

(B30-B31-B32-B33) "RMEJ" UNIVERSAL ELECTRIC MOTORIZATION FOR MANUAL FORESAIL FURLERS

Together with the electric foresail furlers complete with foils, Bamar presents a line of electric motorizations to replace the drum on all existing manual furlers. We have four models available: RMEJ1.02, RMEJ2.02, RMEJ3.02 and RMEJ4.02. They are all made of a hardcote anodised aluminium body with a stainless steel cover.

CORROSION RESISTANT

The RMEJ is made of "HARDCOTE" anodised aluminium. Stainless steel parts are insulated with nylon.

MATERIALS

Most components are machined from aluminium type 6061-T6, protected by hardcote anodising, and some parts are made of stainless steel.

In order to get the best mechanical resistance of materials, we use extruded aluminium to be machined with CNC machines. Aluminium has a high coefficient of resistance against UV rays. All plastic materials, ball bearings and bushes, are protected inside the mechanism, thus granting a long life in salty environments subject to high UV rays concentration.

VERSATILITY

By means of an "ADAPTER", the motorization may be fitted on all models of manual furlers available on the market. You just need to take off the manual drum and replace it with the "RMEJ" motorization. By keeping the original foils and halyard swivel you save money, as you do not need labour to take them off.

EASY TO INSTALL

The unit has been designed and manufactured to make fitting easy, with the help of simple tools. A complete instruction manual is supplied.

SIMPLE TO USE

You furl it from the cockpit: just push the button placed on the console, while you are comfortably seated.

TACK ADAPTER FOR:



**BAMAR
FACNOR
FURLEX
GOIOT
HAASE
HARKEN
HOOD
NEMO
PLASTIMO
PROFURL
RECKMANN
SCHAEFER**

If you take out the locking screws, the motorization slides on the foil and shows the turnbuckle.

MEJ RATIO MOTOR

The worm gear ensures a safe mechanical lock when the sail is reefed. The gear is permanently lubricated, therefore it needs little maintenance. The high precision machining ensures quiet operation. It may indifferently operate clockwise or anti-clockwise.



If you decide to install an electric foresail furler MEJ1.02 on your inner forestay too, we suggest you use the accessory "Sheet protection plate". It is a stainless steel protection plate that, if applied to the front of the s.s.cover of the staysail motorization, prevents the foresail sheet from jamming under the cover while sailing.

The code to place the order is: Stainless steel sheet protection for MEJ1.02 901106500 code.

SAIL TACK HEIGHT

The link plates, that adjust the height of the RMEJ, may be cut to measure in order modify the height of the tack.

FAILSAFE OPERATION

In the event of a total failure of the boat's electrical system, the unit can be manually operated, by inserting a standard winch handle in the manual emergency clutch.

HEIGHT ADJUSTMENT

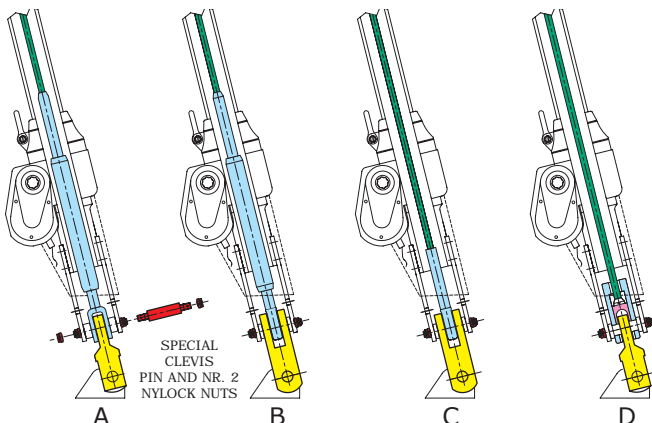
The unit is supplied with stainless steel link plates that raise the motorization from deck.

These link plates are pre-drilled in order to facilitate height adjustment and make the passage of the anchor easy.

USE OF THE EXISTING STAY

The motorization is hollow inside, thus allowing for the use of the existing stay and the housing of a turnbuckle.

You do not need to take off the stay from the boat, as you may install the furler on armed mast, by disconnecting the stay from the chain plate (in some cases, you will need the installation of extra accessories for the modification of the stay - please refer to the scheme below and to page 24 for the order).



**SPECIAL
CLEVIS
PIN AND NR. 2
NYLOCK NUTS**

N.B.: when you anchor the motorization to the chain-plate you have to make use of a bar toggle (eye-fork or fork-fork toggle). In fact, the toggle is an important anti-rotation element when the sail is reefed.

- (A) Use of an eye-fork toggle and special clevis pin to anchor the stay fitted with a turnbuckle with fork terminal.
- (B) Use of a fork-fork toggle and special clevis pin to anchor the stay fitted with a turnbuckle with eye terminal.
- (C) Use of a fork-fork toggle and special clevis pin to anchor a stay fitted with an eye terminal.
- (D) Use of a "ROD adapter" to anchor a rod stay.

HOW TO PLACE AN ORDER

1. determine the model depending on stay diameter, type of foil (please refer to product group B36), foresail area, boat length, voltage.
2. choose the accessories needed to modify the stay (please refer to product group B42).
3. choose the kind of electric plant you want to install (please refer to product group B40).

(B30–B31)					RMEJ1.02				RMEJ2.02			
Voltage					12V				24V			
Stay ø mm	08	10	12	14	08	10	12	14	14	16	19	
ROD #	-12	-17	-22	-40	-12	-17	-22	-40	-40	-48	-60	
Code	110161080000	110161100000	110161120000	110161140000	110261080000	110261100000	110261120000	110261140000	110262140000	110262160000	110262190000	

(B32–B33)				RMEJ3.02				RMEJ4.02	
Voltage				12V				24V	
Stay ø mm	19		22	26		28		28	32
ROD #	-60		-76	-91		-115		-115	-150
Code	110213190000		110213220000	110213260000		110213280000		110214280000	110214320000

(B36) TACK ADAPTERS

In order to fit the RMEJ electric motorization onto existing foils of different furlers brands, we have created a series of tack adapters machined from hardcote anodised aluminium. Such tack adapters are locked onto the motorization torque tube, and foils are fitted inside them.

In the following table you will find the codes that help you place the order for the tack adapter corresponding to your furling foil:



Bamar
BMG 30R-40R-50R



Bamar
BMG 52-60-70-80-90-110



Bamar
30T - 40T - 50T

BAMAR

Manual furler model	R1 / C1	R2 / C2 R3 / C3	R4 / C4							A	B	C / D
Foil abbreviation	BMG30R	BMG40R	BMG50R	BMG52	BMG60	BMG70	BMG80	BMG90	BMG110	BMG30T	BMG40T	BMG50T
ø 1X19 stay	8	8-10	12-14	14	14-16	19-26	26	28	32	8	10-12	14
Foil section mm	23X30	32X40	38X50	43.5X52	50X60	60X70	70X80	80X90	90X110	Ø30	Ø40	Ø50
Tack adapter for RMEJ 1.02	902011005	902011015	902011025	902011026	902011030			902021000 902021010 902021020				
Tack adapter for RMEJ 2.02				902012026	902012030	902012035						
Tack adapter for RMEJ 3.02				902013035 902013040 902013045								
Tack adapter for RMEJ 4.02							902014045 902014055					



Facnor, S



Facnor, SX



Facnor, R

FACNOR

Manual furler model	R150/200	SD150/165/SD200/260/ 180 290/320				LS-LX165 LS-LX180	LS-LX200 LS-LX290	LS-LX330	RX70/100 130	RX165 RX200	RX300	
Foil abbreviation	S24	S38	S46	S54	SX39	SX47	SX53	R14	R24	R34	UNIV.	
ø 1X19 stay	8-10	6-8-10	8-12-14	16-19	8-10	10-12-14	14-22	6	8	12		
Foil section mm	23X36											
Section of adjusting foil			Ø35	Ø42								
Tack adapter for RMEJ 1.02	902071200	902071205	902071220		902071236	902071237		902071241	902071242	902071243	902071100	
Tack adapter for RMEJ 2.02				902072235				902071238				
Tack adapter for RMEJ 3.02							902071239					



Furlex, B/C/D



Furlex,
200S/300S/400S



Furlex, 500S

FURLEX

Manual furler model	B	C	D	200S	300S	400S	500S
Foil abbreviation mm	20X31	27X40	34X50	21X31	27X39	34X48,5	46X60
ø 1X19 stay	8	10-12	12-14	6-8	8-10	12-14	16
Tack adapter for RMEJ 1.02	902031250	902031255	902031260	902031265	902031270	902031275	
Tack adapter for RMEJ 2.02				902032260			902031275 902032280



Goiot

GOIOT

Manual furler model	36	45	57
Foil abbreviation mm	35X57	41X43	51X54
ø 1X19 stay	8	10	14
Tack adapter for RMEJ 1.02	902081300		902081305
Tack adapter for RMEJ 2.02	902082310		



Harken

HARKEN

Manual furler model	UNIT 1.5	UNIT 2	UNIT 2.5	UNIT 3	UNIT 3.25	UNIT 3.5	UNIT 4	UNIT 4.5
Foil abbreviation mm	21X28	27X36	27X36	33X43	33X43	40X49	40X49	50X61
∅ 1X19 stay	8	8-10	12	12	14	16-19	22	25
Tack adapter for RMEJ 1.02	902041400	902041405	902041410	902041415	902041420	902041425		
Tack adapter for RMEJ 2.02					902042420	902042425		
Tack adapter for RMEJ 3.02							902043430	902043435



Hood, SL



Hood, CC/DD/EE

HOOD

Manual furler model	SL800U-E	SL900U-E	3250CC	3250DD	4880DD	4880EE
Foil abbreviation mm	∅ 35	∅ 42	23X34	27X38	27X38	33X44
∅ 1X19 stay	8	10	8	10	12	14
Tack adapter for RMEJ 1.02	902101450	902101455	902101470	902101475	902101476	902101480



Nemo, CR/C



Nemo, DR/D

NEMO

Manual furler model	TR (2 CANALETTE)	C - CR (2 CANALETTE)	D - DR (2 CANALETTE)
Foil abbreviation mm	∅ 31	∅ 40	∅ 45
∅ 1X19 stay	7	8	10-12
Tack adapter for RMEJ 1.02	902111500	902111505	902111510
Tack adapter for RMEJ 2.02			



Plastimo

PLASTIMO

Manual furler model	
Foil abbreviation mm	1012T-1013T
∅ 1X19 stay	10-12
Tack adapter for RMEJ 1.02	902121550



Profurl, B



Profurl, R



Profurl, N/L/C/NC/LC

PROFURL

Manual furler model	R35	NC32	LC32	C32	B35	R42	NC42	C42	LC42S	LC42R	N52	L52	N70
Foil abbreviation mm	28X36	∅ 32	∅ 32	∅ 32	∅ 35	34X43	∅ 42	∅ 42	∅ 42	∅ 42	∅ 52		
∅ 1X19 stay	8	8	8	8	10	10	10	12	12	14	14-16	19	25
Tack adapter for RMEJ 1.02	902051600	902051605	902051606	902051607	902051610	902051615	902051620	902051621	902051622	902051625	902051630		
Tack adapter for RMEJ 2.02								902052621			902052630	902052635	
Tack adapter for RMEJ 2.02								902052621			902052630	902052635	
Tack adapter for RMEJ 3.02													902053640
Tack adapter for RMEJ 4.02													



Reckmann
R4/R3/R2/R1



Reckmann
RS2000

RECKMANN

Manual furler model	R1	R2	R3	R4	RS2000-10	RS2000-20	RS2000-30	RS2000-40
Foil abbreviation mm	18X29	22X35	28X44,5	32X49	24,6X31,9	28,8X35,8	36,1X45,5	38,7X49,1
∅ 1X19 stay	8	10	12	12-14	6-8	8-10	10-12	12-14
Tack adapter for RMEJ 1.02	902061650	902061655	902061660	902061665	902061670	902061675	902061680	902061685
Tack adapter for RMEJ 2.02				902062665				902062685



Schaefer Marine

SCHAEFER

Manual furler model	2100	3100	4100
Foil abbreviation mm	∅ 34	∅ 39	∅ 45
∅ 1X19 stay	10	12	14
Tack adapter for RMEJ 1.02	902131700	902131705	902131710
Tack adapter for RMEJ 2.02			

A wide range of electric accessories complete Bamar electric motorizations.

Multi-function electronic control devices

Boxtron E14

Boxtron E14 is a control box for the best management of direct current electric motorizations up to 150A. The system protects the motorization from possible overloads that may be caused by wrong uses while operating sails, by controlling the current input. The current value (ampere) may be trimmed in order to adjust to the needs of the motorizations used. Boxtron E14 may be equipped with a radio-control device (optional) and may be completed by a second "emergency" box named "EM" (electro-mechanical device). In case of need you may by-pass the Boxtron E14. You just have to disconnect the quick release connectors from Boxtron E14 and re-connect them onto Boxtron "EM". By doing so, you activate the motorization basic functions, such as brake control (Mainsail furler and Captive Winch) and clockwise and anti-clockwise rotation.

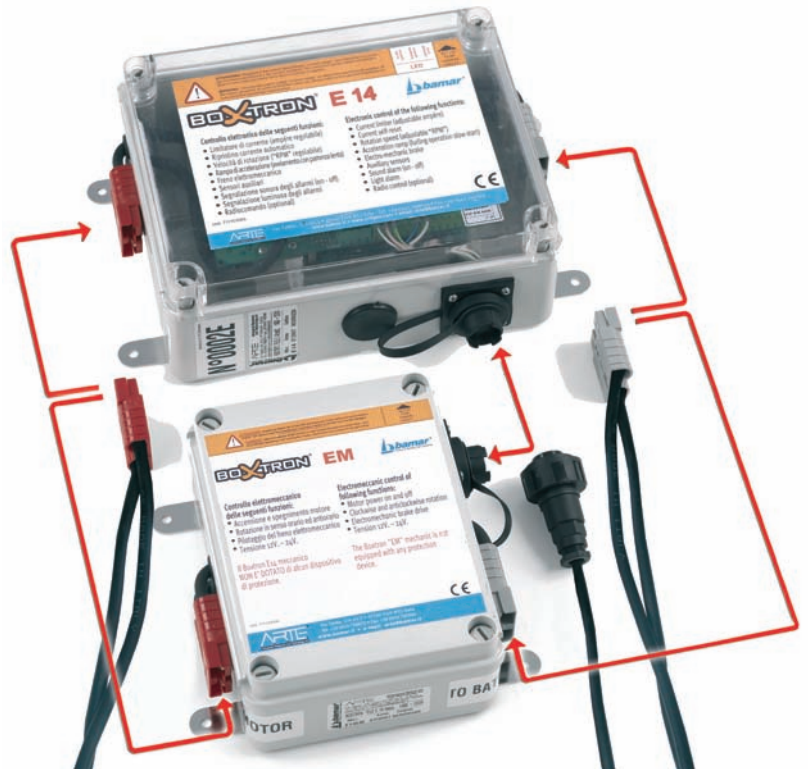
Boxtron E14 is made by a watertight box and has the following characteristics:

1. Furling and unfurling speed trimming (adjustable "RPM").
2. Soft start, progressive start in both directions (slow start-up).
3. Electronic control of current input (ampere).
4. Current adjustment at pre-fixed values through the use of micro-switches, 150A max.
5. Slots to read stroke-end sensors.
6. Sound and visual alarm.
7. Manual restoration of alarms by current cut-off.
8. Watertight 6-poles socket to be used for clockwise and anticlockwise rotation and brake.
9. Quick release electric connectors.
10. Watertight fairleads
11. Protection from overheating with current limitation
12. Protection from polarity inversion.

Dimensions (Base x Height x Depth) 310 x 230 x 98 mm

Weight: 2.4 kg

Important Note: If you fail to use Boxtron, Bamar warranty on motorizations is void.



Boxtron EM

It is an electro-mechanic device used to control 12/24Vdc electric motors (internal manual tension switch) with maximum current input 300A. It may be used to control Bamar motorizations in case of emergency.

Boxtron EM is made of a watertight box and has the following characteristics:

1. Watertight 6-poles socket to be used for clockwise and anticlockwise rotation and brake.
2. Quick release electric connectors.
3. Watertight fairleads.
4. Protection from current overload by means of fuses.
5. 12/24V manual tension switch.

Dimensions (Base x Height x Depth)

210 x 200 x 80 mm

Weight: 1.8 kg.



Boxtron E25

Boxtron E25 is a control box for the best management of direct current motorizations up to 300A. The system protects the motorization from possible overloads that may be caused by wrong uses while operating sails, by controlling the current input. The current (ampere) may be trimmed in order to adjust to the requirements of the motorizations used. It may be equipped with a radio-control device (optional).

Boxtron E25 includes a by-pass circuit for electronic circuits. In case of need you may activate the by-pass by lifting up a mushroom switch. Immediately Boxtron E25 will activate only its basic functions, which means you may still use some essential functions such as brake control and clockwise and anti-clockwise rotation, while all electronic protections are cut off.

Boxtron E25 is made by a watertight box and has the following characteristics:

1. Furling and unfurling speed trimming (adjustable "RPM")
2. Soft start, progressive start in both directions (slow start-up).
3. Electronic control of current input (ampere).
4. Current input adjustment through screwdriver trims, 300A max.
5. Slots to read stroke-end sensors.
6. Visual alarm.
7. Watertight 6-pole socket to be used for clockwise and anticlockwise rotation and brake.
8. Watertight fairleads.
9. Protection from overheating with current limitation.
10. Protection from polarity inversion.
11. Circuit to by-pass the electronic control system (emergency).



Dimensions (Base x Height x Depth) 255 x 315 x 140 mm

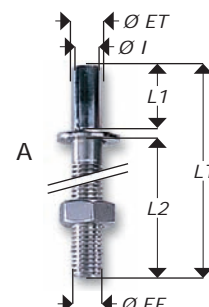
Weight: 5.1 kg

If you fail to use Boxtron, Bamar warranty on motorizations is void.

S.S. THROUGH-DECK FITTING (A)

It allows cables that come out of the motorization run below deck in order to connect either to the branch point box, or directly to Boxtron. It prevents water leakage.

Code	Ø I mm	Ø ET mm	Ø EF mm	L1 mm	L2 mm	LT mm	Use
901100405	15	18	22	36	110	150	MEJ1.02 - MEJ2.02 - RGIEL
901100406	20	26	27	35	110	150	MEJ3.02 - MEJ4.02 - RGIEL



CONTROL SWITCHES (C+D+E+F+G)

We may supply the following articles to control Boxtron and motorizations connected to it:

- 2-switch radio control kit, 1 function
- Toggle switch with sticker, 1 function, 2 positions with return to zero.
- 2-switch watertight remote control 1 function, with "spiral" electric cable and 6-pole plug (max. length 4.0 m).
- 2-switch radio control transmitter; 1 function. We may also supply a 2+2 function transmitter (4 switches) to control 2 motorizations connected to 2 separate Boxtrons.

Box 18 & 24 (H+I)

Branch point box to connect motorization to Boxtron

Dimensions (Base x Height x Depth) 116 x 60 x 116 mm

Cable fairlead dimensions (int. Ø x ext. Ø) 15 x 18 mm (Box 18)

Cable fairlead dimensions (int. Ø x ext. Ø) 20 x 24 mm (Box 24)



Accessories

Accessories	Code
A S.S. through-deck fitting int. Ø15 / ext. Ø 18 L 150	901100405
B S.S. through-deck fitting int. Ø20 / ext. Ø 26 L 150	901100406
B Boxtron E14 "tele"+ EM 12/24V 150A	903650120
B Boxtron E25 "tele" 12/24V 300A	903650201
C Optional "Radio" kit for Boxtron E14-E25, 1 function (2 switches)-(receiver + transmitter)	903651620
D Toggle switch with sticker 1 function (2 positions with return)	903080900
E Watertight remote with cable and 6-pole plug 1 function (2 switches)	903100900
F Compact radio transmitter 1 function (2 switches) for n. 1 BOXTRON "RADIO"	903110800
G Compact radio transmitter 2 functions (4 switches) for n. 2 BOXTRON "RADIO"	903110850
H BOX 18 Branch point box to connect motorization to Boxtron, for Ø 18 tubes	903070000
I BOX 24 Branch point box to connect motorization to Boxtron, for Ø 24 tubes	903070001

(B41) SECONDARY ACCESSORIES FOR ELECTRIC PLANT

Of course, the series of electric accessories is not limited to the precedentemente-mentioned products. Bamar has a wide range of articles that allow the buyer to organise the plant following their own exigencies. In the following table you will find the codes to place the order:

ACCESSORIES

ACCESSORIES	CODE	Image
Electric drill adapter for manual emergency clutch	901102601	
Manual emergency articulated adapter - double handle	901102602	
Jack adapter for manual emergency clutch	901102603	
Endless line emergency pulley	901102604	
Thermal magnet 40 amp	903010003	
Thermal magnet 75 amp	903010004	
Thermal magnet 100 amp	903010005	
Thermal magnet 150 amp	903010006	
1- pole battery cut-out	903020000	
12v reversing solenoid - 2 functions 130 amp	903030003	
24v reversing solenoid - 2 functions 100 amp	903030004	
12v contactor - 1 function	903040003	
24v contactor - 1 function	903040004	
6 poles 1f plug for switch on "tele" & "radio" box	903060900	
6 poles socket + cap	903060901	
6 poles socket + plug + cap	903060902	

Foot switch + cover ext. Ø 75mm



2f watertight remote control - cable + plug (4 switches)



3f watertight remote control - cable + plug (6 switches)



4f watertight remote control - cable + plug (8 switches)



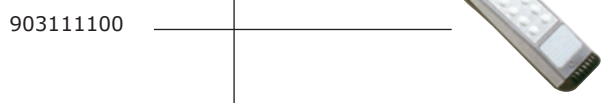
2f compact radio-control hand-held transmitter (4 switches) (to be used with an external radio-control)



3f maxi radio-control hand-held transmitter (6 switches) (to be used with an external radio-control)



4f maxi radio-control hand-held transmitter (8 switches) (to be used with an external radio-control)



5f maxi radio-control hand-held transmitter (10 switches) (to be used with an external radio-control)



1f radio receiver (2 switches) + Compact radio transmitter



2f radio receiver (4 switches)+ Compact radio transmitter



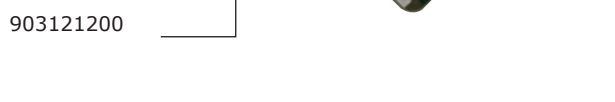
3f radio receiver (6 switches)+ Maxi radio transmitter + antenna



4f radio receiver (8 switches)+ Maxi radio transmitter + antenna



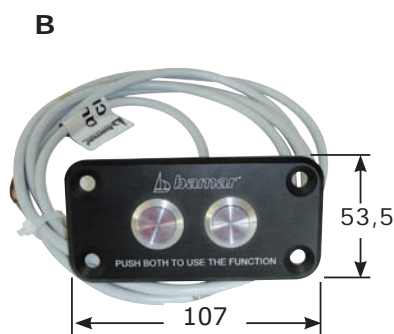
5f radio receiver (10switches)+ Maxi radio transmitter + antenna



Flush-panel switch s.s. 304, Max 30V, 5A with 2 m cable











2-switch1 function alu.+s.s. 304 12/24V 5A with 2 m cable



(B42) "MEJ" - "RMEJ" STAY MODIFICATION ACCESSORIES

The electric foresail furler MEJ is hollow inside, thus allowing for the housing of a turnbuckle and the passage of the stay to the chain plate. Therefore, we supply a list of accessories needed to complete and/or modify the stay.

HOW TO CHOOSE THE ACCESSORIES TO COMPLETE AND/OR MODIFY THE STAY

Manual foresail furler	Type of stay	Standard threaded terminal	Long threaded terminal	Fork turnbuckle	Special clevis pin	Anti-torque eye/fork toggle	Anti-torque fork/fork toggle	"Reckmann" rod adapter R series	"Reckmann" rod adapter RS 2000 series
									
BAMAR	WIRE				•	•			
	ROD				•	•			
FACNOR	WIRE				•	•	•		
FURLEX	WIRE	•*		•*	•	•*	•**		
	ROD				•		•		
GOIOT	WIRE				•	•			
HAASE	WIRE		•	•	•	•			
HARKEN	WIRE		•	•	•	•			
	ROD			•	•	•			
HOOD	WIRE	•		•	•	•			
NEMO	WIRE				•	•			
PLASTIMO	WIRE				•	•			
PROFURL	WIRE				•	•			
	ROD				•	•			
RECKMANN	WIRE	•		•	•	•			
	ROD				•			•	•
SCHAEFER	WIRE				•		•		
	ROD				•		•		

* Excluding models 200s e 300s

** only for models 200s e 300s

	R/MEJ 1.02				R/MEJ 2.02			
	8	10	12	14	14	16	19	
(1 x 19) Max wire Ø mm	8	10	12	14	14	16	19	
Pin Ø mm	12.5	15.6	18.5	21.5	21.5	25.0	28.2	
Standard STA-LOK® threaded terminal	209010800	209011000	209011200	209011400	209011400	209011600	209011900	
Long STA-LOK® threaded terminal	209020800	209021000	209021200	209021400	209021400	209021600	209021900	
Bronze toggle fork turnbuckle	209030800	209031000	209031200					
S.S. toggle fork turnbuckle				209031400	209031400			
Fork turnbuckle						209041600	209041900	
Special clevis pin	901101015	901101025	901101030	901101035	901101135	901101140	901101145	
Eye/fork toggle	209050801	209051001	209051201	209051401	209051401	209051601	209051901	
Fork/fork toggle	210010801	210011001	210011201	210011401	210011401	210011601	210011901	

	R/MEJ 3.02				R/MEJ 4.02			
	19	22	26	28	28	44.5	47.6	54.0
(1 x 19) Max wire Ø mm	19	22	26	28	28	44.5	47.6	54.0
Pin Ø mm	28.2	31.5	34.6	39.7	39.7	44.5	47.6	54.0
Standard STA-LOK® threaded terminal	209011900	209012200	209012600					
Long STA-LOK® threaded terminal	209021900	209022200	209022600					
Fork turnbuckle	209041900	209042200	209042600					
Special clevis pin	901101245	901101250	901101255	901101260	901101360	901101365	901101370	901101375
Eye/fork toggle	209051901	209052201	209052601	upon demand	upon demand	upon demand	upon demand	upon demand
Fork/fork toggle	210011901	210012201	210012601	upon demand	upon demand	upon demand	upon demand	upon demand

Should the RMEJ motorization replace a Reckmann drum fitted on a ROD stay, you need to use a special adapter to lock the lower head of the stay located inside the original drum.

In the following table you will find the codes to place the order:

Manual foresail furler model	R1 "OLD"			R2 "OLD"		R3 "OLD"			R4 "OLD"		
	-8	-10	-12	-12	-17	-17	-22	-30	-30	-40	-48
ROD #	-8	-10	-12	-12	-17	-17	-22	-30	-30	-40	-48
Code	901105008	901105010	901105012	901105112	901105117	901105217	901105222	901105230	901105330	901105340	901105348

Manual foresail furler model	RS 2000/10			RS 2000/20		RS 2000/30			RS 2000/40			RS 2000/50		
	-8	-10	-12	-12	-17	-17	-22	-30	-30	-40	-48	-48	-60	-76
ROD #	-8	-10	-12	-12	-17	-17	-22	-30	-30	-40	-48	-48	-60	-76
Code	901106108	901106110	901106112	901106212	901106217	901106317	901106322	901106330	901106430	901106440	901106448	901106548	901106560	901106576