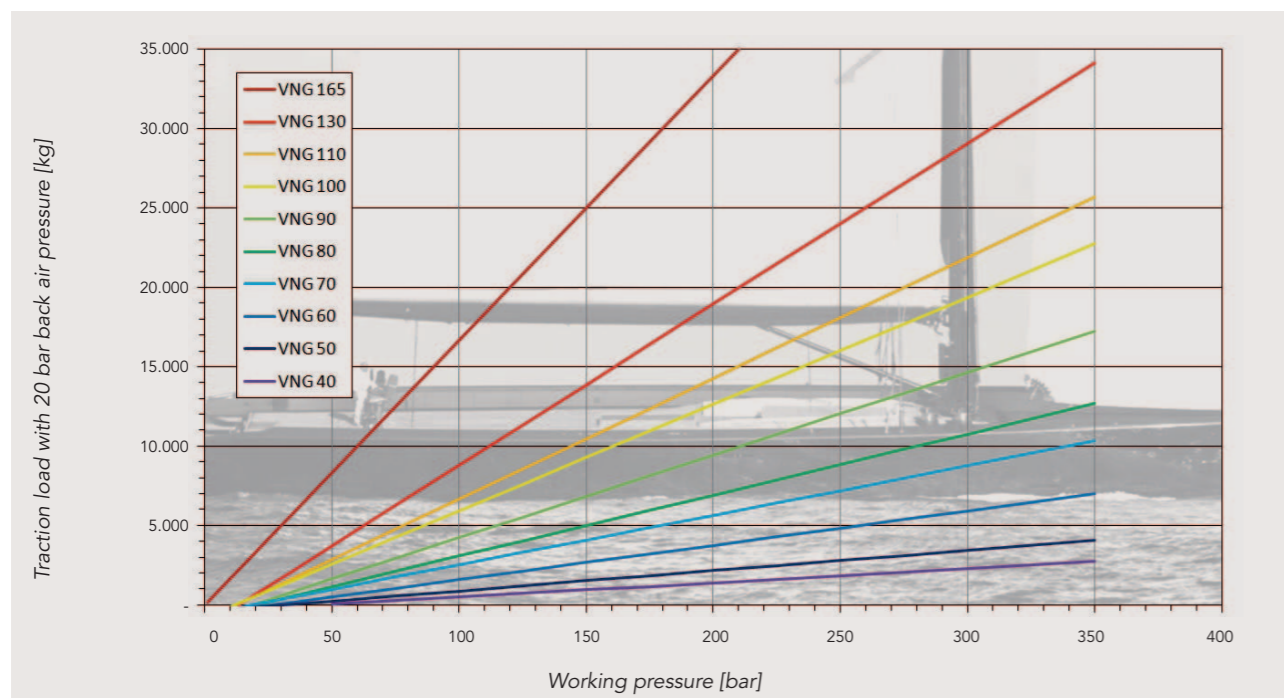
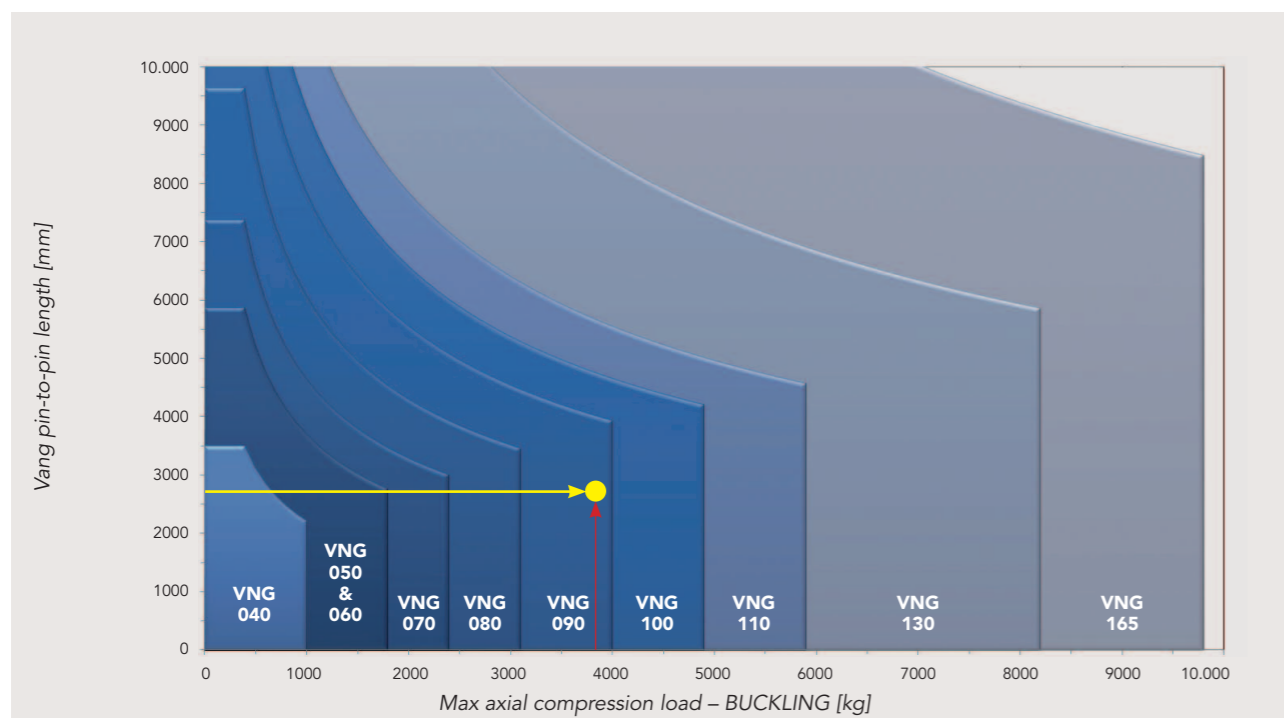


VANG

The best way to find your own vang is easy. Here below some steps.

- 1 Have a look to the rigging geometry and find out the vang pin-to-pin distance (PCLC) with boom in horizontal position
- 2 Make some calculation to identify the compression axial load on the vang: we suggest to mind the weight of the boom vang, mainsail, accessories (furling boom, other hydraulic cylinders) and add the weight of two people hanging up by the end of the boom...yes, it really could happens!
- 3 Check in the vang buckling diagram the size of your Cariboni vang
- 4 Check in the traction load diagram if the power of the vang is enough for your hydraulic system which is the working pressure of the ram

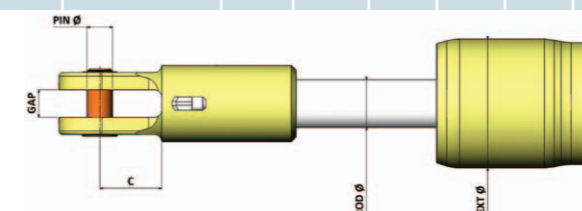
In the example shown in the diagram, with 3800 kg of maximum axial compression load and 2500 mm of PCLC, the right choice is a Cariboni VNG 90.



VANG

BOOM VANG MADE OF BLACK HARD COATED ALUMINIUM FOR SAILING YACHTS
POLISHED STAINLESS CYLINDER AVAILABLE FOR EACH SIZE

SIZE	MODEL	Max traction load ⁽¹⁾		Max return force ⁽²⁾		Stroke		Rod Ø	Gap	Pin	C	Oil vol.	Weight		
		kg	lb	kg	lb	mm	in	mm	mm	mm	mm	litres	Wkg ⁽³⁾	a	c
17	VNG 40	3127	6894	384	847	250	9,84	22	16,3	16,0	36,0	0,2	6	0,00204	1,7
20	VNG 50	4483	9884	600	1324	280	11,02	30	16,3	15,5	32,5	0,4	8	0,00303	2,9
24	VNG 60	7566	16679	865	1906	280	11,02	30	16,3	15,8	33,0	0,6	9	0,00303	3,7
30	VNG 70	10897	24023	1177	2595	300	11,81	31,8	19,5	19,0	47,0	0,9	14	0,00335	8,6
40	VNG 80	13450	29652	1537	3389	350	13,78	40	23,0	22,0	52,0	1,3	23	0,00511	11,6
60	VNG 90	18214	40154	1945	4289	360	14,17	40	25,0	25,0	52,0	1,8	31	0,00596	11,7
70	VNG 100	23538	51892	2402	5295	400	15,75	40	32,6	28,0	64,0	2,6	41	0,00681	22,9
90	VNG 110	26675	58808	2906	6407	430	16,93	50,8	32,6	31,8	66,2	3,2	54	0,00766	29,2
110	VNG 130	35517	78301	4059	8949	500	19,69	65	36,0	35,0	78,0	5,0	88	0,01290	51,9
195	VNG 150	42803	94365	5404	11914	500	19,69	85	45,0	45,0	95,0	6,0	114	0,01915	51,5
260	VNG 165	56043	123552	PUSH/PULL		526	20,71	85	50,8	50,8	112,5	11,3	134	0,02384	51,1
300	VNG 180	62768	138380	7782	17156	550	21,65	100	55,0	55,0	125,0	9,7	196	0,02785	100
400	VNG 200	84064	185330	9607	21180	550	21,65	100	55,0	55,0	135,0	13,0	280	0,03321	166
1	VNG 220	101717	224248	PUSH/PULL		600	23,62	110	60,0	60,0	148,0	22,8	363	0,03856	232



BOOM VANG FOR RACE SAILING YACHTS with CARBON FIBRE EXTENSION
HYDRAULIC RAM MADE ON TITANIUM and ALUMINIUM ALLOY

1	VNG 55 C	8971	19777	727	1602	280	11,02	28	16,3	16	35,5	0,49	4,80 kg w/o extension
1	VNG 60 C	10808	23828	865	1906	280	11,02	30	16,3	16	36,0	0,59	5,75 kg w/o extension
1	VNG 70 C	15516	34206	1177	2595	280	11,02	32	20,0	20	47,5	0,85	8,96 kg w/o extension
1	VNG 80 C	19215	42362	1537	3389	400	15,75	40	25,4	25	60,0	1,51	20,00 kg w/o extension
1	VNG 95 C	28021	61776	2168	4779	310	12,20	45	35,0	35	70,0	1,70	30,73 kg w/o extension

Notes:

- (1) At 350 bar (5000 PSI) and no gas pressure. At 500 bar (7150 PSI) for carbon vang
- (2) At 30 bar (435 PSI) gas pressure. Return force can vary with gas pressure
- (3) Weight for minimum length as example, please calculate the exact weight using the following formulas:
 $Wkg = (PCLCmm \times a) + c$ (PCLC is the vang length pin to pin cylinder closed in mm)
 $Wlb = Wkg \times 2,205$