# HYDRAULIC REEFING SYSTEM

RECKMANN

RF • 90

# ABOVE STANDARDS

EF90 Electric Reefing System

RC30 Carbon Reefing System

RS2000 Reefing System

Roller Reefing Systems from Reckmann are the first choice for sailing vessels of all sizes; they are the preferred system on 30-foot boats as well as on megayachts. In addition to series boats and semi-custom projects from Nautor (Swan), Baltic, Oyster, X-Yachts and Contest we also equip individual yachts from international boatyards. There are three main reasons why we have earned this excellent reputation. Firstly, our products offer ease of handling, work under all conditions, are extremely reliable and essentially maintenance free. Secondly they represent current state-of-the-art technology and the materials used are uncompromising as far as quality requirements are concerned.

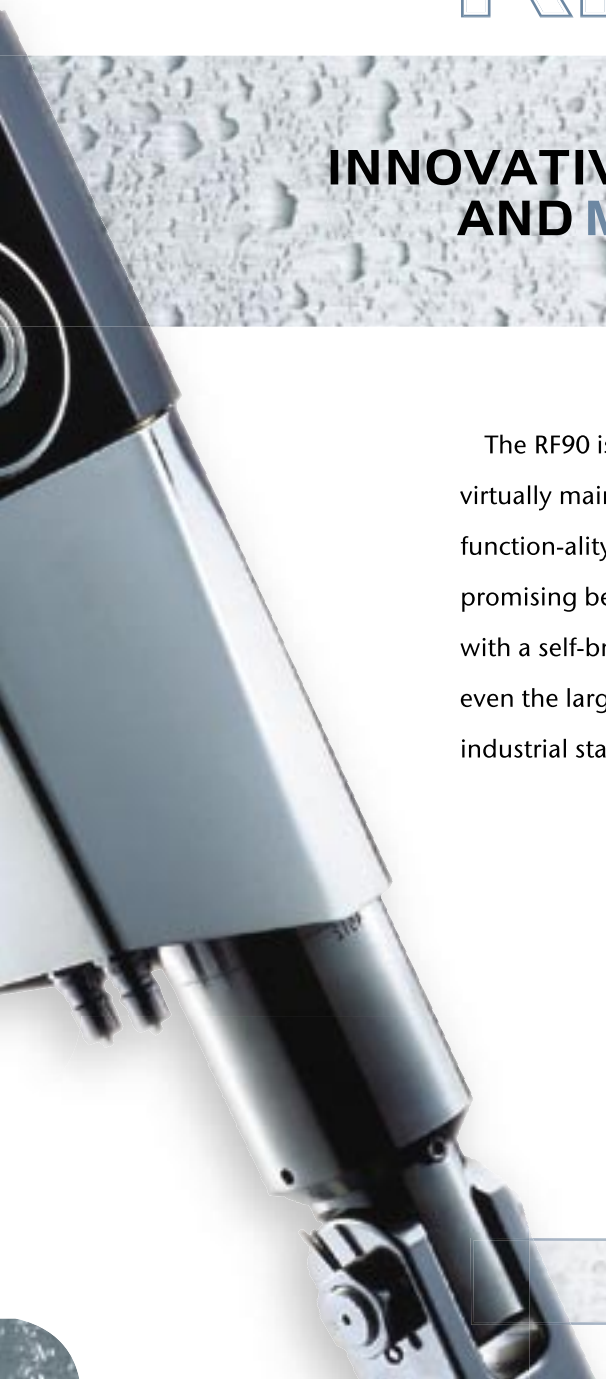
As we are so committed to this claim, we invest a lot of time and energy in the development process and materials testing, so that at all times in everyday use at sea, what our product philosophy promises it delivers. Our view is that each successful step on the way to perfection is the basis for the others to come.

In this constant endeavour to develop the best possible products, we see our challenge and our future. With 20 service stations worldwide, in Europe, the USA, the Caribbean and New Zealand we are present in every location, where yachtsmen also need active support in addition to expert advice.

# RF90

**Perfection in function and design. Manufactured according to the most stringent quality control criteria and equipped with superior technical features, the RF90 is the ultimate roller reefing system.**

## INNOVATIVE TECHNOLOGY AND MODERN DESIGN



The RF90 is a hydraulic high-performance system for foresails. Its virtually maintenance-free gearing technology guarantees maximum function-ality and longevity. Thanks to spiral mesh gearing and uncom-promising bearing technology it operates extremely quietly. Combined with a self-braking worm gear, which hinders a transfer of force from even the largest sail areas onto the hydraulic drive, it meets the highest industrial standards.

Above all, the unique RF90 manual drive guarantees a reassuring maximum of safety. Through the simple insertion of a standard winch handle the hydraulic drive is disengaged and switched over to manual. Thanks to a special gear mechanism, which hinders the transfer of sail force onto the winch handle, the reefing system can be simply and safely operated – even by hand.

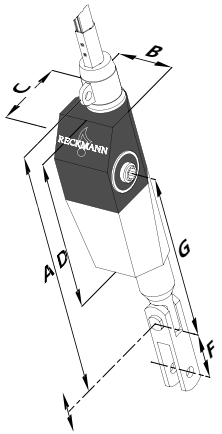
All systems in this series offer an easy to operate length adjuster, which helps to achieve optimal mast and sail trimming. Starting with model RF90-4, the adjustable mechanics work with hydraulic support.

**The RF90 is also available as a "Silver Edition" version with silver profiles**

## Halyard Swivel Technology

Maximum functionality and nearly no maintenance are the decisive advantages of our halyard swivels. The profile forestay rotates without any noticeable friction even under high halyard loads, thanks to the high-performance stainless steel bearings and the top quality materials used. The tightly-fitted ball bearings or ball/needle bearings bear the load.

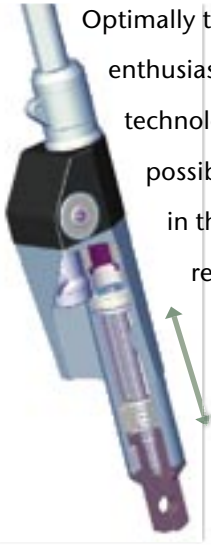
# ATTENTION TO DETAIL




| RF90 | | | -2 | -3 | -4 | -5 | -6 | -7 |
|---|---|---|---|---|---|---|---|---|
| A | ** | (mm) | 440 | 510 | 735 | 940 | 1240 | 1541 |
| B | | (mm) | 128 | 145 | 165 | 204 | 270 | 348 |
| C | | (mm) | 156 | 180 | 235 | 256 | 350 | 483 |
| D | | (mm) | 280 | 320 | 400 | 520 | 680 | 760 |
| E | * | (mm) | 50 | 60 | 90 | 120 | 220 | 350 |
| F | | (mm) | Customer-specific | | | | | |
| G | ** | (mm) | 310 | 354 | 526 | 690 | 1010 | 1154 |
| Weight | | (kg) | 21 | 31 | 60 | 98 | 235 | 428 |
| Motor | *** | | OMM20 | OMM32 | OMP80 | OMR100 | OMR100 | OMT160 |
| Oil Flow | | (l/min) | 10 | 18 | 35 | 45 | 60 | 100 |
| Pressure | | (bar) | 140 | 140 | 140 | 175 | 180 | 200 |

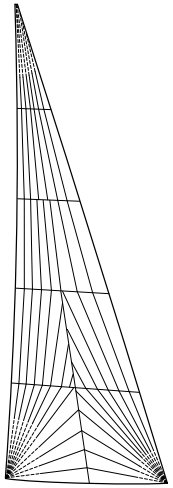
* Adjustment Range
** Value with adjustment in middle position
*** Danfoss Motor Measurement for systems with "Real Time Adjuster" (RF90RT) on request

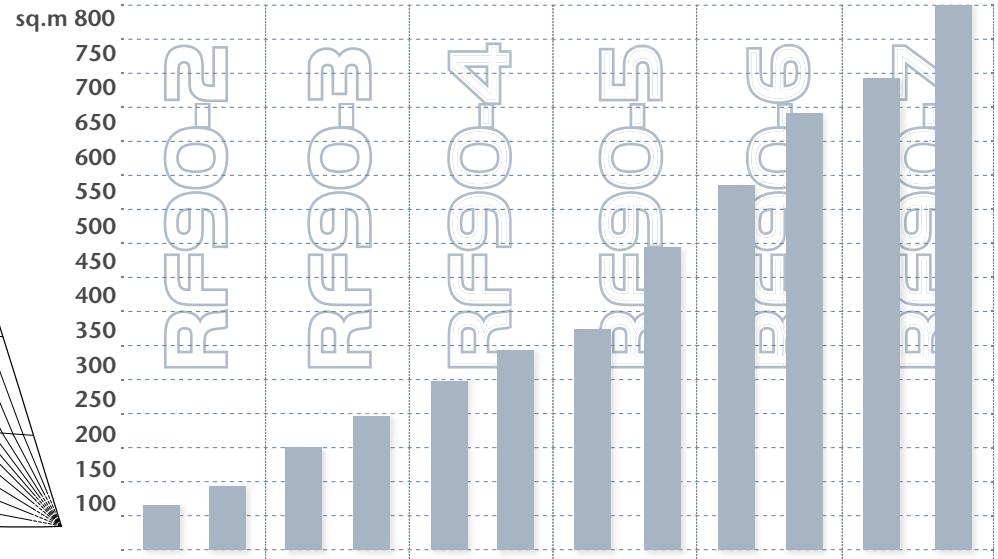
## ”Real Time Adjuster“



Optimally trimmed sails and masts are the passion of demanding enthusiasts and require experience as well as cleverly thought out technology. From now on, with the “Real Time Adjuster” it is possible to change the forestay tension while sailing. Particularly in the challenge of trimming two closely-adjacent forestays, which requires rapid and flexible reactions, this solution shows itself to be of decisive and comfortable assistance. The “Real Time Adjuster” was developed for the RT Series of the RF 90 and to this end has been equipped with an adjusting cylinder, operated via the on-board hydraulic system. At an operating pressure of 350 bar it bears the entire forestay load and has an adjustment range of 100 – 250 mm.

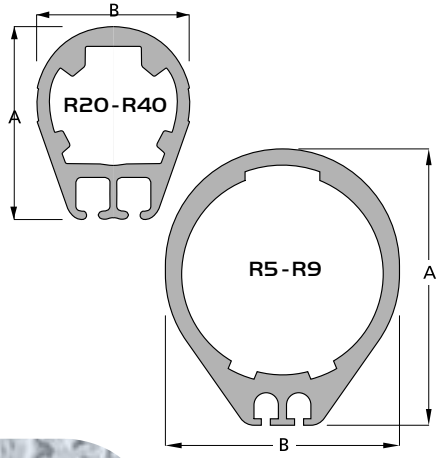
## RF90 System - suitable for every forsail






| Aluminium profile | R20 | R30 | R40 | R5 | R5 | R6 | R6 | R7 | R7 | R8 | R8 | R9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Carbon profile | | S2.5 | S3 | S4/4.5 | S5 | S5.5 | S6 | S6.5/S7 | S7 | S7.5/S8 | S8 | S8T |
| max. rod size | -17 | -30 | -48 | -60 | -76 | -91 | -91 | -115/-170 | -170 | -220/-260 | -260 | -320 |
| max. wire (mm) | 10 | 12 | 14 | 16 | 19 | 22 | 26 | 32 | - | - | - | - |
| max. forestay length | 18m | 23m | 27m | 36m | 36m | 42m | 42m | 50m | 50m | 60m | 60m | 70m |

## Forestay profile




### Aluminium

| Profile | A (mm) | B (mm) | Weight (kg/m) |
|---|---|---|---|
| **R20** | 35,8 | 28,8 | 0,85 |
| **R30** | 45,5 | 36,1 | 1,25 |
| **R40** | 49,1 | 38,7 | 1,45 |
| **R5** | 60,0 | 47,0 | 1,99 |
| **R6** | 72,0 | 60,0 | 3,22 |
| **R7** | 85,0 | 72,0 | 3,85 |
| **R8*** | 107,0 | 93,0 | 5,17 |
| **R9*** | 119,0 | 105,0 | 7,20 |

* Only one groove for luff

### Carbon

| Profile | A (mm) | B (mm) | Weight (kg/m) |
|---|---|---|---|
| **S2.5** | 38,5 | 32,2 | 0,46 |
| **S3** | 49,0 | 38,5 | 0,62 |
| **S4** | 55,4 | 44,4 | 0,77 |
| **S4.5** | 60,0 | 50,8 | 0,86 |
| **S5** | 67,1 | 56,6 | 1,03 |
| **S5.5** | 72,8 | 62,7 | 1,14 |
| **S6** | 82,0 | 68,9 | 1,76 |
| **S6.5** | 86,9 | 76,2 | 1,50 |
| **S7** | 91,3 | 81,3 | 1,97 |
| **S7.5** | 101,0 | 90,2 | 2,05 |
| **S8** | 103,0 | 99,0 | 2,61 |

From S3, available as double groove profile on request.

## Reckmann Hydraulic Applications

- RF90 Roller Reefing Systems
- "Real Time" RF90 Forestay Length Adjuster
- RF90 Below Deck Furler
- In Mast & In Boom Furling
- Hydraulic Outhaul & Main Sheet Systems
- Hydraulic Winches
- Hydraulic Boom Vang & Backstay
- Hydraulic Transom Hatch
- Anchor Winches
- Special Functions

Naturally we also develop and produce specific customised solutions. Our engineers will gladly work with you with complete confidence to realise your projects. Why not give us a call?

## System solutions for all applications

Reckmann Hydraulic units are available in five sizes and are tailor-made to the specific requirements of sailing yachts. The main components are manufactured using anodised aluminium or stainless steel.

Special valve blocks provide a clearly separated layout. The use of Bosch electro-motors, filter components and valves guarantees world-wide service.

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