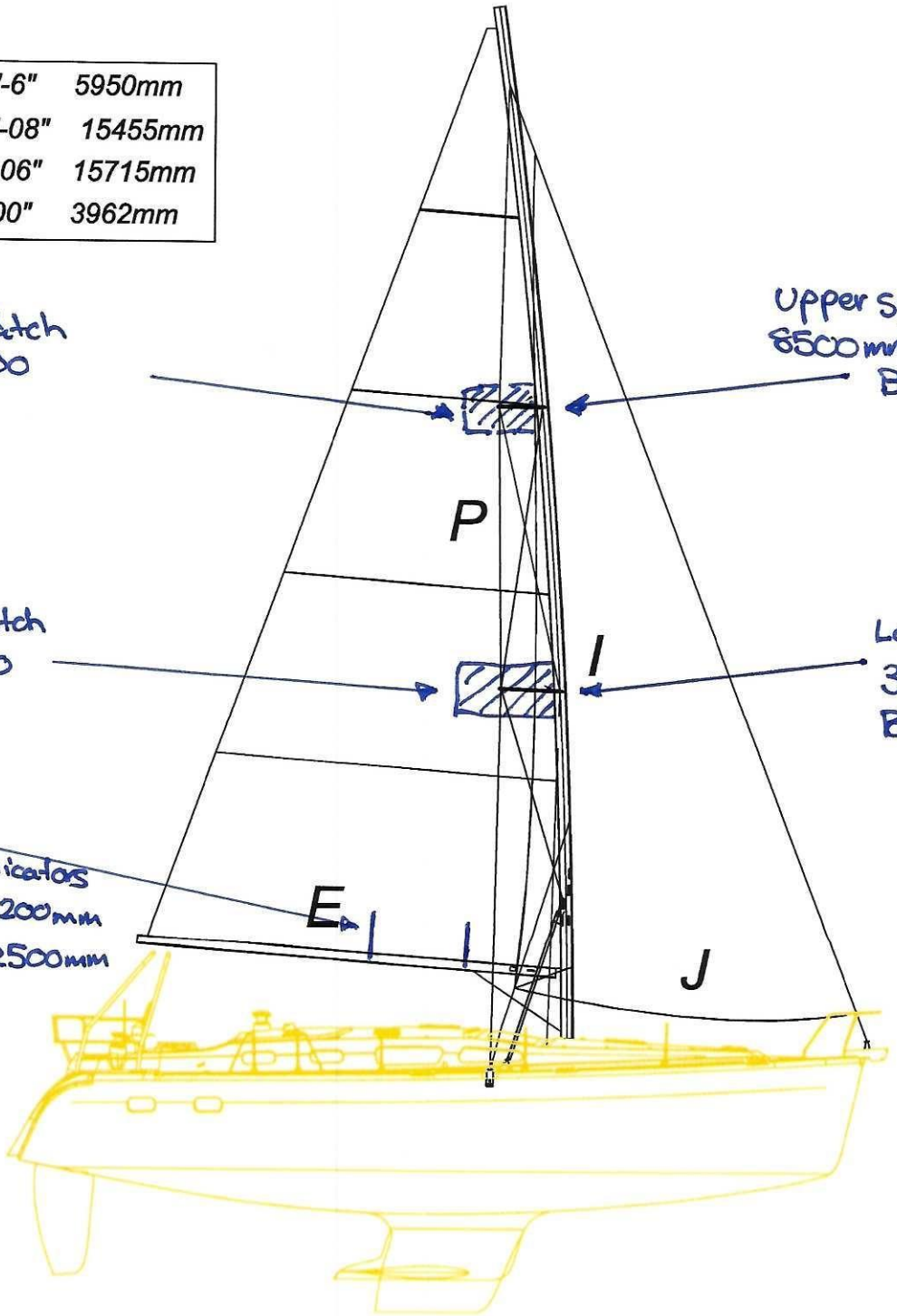
SELDEN MAST P/N°. H41F A.C. - SMI - D23 - F228 - 2910 - 6859

H41 FURLING SAILPLAN

E	19'-6"	5950mm
P	50'-08"	15455mm
I	51'-06"	15715mm
J	13'-00"	3962mm



Chafe Patch
900 x 600

Upper spreader
8500mm from
Boom

Chafe Patch
1300 x 600

Lower spreader
3500mm from
Boom

Reefing Indicators
1st Reef 1200mm
2nd Reef 2500mm

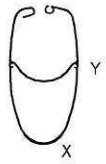
HUNTER

SAILPLAN (FURLING)

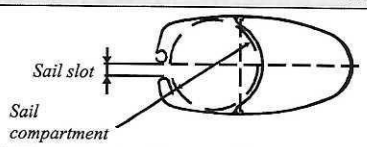
3968036B | None | 01/15/03 | ENG

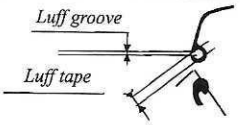
F

6.2 F section: manual, hydraulic and electro (2003 - →)

Sections		Section dimn. X/Y mm	I_y cm⁴	I_x cm⁴	Wall thickness, mm	Weight kg/m	$W_y$min cm³	$W_x$min cm³
Furling masts	F176	176/93	526	187	2.90	4.12	58.2	40.0
	F194	194/101	709	254	3.05	4.69	70.8	49.8
	F212	212/109	970	337	3.15	5.45	88.2	61.8
	F228	228/118	1306	453	3.4	6.30	112	76.8
	F246	246/126	1781	613	3.75	7.37	139	97.3
	F265	265/135	2392	828	4.15	8.66	173	122
	F286	286/146	3237	1122	4.5	10.02	220	154
	F305	305/156	4389	1513	5.05	11.75	276	194
	F324	324/169	5576	2056	5.5	13.8	329	243
	F370	370/192	8835	3149	5.8	16.6	468	326
	F406	408/207	14321	4725	6.5	19.34	671	451

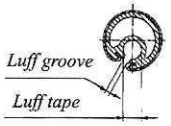
Mast section





Section	Sail compart-ment	Max foot length E max[1]		Sail slot	Spare luff groove in mast		
					Luff groove	Max space available for luff tape	Slide
	mm		mm	mm	mm	mm	mm
F176	Ø 85	RA	3750	15±3	3.25±0.25	6	-
F194	Ø 93	RA	4200				
F212	Ø 100	RA	4500			8	Bainbridge AO31
		RB	4400				
F228	Ø 108	RA	5000				
		RB	4900				
F246	Ø 114	RB	5400				
F265	Ø 123	RB	6000	17±3		10	Bainbridge AO32
		RC	5800				
F286	Ø 133	RB	6500				
		RC	6300				
F305	Ø 141	RB	6900				
		RC	6700				
		RD	6000				
F324	Ø 154	RC	7000	20±3	4±0.25	12	Bainbridge AO32
		RD					
F370	Ø 174	RC	7500	22±3		13	
		RD					
F406	Ø 190	RD	9500	24±3	6.5±0.5	15	Bainbridge AO33

Luff extrusion



Type	Dia-meter	Luff groove	Max space for luff tape
mm	mm	mm	mm
RA	Ø 25	2.75±0.25	Ø 6
RB	Ø 30	3.25±0.35	Ø 8
RC	Ø 38		Ø 7[2]
RD	Ø 58		Ø 10

Note: For more performance oriented furling main sails with a lot of shape and/or stiffer (non-dacron) sail cloth, and for sails with horizontal battens, an optional sail guide can be provided

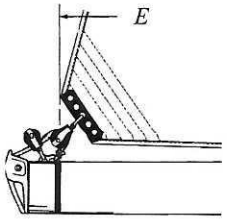
1) *When the sail is fully furled, min 300 mm of Emax will remain outside the mast due to reinforcement and clew-board. Note! Listed values are MAX VALUES for DACRON® main sails designed primarily for easy furling and reefing. For more performance oriented sails with more shape and stiffer sail cloth, max foot length will be reduced depending on sail design and sail cloth.*

2) *For systems older than 2001 (without stainless sailfeeder), max space Ø 10 mm.*

3) *Note! Spare main sail entry is an optional feature from 2012 and onwards.*

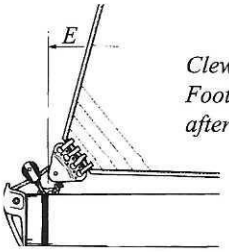
☐ Design aspects on furling main sails, see page 44.

Alternative clew executions



Clew with clew-board:
Foot ("E") measured to after point of sail.
Clew-board gives longer effective ("E") than integrated block or normal cringle.

Fig. 6.2.a



Clew with integrated block:
Foot ("E") measured to after point of block.

Fig. 6.2.b

F

Mast section	RA			RB			RC			RD		
	A	B	T	A	B	T	A	B	T	A	B	T
F176	600	400	80									
F194	600	400	80									
F212	600	400	80	650	400	80						
F228	600	400	80	650	400	80						
F246				650	400	80						
F265				650	400	125	700	500	130			
F286				650	400	125	700	500	130			
F305				650	400	125	700	500	130	700	500	135
F324										700	500	135
F370										700	500	135
F406										700	500	175

Boom section	OS mm
B120	140
B135	140
B143	150
B152	150
B153	150
B171	150
B172	150
B199	150
B200	200*
B232	285
B250	200*
B256	310
B290	360
B300	395
B380	430

*For RCB car 511-617:320

For motorised Furling

Red mark(s) may be used to indicate when sail is fully unfurled.

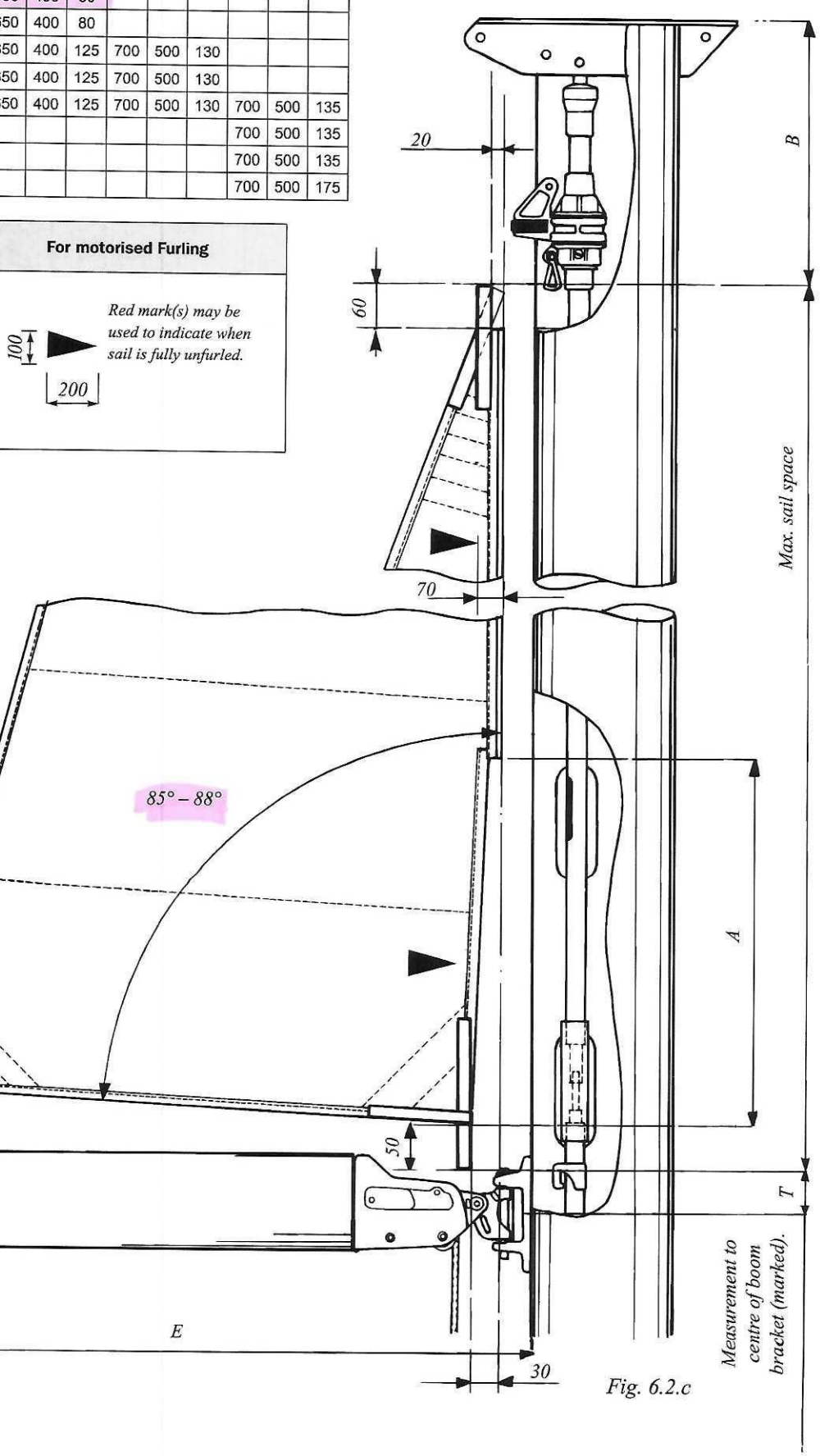


Fig. 6.2.c

7.2 Furlex 50S-500S

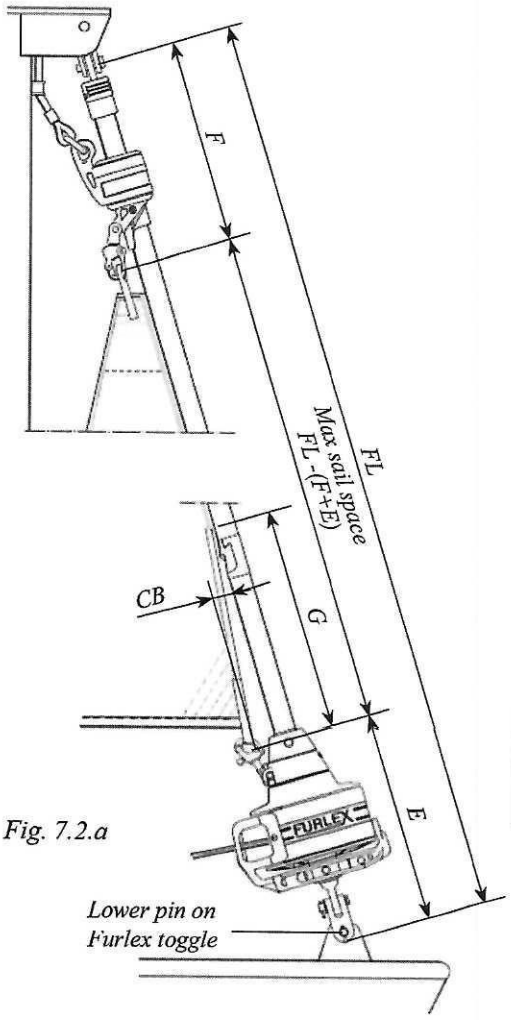


Fig. 7.2.a

Sails with a luff considerably shorter (more than 500 mm) than the maximum permissible must be fitted with a permanent head pendant. The total luff length including pendant should be just less than the "Max. sail space" dimension. A too short luff length (including head pendant) can result in "halyard wrap" which may cause severe damage to the forestay, and put the entire rig at risk. For more information please refer to ***"Sail information"*** *in the relevant Furlex manual.*

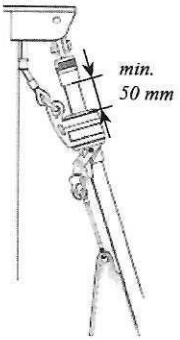


Fig. 7.2.b

Furlex 400S Mk2 halyard swivel.

If "F" measurement is >specified (sail is made too short) there is a risk of the halyard shackle shafing the luff extrusion.

Always check clearance. Add a pendant between sail and halyard swivel or a soft shackle between HMPE loop in the halyard swivel and the halyard shackle. A too short luff length (including head pendant) can also result in "halyard wrap" which may cause severe damage to the forestay, and put the entire rig at risk. For more information please refer to ***"Sail information"*** *in the relevant Furlex manual.*

Fig. 7.3.c

Furlex 50S

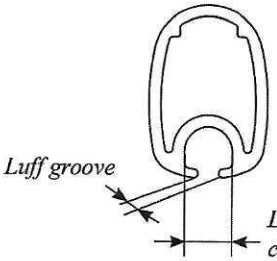


Fig. 7.2.c

Furlex 100S - 500S

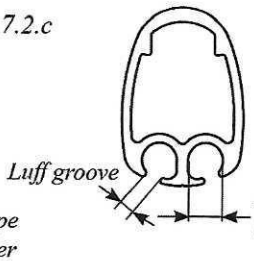


Fig. 7.2.d

	Furlex Type/Serie	Section dimension	Luff groove mm	Max. space available in chamber mm	Max. luff tape mm	Cut-back CB mm	Cut-back height G mm	Maximum sail space FL–(F+E) (Measurement calculated from existing forestay length: FL). F mm	E mm	F+E mm
Manual	A	26/17	3.0	Ø 6	Ø 5	60	1100	360	280	640
	B	31/20	3.0	Ø 6	Ø 5	60	1100	390	340	730
	C	40/27	3.0	Ø 7	Ø 6	80	1100	540	420	960
	D	50/34	3.0	Ø 8	Ø 6	100	1100	620	490	1110
	50S	22/15	2.6	Ø 6	Ø 5	25	630	360	215	575
	100S Ø 4 & 5	26/17	3.0	Ø 6	Ø 5	60	1100	410	280	690
	100S Ø 6	26/17	3.0	Ø 6	Ø 5	60	1100	425	295	720
	200S	31/21	3.0	Ø 6	Ø 5	60	1100	540	330	870
	300S Ø 8	39/27	3.0	Ø 7.5	Ø 6.5	80	1100	550	400	950
	300S Ø 10	39/27	3.0	Ø 7.5	Ø 6.5	80	1100	650	400	1050
	400S	48/34	3.0	Ø 8	Ø 6.5	95	1100	620	535	1155
	500S	60/46	3.0	Ø 9	Ø 7	95	1100	670	535	1205

This data is also valid for Furlex Electric.

6.5 Design aspects on furling mast main sails

Sail cloth type
In general, single layer cloth (e.g. Dacron ™) folds easier around the luff extrusion than multi-layer laminate cloth, causing less furling resistance. "Softer" sail cloth therefore allows more sail to be furled into the mast. Sail cloth generally becomes softer with time, so a new sail can cause more furling resistance than a sail that has been used for some time.

Sail cloth disposition
The luff extrusion is asymmetrically shaped in order to help overcome initial resistance when starting to furl. Do not use heavy sail cloth in the luff area.

Clew height
A furling main sail foot should should rise towards the clew, approximately 85°– 88° (see e.g. fig. 6.2.c). This increases leech tension when furling and prevents the lower part of the sail roll becoming too bulky. Note that when the sail is furled, the weight of the sail may cause the clew to move downwards.

Luff curve shape
The upper part of the luff extrusion will be kept centered by the top swivel, while most of the luff extrusion will rest on the aft face of the sail compartment when sailing. The luff curve must have a wedge formed into it for compensation (0- to 30 mm) at the upper 500 – 800 mm of the luff.

Clew reinforcement
The clew reinforcement should be made so that it allows the sail to be furled in leaving approximately 300 – 500 mm outside the mast.

Webbing tape
Head and tack webbing tapes should be of soft quality which can fold easily. Do not use cringles.

Luff tape
Avoid using luff tape close to head and tack. The high loads in head and tack may damage the luff tape. (See e.g. fig. 6.2.c)

Clew cringles
If clew cringles are used they must not be thicker than 14 mm in order to fit the outhaul block.

Batten types
The main batten types used in furling main sails are: full-length vertical battens, short vertical battens and horizontal (foldable) battens. Experience has shown that vertical battens work very well whereas horizontal battens have a tendency to snag in the sail slot when the sail is furled out.
If full-length vertical battens are used, round battens generally work better than square battens since square battens can twist. If short vertical battens are used, square battens often work well and are usually less bulky.

Batten location
Battens must be located on the port side of the sail so as not to snag on the inside of the sail compartment.

End fittings, connectors and tensioning arrangement
End fittings, connectors and tensioning arrangement (vertical battens) should be made as slim as possible. Bulky solutions may cause the battens to snag in the sail slot.

Short vertical battens – vertical displacement
Short vertical battens should be located so that they do not overlap each other vertically. The lowest batten should not overlap the clew reinforcement.