

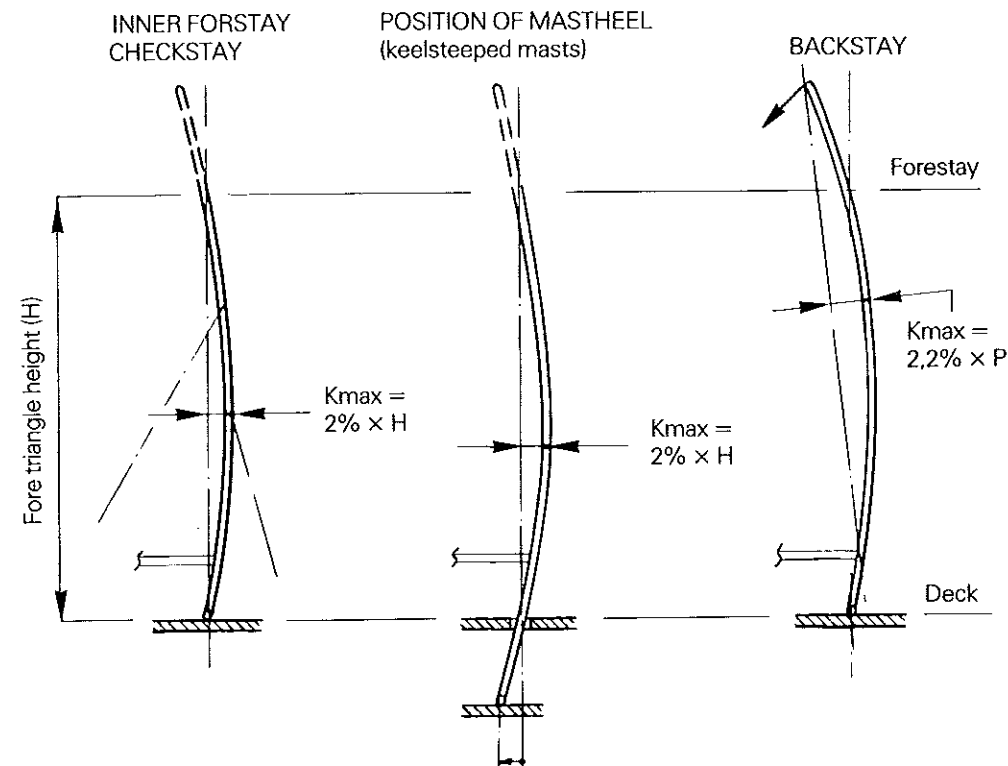
Mast deflection curves

Our spars and fittings are designed to cope with a longitudinal deflection (chord depth) of maximum 2% of the fore triangle height (H). For fractional rigs max. chord depth can also be taken as 2,2% of mainsail luff length (P). These values are guiding principles.

The conditions are:

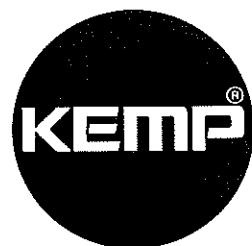
1. The mast forms an even curvature (convex front) from deck level to masthead.
2. The deflection must, by suitable longitudinal staying, be kept within stated values, even when sailing in rough seas.

The deflection curve is formed by



For some masts it may be possible to increase the values stated above. The customer should in this case ask for a special calculation and have an agreement in writing to increase the chord depth.

Masts and Sailing Systems



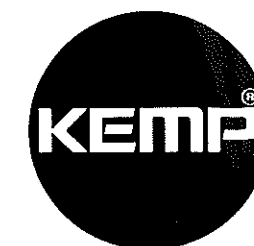
Kemp Masts Limited, St. Margaret's Lane, Titchfield, Fareham, Hampshire, England. PO14 4BG. Tel: Titchfield (0329) 41900 Telex: 86804 KEMP G

SAILMAKERS . . .

Here is all you need to know about fitting your sails to a Kemp Mast

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Masts and Sailing Systems

The sailmaker requires the following information from his customer:

Main dimensions of the mast section:

To determine width of sail groove and type of sailslide to be used.

Main dimensions of the boom:

To determine tack offset, position of reef hooks and type of clew car.

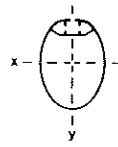
189/132 and 206/139 booms

Sailmakers Instructions

The series of large booms, 189/132 and 206/139, are made from mast sections and do not have integral tracks extruded in them. For this reason a different system of attaching reefing lines is employed, which is illustrated below.

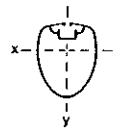
Mast and boom sections

OVAL SECTIONS

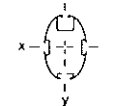


Dimensions over all	Sail groove	Sail slide	Sail Shackle
122/85	4 +1.00 -0.00	511-601 or Short & Norvill A013	307-028 or Short & Norvill A027
130/93			
138/95	5.5 ±0.75	511-602 or Short & Norvill A014	307-029 or Short & Norvill A028
155/104			
170/115			
177/124			
189/132			
206/139			
224/150			
237/162			
274/185			
109/88	4 +1.00 -0.00	511-601 or Short & Norvill A013	307-028 or Short & Norvill A027
121/92			
129/100	5.5 ±0.75	511-602 or Short & Norvill A014	307-029 or Short & Norvill A028
137/113			
146/112			
160/132			
85/58	4 +1.00 -0.00		
86/59			
111/75	5.5 ±0.75		
128/90			
150/105			
162/125			
189/132			
206/139			
48/48			
60/60			
72/72			
84/84			
96/96			
∅110×∅104			

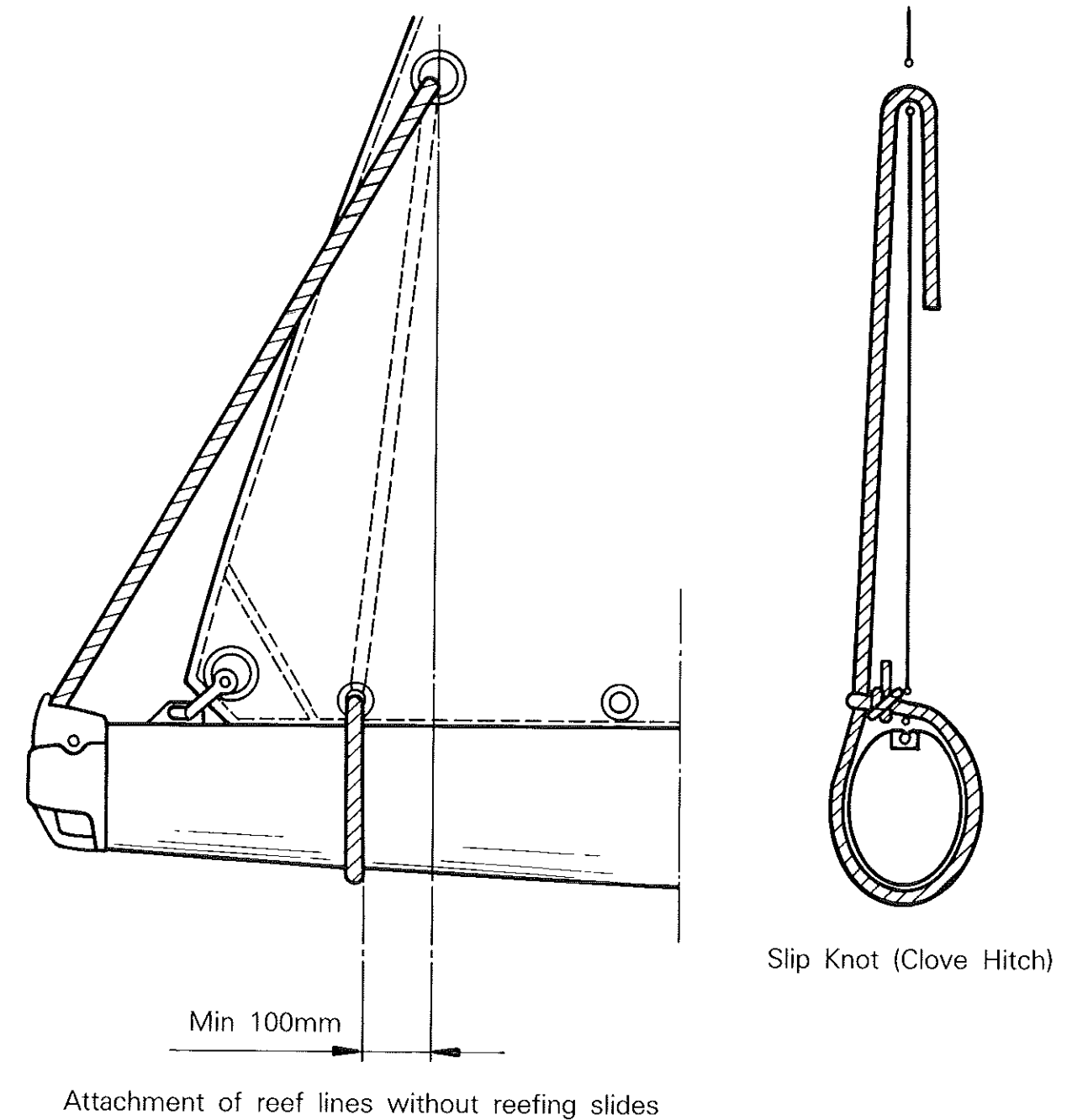
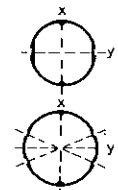
DELTA SECTIONS



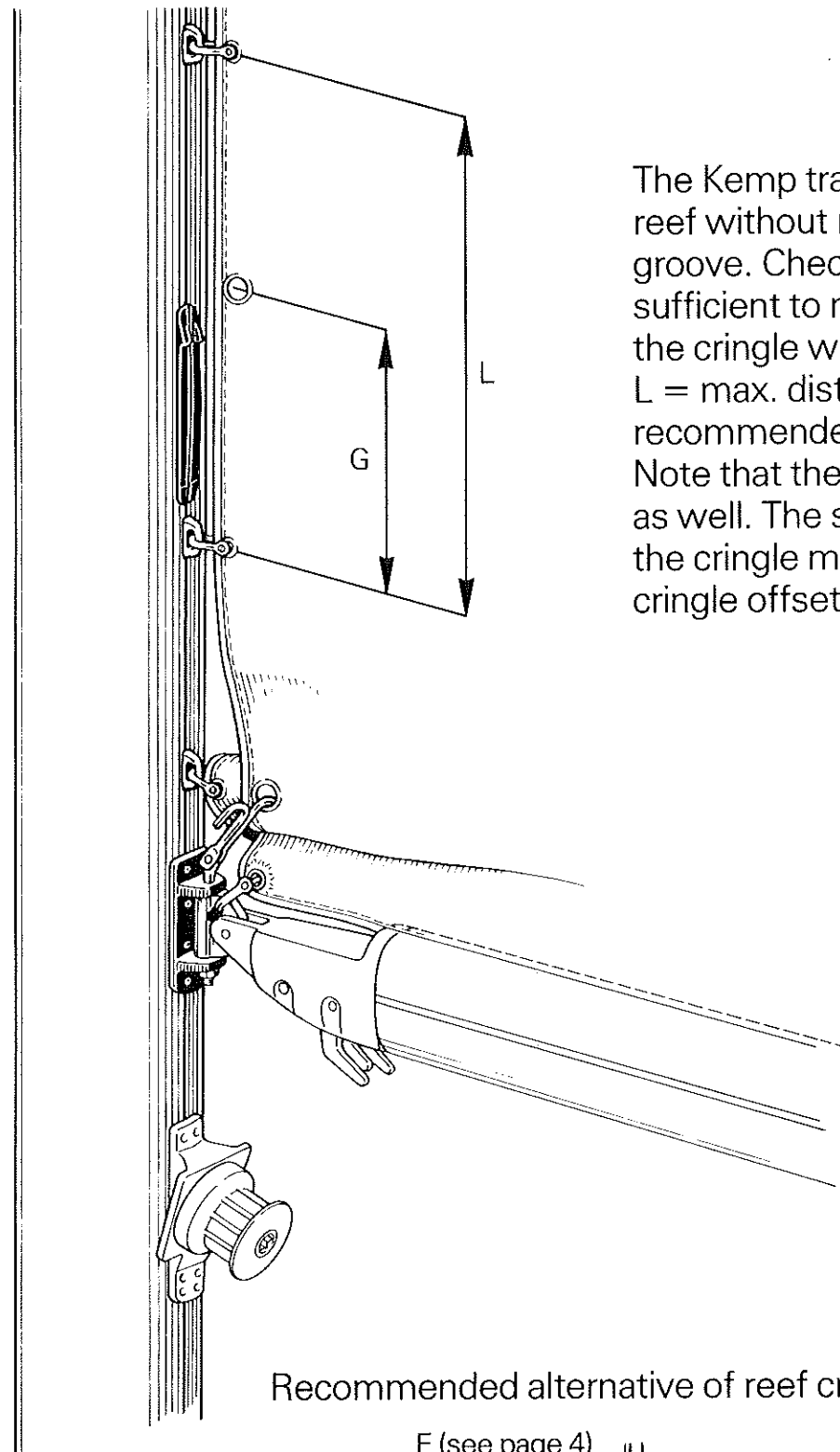
BOOMS



SPINNAKER POLES

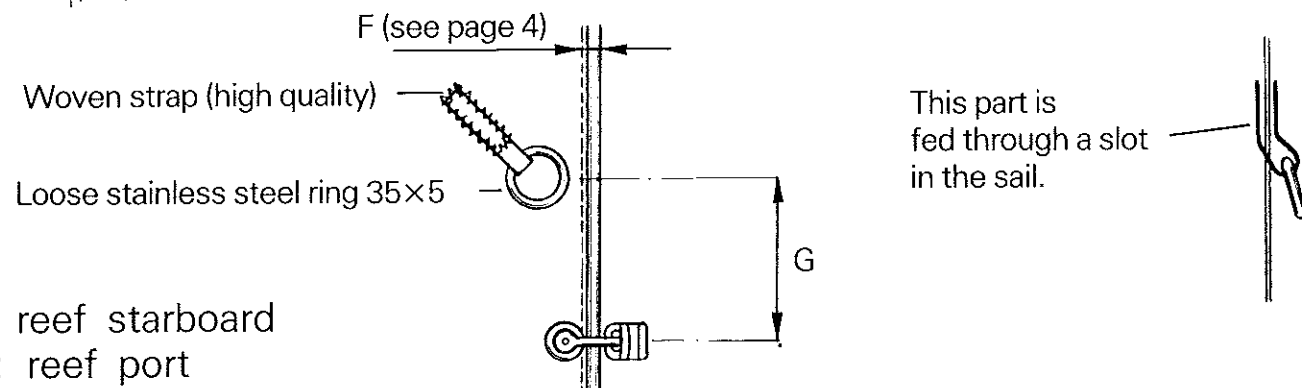


Reefing



The Kemp track gate makes it possible to reef without removing the slides from the groove. Check that dimension G is sufficient to make it possible to hook on the cringle without removing the slides. L = max. distance between slides recommended by the sailmaker. Note that the reef cringle has an "offset" as well. The sail slide immediately above the cringle must not be overloaded. (Reef cringle offset = F, page 4.)

Recommended alternative of reef cringle design.



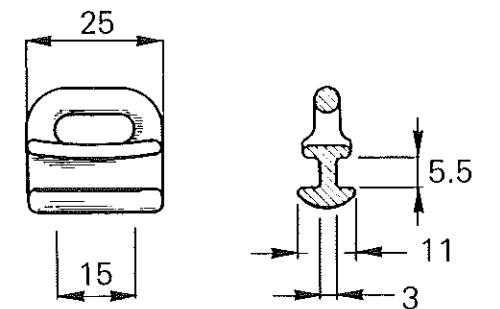
- 1st: reef starboard
- 2nd: reef port
- 3rd: reef starboard and so on

Sail slides

To suit our track gate, it is of the utmost importance that Kemp sail slides are used on Kemp masts.

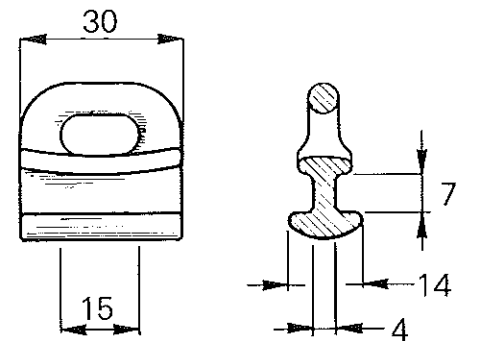
Small sail slide 511-601 (or Short and Norvill A013)

Suits sailgroove 4 mm
Acetal resin
Ult. breaking load: 700 N (70 kgf)
Fit to sail with shackle 307-028 (or Short and Norvill A027)



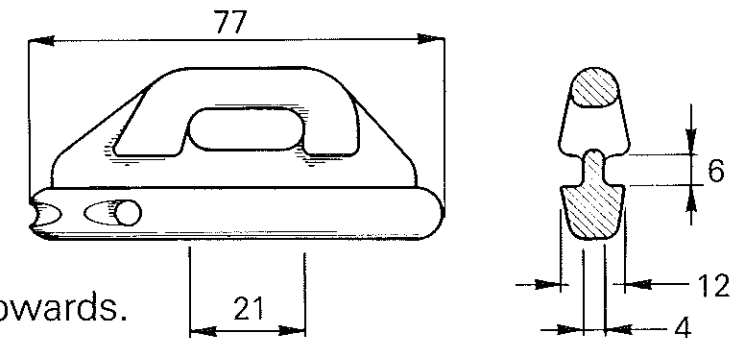
Large sail slide 511-602 (or Short and Norvill A014)

Suits sail groove 5,5 mm
Acetal resin
Ult. breaking load: 2250 N (225 kgf)
Fit to sail with shackle 307-029 (or Short and Norvill A028)



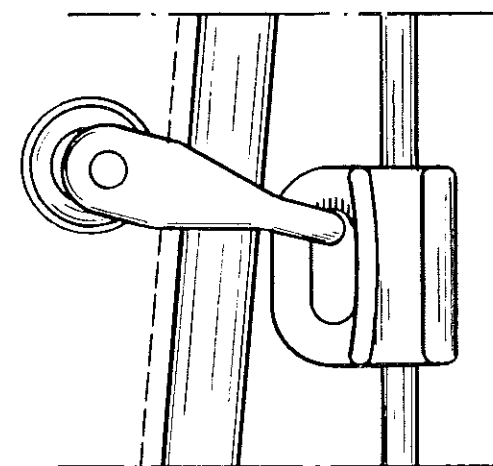
Head board slide

Suits sail groove 5,5 mm
Anodized, anti-friction laquered aluminium alloy.
To be used on 3/4-tonners and upwards.

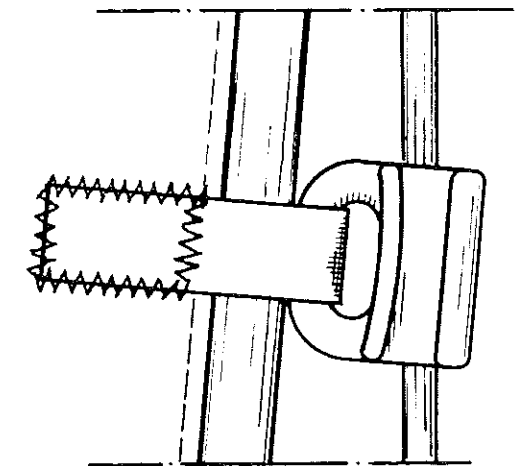


Fastening of sail slides:

The sail slide must be free to move or it will jam in the sail groove.



Correct: Movable fastening.



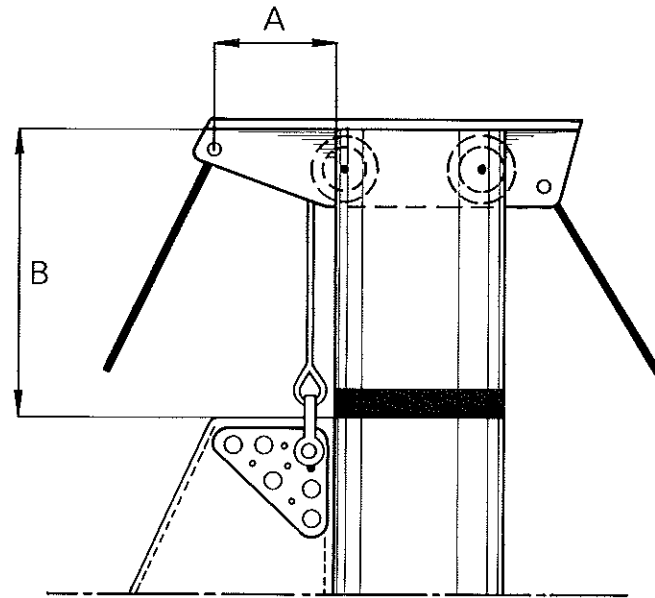
Wrong: Rigid fastening.

Head

A = 75 – 100 mm (for untapered fractional rigs of section 109/88 or 122/85: A = 25)

When choosing the B-dimension, the horizontal dimension of the headboard and main sail roach must also be taken into account.

In order to avoid damage to the sheaves caused by the halyard splice B must not be less than:

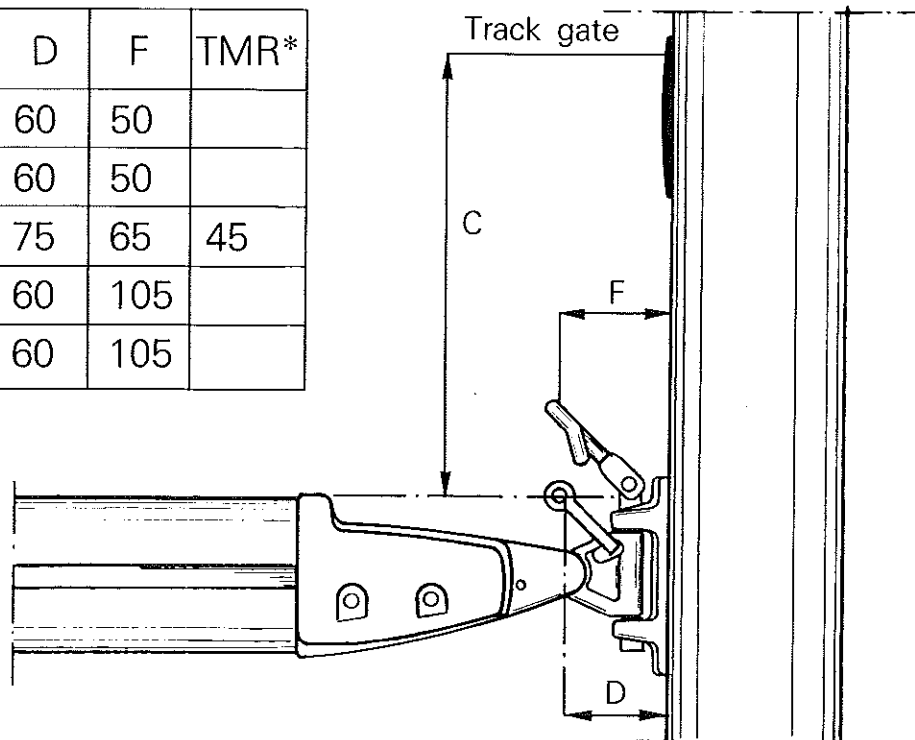


Halyard dimension		ø3	ø4	ø5	ø6	ø7	ø8
Handmade splice	B=	200	230	260	300	350	400
Talurit splice	B=	140	150	170	200	230	250

Tack offset, tack, reef hooks

Boom section	C	D	F	TMR*
73/53	550	60	50	
86/59, 85/58	600	60	50	
111/75, 128/90	830	75	65	45
150/105, 162/125	830	60	105	
189/132, 206/139	830	60	105	

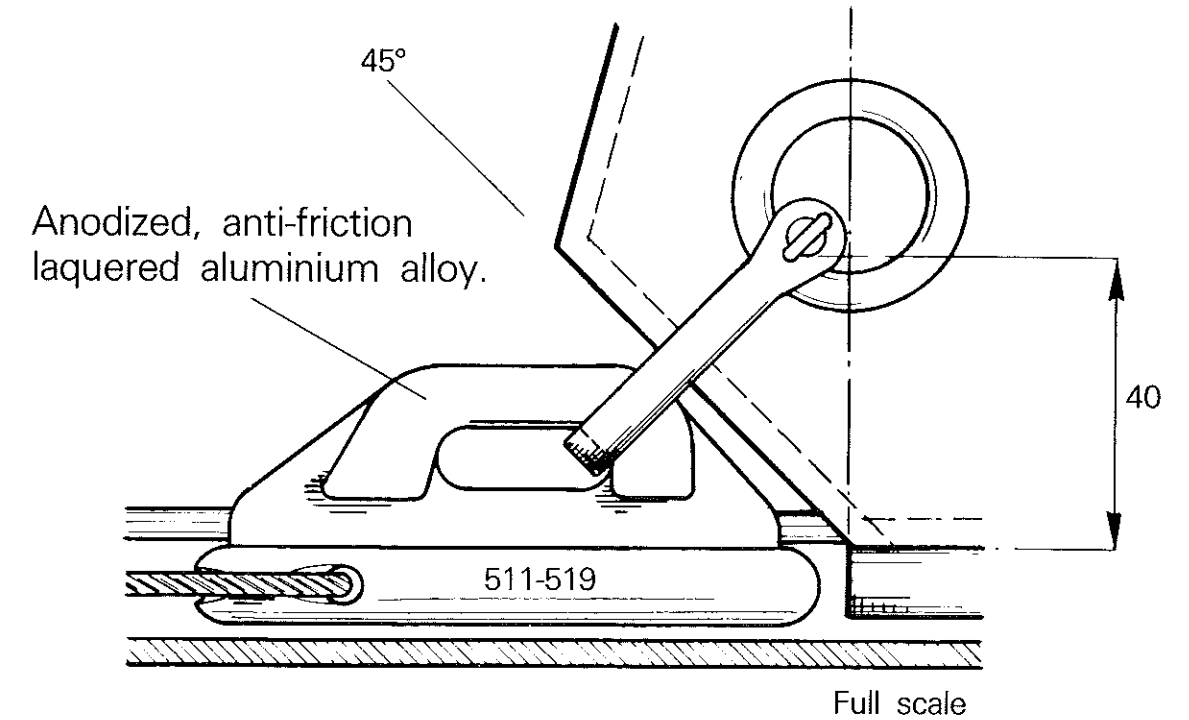
* Through mast roller reefing.



Clew

An outhaul car or slider + shackle is included as a standard in our outhaul tackle.

Booms: 85/58 and 84/59 (5 mm key-shackle 357-001)



Booms: 111/75, 128/90 and 150/105 (8 mm key-shackle 307-004)
Booms: 162/125, 189/132 and 206/139 (M10 pin shackle 307-024)

