduction gears with hydraulically operated clutch Vertically offset



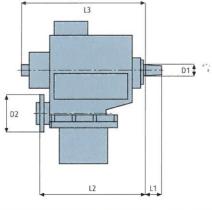


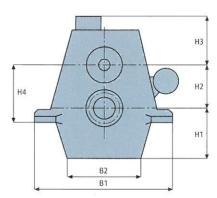
430	540	75	220	270	235	185	97	686	952	360
730	640	92	260	325	310	480	110	795	1000	560
930	720	102	280	350	340	500	120	870	1125	740
1130	850	116,9	350	425	425	570	154	1095	1240	1300
2230	920	126,8	390	460	460	600	162	1150	1300	1600

¹⁾Gearbox standard design (dry). Dimensions and weights not strictly binding. Subject to changes.

VLJ 4431 -9731

Reduction gears with hydraulically operated clutch **Vertically offset**

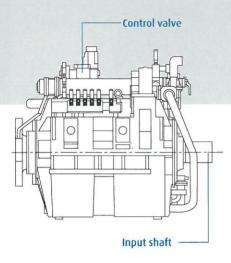


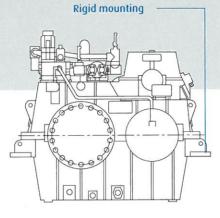


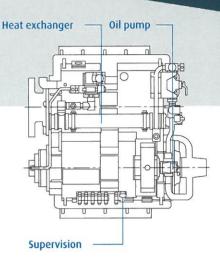
4431	1350	770	186,8	550	620		560	770	740	237	1600	1950	3500
6831	1400	800	186,8	600	650	Py.	600	800	780	237	1500	1850	3800
7531	1450	830	196,8	650	670		630	820	810	251	1600	1950	4300
8531	Main dimensions according to customers requirements.												
9531	Main dimensions a	according to c	ustomers require	ements.									
9731	Main dimensions a	according to c	ustomers require	ments.									

[&]quot;Gearbox standard design (dry). Dimensions and weights not strictly binding. Subject to changes.

Standards VLJ 430 - 9731







Basic Equipment

- Housing made from aluminium alloy or made from steel with a weight optimised design from VLJ 8531 on
- With cast brackets or prepared for fitting of mounting brackets for foundation connection (VLJ 430-2230 only)
- Vertical, alternative horizontal execution
- Spur wheels helically toothed, case hardened and tooth flank ground
- Built-in hydraulically operated disc clutches with steel/ sinter friction surface.
- Smooth engagement by adapted pressure increase during shifting

Scope of supply

STANDARD

- 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. 32 °C, seawater resistant
- Supervision instruments for pressure and temperature
- Built-on control valve, electrically or pneumatically operated
- Input: free shaft end with taper 1:30
- Output: forged-on flange
- Paint coating with synthetic resin varnish. Colour: RAL 7001 silver grey

EXTRAS

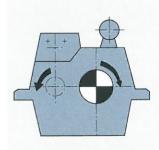
- Rigid, alternative resilient mounting (VLJ 430-2230 only)
- Supervision instruments in accordance with class requirements
- Spare parts kit as per classification rules
- Paint coating with synthetic resin varnish in all RAL-colours

In addition to our comprehensive standard VLJr; gears, we offer customers special systems individually tailored to meet their propulsion unit requirements.

Subject to changes

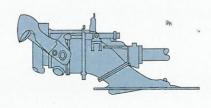
Direction of rotation VLJ

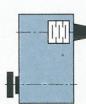
Seen from waterjet onto engine flywheel anticlockwise clockwise

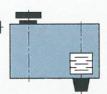


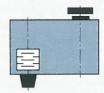
VLJ series

Reduction gear for water jet propulsion







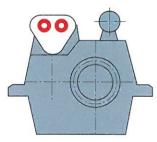




Options

POWER TAKE OFF

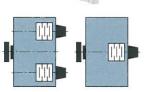
If required, the gears can be fitted with additional power take offs (PTO), (application: hydraulic pumps).



DVLJ SERIES

VLJ gears are also available in twin input/single output execution.





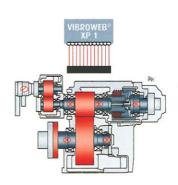
UNATTENDED MACHINERY SPACE

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



CONDITION MONOTORING

Monitoring for all key data for proactive maintenance and management.



Duty Cycle Classification

MEDIUM DUTY



- Intermittent operation with some variations in engine speed and power
- Average engine operating hours limit: 4,000 hours/year
- Allowable hull forms: planing, semi-planing, catamaran
- Allowable applications: private, charter and commercial craft, navy and police activity (example: crew boats, high speed ferries)

CONTINIOUS 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

Other duty cycles for special applications such as patrol boats, rescue vessels etc. on request.







XIN MING HUA PTE LTD XMH ENGINEERING PTE LTD

No. 44 Sungei Kadut Avenue Singapore 729667

YOUR CONNECTION TO THE RIGHT MACHINE

Tel : (65) 6368 0188 Fax : (65) 6368 0633 Email : sales@engine.com.sg Website : www.xmh.com.sg

