RFT22-O2 RAIL FOOT THIMBLE Specifications



Rail Threading Device for Running Rails and Conductor Rails

Issue I

July 2022



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Issue Record

First Issue

July 2022

Introduction

The Thomson Engineering Design RFT22-02 Rail Foot Thimble is the most versatile rail threading device currently available, being able to cope with both running rails and conductor rails without any need for adjustment.

By gripping the edges of the rail foot between grooved rollers the rail is fully restrained against twisting and can be easily threaded into position.

The ability to thread both running and conductor rails provides owners with greater utilisation and faster return on investment whilst its robust construction ensures a low whole-life cost of ownership.

The RFT22-02 is the only device of its kind fitted with a pressure reducing valve, factory set to ensure that the system pressure is correct regardless of the settings of the host machine. Two hydraulic cylinders are used to grip and release the rail, each of which is fitted with a pilot operated check valve to lock the cylinder in the event of a hose failure. Together, these two features make this the safest device of its type.

All the joints in the mechanism and the threader rollers themselves are fitted with replaceable bushes and grease nipples allow lubrication of all moving elements.

Two grab handles are provided allowing an assistant to align and guide the device onto the rail if necessary. A large safety bow shackle fitted to the top of the device makes it easy to hitch to the host machine lifting hook.

The RFT22-02 is one of a wide range of rail handling devices available from Thomson Engineering Design all of which have been designed and constructed following our ISO9001:2015 approved quality assurance system.

Key Features

Grooved rollers on the bottom of the four legs are used to grip the edges of the rail foot. This unique design allows the device to be fitted to both running and conductor rails without any adjustments being made.



The rail foot rollers are opened and closed onto the foot of the rail by two hydraulic cylinders. Each cylinder is fitted with a pilot operated check valve to lock the cylinder in the event of a burst hose or host machine hydraulic system failure.

There is no need to adjust the pressure output of the host machine to use this device. Instead, a pressure reducing valve fitted to the frame controls the system pressure ensuring that the device cannot be damaged.





To fit the RFT22-02 to the rail section it is lowered until the wider flanges of the upper part of the rollers are resting on the rail head. The hydraulic system is then actuated to close the bottom of the roller grooves onto the sides of the rail foot.

Once the rollers have been closed onto the rail the device is lifted to raise the rail and begin the threading operation.

As the device is lifted an automatic mechanism opens the jaws by 2mm to allow a small amount of clearance between the rail foot edges and the rollers. This makes the threading operation smoother and lowers the friction.

The whole device is very compact weighing approximately 210kg.

A special transport stillage can be supplied which fully protects the device during transport.

The result of many years' experience in the design and construction of rail threading devices, the RFT22-02 smoothly and accurately handles rails of all types for fast, efficient operation.











Specifications

Tare Weight	210	kg
Maximum Working Load Limit	2,000	kg
Application	Running Rails (Vignole Rail)	
	Conductor Rails	
Maximum Rail Foot Thickness	23	mm
Maximum Rail Foot Width	165	mm
Maximum Hydraulic Pressure	210	Bar
Minimum Hydraulic Pressure	90	Bar
Pressure Control	Pressure Reducing Valves	
System Pressure	100	Bar
Construction	All-Steel Fully Welded	





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PLEASE NOTE

Whilst every care is taken to ensure that the contents of this document are true and accurate, the specifications of our products and the scope of our services are constantly changing as part of our policy of continuous improvement.

We strongly recommend contacting the factory to ensure that details given are still current.

More than half our business comes from special products designed and built as one-off's and we are always pleased to discuss amended specifications should the product detailed here not meet your exact requirements.

