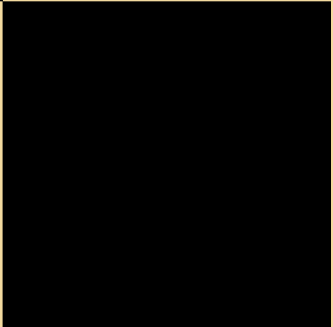


SAILTEC™



Marine Hydraulic Systems

Hydraulic Integral Adjusters



As boats get bigger and headstays longer, both easy adjustment and accurate backstay tension become increasingly important. The solution to this is hydraulics.

A hydraulically controlled backstay permits quick adjustment of headstay sag and mast bend which can make boats sail faster, point higher and make furling and reefing much easier.

The integral hydraulic adjuster should offer simple installation, easy operation, and effective adjustment with an accurate pressure gauge.

Sailtec offers all of this and much more in all of its integral adjusters. Sailtec also offers all of this at a lower cost than any other manufacturer.

The Sailtec Integral Adjuster is the right choice for all sailors with boats from 28' to 75' when only one hydraulic adjuster is desired.

Cylinder: All Sailtec cylinders are “aircraft” quality aluminum alloy, precision gun drilled, honed, polished and anodized to retain their attractive appearance and performance for years of service.

Locking Option: The mechanical device locks rod in position thus allowing release of hydraulic pressure. Also, the threaded rod can be marked for upwind and downwind positions, allowing consistent repeatability, without checking the pressure gauge.

Pressure Relief Valve: The pressure relief valve is one of the more important features on all Sailtec integral adjusters. This feature will not allow over tensioning of the rigging.



Hydraulic Integral Adjusters

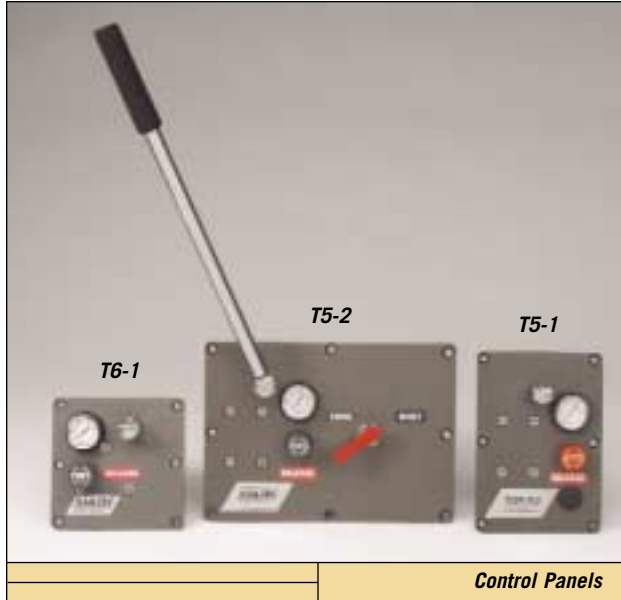
Valving: Sailtec uses a cartridge valve to control pressure. The valve is a ball valve and can be replaced in the field. This type of cartridge release valve prevents damage to pump and is more reliable than other brands.

Gauge: Sailtec gauges feature wide arc dual scale (psi/kg) dial faces for the accurate reading of pressure.

Piston/Piston Rod: Type 316 stainless steel piston rods are larger and stronger than other hydraulics on the market. This is important to prevent bending caused by side loads and premature seal wear.

Stroke: Integrals are available in both standard and long stroke.

	MODEL NO.	PISTON ROD SIZE		TENSION		CABLE/WIRE MAX. SIZE		PIN DIAMETER		LENGTH				STROKE	
		INCH	MM	LB	KG	INCH	MM	INCH	MM	CLOSED		OPEN		INCH	MM
-10 Standard	10SI	5/8"	15.9	4750	2152	9/32"	7.0	1/2"	12.7	23.0	584	32.5	824	9.5	241
-10 Long	10LI									27.0	686	40.5	1029	13.5	343
-10 Std Locking	10SLKI									39.0	990	47.5	1206	8.5	216
-10 Long Locking	10LLKI									48.0	1219	60.5	1536	12.5	318
-12 Standard	12SI	3/4"	19.0	6500	2945	5/16"	8.0	5/8"	15.9	24.0	609	34.0	863	10.0	254
-12 Long	12LI									28.0	711	42.0	1068	14.0	356
-12 Std Locking	12SLKI									40.0	1016	49.0	1244	9.0	229
-12 Long Locking	12LLKI									49.0	1244	62.0	1574	13.0	330
-17 Standard	17SI	3/4"	19.0	8750	3963	3/8"	9.6	5/8"	15.9	25.0	635	35.0	890	10.0	254
-17 Long	17LI									29.0	737	43.0	1092	14.0	356
-17 Std Locking	17SLKI									44.0	1178	53.0	1346	9.0	229
-17 Long Locking	17LLKI									53.0	1346	66.0	1676	13.0	330
-22 Standard	22SI	7/8"	22.0	11500	5209	7/16"	11.2	3/4"	19.0	29.0	737	40.0	1016	11.0	279
-22 Long	22LI									33.0	838	49.0	1244	16.0	408
-22 Std Locking	22SLKI									48.0	1219	58.0	1473	10.0	254
-22 Long Locking	22LLKI									57.0	1448	70.7	1795	13.75	319
-30 Standard	30SI	1"	25.4	20600	9332	1/2"	12.7	7/8"	25.4	34.0	864	45.0	1142	11.0	279
-30 Long	30LI									40.0	1016	56.5	1435	16.5	421



FOR REMOTE CONTROL OF CYLINDERS, INCLUDING VANGS, SAILTEC PANELS OFFER THE MOST POWER FOR THEIR SIZE AND WEIGHT.

Sailtec panels control up to four functions per panel. Backstay cylinders, vangs, outhauls and forestay cylinders can be pumped to 5,000 p.s.i (350 bar) and released from the panel location.

We offer two basic designs: the T5 double-acting and the T6 single-acting panels.

Panel Construction: Aircraft quality aluminum. Panel housing contains a filtered reservoir inlet and an adjustable relief valve to prevent over tensioning.

Gauges: All panels are produced with nearly flush mount gauges that are easy to read and have psi/kg scales.

Valves: Release valve is a ball valve that provides zero leakage. Rated 6000 psi with minimal bleed between functions. The selector valves are ball valves constructed of T316 stainless steel.

Design: Permits removal and replacement for service without having to pull the panel out.

T5 Panel Series:

Our double acting pump is faster, easier to use and install, and is smaller than the other panels on the market.

This pump moves .33 cubic inches of oil per stroke, pumps side to side, with a removable handle, nearly flush mount gauges and an adjustable internal relief valve.

Type 5 Control Panel Specifications

DESCRIPTION	PANEL DIMENSIONS		DEPTH		WEIGHT		PART NO.
	INCH	MM	INCH	MM	LB	KG	
1 Function	8.6 x 6.0	218 x 152	4.3	109	5.5	2.45	T5-1
2 Function	8.6 x 12.0	218 x 305	4.3	109	6.1	2.70	T5-2
3 Function	8.6 x 12.0	218 x 305	4.3	109	7.4	3.29	T5-3
4 Function	8.6 x 12.0	218 x 305	4.3	109	7.4	3.29	T5-4

T6 Panel Series:

Sailtec designed the T6 panel in response to customer requests for a small, powerful, remote panel pump for backstays and vangs.

This single acting panel pump moves .18 cubic inches of oil per stroke and is 40% smaller, lighter and less expensive than comparable double acting pumps.

Type 6 Control Panel Specifications

DESCRIPTION	PANEL DIMENSIONS		DEPTH		WEIGHT		PART NO.
	INCH	MM	INCH	MM	LB	KG	
1 Function	6.0 x 6.0	152 x 152	2.8	71.0	3.3	1.50	T6-1
2 Function	6.0 x 10.0	152 x 254	3.0	76.2	4.0	1.80	T6-2

Note: All panels come complete with handle, hardware, reservoir and reservoir hose.

Cylinders



Sailtec has designed its cylinders to be reliable, long lasting and efficient. Sailtec has done this by using high strength aluminum alloys and advanced manufacturing techniques. Sailtec also uses Molyguard bearing on the piston and the upper end to insure cylinder and piston rod scoring does not occur while under side load.

Sailtec cylinders are available in two standard stroke lengths with pneumatic return or double acting feature. Aluminum upper jaws are standard on all cylinders. All exterior surfaces are hard anodized for greater corrosion resistance and to retain their attractive appearance for many years of service.

The Sailtec Locking Option is available on both standard and long stroke cylinders. This mechanical device locks the cylinder in position, thus allowing the release of hydraulic pressure. Also, the threaded lock rod can be marked for upwind and downwind positioning.

Designed to pull (typically), push or both with common applications such as backstays, forestays, outhauls and travelers.



Cylinders

Sailtec cylinders have proven to be reliable, long lasting and efficient. High strength aluminum and T-316 stainless alloys and state of the art manufacturing techniques result in precision zero leak cylinders with even seal loads and minimal seal wear. Aluminum upper jaw, lower jaw and cylinder material is high strength heat treated aluminum allow, precision honed, polished for appearance.

The stock cylinders available can also be custom built with hard coat anodized, polished T-316 steel, custom stroke lengths to 100 inches (2,500 mm), threaded rod ends for turnbuckle bodies and configured to pull hydraulic/push pneumatic or push/pull hydraulically.

CYLINDER SIZE	MODEL NO.	PISTON ROD SIZE		TENSION AT 5000 PSI		BREAKING STRENGTH		MAX. WIRE SIZE		GAP & PIN		LENGTH				STROKE	
		INCH	MM	LB	KG	INCH	MM	INCH	MM	INCH	MM	CLOSED	OPEN	INCH	MM	INCH	MM
-10	10SC	5/8"	15.9	4750	2152	12500	5660	9/32	7.0	1/2"	12.7	20.5	520	30.0	762	9.5	241
	10LC											24.5	621	38.0	965	13.5	343
	10FR											35.5	902	57.5	1460	22.0	559
-12	12SC	3/4"	19.0	6500	2945	18500	8380	5/16	8.0	5/8"	15.9	22.0	559	32.0	812	10.0	254
	12LC											26.0	660	36.0	914	14.0	356
	12FR											42.5	1080	66.5	1690	24.0	610
-17	17SC	3/4"	19.0	8750	3963	22500	10200	3/8	9.6	5/8"	15.9	23.0	584	33.0	838	10.0	254
	17LC											27.0	685	41.0	1041	14.0	356
	17FR											46.0	1168	74.0	1880	28.0	711
-22	22SC	7/8"	22.0	11500	5209	30000	13500	7/16	11.2	3/4"	19.0	24.5	622	35.5	902	11.0	279
	22LC											29.5	749	45.5	1156	16.0	406
	22FR											52.5	1333	87.5	2222	35.0	914
-30	30SC	1-0"	25.4	20600	9332	40000	18000	1/2	12.7	7/8"	22.0	28.0	711	39.0	991	11.0	279
	30LC											33.5	851	50.0	1270	16.5	419
	30FR											58.0	1473	98.0	2488	40.0	1018
-40	40SC	1.0"	25.4	32180	14578	52000	23500	5/8	15.9	1.0"	25.4	30.0	762	42.0	1067	12.0	304
	40LC											36.0	914	54.0	1372	19.0	482
	40FR											64.7	1643	109.7	2769	45.0	1143
-60	60SC	1-1/4"	31.8	42500	19252	84000	38000	3/4	19.0	1-1/4"	31.8	34.7	881	48.7	1237	14.0	356
	60LC											41.6	1056	62.6	1590	21.0	533



Hydraulic Boom Vang

Sailtec manufactures boom vang in the same manner as its standard cylinders. The boom vang has a nitrogen return system and in most cases will support the weight of the boom, eliminating the need for a topping lift.

- Tension is 5000 psi or 350 bar.
- Return force is at 500 psi or 35 bar.
- Length is pin to pin closed and will be adjusted to meet your EXACT REQUIREMENTS, and may be subject to custom length charges.
- Stainless cylinders available.
- Standard finish is hard coat anodized.

CYLINDER SIZE	MODEL NO.	PISTON ROD SIZE		TENSION AT 5000 PSI		LENGTH		STROKE		RETURN FORCE	
		INCH	MM	LB	KG	INCH	MM	INCH	MM	LB	KG
-06	-06BV	5/8"	16.0	3300	1500			9.5"	241	400	180
-10	-10BV	5/8"	16.0	4750	2100	70"	1778	9.5"	241	620	280
-12	-12BV	3/4"	19.0	6500	2850	72"	1828	10.0"	254	883	405
-17	-17BV	7/8"	22.0	8300	3820	76"	1955	11.0"	279	1202	547
-22	-22BV	7/8"	25.0	12500	5600	84"	2132	11.0"	279	1600	726
-30	-30BV	1-1/4"	32.0	21200	9615	N/A	N/A	12.0"	365	2450	1110
-40	-40BV	1-1/4"	32.0	29900	13560	N/A	N/A	12.0"	305	3600	1635
-60	-60BV	1-1/2"	38.0	39980	18100	N/A	N/A	14.0"	356	4810	2180
-90	-90BV	1-3/4"	45.0	51810	23500	N/A	N/A	16.0"	406	6283	2850
-110	-110BV	2-1/8"	51.0	64430	29100	N/A	N/A	18.0"	457	7950	3620
-150	-150BV	2-3/8"	60.0	77100	35000	N/A	N/A	18.0"	457	9820	4450

Boom Vang Jaw Specifications

SIZE	JAW MODEL NO.	A-GAP		B-PIN		C-PIN & DEPTH		D-SLOT DEPTH	
		INCH	MM	INCH	MM	INCH	MM	INCH	MM
-06	110 650 Upper	0.500	12.7	7/16"	11.0	0.75	19.0	1.75	44.0
	106 650 Fixed	0.500	12.7	7/16"	11.0	0.85	21.6	2.15	54.6
-10	110 600 Upper	0.680	17.0	1/2"	12.7	0.93	23.6	1.80	45.7
	110 650 Fixed	0.660	16.7	1/2"	12.7	1.06	26.9	1.85	46.7
-12	112 600 Upper	0.687	17.4	5/8"	15.9	1.03	26.1	2.38	60.4
	112 650 Fixed	0.660	16.7	5/8"	15.9	1.13	28.7	2.16	54.8
-17	117 600 Oil	0.687	17.4	5/8"	15.9	1.03	26.1	2.38	60.4
	117 650 Fixed	0.660	16.7	5/8"	15.9	1.13	28.7	2.16	54.8
-22	122 600 Oil	0.875	22.0	3/4"	19.0	1.25	31.8	2.75	69.8
	122 650 Fixed	0.787	20.0	3/4"	19.0	1.31	33.2	2.94	74.6
-30	130 600 Oil	0.875	22.2	7/8"	22.2	1.25	31.8	2.75	69.8
	130 650 Fixed	1.030	26.1	7/8"	22.2	1.53	38.8	3.25	82.5
-40	140 600 Oil	1.000	25.4	1-0"	25.4	1.53	38.8	3.25	82.5
	140 650 Fixed	1.000	25.4	1-0"	25.4	1.53	38.8	3.25	82.5
-60	160 600 Oil	1.250	31.8	1-1/4"	31.8	1.88	47.7	4.38	111.2
	160 650 Fixed	1.250	31.8	1-1/4"	31.8	1.88	47.7	4.38	111.2
-90	190 602 Oil	1.250	32.0	1-1/4"	32.0	2.87	52.6	4.51	116.1
	160 650 Fixed	1.250	32.0	1-1/4"	32.0	2.87	52.6	4.38	111.2
-110	1110 602 Oil	1.375	35.0	1-3/8"	35.0	2.33	59.1	5.50	140.0
	190 650 Fixed	1.375	35.0	1-3/8"	35.0	2.50	63.1	5.50	140.0
-150	1150 602 Oil	1.500	38.0	1-1/2"	38.0	2.70	68.5	6.00	154.0
	1110 650 Fixed	1.500	38.0	1-1/2"	38.0	2.80	65.8	6.00	154.0



Oil Jaw

SAME HIGH QUALITY materials used for Sailtec cylinders, vang have heavier piston rods than cylinders and models – 17 and larger have a passage in the piston rod to permit plumbing the system pressure to the ram jaw to reduce the amount of the deck hose.

Accessories and Fittings

Accessories:

- 43010 Pump handle-Integral
- 43020 Pump handle-Panel
- 43111 Pressure gauge
- 43120 Remote gauge
- 43210 3/16" Thru Deck Gland
- 43212 1/4" Thru Deck Gland
- 43310 Remote Release valve
- 43315 Remote Valve Hose Kit
- 43410 Cartridge valve Assembly
- 43411 Knurled knob for Cartridge valve
- 43440 Pnuematic Valve
- 43445 PnuematicValve Charge hose/adapter
- 43510 One Quart reservoir
- 43620 Two Quart reservoir
- 66940 -10 JET 1/2"
- 66941 -12/17 JET 5/8"
- 66944 -22 JET 3/4"
- 66946 -30 JET 7/8"
- 66948 -40 JET 1"



Accessories and Fittings

Hydraulic Fittings and Hoses

- 66100 1/4" SS tubing/ft
- 66110 520N-3 Kevlar 5000 psi, 3/16" hose/ft
- 66112 520N-4 Kevlar 5000 psi, 1/4" hose/ft
- 66220 1/4" Reservoir Hose
- 66310 10655-4-3 steel swage on hose end fitting (3/16")
- 66312 10655-4-4 steel swage on hose end fitting (1/4")
- 66320 10655-4-3 SS swivel swage on end fitting (3/16")
- 66322 10655-4-4 SS swivel swage on end fitting (1/4")
- 66410 1/4" Hose Barb
- 66510 4-4 CTS-S Steel Elbow
- 66520 4-4 CTX-SS Stainless Steel Elbow
- 66530 4-4 FTX-S Steel Union
- 66540 4-4 FTX SS Stainless Union
- 66550 4-BTX - S Steel Nut
- 66560 4-BTX-SS Stainless Nut
- 66700 4-JTX-S Steel Union Tee
- 66710 4-JTX-SS Stainless Union Tee
- 66720 4-HTX-S Steel Union Tee
- 66750 3-P50N-S Steel Plug
- 66790 4-TX-S Steel Sleeve
- 66800 4-TX-SS Stainless Sleeve
- 66900 4-WBTC-SS Stainless Thru Deck Elbow
- 66910 4-WBTX-SS Stainless Thru Deck Straight
- 66920 4-STX-S (2) 37 Degree Flare & (1) NPTF Steel Tee
- 66930 4-STX-SS (2) 37 Degree Flare & (1) NPTF Stainless Tee
- 67200 4-4F6X-SS Adapter 37 Degrees to 1/4NPT-SS
- 67210 SS H 2-63Y Stainless Quick disconnect-nipple
- 67220 SS H 2-62Y Stainless Quick disconnect-coupler

Service Parts

- 43007 Pump Piston Assembly - Integral
- 43008 Pump Lever / Piston Assembly
- 43111 Gauge, psi / kg
- 43410 Cartridge Release Valve Assembly
- 43411 Knurled Knob for Valve
- 43412 Cartridge Valve Rebuild Kit
- 43413 Lock Jaws for locking option

Seal Kits

- 42000 Integral Pump Seals
- 42010 -10 Cylinder Seals
- 42012 -12 Cylinder Seals
- 42017 -17 Cylinder Seals
- 42022 -22 Cylinder Seals
- 42030 -30 Cylinder Seals
- 42040 -40 Cylinder Seals
- 42060 -60 Cylinder Seals
- 43420 T5 Panel Seal Kit
- 43421 T6 Panel Seal Kit



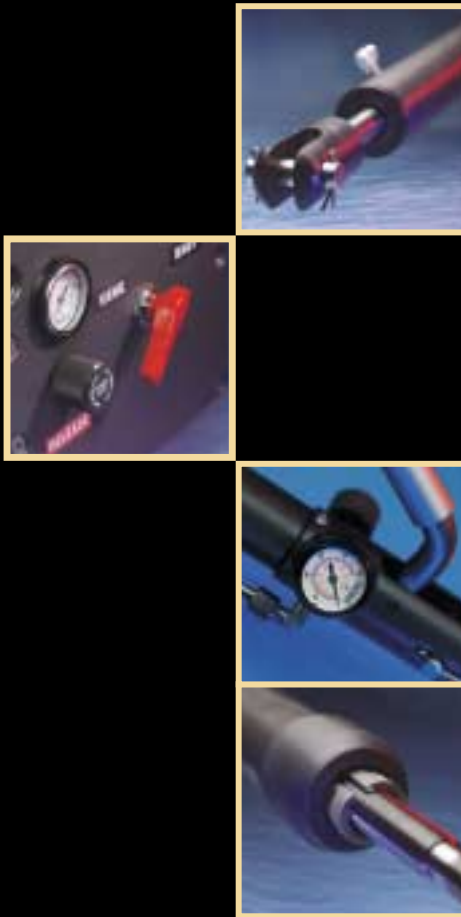
Cylinders can be customized to include:

- Custom strokes to 3500 mm
- Custom finishes including stainless steel
- Customer applications such as push/pull
- Customer sizes to 50 ton
- Custom end jaws or eyes

Panel layout, functions, or finishes can be manufactured to your exacting specifications.

Custom mounts for furling hubs, radar tubes, cylinder toggles and risers.

Call, fax or email requests.



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