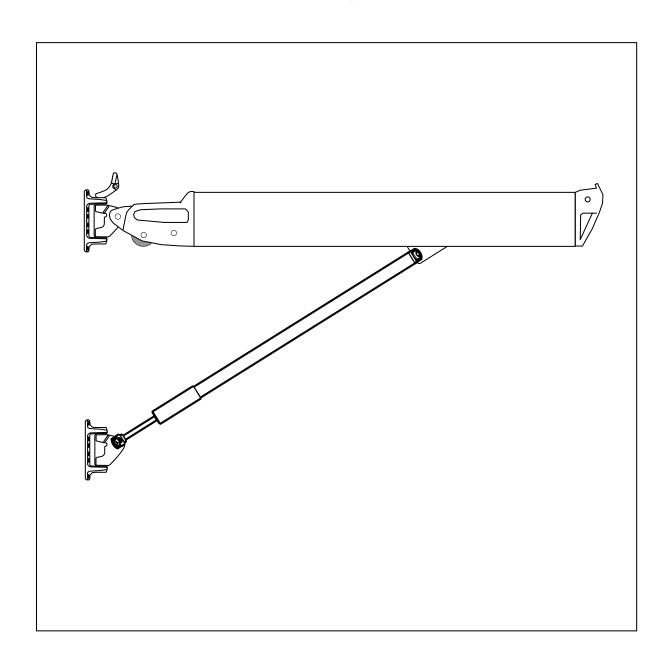
Hydraulic boom vang





General / The manual

To derive the maximum benefit and enjoyment from your Seldén Hydraulic Boom Vang, we recommend that you study this manual carefully.

Selden limited warranty applies to this product. For full details please see our general conditions of sale.

The guarantee is only valid if the Vang is installed and operated in accordance with this manual.

If the Vang is repaired by anyone not authorized by Seldén Mast AB, the guarantee ceases to be valid.

Seldén Mast AB reserves the right to alter the content of the manual and design of the product without prior warning.

For latest update check www.seldenmast.se or contact Seldén for your own issue.



This symbol denotes safety related information

Please follow Selden 595-540 "Hints and Advice" on rigging and tuning masts.

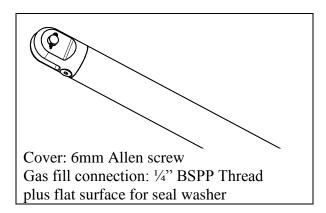
Product Description / Information

The Selden hydraulic boom vang is intended for use on a sailing boat as an aid to control the boom vertically.

It needs to be connected to a hydraulic system that has a pump station and a holding tank.

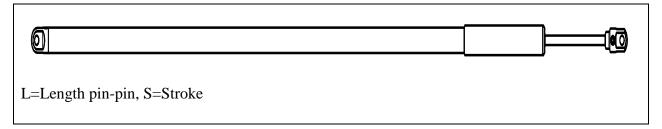
When pressurized the boom vang will contract and pull the boom downwards.

The hydraulic system shall have a release valve that can release the pressure and let oil return to the tank. The internal gas pressure will then extend the vang so that it acts as a support to the boom, pushing it upwards.



The vang is filled with nitrogen gas to the correct pressure whe delivered from Selden. The gas filling connector is according to the figure above.

Technical data



Fork Width X Upper Fork Depth Z Upper	Fork Width X Lower Fork Depth Z Lower	
Hole Upper	Hole Lower	

		1	
Selection	HV 22	HV 44	HV 57
Part No Nature Anodized	580-009-10	580-013-10	580-015-10
Part No Black Anodized	580-010-10	580-014-10	580-016-10
Safe working load [kN]	26	44.2	56.7
Min. length(L) [mm]	1720	2694	2950
Stroke (S) [mm]	250	280	280
Cylinder outer diameter [mm]	50	70	80
Rod diameter [mm]	16	22	25
Max Return Force [kN]	5	8.4	12
Weight [kg]	5,5	12	15,8
Gas Pressure [Bar]	52	43	42
Hole Upper / Lower [mm]	ø12.5	ø16.5	Ø20
Pin Upper / Lower [mm]	Ø12	ø16	Ø19
Fork Width X Upper / Lower	14 / 21	16 / 16	20.5
Fork Depth Z Upper / Lower	30 / 22	34 / 32	39 / 39

Maximum working	345 bar	
pressure		
Oil viscosity	ISO VG 46	
Oil Quality, standards to	DIN 51524 part 3,	
be met	HVLP 46	

Recommended oil	Statoil Hydraway HVXA 46	
Examples of alternative	Castrol Hyspin AWH-M	
oils with comparable	46, Shell Tellus S2 V	
properties	46	

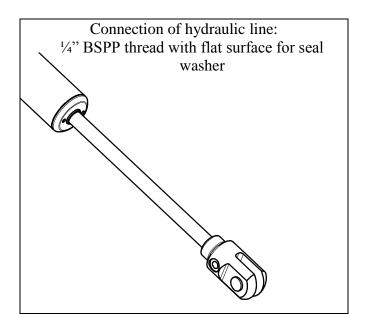
Fitting Instructions / Installation



The hydraulic system should be professionally installed.

Use only hydraulic hoses and connectors suitable for marine environment and working pressure 345 bar.

Be careful not to get any impurities into the hydraulic system.



For information about Selden hoses, pump station and tank suitable for this product, please see Selden Manual 597-145 "I:HYDR.PUMP STATION (HAND OP.) ".

For advice regarding split pins please see Selden 595-540 "Hints and advice" p.18

Operation

Pulling boom downwards:

When pressurized with oil the boom vang will act on the boom to pull it down. When sailing downwind it can be used to keep the boom end from lifting. It flattens the sail, and reduces twist.

Support of the boom's weight when the mainsail is not used:

If the size of the boom vang is correct the vang will statically support the weight of the boom so that a topping lift is not required.

Note:

If the boom is to be kept still under all circumstances, for example when motoring towards rough, choppy seas, extra support such as a topping lift or a support under the boom may be needed.

Maintenance

Cleaning

We recommend rinsing the unit with freshwater at regular intervals. If detergents are used for cleaning it is important to rinse all traces off with fresh water afterwards. Most detergents contain elements that can corrode aluminium. Silicone free wax can be used to protect the surfaces.

Periodic Servicing

We recommend that you have the unit serviced at intervals of no more than five years in normal use. For boats used in charter operations or circumnavigation etc. the unit should be serviced on a more frequent basis. Please contact your authorized Selden dealer.

It is very important that the hydraulic hoses are inspected as a part of the maintenance. They are to be replaced if they show signs of wear.

Storage

When stored please see to it that no stainless parts such as for example wire halyards or standing rigging is in contact with the aluminium surfaces of the hydraulic boom vang, otherwise galvanic corrosion may occur.

See to it that during storage, the boom vang is kept dry and with access to air circulating around it. Do not wrap it in plastic or other impervious material.

Troubleshooting

Problem: Not enough return force

Information: The return force (pushing action when no oil pressure is present) is

achieved by gas pressure inside the boom vang. Each vang size has a maximum compression load, see "Max Return Force" elsewhere

in this manual.

Probable cause: Gas pressure is reduced because of leakage.

Action: Have the unit serviced and refilled with nitrogen gas.

Problem: Not enough tension in vang.

Information: The tension achieved by the vang is proportional to the oil

pressure.

Probable cause: Air in the hydraulic system or leakage past the piston seals.

Action: Check the hydraulic system for trapped air.



Hydraulic pressure can be dangerous. This should be done by trained personnel.

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Dealer:

The Seldén Group is the world's leading manufacturer of mast and rigging systems in carbon and aluminium for dinghies, keelboats and yachts. The range was extended with deck hardware in 2008.

The Group consists of Seldén Mast AB in Sweden, Seldén Mast A/S in Denmark, Seldén Mast Ltd in the UK, Seldén Mid Europe B.V. in the Netherlands, Seldén Mast SAS in France, Seldén Mast Inc. in the USA and Seldén Mast Asia Ltd in Hong Kong.

Our well known brands are Seldén and Furlex. The worldwide success of Furlex has enabled us to build a network of over 750 authorised dealers covering the world's marine markets. So wherever you sail, you can be sure of fast access to our service, spare parts and knowhow.

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