



SAFETY RAIL SYSTEM S22



Certified to European Standard EN795:1996 Class D

This system provides a method of attachment for use in conjunction with personal protection equipment to protect against falls from a height, such as when working outside of conventional guardrails for cleaning and maintenance purposes on yachts or other vessels. It shall not be used for any other purpose.



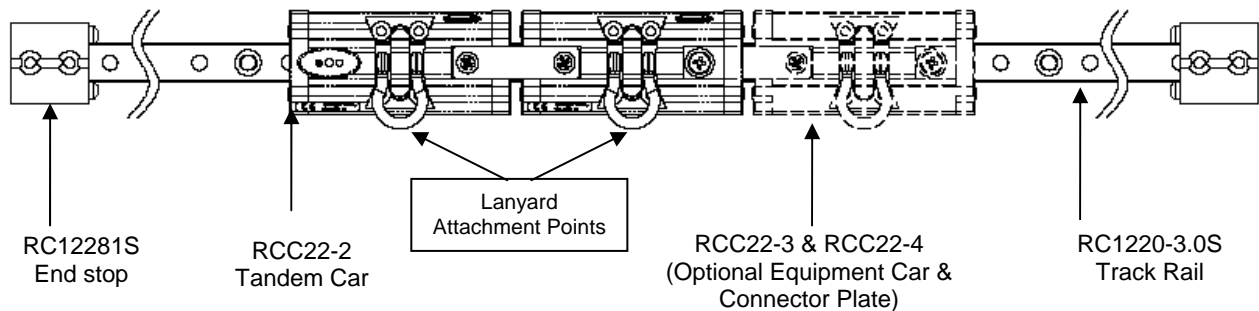
Important Advice

The system is tested and certified to the European Standard EN795;1996 Class D by Lloyd's Register, Copenhagen (Denmark), and is appropriate for single person use with an energy absorber to the EN355 standard. It must only be used with personal protection equipment (harnesses, lanyards, fall arresters and other devices) that are approved to the relevant CE or other standards for such equipment. Each harness or device must be secured to a separate attachment point.

System Description

The complete Safety Rail System consists of the following components:

- One track rail with stop holes at 50mm centres and mounting holes at 100mm (3 15/16") centres.
- One tandem sliding car assembly consisting of two cars joined together with a connecting plate.
 - Each car has a single attachment point for personal protection equipment.
 - One of the cars has a spring-loaded plunger to allow the assembly to be fixed in position at any of the stop holes in the track rail. This plunger can be disengaged to allow the free movement of the car assembly along the rail.
- Two end stops installed at the extremities of the track rail.



Features

- Marine grade aluminium alloy cars, track rails and end stops, anodised for corrosion protection and long service life.
- Recirculating Torlon® ball bearings for free running, low friction performance and low maintenance.
- Grade 316 forged stainless steel pivoting shackles for lanyard attachment.
- Rubber buffers for reduced vibration and to lift pivoting shackles away from car body for quick access.
- Spring-loaded stainless steel plunger for simple, positive re-positioning at stop locations. Can be locked in the disengaged position to allow free movement along the track rail. The elliptical knob is easy to grip and turn, and indicates clearly whether the plunger is engaged or not.



Plunger down, fixed in position

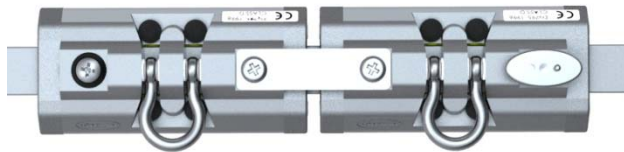


Plunger up, ready to move to new position



Plunger up and locked, car free to move along track rail

- The track rail can be mounted in either a vertical or horizontal plane as shown below.



Options

- Longer runs can be achieved by using more than one section of track rail and trimming to length as required, provided that the distance between mounting fasteners never exceeds 100mm (3 15/16"). The joining insert RC1221J is used to aid alignment when fitting multiple sections of track rail.
- Additional sliding cars for supporting tools or equipment can be connected to the main tandem car RCC22-2 with the connector plate RCC22-4.

System Components



RCC22-2



RC1221J



RCC22-1



RCC22-4



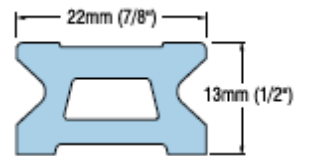
RC12281S



RCC22-3



RC1220-3.0S



Part No.	Description	Length		Width		Certified Maximum Working Load	
		mm	in	mm	in	kg	lb
RCC22-2	Tandem Car, 2 Attachment Points, Plunger Stop	254	10	58	2 5/16	100	220
RCC22-1	Single Car, 1 Attachment Point, Plunger Stop	124	4 7/8	58	2 5/16	100	220
RCC22-3	Single, Car, 1 Attachment Point	124	4 7/8	58	2 5/16	100	220
RCC22-4	Connector Plate including Screws						
RC12281S	Track Rail End Stop	48	1 29/32	47	1 27/32		
RC1221J	Track Rail Joiner						
RC1220-3.0S	Track Rail	2996	118	22	7/8		

Installation

- Refer to the installation recommendations of EN795;1996 Annex A section A.6 regarding the distance available on site to arrest the fall of a falling worker.
- The track rail must be mounted using 6mm (1/4") countersunk Grade 316 Stainless Steel fasteners at 100mm (3 15/16") centres.
- End stops must be mounted using 6mm (1/4") countersunk Grade 316 Stainless Steel fasteners
- Fasteners must be installed in accordance with EN795;1996 Annex A (Installation Recommendations) section A.6.
- The RCC22-2 tandem car is supplied with ball bearings already fitted, on a short loading track rail. To install the car, first remove the RC12281S end stop from the end of the installed track rail. Align the loading track rail with the installed track rail such that they are in contact with each other end-to-end, then slide the car onto the installed track rail and fit the end stop back in place. DO NOT discard the loading track rail, which is required for retaining the ball bearings while installing or removing the car.

Use and Maintenance

- Two labels are affixed to each individual car by the manufacturer.
 - One label indicates the standard (EN795:1996 Class D) to which the product conforms.
 - A second label indicates the part number and date of manufacture, which must be referred to in all communication with the manufacturer or its authorised representatives.
- If re-sold outside the original country of destination, it is essential for the safety of the user that the reseller provide all information relating to the installation, use, maintenance, periodic examinations and service of the system in the language of the country of destination.
- Each user must read and understand this user manual prior to first use of the system.
- As with any workplace where hazards may be present, an appropriate rescue plan shall be in place for any emergencies that may arise during work involving the system.
- The system must be used only in conjunction with personal protective equipment approved to relevant standards.
- The user must NEVER rely on only one attachment point for personal protective equipment!
- The spring loaded plunger which locks the car in position along the track rail must ONLY be disengaged from the track rail while the user is changing position. Once the user is in position, the plunger MUST be re-engaged to hold the car in position and limit the user's movement along the track rail.
- For the safety of the users a visual inspection of the system must be carried out by a competent person before each use to verify the following conditions:
 - The track rail is securely fixed to its mounting surface and both end stops are in place at the extremities.
 - The sliding cars run smoothly and freely on the track rail.
 - The lanyard attachment points (pivoting shackles) are free to articulate.
 - There are no signs of excessive wear, corrosion, deformation or breakage of parts.
 - The plunger used to fix the car in position is operating correctly.
 - All screws in the sliding car assembly are in place and secure.
- It is recommended that the complete system be inspected annually by a competent person. In addition to verification of the conditions noted above, the cars shall be removed from the installed track rail and the following checks.
 - To remove a car from the track rail, use the short loading track rail that was originally supplied with the car. (If no loading track is available, contact the manufacturer before proceeding).
 - Once the car is transferred to the loading track rail, the recirculating ball bearings can be inspected from the underside of the car.
 - A small screwdriver may be used to push the ball bearings to verify that they are free to circulate.
 - If all ball bearings are present, the balls can be pushed together to leave a space slightly less than one ball diameter. A larger space indicates that one or more balls is missing. Each individual car in the RCC22-2 tandem assembly (and the individual cars RCC22-1 and RC22-3) must contain a total of 74 ball bearings.
 - Any ball bearings that are missing, or that appear worn or cracked, must be replaced. Use only replacement ball bearings supplied by the manufacturer.
 - The plunger assembly may be lubricated with a light grease. Lift the spring loaded plunger and apply grease to the exposed rod below the elliptical knob.
 - The manufacturer should be contacted if the labels on any car are found to be missing or illegible.

- In case of any doubts about the condition of the system, or if any component is found to be damaged in any way, the parts must be immediately removed from service and replaced. The system must not be used until repairs are completed and approved in writing by a competent person.
- No changes or alterations may be made to the components of the system without the manufacturer's prior written consent. Any repair must be carried out according to the manufacturer's procedures.
- After any fall, the system must not be used until it has been inspected and a competent person has confirmed in writing that it is safe to do so.
- Regular rinsing of all components with fresh water is required to help to prevent the build up of salt and contaminants and ensure efficient operation of the system.
- Spray lubricants should not be used on the rail and ball bearings as they can lead to accumulation of contaminants and dirt which will compromise the long term performance of the system.

Record Keeping

It is recommended that a record be kept for each component of the system, with particular regard to installation, inspection, maintenance and service interventions. A facsimile of a typical equipment record format is provided below.

EQUIPMENT RECORD				
Manufacturer: Ronstan Denmark Aps Karetmagervej 23 7100 Vejle, Denmark		Contact Details +45 76408200 office@ronstan.dk www.ronstan.com		
Product: SAFETY RAIL SYSTEM S22				
Part Number:				
Year of Manufacture:		Date of Purchase:		Date of First Use:
Other Relevant Information (e.g. document number, details of supplier or installer):				
PERIODIC INSPECTION, MAINTENANCE AND REPAIR HISTORY				
Date	Type of intervention (periodic inspection, maintenance or repair)	Details (defects, rapairs, other)	Name/Signature of Competent Person	Date of next periodic inspection

Re-Seller Contact Details

If the system or any of its components have been supplied by a company or organisation other than the manufacturer, contact details of the supplier may be recorded in the space below:

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