C-Rail Festoon track systems

Cable & Hose carrying systems

Application

C-Rail festoon track systems are the ideal solution for carrying cables supplying power to many types of moving machinery using either flat or round cables, typical uses include power feeds to hoists, factory cranes and pendant control systems. They can also be used to carry hoses for air, water, etc. A complete range of standard fittings is available for these systems along with a comprehensive selection of trolleys with carrying capacities up to 40kg / trolley. Standard track and components are manufactured from zinc plated steel and are suitable for the majority of industrial applications, where extra protection is required most components can be supplied with a polyester / epoxy coating and for extreme applications Stainless Steel track and components are also available. C-Rail festoon systems are also available for Ex rated Hazardous areas classified in Group 1 & 2 (Gas) & Group 21 & 22 (Dust) – details of these systems are shown later on in this section.

System Calculations (see drawing opposite)

System (Track size) selection

System 2331 – max cable stack = 58mm x 20mm, max trolley load = 20kg System 2500 – max cable stack = 115mm x 50mm, max trolley load = 40kg

Cable Length

For correct installation the cable should never be pulled tight, we therefore recommend a 20% surplus be added to the overall track length, the calculation for cable length is shown below:

Total cable length = (overall track length x 1.2) + required tail lengths.

Example	Overall track length =15m
	Tail at Hoist end = 0.50m
	Tail at Feed end = 3m
	Total cable length = $(15 \times 1.2) + 0.5 + 3 = 21.5m$

Number of Trolleys

The number of trolleys required in the system is determined by the cable loop depth, so using the information above we can calculate the number of trolleys Required as follows:

No. of trollevs = $\Gamma(\text{overall track length x 1.2}) / (2 \times \text{Loop depth})1 - 1$

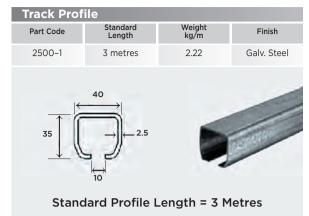
	•	
Example		Overall track length =15m
		Loop depth = 0.75m
		No. of Trolleys = $[(15 \times 1.2) / (2 \times 0.75)] - 1 = 11$
		In addition you require 1 x Tow Trolley & 1 X End Anchor

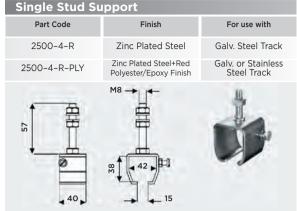
Trolley selection

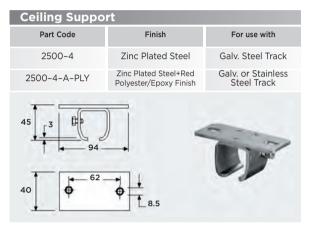
The correct trolleys should be selected by referring to the maximum cable stack, and maximum cable weight information shown on the trolley information on the following pages, maximum recommended cable stacks are calculated to ensure that trolley bodies will come together before the loops of cable clash or foul each other.

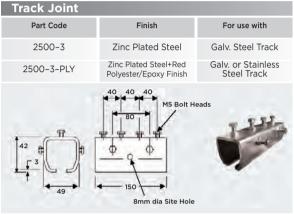
System 2500 C-Rail Festoon System

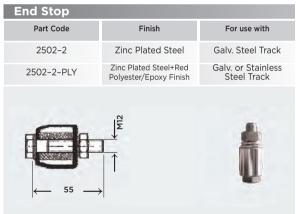
40 x 35mm C-Rail Cable & Hose carrying system

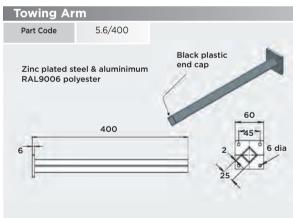


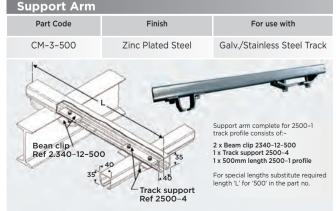














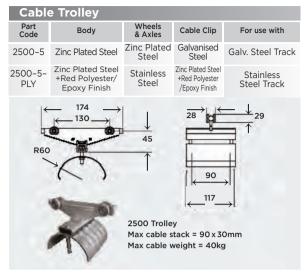
Finish

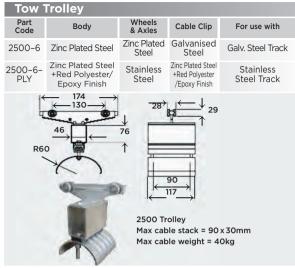
For use with

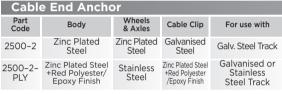
Beam Clip

System 2500

40 x 35mm C-Rail Cable & Hose carrying system





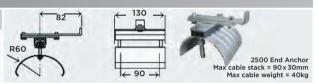


Cable Clip

For use with

Cable Trolley

Body



Wheels & Axles

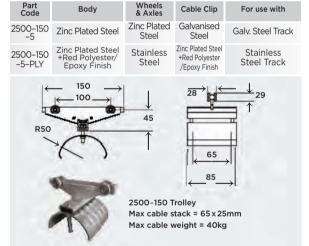
Cable Clip

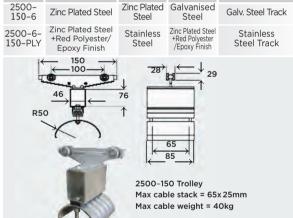
For use with

Tow Trolley

Body

Part Code

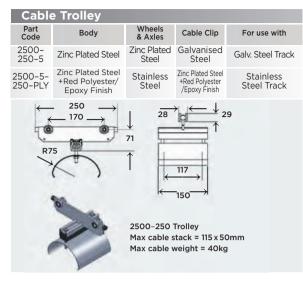




Cable End Anchor							
Part Code	Body	Wheels & Axles	Cable Clip	For use with	82	← 85 →	
2500- 150-2	Zinc Plated Steel	Zinc Plated Steel	Galvanised Steel	Galv. Steel Track	R50		
2500-2- 150-PLY	Zinc Plated Steel +Red Polyester/ Epoxy Finish	Stainless Steel	Zinc Plated Steel +Red Polyester /Epoxy Finish	Galvanised or Stainless Steel Track		← 65 →	2500-150 End Anchor Max cable stack = 65 x 25mm Max cable weight = 40kg

System 2500

40 x 35mm C-Rail Cable & Hose carrying system



Tow Trolley							
Part Code	Body	Wheels & Axles	Cable Clip	For use with			
2500-6	Zinc Plated Steel	Zinc Plated Steel	Galvanised Steel	Galv. Steel Track			
2500-6- PLY	Zinc Plated Steel +Red Polyester/ Epoxy Finish	Stainless Steel	Zinc Plated Steel +Red Polyester /Epoxy Finish	Stainless Steel Track			
46 R75	76		90 117 2500-250 To	w ick = 115 x 50mm			

Cable End Anchor							
Part Code	Body	Wheels & Axles	Cable Clip	For use with	←125→1		
2500- 250-2	Zinc Plated Steel	Zinc Plated Steel	Galvanised Steel	Galv. Steel Track	R75		
2500- 250-2- PLY	Zinc Plated Steel +Red Polyester/ Epoxy Finish	Stainless Steel	Zinc Plated Steel +Red Polyester /Epoxy Finish	Galvanised or Stainless Steel Track			

