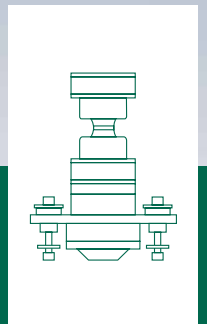


## Aquadrive Antivibration System



Edition 2012



**No noise**  
**No vibration**  
**No maintenance**



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## Introduction

GKN is an engineering group with operations in over 30 countries employing more than 35,000 people. Based on a long technological tradition GKN is a global leader in the development and production of world-class solutions within the following sectors:

- Driveline systems for the automotive industry
- Sinter metal components
- Systems and components for specialty vehicles
- Aircraft components

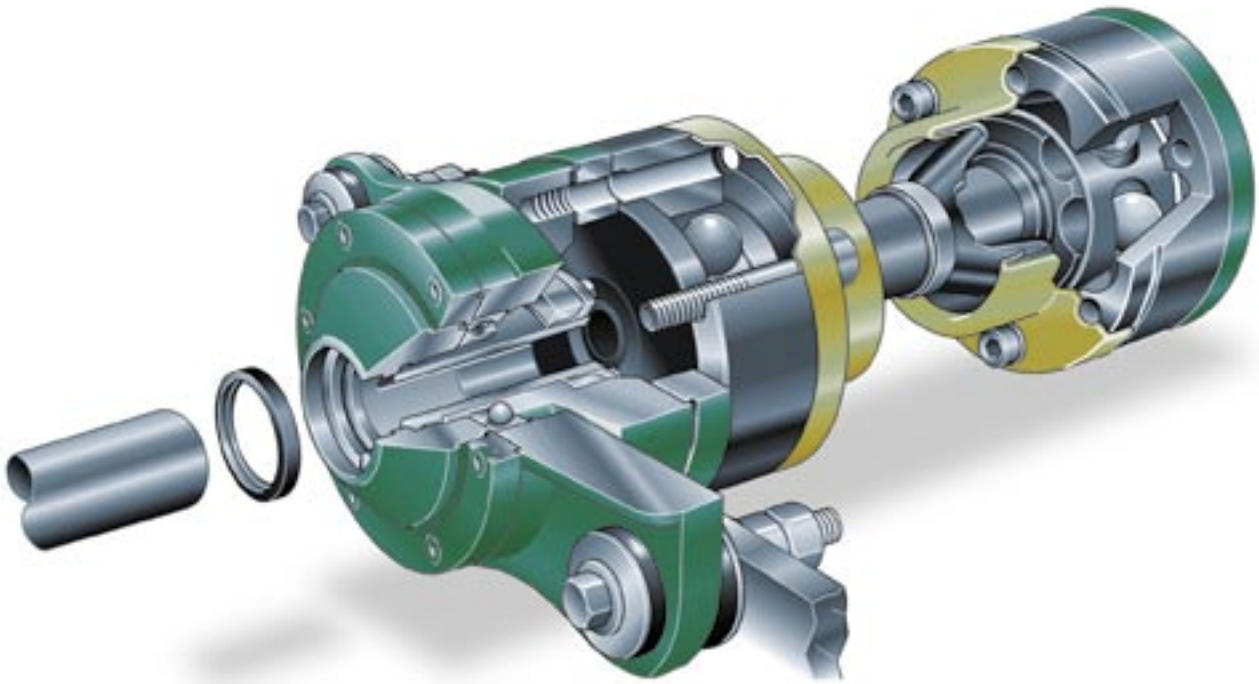
Within the group, GKN Aftermarkets & Services supplies not only original GKN parts for the worldwide passenger car and commercial vehicle aftermarket. Systems and components are also developed and manufactured in specialist service centres for specialty vehicles, industrial and marine applications.

GKN Aftermarktes & Services – Your partner for driveline parts and systems, repair and maintenance and the development and production of specialist driveline solutions.

**EXPECT > MORE**

# aquadrive<sup>®</sup>

antivibration system  
by GKN



## Superior engineering

The Aquadrive antivibration system will help you, and your crew, enjoy the peace and quiet of boating. By isolating the engine from the rest of your boat, noise and vibration are greatly reduced. Most installations result in a 50% or more reduction in cabin or cockpit noise and vibration. Aquadrive will also help to keep your driveline in good condition by minimising wear and tear on the transmission and cutlass bearings.

The propeller shaft is aligned to an Aquadrive thrust bearing, which absorbs the propeller thrust. A Constant Velocity (CV) shaft transmits engine power to the thrust bearing and propeller shaft. The CV shaft automatically adjusts to changes in the alignment between engine and thrust bearing and allows engine movements in every direction. Unlike standard installations, periodic realignment will not be required. The use of softer engine mounts, which isolate engine vibration from the hull, completes the system. Aquadrive antivibration system creates the necessary conditions for a smooth running, quiet boat.

## The Aquadrive system



### CV shaft

The drive shaft of variable length includes two true plunging Constant Velocity joints that work independently at any angle, this eliminates the need for accurate engine alignment, either during initial installation or subsequent use. The rolling action of the balls within the CV-joints absorb all axial and radial loads, permitting the use of very soft engine mounts as well as reducing wear in connected bearings. A range of pre-machined gearbox coupling kits allows problem free coupling to almost every marine gearbox transmission.



### Thrust bearing

Aquadrive thrust bearing assemblies with rubber mounts attach to a cross brace in the hull. Robust bearings transfer the thrust directly to the hull and not the engine. In addition, the propeller shaft is much better supported, leading to smoother running and less wear on the stern seal.

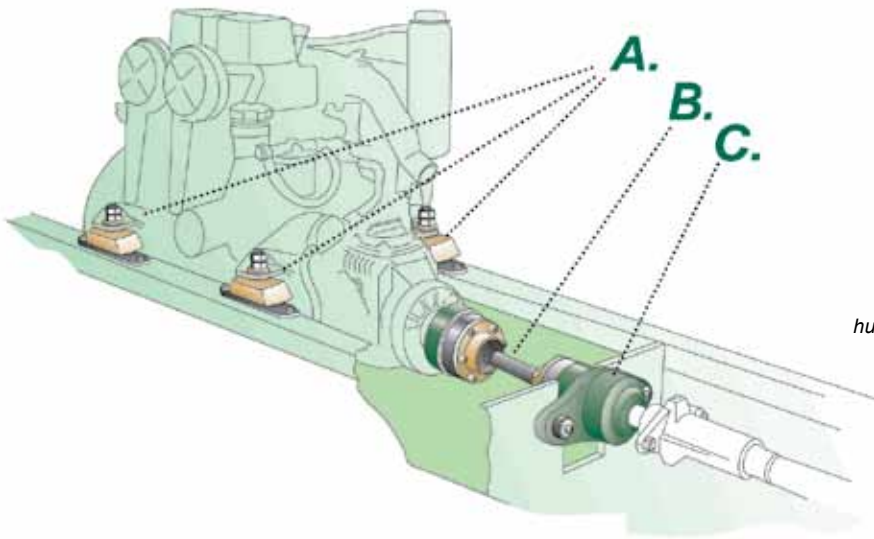


### Engine mounts

Aquadrive's proven engine mounts are softer than almost any other and should be used to take full advantage of the system. These mounts are steel hooded to prevent diesel damage and fully captive so that the engine cannot leave its frame even if the vessel is turned over.

## Outstanding technology to improve boats worldwide

Aquadrive offers fourteen different models designed to match boats powered from 5 hp to 1500 hp, we have a system that's right for nearly any boat. Whether you are a professional marine engine installer or an enlightened boat owner, we can help you find the system that's right for your boat.



**A.** The soft engine mounts isolate the engine from the hull

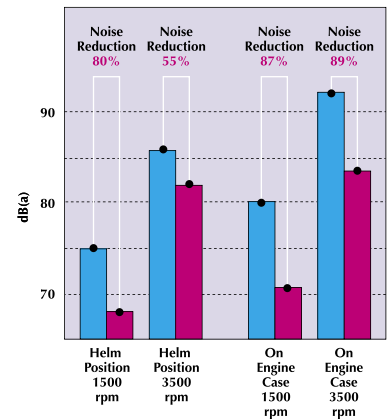
**B.** The Constant Velocity drive shaft absorbs engine vibrations and eliminates the need for accurate alignment

**C.** The thrust unit, fastened on a load bearing hull section, reduces stress on the transmission, on the engine mounts and, in particular, on the engine bearings



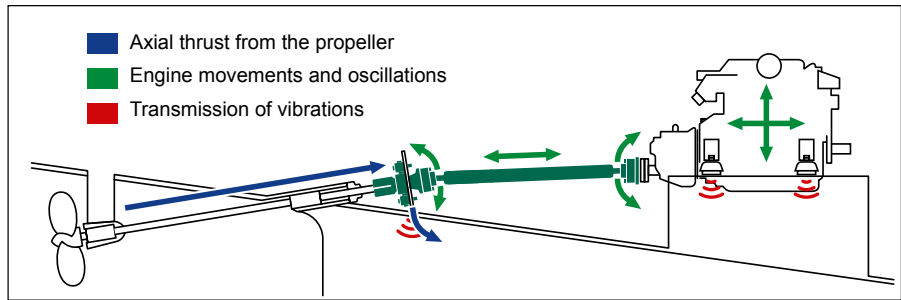
Vessel: 7.4m Sportsfishing Boat  
Engine: 88hp turbo diesel @ 3600rpm

■ db(a) without Aquadrive ■ db(a) with Aquadrive



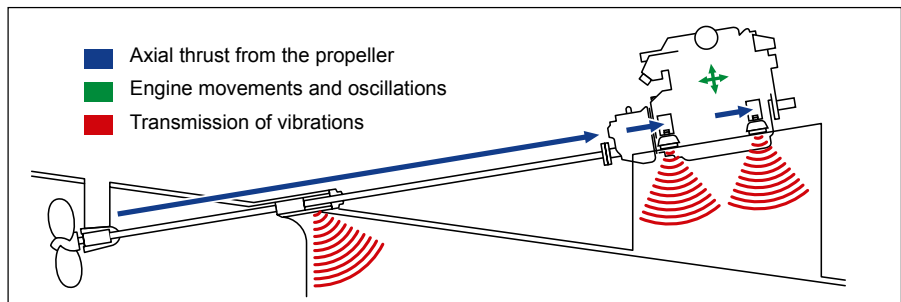


### With Aquadrive



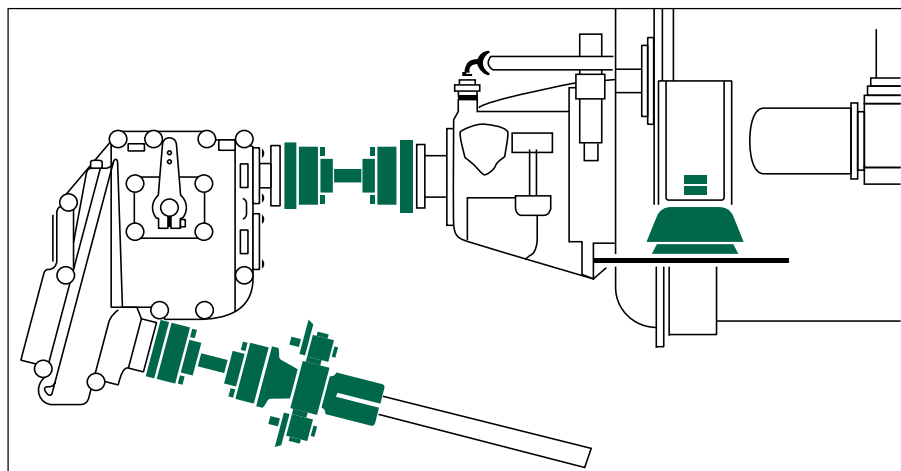
*With Aquadrive the engine can be installed in a horizontal position using soft and efficient mounts. Apart from easy installation and permanent alignment, this also leads to better space utilisation while dramatically reducing vibration and noise.*

### Without Aquadrive



*In traditional installations, the alignment of the propeller shaft to the engine has to be precise and subject to periodical maintenance. Stiff mounts transmit high levels of vibration to the hull, even when perfectly aligned.*

### Aquadrive for V-drives

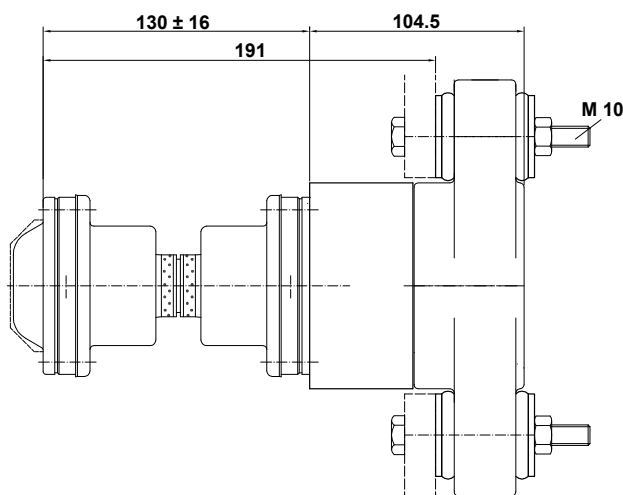


*Aquadrive for installations with V-drive.*

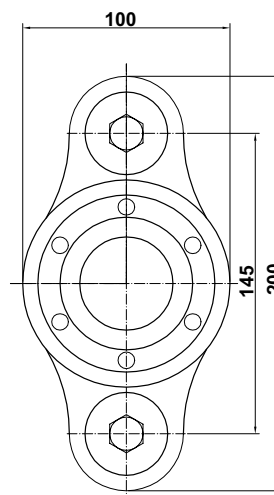


**CVB 05.10**

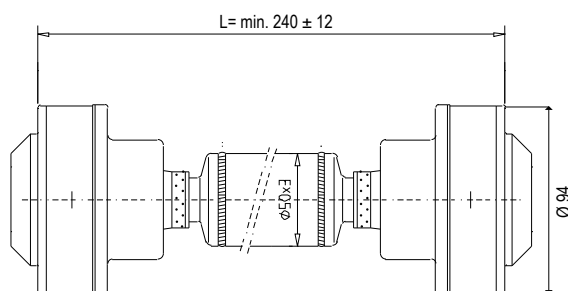
Max static torque (ØA=20 mm):	1034 Nm / 763 lbft
Max propeller shaft revolutions:	4000 rpm
Max continuous propeller thrust:	11 kN / 2475 lbf



**CV 05**



Custom-length CV 05 driveshaft is available in lengths from 150 mm (from 240 mm with tubeshaft design). Maximum length depends on shaft rpm.



**Application examples**

	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Sailing boat	33 (45)	3800	2.6:1
Displacement motorboat	26 (35)	2600	3.0:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 4-8° depending on shaft rpm.*

**Propeller shaft options**

B10 standard version accepts following propeller shaft ØA:

3/4"	20 mm	22 mm	7/8"	25 mm	1"	1 1/8"	30 mm	1 1/4"	32 mm	35 mm	1 1/2"	40 mm
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Oversize version with external clamp mechanism suits shaft diameters:

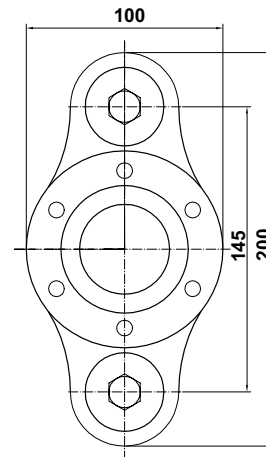
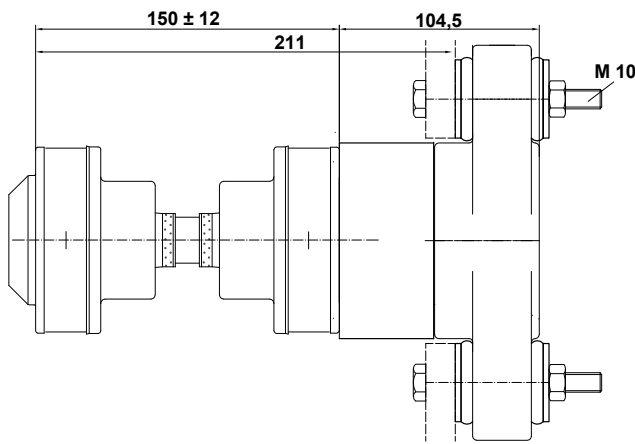
1 3/4"	45 mm	50 mm	2"
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All B10 systems are also available with flange coupling to suit standard BW 5" propeller flange. Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.



**CVB 10.10**

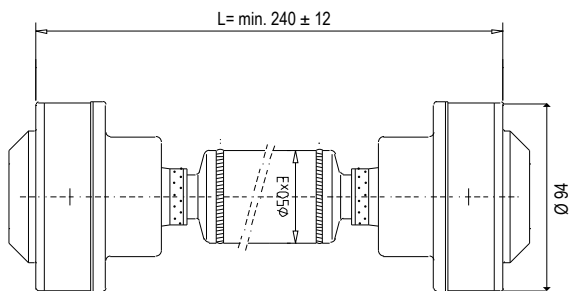
Max static torque (ØA=1"):	1300 Nm / 969 lbft
Max propeller shaft revolutions:	4000 rpm
Max continuous propeller thrust:	11 kN / 2475 lbf



**CV 10**

**Application examples**

Custom-length CV 10 driveshaft is available in lengths from 150 mm (from 240 mm with tubeshaft design). Maximum length depends on shaft rpm.



	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Planing boat	62 (85)	3800	2.0:1
Sailing boat	55 (75)	3800	2.6:1
Displacement motorboat	40 (55)	2600	3.0:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 4-8° depending on shaft rpm.*

**Propeller shaft options**

B10 standard version accepts following propeller shaft ØA:

3/4"	20 mm	22 mm	7/8"	25 mm	1"	1 1/8"	30 mm	1 1/4"	32 mm	35 mm	1 1/2"	40 mm
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Oversize version with external clamp mechanism suits shaft diameters:

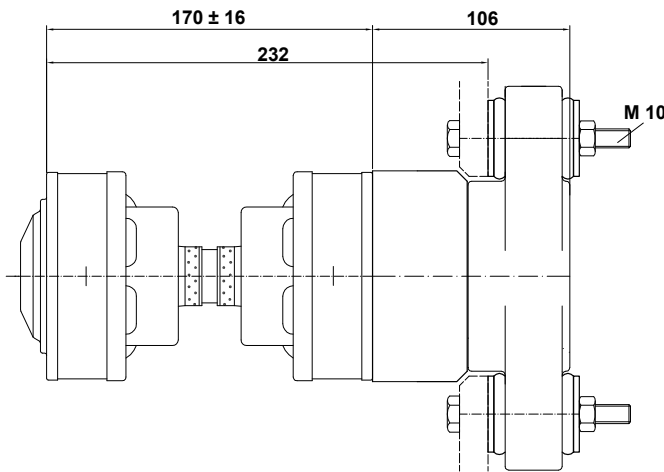
1 3/4"	45 mm	50 mm	2"
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All B10 systems are also available with flange coupling to suit standard BW 5" propeller flange. Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.

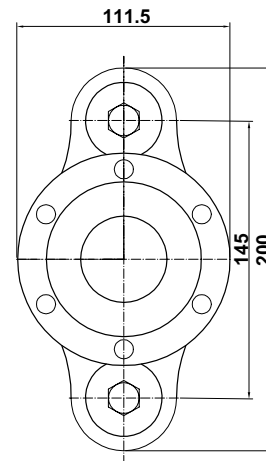


**CVB 15.10**

Max static torque (ØA=1 1/4"):	1625 Nm / 1200 lbft
Max propeller shaft revolutions:	4000 rpm
Max continuous propeller thrust:	11 kN / 2475 lbf

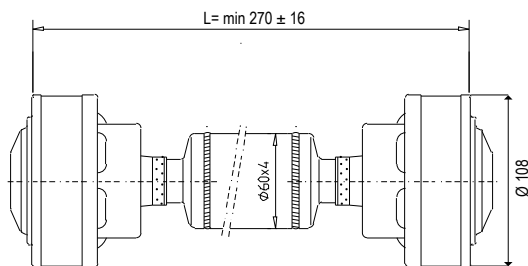


**CV 15**



**Application examples**

Custom-length CV 15 driveshaft is available in lengths from 170 mm (from 270 mm with tube-shaft design). Maximum length depends on shaft rpm.



	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Planing boat	114 (155)	3800	2.0:1
Semi-displacement motorboat	96 (130)	3300	2.2:1
Sailing boat	85 (115)	3300	2.6:1
Displacement motorboat	66 (90)	2600	3.0:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 4-8° depending on shaft rpm.*

**Propeller shaft options**

B10 standard version accepts following propeller shaft ØA:

3/4"	20 mm	22 mm	7/8"	25 mm	1"	1 1/8"	30 mm	1 1/4"	32 mm	35 mm	1 1/2"	40 mm
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Oversize version with external clamp mechanism suits shaft diameters:

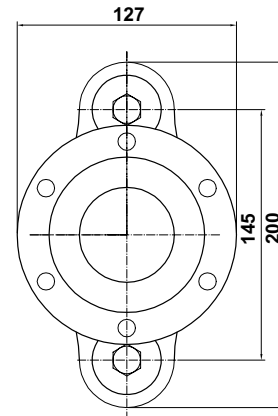
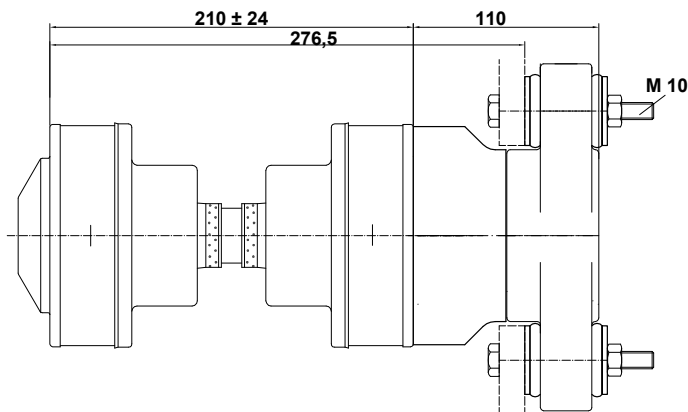
1 3/4"	45 mm	50 mm	2"
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All B10 systems are also available with flange coupling to suit standard BW 5" propeller flange. Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.



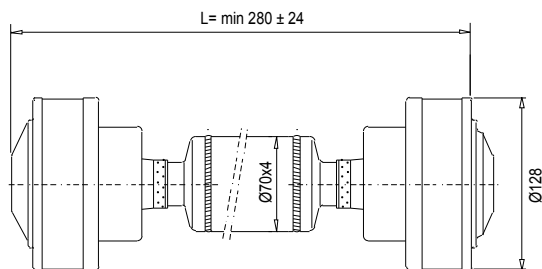
### CVB 21.10

Max static torque (ØA=40 mm):	2068 Nm / 1526 lbft
Max propeller shaft revolutions:	4000 rpm
Max continuous propeller thrust:	11 kN / 2475 lbf



### CV 21

Custom-length CV 21 driveshaft is available in lengths from 210 mm (from 280 mm with tube-shaft design). Maximum length depends on shaft rpm.



### Application examples

	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Planing boat	173 (235)	3800	2.0:1
Semi-displacement motorboat	147 (200)	3300	2.2:1
Displacement motorboat	96 (130)	2500	3.1:1

Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 4-8° depending on shaft rpm.

### Propeller shaft options

B10 standard version accepts following propeller shaft ØA:

3/4"	20 mm	22 mm	7/8"	25 mm	1"	1 1/8"	30 mm	1 1/4"	32 mm	35 mm	1 1/2"	40 mm
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Oversize version with external clamp mechanism suits shaft diameters:

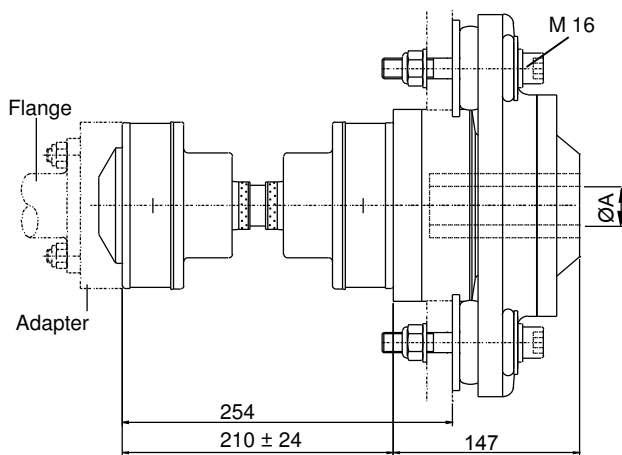
1 3/4"	45 mm	50 mm	2"
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All B10 systems are also available with flange coupling to suit standard BW 5" propeller flange. Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.

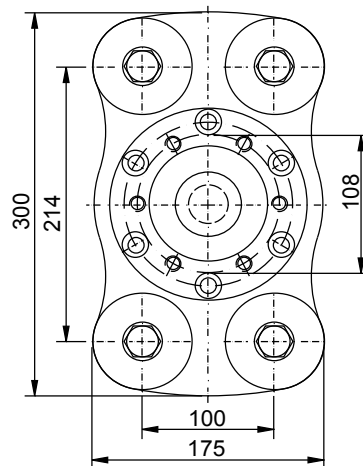


**CVB 21.20**

Max static torque (ØA=2"):	1400 Nm / 1034 lbft
Max propeller shaft revolutions:	2000 rpm
Max continuous propeller thrust:	14 kN / 3150 lbf

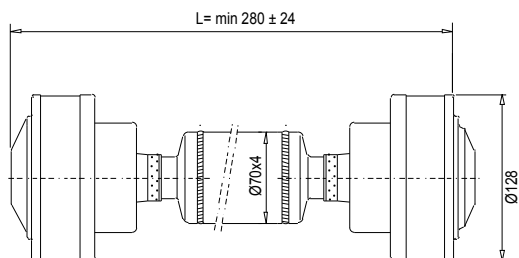


**CV 21**



**Application examples**

Custom-length CV 21 driveshaft is available in lengths from 210 mm (from 280 mm with tubeshaft design). Maximum length depends on shaft rpm.



	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Displacement boat	100 (135)	2600	3:1
Planing boat	165 (225)	3900	2:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 4-8° depending on shaft rpm.*

**Propeller shaft options**

B20 standard version accepts following propeller shaft diameters:

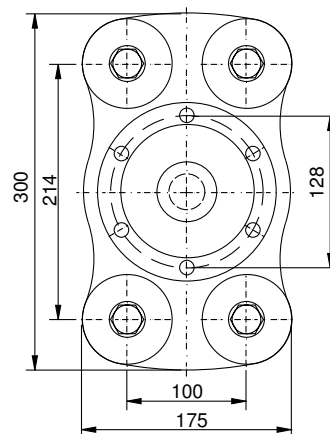
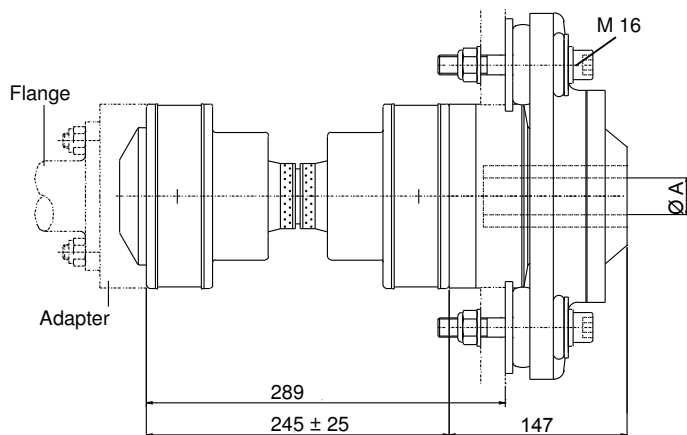
<b>ØA</b>	35mm	1 1/2"	40 mm	1 3/4"	45 mm	50 mm	2"
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All B20 systems are also available with flange coupling. Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.



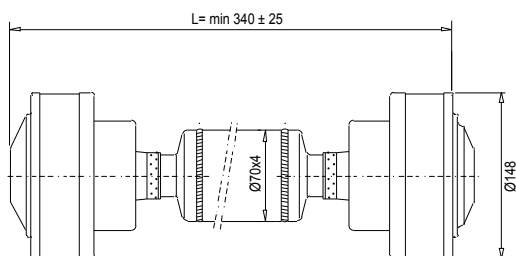
### CVB 30.20

Max static torque (ØA=2"):	1400 Nm / 1034 lbft
Max propeller shaft revolutions:	2000 rpm
Max continuous propeller thrust:	14 kN / 3150 lbf



### CV 30

Custom-length CV 30 driveshaft is available in lengths from 245 mm (from 340 mm with tubeshaft design). Maximum length depends on shaft rpm.



### Application examples

	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Displacement boat	130 (175)	2600	3:1
Planing boat	200 (270)	3300	2:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 5-8° depending on shaft rpm.*

### Propeller shaft options

B20 standard version accepts following propeller shaft diameters:

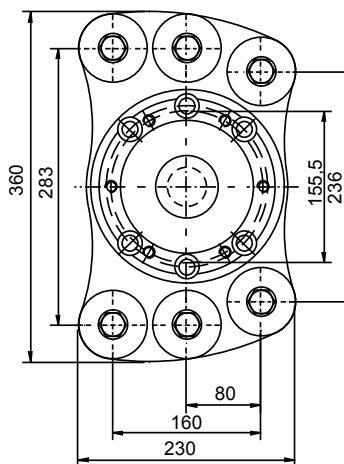
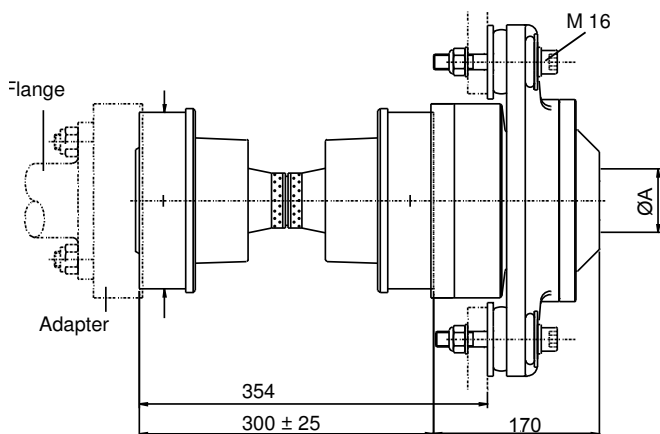
ØA	35mm	1 1/2"	40 mm	1 3/4"	45 mm	50 mm	2"
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All B20 systems are also available with flange coupling. Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.



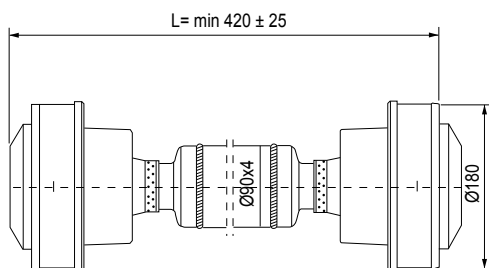
**CVB 32.30**

Max static torque (ØA=65 mm):	3000 Nm / 2215 lbft
Max propeller shaft revolutions:	1700 rpm
Max continuous propeller thrust:	21 kN / 4725 lbf



**CV 32**

Custom-length CV 32 driveshaft is available in lengths from 300 mm (from 420 mm with tubeshaft design). Maximum length depends on shaft rpm.



**Application examples**

	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Displacement boat	195 (265)	2600	3:1
Planing boat	270 (365)	3000	2:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 5-8° depending on shaft rpm.*

**Propeller shaft options**

B30 standard version accepts following propeller shaft sizes:

ØA	40 mm	1 3/4"	45 mm	50 mm	2"
	2 1/4"	60 mm	2 1/2"	65 mm	70mm

All B30 systems are also available with flange coupling.

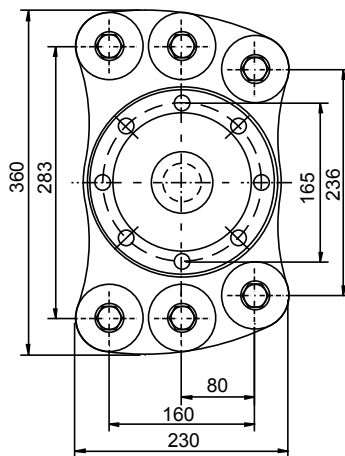
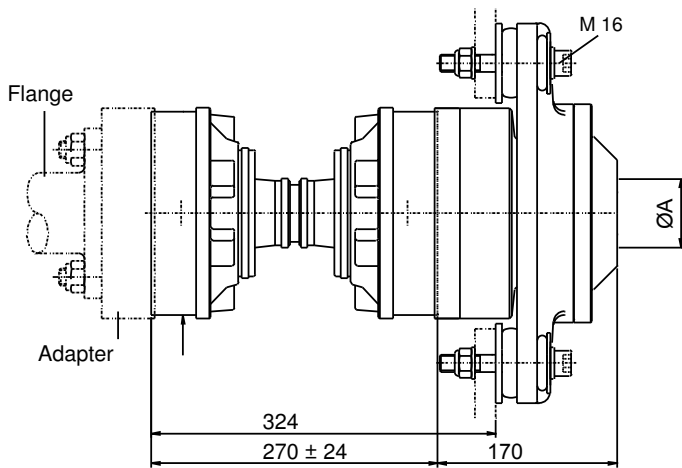
Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.





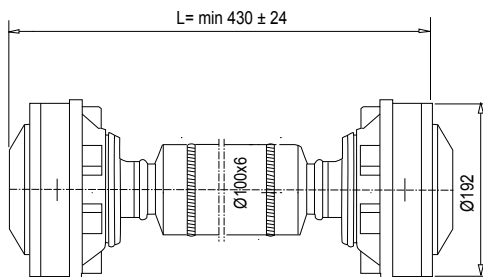
### CVB 42.30

Max static torque (ØA=65 mm):	3000 Nm / 2215 lbft
Max propeller shaft revolutions:	1700 rpm
Max continuous propeller thrust:	21 kN / 4725 lbf



### CV 42

Custom-length CV 42 driveshaft is available in lengths from 270 mm (from 430 mm with tubeshaft design). Maximum length depends on shaft rpm.



### Application examples

	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Displacement boat	240 (325)	2800	3:1
Planing boat	310 (420)	2600	2.5:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 5-8° depending on shaft rpm.*

### Propeller shaft options

B30 standard version accepts following propeller shaft sizes:

ØA	40 mm	1 3/4"	45 mm	50 mm	2"
	2 1/4"	60 mm	2 1/2"	65 mm	70mm

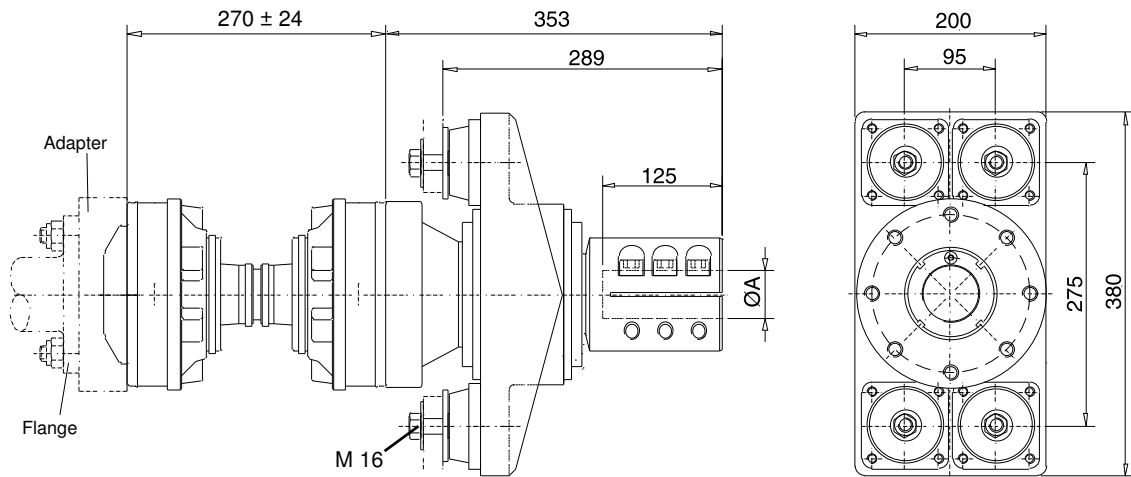
All B30 systems are also available with flange coupling.

Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.



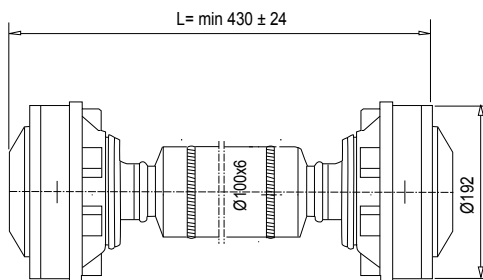
**HDL 42.680**

Max static torque:	10500 Nm / 7750 lbft
Max propeller shaft revolutions:	1700 rpm
Max propeller thrust:	40 kN / 9000 lbf



**CV 42**

Custom-length CV 42 driveshaft is available in lengths from 270 mm (from 430 mm with tubeshaft design). Maximum length depends on shaft rpm.



**Application examples**

	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Displacement boat	220 (300)	2100	3:1
Planing boat	420 (570)	2600	2:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 5-8° depending on shaft rpm.*

**Propeller shaft options**

HDL 680 standard version accepts following propeller shaft sizes:

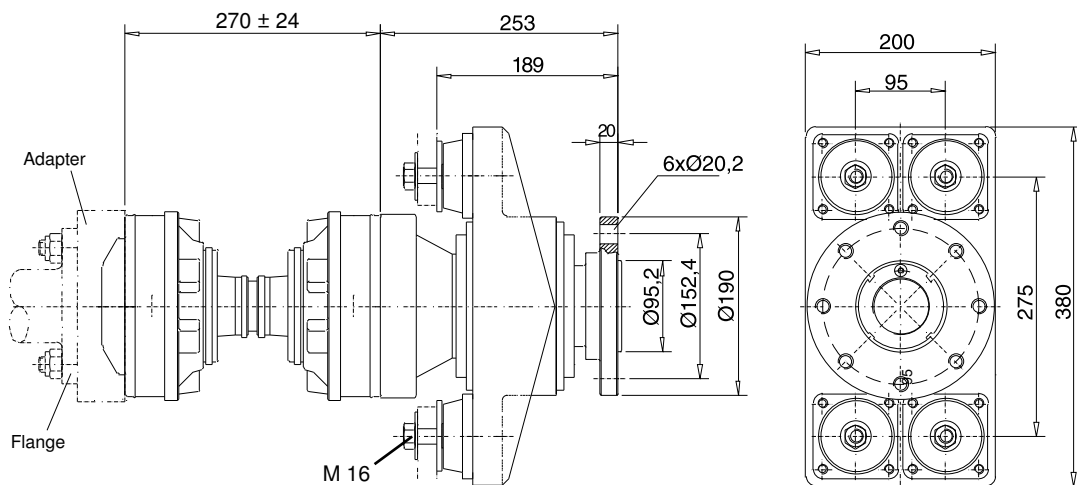
50 mm	2"	2 1/4"	60 mm	2 1/2"	65 mm	70 mm
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Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.



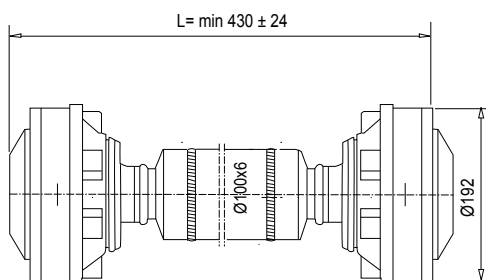
**HDL 42.680  
Flanged**

Max static torque:	10500 Nm / 7750 lbft
Max propeller shaft revolutions:	1700 rpm
Max propeller thrust:	40 kN / 9000 lbf



**CV 42**

Custom-length CV 42 driveshaft is available in lengths from 270 mm (from 430 mm with tubeshaft design). Maximum length depends on shaft rpm.



**Application examples**

	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Displacement boat	220 (300)	2100	3:1
Planing boat	420 (570)	2600	2:1

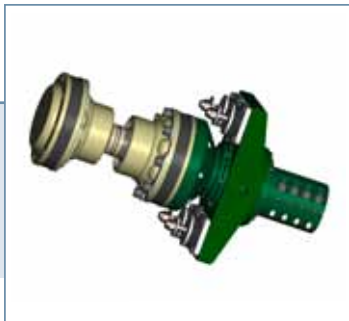
Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 5-8° depending on shaft rpm.

**Propeller shaft options**

HDL 680 standard version accepts following propeller shaft sizes:

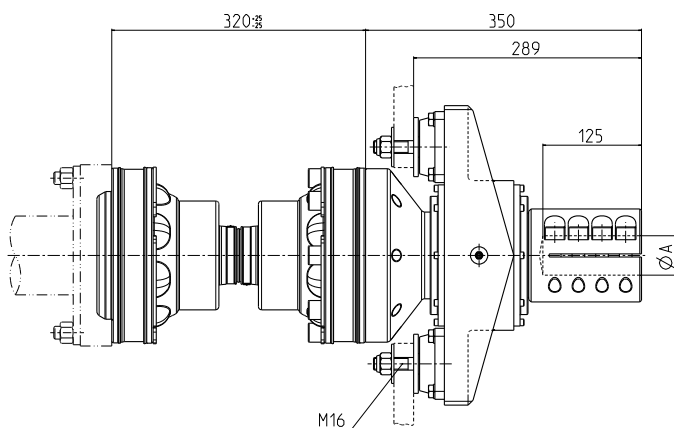
50 mm	2"	2 1/4"	60 mm	2 1/2"	65 mm	70 mm
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Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.



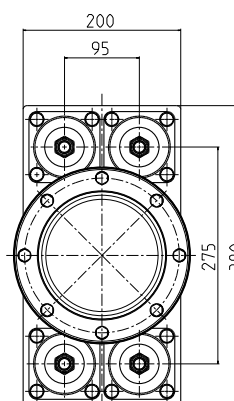
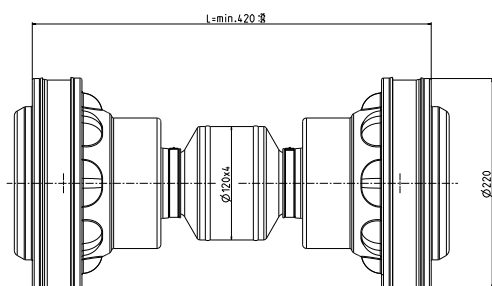
**HDL 48.690**

Max static torque:	12240 Nm / 9060 lbft
Max propeller shaft revolutions:	1700 rpm
Max propeller thrust:	40 kN / 9000 lbf



**CV 48**

Custom-length CV 48 driveshaft is available in lengths from 320 mm (from 420 mm with tubeshaft design). Maximum length depends on shaft rpm.



**Application examples**

	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Displacement boat	410 (550)	2100	3:1
Planing boat	670 (900)	2800	2:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 5-8° depending on shaft rpm.*

**Propeller shaft options**

HDL 680 standard version accepts following propeller shaft sizes:

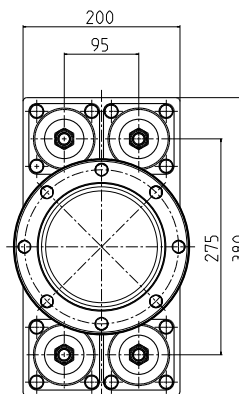
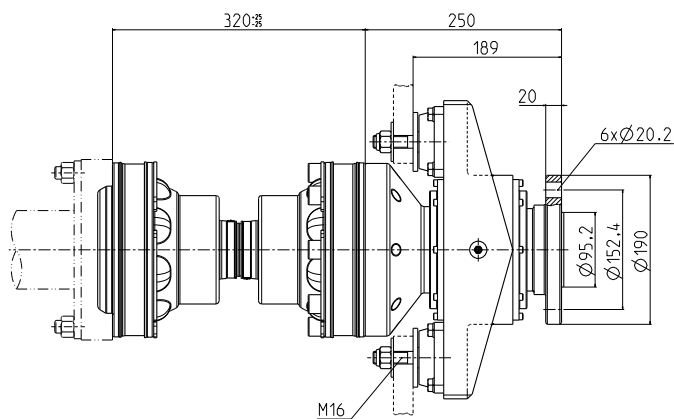
50 mm	2"	2 1/4"	60 mm	2 1/2"	65 mm	70 mm
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Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.



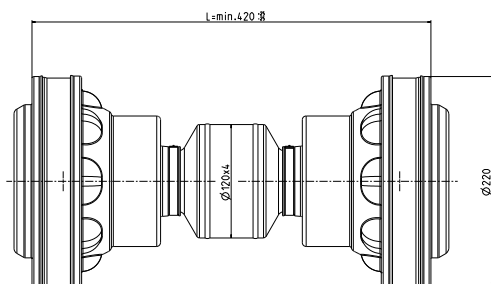
**HDL 48.690  
Flanged**

Max static torque:	12240 Nm / 9060 lbft
Max propeller shaft revolutions:	1700 rpm
Max propeller thrust:	40 kN / 9000 lbf



**CV 48**

Custom-length CV 48 driveshaft is available in lengths from 320 mm (from 420 mm with tubeshaft design). Maximum length depends on shaft rpm.



**Application examples**

	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Displacement boat	410 (550)	2100	3:1
Planing boat	670 (900)	2800	2:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 5-8° depending on shaft rpm.*

**Propeller shaft options**

HDL 680 standard version accepts following propeller shaft sizes:

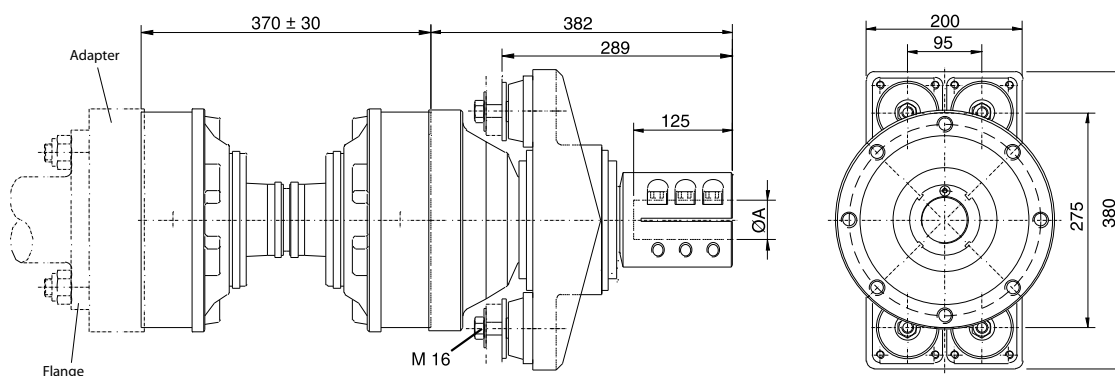
50 mm	2"	2 1/4"	60 mm	2 1/2"	65 mm	70 mm
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Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.



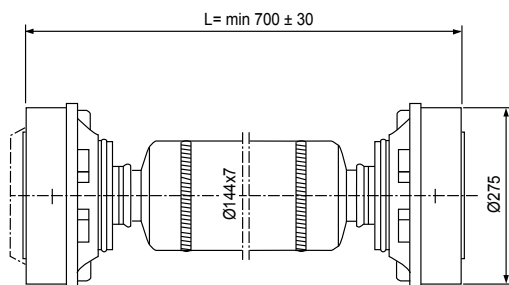
**HDL 60.700**

Max static torque:	12240 Nm / 9060 lbft
Max propeller shaft revolutions:	1700 rpm
Max propeller thrust:	40 kN / 9000 lbf



**CV 60**

Custom-length CV 60 driveshaft is available in lengths from 370 mm (from 700 mm with tubeshaft design). Maximum length depends on shaft rpm.



**Application examples**

	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Displacement boat	370 (500)	1900	2.7:1
Planing boat	660 (900)	2300	1.75:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 3° depending on shaft rpm. For higher benching angles please consult our technical department.*

**Propeller shaft options**

HDL 700 standard version accepts following propeller shaft sizes:

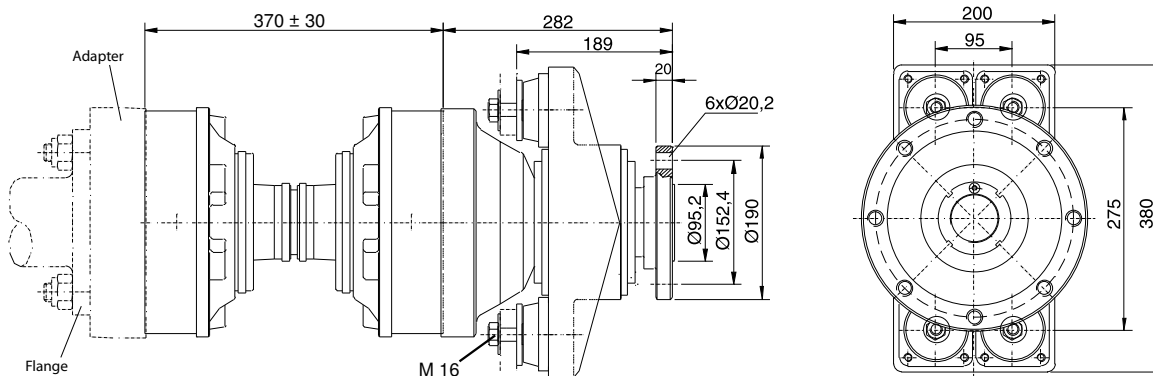
50 mm	2"	2 1/4"	60 mm	2 1/2"	65 mm	70 mm
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Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.



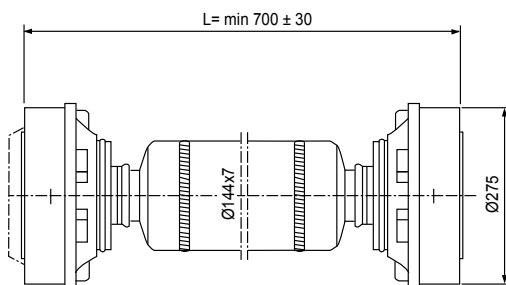
**HDL 60.700  
Flanged**

Max static torque:	12240 Nm / 9060 lbft
Max propeller shaft revolutions:	1700 rpm
Max propeller thrust:	40 kN / 9000 lbf



**CV 60**

Custom-length CV 60 driveshaft is available in lengths from 370 mm (from 700 mm with tubeshaft design). Maximum length depends on shaft rpm.



**Application examples**

	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Displacement boat	370 (500)	1900	2.7:1
Planing boat	660 (900)	2300	1.75:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 3° depending on shaft rpm. For higher benching angles please consult our technical department.*

Also available with 10,5" diameter flange.

**Propeller shaft options**

HDL 700 standard version accepts following propeller shaft sizes:

50 mm	2"	2 1/4"	60 mm	2 1/2"	65 mm	70 mm
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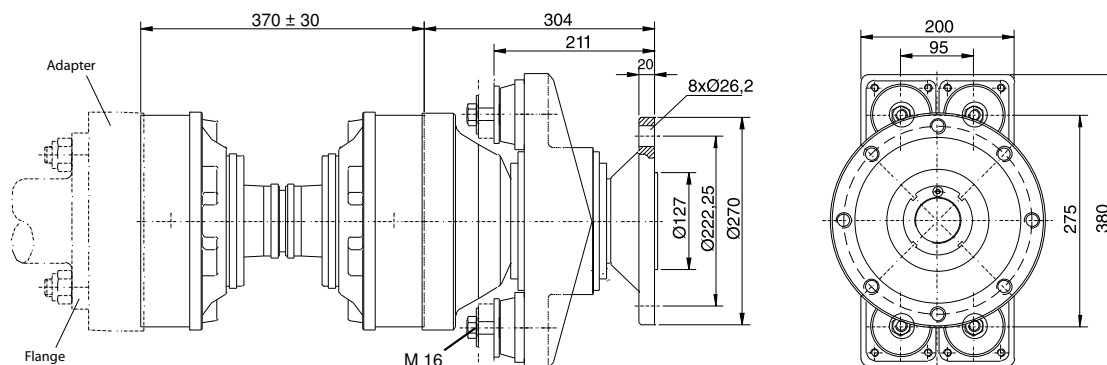
Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.



**HDL 60.700 HT\***

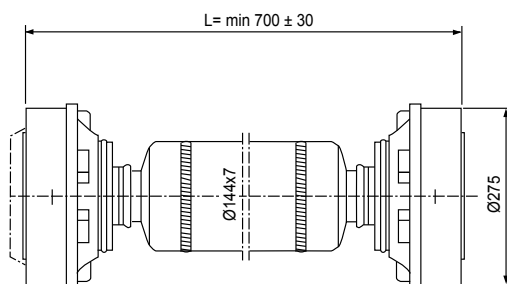
\* HT - High tensile steel version

Max static torque:	22000 Nm / 16280 lbft
Max propeller shaft revolutions:	1700 rpm
Max propeller thrust:	40 kN / 9000 lbf



**CV 60**

Custom-length CV 60 driveshaft is available in lengths from 370 mm (from 700 mm for tubeshaft design). Maximum length depends on shaft rpm.



**Application examples**

	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Displacement boat	515 (700)	1900	3:1
Planing boat	735 (1000)	2300	2.5:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°).*

*The maximum allowable joint angle is 3° depending on shaft rpm. For higher benching angles please consult our technical department.*

**Propeller shaft options**

HDL 700 standard version accepts following propeller shaft sizes:

50 mm	2"	2 1/4"	60 mm	2 1/2"	65 mm	70 mm
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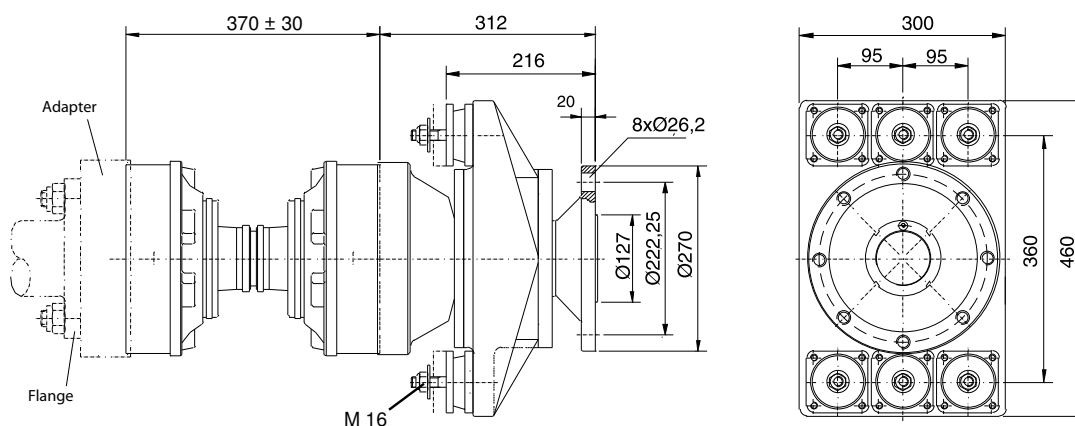
Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.





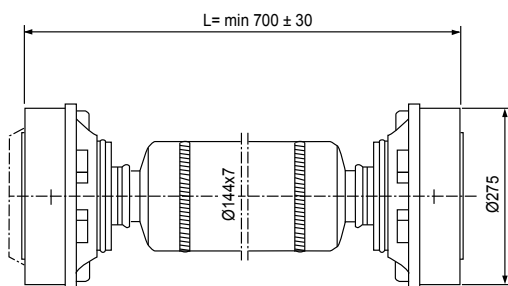
**HDL 60.780  
Flanged**

Max static torque:	25000 Nm / 18500 lbf
Max propeller shaft revolutions:	1400 rpm
Max propeller thrust:	60 kN / 13500 lbf



**CV 60**

Custom-length CV 60 driveshaft is available in lengths from 370 mm (from 700 mm for tubeshaft design). Maximum length depends on shaft rpm.



**Application examples**

	Rated power kW / HP	Crankshaft rpm	Gearbox ratio
Displacement boat	590 (800)	2100	3:1
Planing boat	1100 (1500)	2300	1.75:1

*Note: Above rating examples are based on optimum conditions with 2° for each CV joints. In case a CV joint will run at an angle greater than 2°, the max permitted power must be reduced (normally by 8-9% for each degree over 2°). The maximum allowable joint angle is 3° depending on shaft rpm. For higher benching angles please consult our technical department.*

**Propeller shaft options**

HDL 700 standard version accepts following propeller shaft sizes:

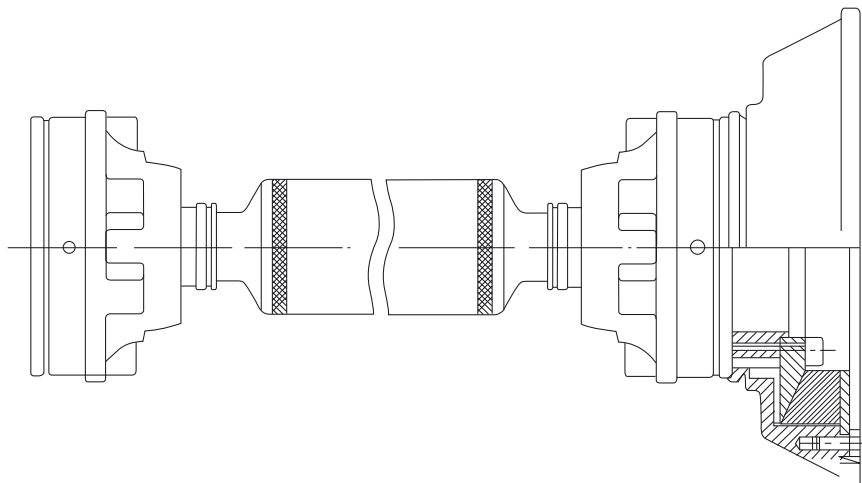
50 mm	2"	2 1/4"	60 mm	2 1/2"	65 mm	70 mm
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Please contact our technical department to assist you in selecting a suitable Aquadrive system for your application.

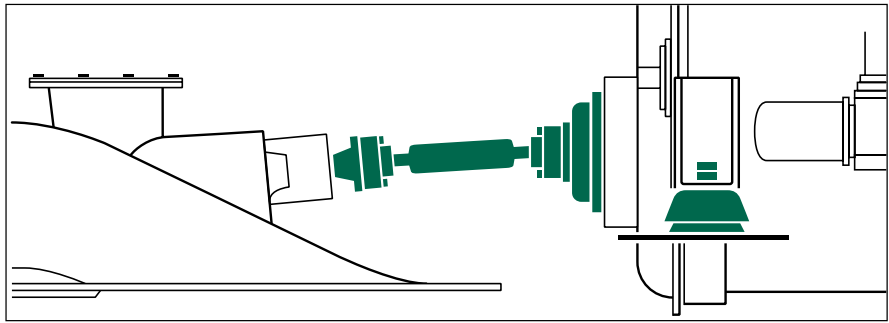


## Aquadrive and torsional damping

Soft, flexible rubber elements are normally installed between the engine flywheel and gearbox to avoid torsional vibration. Aquadrive CV shafts can be directly coupled to those gearboxes without additional rubber or flexible elements (CVT units). For flywheel-mounted installations, Aquadrive is able to provide you with CV shafts combined with elastic torsional dampers as a customized solution in a full range of power applications involving remote mounted propulsion equipment, such as water-jets, stern-drives and remote v-drives.

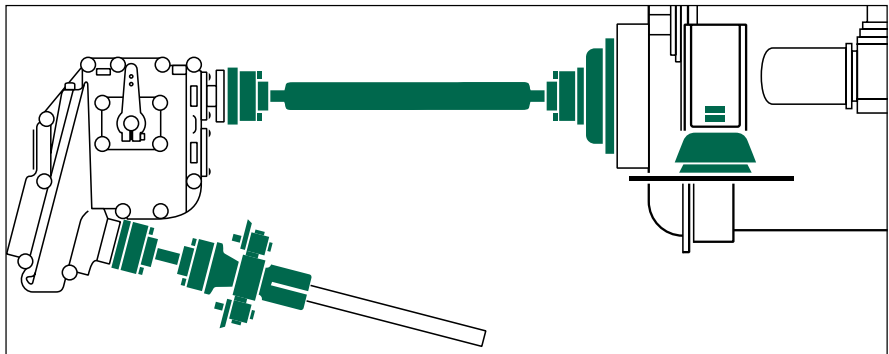


### Aquadrive CVT for water-jet



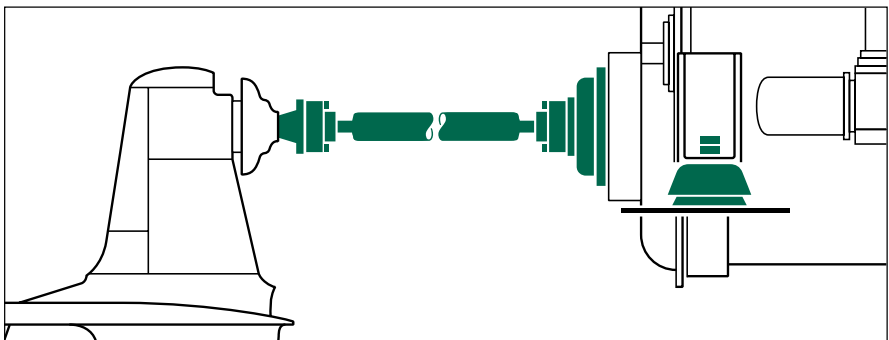
*The CVT unit consists of a CV shaft of variable length and a rubber element torsional damper designed to bolt directly to the engine flywheel. This is the ultimate combination of excellent torsional damping and total absorption of misalignment and movement between water-jets and soft mounted engines.*

### Aquadrive for remote V-drives



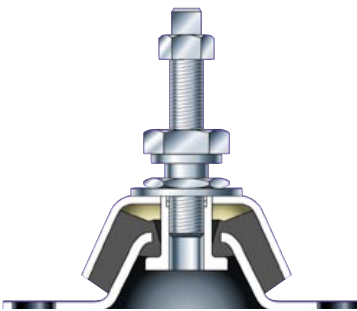
*Demonstrably the best way to install a remote v-drive: The floating CVT unit with torsional damping between soft mounted engine and gearbox, then a CV shaft and thrust bearing that takes out the propeller thrust and allows soft mounted gearbox and free alignment. When required, "dual-rate couplings" are available to reduce "gear rattle".*

### Aquadrive CVT Jack-shaft



*When splitting the engine and outboard stern drive, the best way to couple the flywheel to the stern drive is by means of a CVT unit. This surely offers a smoother and quieter solution, with considerably less wear on the bearings, than any other drive shaft systems available.*

## Engine mounts

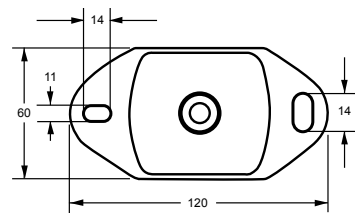
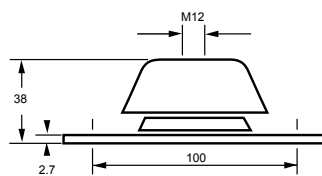


The Aquadrive system creates free movement between the engine and the propeller shaft. One result is the engine's mountings can be much softer than normal, partly because the engine can vibrate freely relative to the shaft, and partly because no propeller thrust reaches the mounts and strains them forwards. Aquadrive engine mounts can be used with almost any marine engine, and our expert staff will rapidly select the correct rubber stiffness for the machinery involved.



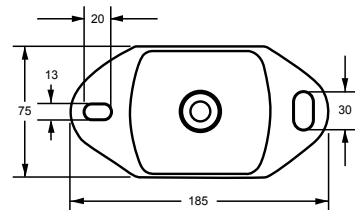
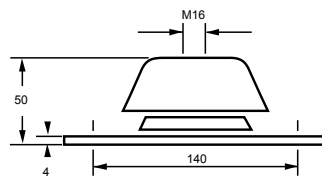
### 50210

*The smallest engine mount of the range are available in four rubber grades for weights up to 60kg per mount.*



### 50220

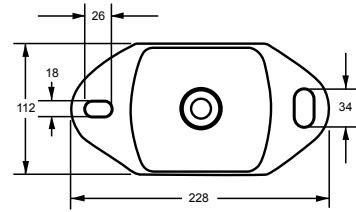
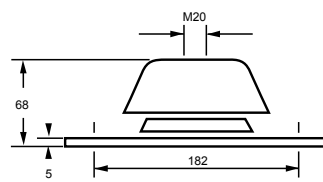
*The most versatile mount, are available with five different rubber grades and takes weights up to 200kg per mount.*





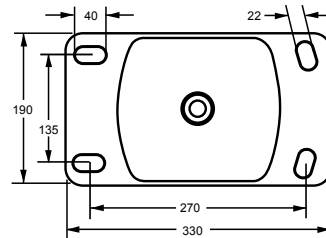
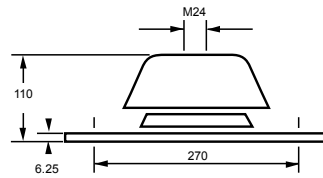
### 50230

This engine mount are available in four different rubber grades and will take weights up to 800kg per mount.



### 50240

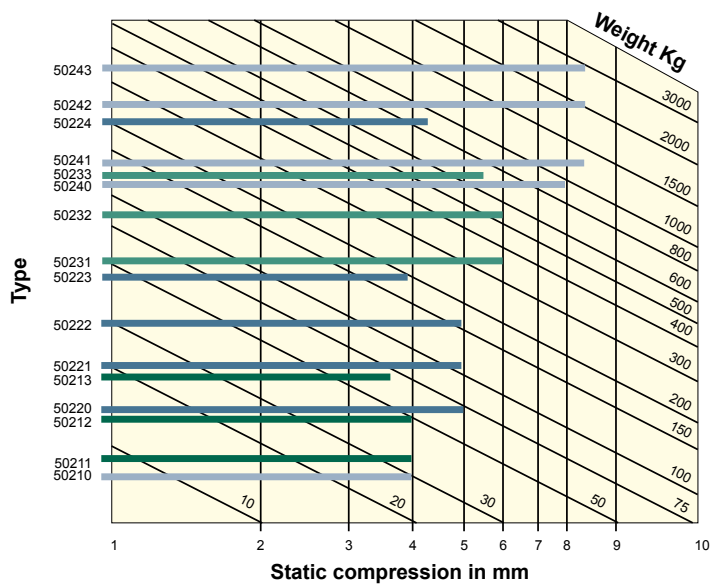
The largest of engine mount of the range are available in four rubber grades taking up to 3000kg per mount.



### Engine mount deflection chart

Selecting the correct rubber grade and mount for a particular engine or generator is a skilled task and our expert staff will advise. For those who wish to study the science, the chart above shows how much deflection will occur on each mount and rubber hardness given a particular weight on the mount. In general you should aim for 3mm on the 50210, 4mm on the 50220, 5mm on the 50230 and 6mm on the 50240.

- 50210    ■ 50230
- 50220    ■ 50240





## Aquadrive References



**Green Line 33**, Slovenia  
Aquadrive Moduline



**Gran Soleil 56**, Italy  
Aquadrive Moduline



**Hallberg Rassy 62**, Sweden  
Aquadrive Moduline



**Flemming 75**, USA  
Aquadrive HDL



Discover the peace  
and quiet of boating.



**Grand Banks 58 classic, USA**  
Aquadrive HDL



**Norwegian Sea Rescue NSSR, Norway**  
Aquadrive CV shafts



**VDL Pilot 50, The Netherlands**  
Aquadrive ModuLine



**Oyster 82, UK**  
Aquadrive HDL



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