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.

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

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 trolleys = [(overall track length x 1.2) / (2 x Loop depth)] - 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.





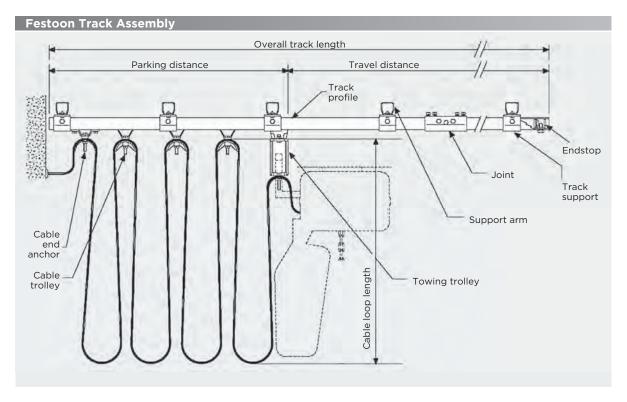
C-Rail Festoon track systems

Cable & Hose carrying systems

Parking Distance (see below)

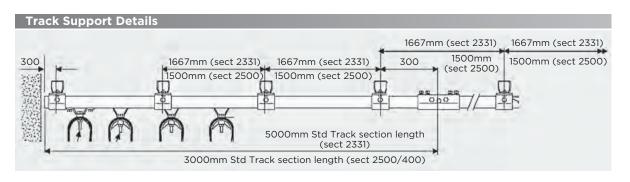
The parking distance is the section of track taken up by the trolleys when collected together at the end of the system, this is a simple calculation determined by the number and type of trolleys.

Example	Overall track length =15m
	Loop depth = 0.75m
	Trolley type 2401-5 (80mm body length)
	Tow trolley 2401-6 (80mm body length)
	Cable end anchor 2331–2 (80mm body length)
	No. of trolleys = 11
	Parking distance = 80 + (11 x 80) + 80 = 1040mm



Installation

Installation of the C-Rail festoon system is very straightforward and can easily be carried out by a team of two accomplished installation engineers. Support centres (as shown below) are 1667mm for system 2331 (5m Lengths) and 1500mm for systems 2500/400 (3m/6m Lengths). A support should always be included within 300mm of a track joint as indicated. A variety of supports & support brackets are available and are detailed on the following pages.





System 2331 C-Rail Festoon Track System

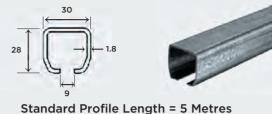
30 x 28mm C-Rail Cable & Hose carrying system











Single Stud Support			
Part Code	Finish	For use with	
2331-4-A-R	Zinc Plated Steel	Galv. Steel Track	
2331-4-A-R-PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Galv. or Stainless Steel Track	
30	M8 - 12		

Ceiling Support (Preferred)		
Part Code	Finish	For use with
2340-13-31-31	Zinc Plated Steel	Galv. Steel Track
2340-13-31-31-PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Galv. or Stainless Steel Track
37 2 80 - 55 -	6.5	

Calling Cumport (Droforred

Track Support

Ceiling Support (Optional)				
Part Code	Finish	For use with		
2331-4	Zinc Plated Steel	Galv. Steel Track		
2331-4-PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Galv. or Stainless Steel Track		
2331-4-SS	Stainless Steel	Stainless Steel Track		
85 55	M6 M6			

Part Code	Finish	For use with
2331-13-31-31	Zinc Plated Steel	Galv. Steel Track
2331-13-31-31-PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Galv. or Stainless Steel Track
800	35	For use with support arms from 2331-1 track profile (see part no. CM-2)

Beam Clip		
Part Code	Finish	For use with
2340-12	Zinc Plated Steel	Galv. Steel Track
2340-12-PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Galv. or Stainless Steel Track
36 3	5mm x 20mm x 5mm 18 x 40mm Hex. Head olt DIN931 For use with supp track profile (see	ort arms from 2331-1 part no. CM-2)

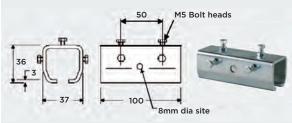




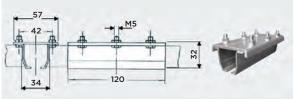
System 2331

30 x 28mm C-Rail Cable & Hose carrying system





Track Joint (Optional)				
Part Code	Finish	For use with		
2331-3	Zinc Plated Steel	Galv. Steel Track		
2331-3-PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Galv. or Stainless Steel Track		
2331-3-SS	Stainless Steel	Stainless Steel Track		

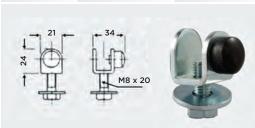


Part Code

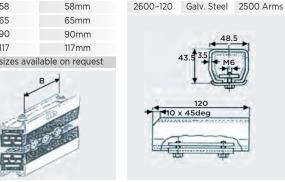
Welded Beam Fixing Clamp

Finish

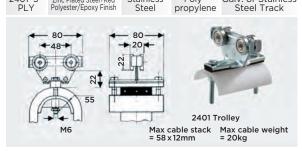
Endstop		
Part Code	Finish	For use with
2309-2	Zinc Plated Steel	Galv. Steel Track
2309-2-PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Galv. or Stainless Steel Track



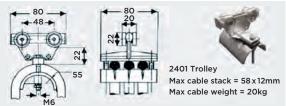
Cable Clamp				
Part Code	Max Cable Width			
B-58	58mm			
B-65	65mm			
B-90	90mm			
B-117	117mm			
Other sizes available on request				
	3.21			



	Cable Trolley					
	Part Code	Body	Wheels & Axles	Cable Clip	For use with	
	2401-5	Zinc Plated Steel	Zinc Plated Steel	Poly- propylene	Galv. Steel Track	
	2401-5-	Zinc Plated Steel+Red	Stainless	Poly-	Galv. or Stainless	

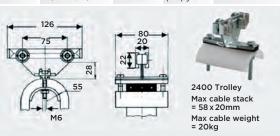


Cable Trolley				
Part Code	Body	Wheels & Axles	Cable Clip	For use with
2401- C-5	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Galv. Steel Track
2401-C- 5-PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Stainless Steel	Zinc Plated Steel +Red Polyester/ Epoxy Finish	Galv. or Stainless Steel Track
2401-CH -5-SS	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel Track
				and the same of



Cable Trolley (Long body)

Cable Trolley (Long body)					
Part Code	Body	Wheels & Axles	Cable Clip	For use with	
2400-5	Zinc Plated Steel	Zinc Plated Steel	Poly- propylene	Galv. Steel Track	
2400-5- PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Stainless Steel	Poly- propylene	Galv. or Stainless Steel Track	
				- 40	



Code	Body	& Axles	Cable Clip	For use with
2400-C- 5	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Galv. Steel Track
2400-C- 5-PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Stainless Steel	Zinc Plated Steel +Red Polyester/ Epoxy Finish	Galv. or Stainless Steel Track
100	25 75 75 8 8 8 75 75 75	80 20 20 20	= 58 x 2	ole stack



System 2331

30 x 28mm C-Rail Cable & Hose carrying system









Part Code	Body	Wheels & Axles	Cable Clip	For use with
2401-C- 6	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Galv. Steel Track
2401-C- 6-PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Stainless Steel	Zinc Plated Steel +Red Polyester/ Epoxy Finish	Galv. or Stainless Steel Track
2401-CH -6-SS	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel Track
80 48 98 M6	55	80 +20 27	2401 Trolley Max cable sta Max cable we	ck = 58×12mm ight = 20kg

Towing Trolley

Towing Trolley (Long body)					
Part Code	Body	Wheels & Axles	Cable Clip	For use with	
2400-6	Zinc Plated Steel	Zinc Plated Steel	Poly- propylene	Galv. Steel Track	
2400-6- PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Stainless Steel	Poly- propylene	Galv. or Stainless Steel Track	
	125 75 92	1	2400 Trolley Max cable sta Max cable we	ick = 58×20mm ight = 20kg	

Code	Body	& Axles	Cable Clip	For use with
2400-C- 6	Zinc Plated Steel	Zinc Plated Steel	Zinc Plated Steel	Galv. Steel Track
2400-C- 6-PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Stainless Steel	Zinc Plated Steel +Red Polyester/ Epoxy Finish	Galv. or Stainless Steel Track
	125 — 75 — 36 — 36 — 37 — 37 — 37 — 37 — 37 — 37	P01	80 204 81	
	1		النالاليا"	

2400 Trolley

Max cable stack = 58 x20mm Max cable weight = 20kg

Wheels

Towing Trolley (Long body)

Part Code	Body	Cable Clip	For use with
	200,		
2331-2	Zinc Plated Steel	Polypropylene	Galvanised Steel Track
2331-2-PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Polypropylene	Galv. or Stainless Steel Track
49	17 555		

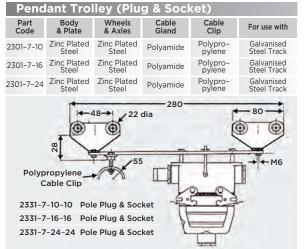
Cable End Anchor					
Part Code	Body	Cable Clip	For use with		
2331-C-2	Zinc Plated Steel	Zinc Plated Steel	Galvanised Steel Track		
2331-C-2 -PLY	Zinc Plated Steel+Red Polyester/Epoxy Finish	Zinc Plated Steel+Red Polyester/Epoxy Finish	Galv. or Stainless Steel Track		
2331-C-2 -SS	Stainless Steel	Stainless Steel	Stainless Steel Track		
49 45 M6	17	2331 Anchor Max cable stack = Max cable weight			



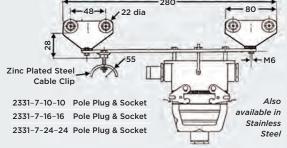
Cable End Anchor

System 2331

30 x 28mm C-Rail Cable & Hose carrying system



Pend	Pendant Trolley (Plug & Socket)					
Part	Body	Wheels	Cable	Cable	For use with	
Code	& Plate	& Axles	Gland	Clip		
2301-7-C-	Zinc Plated	Zinc Plated	Polyamide	Zinc Plated	Galvanised	
10	Steel	Steel		Steel	Steel Track	
2301-7-C-	Zinc Plated	Zinc Plated	Polyamide	Zinc Plated	Galvanised	
16	Steel	Steel		Steel	Steel Track	
2301-7-C-	Zinc Plated	Zinc Plated	Polyamide	Zinc Plated	Galvanised	
24	Steel	Steel		Steel	Steel Track	
280 Sieel Sieel Sieel Sieel Sieel Flack						

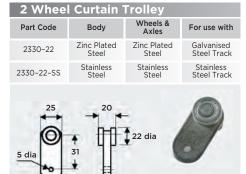


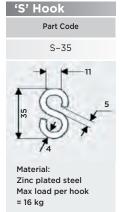
Max load / Trolley

= 8 kg

4 wneel	Curtain	Trolley	
Part Code	Body	Wheels & Axles	For use with
2330-D-22	Zinc Plated Steel	Zinc Plated Steel	Galvanised Steel Track
2330-D-22 -SS	Stainless Steel	Stainless Steel	Stainless Steel Track







Round Cable / Hose Trolleys						
Part Code	Item	Body	Wheels & Axles	For use with		
2338-5	Trolley	Zinc Plated Steel	Zinc Plated Steel	Galv. Steel Track		
2338-2	End Anchor	Zinc Plated Steel	N/A	Galv. Steel Track		
2338-6	Tow Trolley	Zinc Plated Steel	Zinc Plated Steel	Galv. Steel Track		

