

BI-CYLINDER

During **Mets trade fair 2007**, Cariboni presented its new astonishing product: two hydraulic cylinders to control the headstay and the Cunningham of TP52 yacht class, matched together in a new benchmark hydraulic cylinder. Our Bi-cylinder is the best choice for racing yachts which need to improve the control of their jibs.

During a sail, sometimes it is necessary to release the stay, so you have to remember first to release the Cunningham to avoid to overload it. With our Bi-cylinder you won't have this problem anymore: the Cunningham cylinder is fixed on the headstay cylinder tube and, when you release the headstay, the Cunningham follows it automatically.

Another winning idea of the Bi-cylinder is to match together tubes of the headstay and tubes of the Cunningham cylinder in a single lighter and smaller double tube. This piece is machined out from a single block of aluminium (or titanium) alloy in order to reduce as much as possible the weight of the cylinder.

The Cunningham ram has a gas room for a fast release even without traction load and the terminal rod has a standard female fork design.

The headstay tensioner tube terminal is ready to fit PBO stay; tube terminal is made of 17-4-PH to increase performances and avoid any problem of rust with carbon fibre headstay.

Cariboni's Bi-cylinder is fixed on board by the headstay terminal rod: it can be a female fork or a male terminal



Jethou 72

with a spherical joint for a self-alignment system under load. Standard Bi-cylinders have hard coated aluminium alloy tube, rod and tube terminals, nitronic 50 rods and 17-4PH headstay rod terminal.



Cariboni's first **Bi-cylinder** shown at METS 2007.

MODEL	Headstay Ram Bore		Headstay Ram Stroke		Cunningham Ram Bore		Cunningham Ram Stroke		Headstay Max Pull		Cunningham Max Pull		Dry Weight	
	mm	in	mm	in	mm	In	mm	in	kg	lb	kg	lb	kg	lb
BCL 045 022 250	45	1,77	250	9,84	22	0,87	208	8,19	6809	15011	1537	3389	3,7	8,16
BCL 050 022 255	50	1,97	255	10,04	22	0,87	210	8,27	8711	19203	1537	3389	4,5	9,92
BCL 055 022 300	55	2,17	300	11,81	22	0,87	250	9,84	9803	21613	1537	3389	5,0	11,02
BCL 060 030 300	60	2,36	250	9,84	30	1,18	250	9,84	10000	22046	1261	2780	8,5	18,74
BCL 065 025 350	65	2,56	350	13,78	25	0,98	280	11,02	14975	33015	1925	4245	7,0	15,43
BCL 070 030 350	70	2,76	350	13,78	30	1,18	300	11,81	16012	35300	2818	6213	8,5	18,74
BCL 075 030 350	75	2,95	350	13,78	30	1,18	300	11,81	18418	40604	2818	6213	9,4	20,72
BCL 085 040 350	85	3,35	350	13,78	40	1,57	300	11,81	25319	55819	5380	11861	12,4	27,34
BCL 085 050 350	85	3,35	350	13,78	50 ⁽¹⁾	1,97	165 ⁽¹⁾	6,50	25456	56121	3603 ⁽¹⁾	7943	18,9	41,67
BCL 090 045 250	90	3,54	250	9,84	45	1,77	230	9,06	25493	56202	6128	13510	14,8	32,63
BCL 090 055 600	90	3,54	600	26,62	55 ⁽²⁾	2,17	265 ⁽²⁾	10,43	19450 ⁽²⁾	42880	4662 ⁽²⁾	10278	26,0	57,32
BCL 095 055 190	95	3,74	190	7,48	55 ⁽³⁾	2,17	120 ⁽³⁾	4,72	14311 ⁽³⁾	31550	1865 ⁽³⁾	4112	15,1	33,29
BCL 100 055 250	100	3,94	250	9,84	55	2,17	300	11,81	35995	79355	6055	13344	26,2	57,74

(1) Pushing 2:1 cylinder **(2)** Pushing 2:1 cylinder, bi-cylinder working pressure @ 350 bar **(3)** Pushing 2:1 cylinder @ 150 bar, headstay @ 200 bar

Titanium or 17-4PH models are available on request as custom arrangements for terminal rods, strokes and bores. Our Bi-cylinders are installed on racing and fast cruising yachts in different sizes and with customised terminals.

BI-CYLINDER



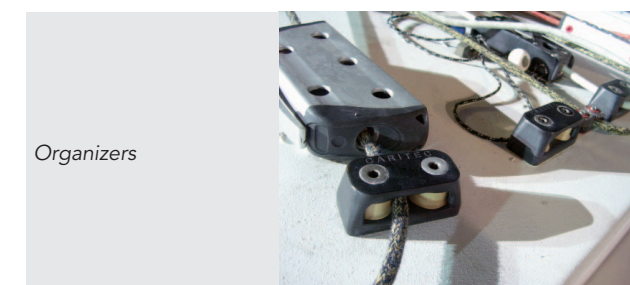
Bi-cylinder *developed for class yacht races.*



Momo '72
Judel Vrolijk design – Persico

DECK ORGANIZERS

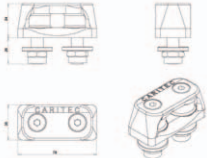
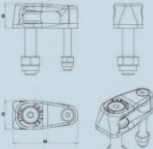
Caritec's deck organizers are designed for race sailing yachts to lead halyards and to control sheets to the cockpit. These new organizers are made of 7075 ergal or 6082 aluminium alloy on main body; 17-4PH or titanium are used for the fixing screws.



Organizers

The core of the system is the high strength peek rollers which guarantee the minimum friction on the sheet even under big loads.

Deck organizers are available with single or double pulley, depending on the needs and for the best layout of the cockpit. Custom models available on request.

MODEL	Weight		Dimensions		Sheet diameter		Notes
	kg	lb	mm	in	mm	in	
	0,146	0,31	78x35 34 (h)	3,07x1,38 1,34 (h)	15	0,59	DOUBLE model Black hard coated aluminium base, peek roller, 17-4PH fixing screws Double pulley to drive the sheet left and right under load.
	0,70	0,15	68x30 26 (h)	2,67x1,18 1,02 (h)	13	0,51	SINGLE model Ergal 7075 hard coated base, peek roller with ball bearings, titanium fixing screws. Single pulley to drive the sheet or left or right under load.