Mast sections

C-sections and F-sections

Longitudinal oriented mast sections

Loads generated by the crew (mainsheet, vang, outhaul, Cunningham etc.) are transferred to the mainsail and on to the mast. As the mainsail is designed according to the expected curve of the mast, a longitudinally stiff mast allows for less luff curve of the sail. Instead, this sail area can be added to the roach of the sail, where it is subjected to the wind and more efficient. The longitudinal rigidity of the mast section makes for higher forestay load created by tensioning the backstay. Running backstays can often be avoided. The risk of mast pumping is also reduced.

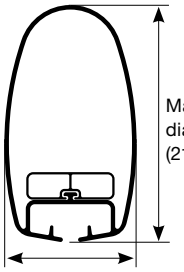
Longitudinal oriented
C-section

Lateral oriented mast sections

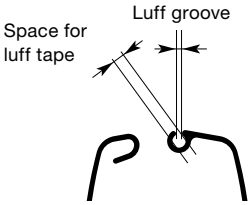
The new C137 & C153 mast profiles have been designed to provide a solution for the modern, swept spreader rig arrangements. The developing trends for large spreader sweep angles, enables the rig to rely less on the mast section to provide longitudinal inertia (stiffness) allowing material and ultimately weight to be removed from the profile. The new sections are also suitable for 1-spreader rigs on 26’ to 32’ boats.

Longitudinal oriented
F-section

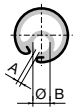
Lateral oriented
C-section



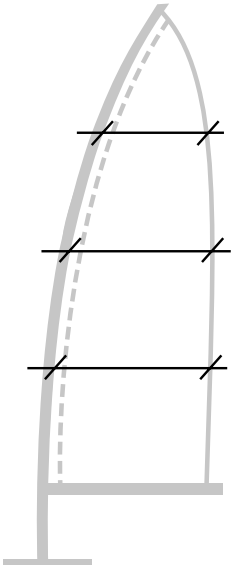
*Mast section measurements are given as follows: Major diameter/Minor diameter (i.e. 211/110). This will help identification and the use of correct measurements. The major diameter of the mast can usually be found in the number engraved at the mast heel. For example K23-**C211**-4475.*



Furling mast luff extrusion

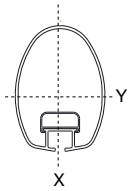
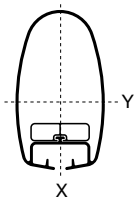
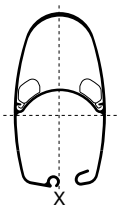


	Weight kg/m	A mm	B mm
RA	0.55	2.8 ±0.25	6.0
RB	0.93	3.25 ±0.35	8.0
RC	1.28	3.25 ±0.25	10.6
RD	2.11	3.25 ±0.25	10.6



Big luff curve. Less roach.

Stiff mast. Bigger roach for more projected area.

		Mast section	Section dim. mm	I_y cm⁴	I_x cm⁴	Wall thickness mm	Weight kg/m	W_y cm³	W_x cm³	Sail groove mm	Sail groove for bolt rope*	Car	Sail slides Art. no.
C-sections 		C137	138/98	267	138	2,8	3,02	34,7	28,2	10,5 ± 0.7	–	IWS 45	511-605
		C153	153/107	369	186	2,9	3,34	43,5	34,9				
C-sections 		C156	156/87	391	144	3,00	3,71	42,8	33,2	10 ± 0.75	5.5 ± 0.75	MDS	511-605 or 511-607
		C175	175/93	558	191	3,24	4,18	53,6	41,0				
		C193	193/102	779	257	3,40	4,74	69,3	50,6				
		C211	211/110	1051	341	3,65	5,34	86,5	62,0				
		C227	227/119	1407	456	3,95	6,15	108,0	76,6				
		C245	245/127	1910	614	4,35	7,15	137,0	96,5				
		C264	264/136	2591	830	4,80	8,40	172,0	122,0				
		C285	285/147	3508	1127	5,20	9,72	214,0	153,3				
		C304	304/157	4686	1524	5,80	11,44	272,0	194,0				
		C321	321/171	5822	2056	5,5/6,4	13,06	324,4	238,7	16 ± 0.75			511-603
		C365	365/194	9160	3161	5,5/6,8	15,50	447,0	326,3				
F-sections 	RA	F176	176/93	526	187	2,89	4,20	58,2	40,0	See table page 10.**			
		F194	194/101	709	254	3,04	4,79	70,8	49,8				
	RA/RB	F212	212/109	970	337	3,15	5,49	88,2	61,8				
	RA/RB	F228	228/118	1306	453	3,40	6,35	112,0	76,8				
	RB	F246	246/126	1781	613	3,75	7,44	139,0	97,3				
	RB/RC	F265	265/135	2392	828	4,15	8,73	173,0	122,0				
	RB/RC	F286	286/146	3237	1122	4,50	10,10	220,0	154,0				
	RB/RC	F305	305/156	4389	1513	5,05	11,84	276,0	194,0				
	RC/RD	F324	324/169	5576	2056	5,5/7,0	13,80	328,8	243,3				
	RD	F370	370/192	8835	3149	5,8/9,0	16,60	468,0	326,0				
	RD	F406	408/207	14321	4725	6,5/10,0	21,20	671,0	451,0				

* If a traditional bolt rope is to be used, a plastic profile (Art. No. 535-710), as well as a sail feed (505-526-01) must be added to the luff-groove on the mast.
** For more detailed information on Seldén's furling masts, see pages 79-89 or "Sailmakers' Guide" (www.seldenmast.com).