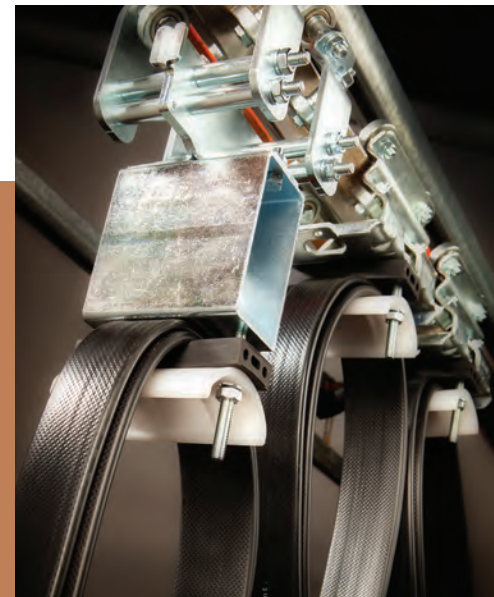


Diamond Track Festoon Systems

Cable & Hose carrying systems



Application

Diamond track festoon systems are the ideal solution for carrying cables supplying power to many types of moving machinery in dusty or dirty environments, or in applications where curved sections are required. Typical uses include power feeds to overhead conveyors in foundries and biomass applications. A complete range of standard fittings is available for these systems along with a comprehensive selection of trolleys with carrying capacities up to 30kg / 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. Diamond track 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 on a separate data sheet.

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.

<i>Example</i>	Overall track length = 20m
	Tail at Hoist end = 0.50m
	Tail at Feed end = 3m
	Total cable length = (20 x 1.2) + 0.5 + 3 = 27.5m

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 :

Number of trolleys = [(overall track length x 1.2) / (2x loop depth)] -1

	Overall track length =20m
	Loop depth = 0.75m
	No. of Trolleys = [(20 x 1.2) / (2 x 0.75)] -1 = 15

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.

Parking Distance (see below)

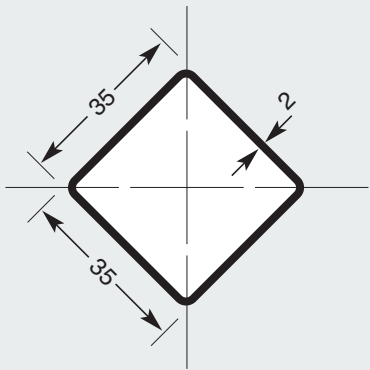
The parking distance is the section of track taken up by the trolleys when collected together at the end of the system, this is a simple calculation determined by the number and type of trolleys.

<i>Example</i>	Overall track length = 20m, Loop depth = 0.75m
	Trolley type H-2307-5 (110mm body length)
	Tow trolley H-2307-6 (110mm body length)
	Cable end anchor 2307-2 (80mm body length)
	No. of trolleys = 15
	Parking distance = 110 + (15 x 110) + 80 = 1840mm

Diamond Track Festoon Systems – System 2307

35 x 35mm Diamond Track System for carrying Round Cable & Hoses

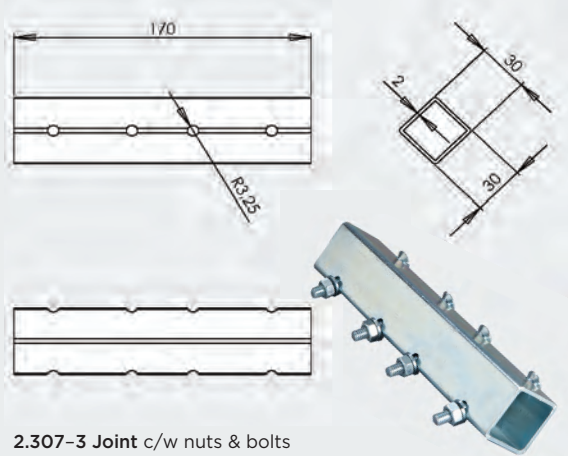
Track Profile Ref: 2307-1



2.307-1 Profile

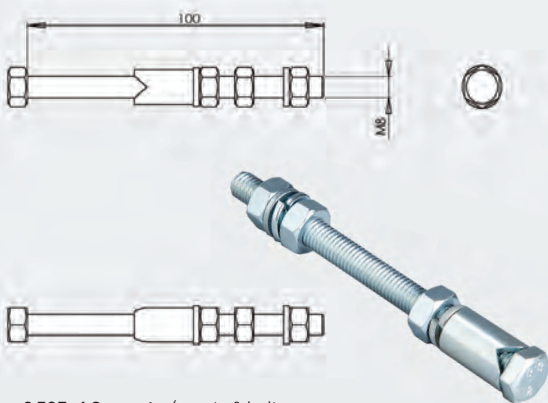
6000mm Lengths (support crs. = 2000mm)
Curved sections available - min radius = 1000mm
Standard Finish : Galvanised Steel
(also available in Stainless Steel)

Track Joint Ref: 2307-3-Inbox



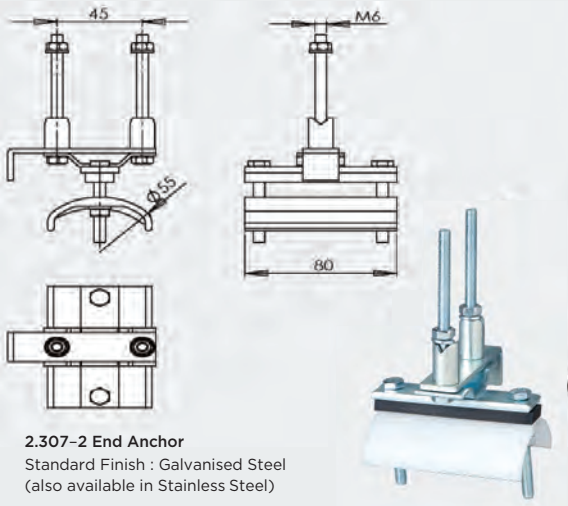
2.307-3 Joint c/w nuts & bolts
Standard Finish : Galvanised Steel
(also available in Stainless Steel)

Track Support Ref: 2307-4



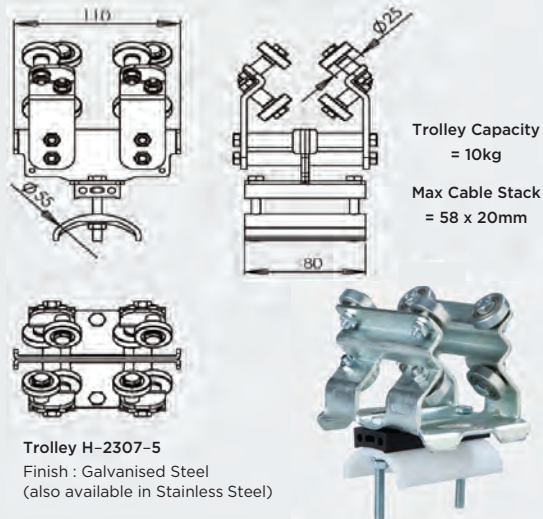
2.307-4 Support c/w nuts & bolts
Standard Finish : Galvanised Steel
(also available in Stainless Steel)
Support centres = 2000mm

End Anchor Ref: 2307-2



2.307-2 End Anchor
Standard Finish : Galvanised Steel
(also available in Stainless Steel)

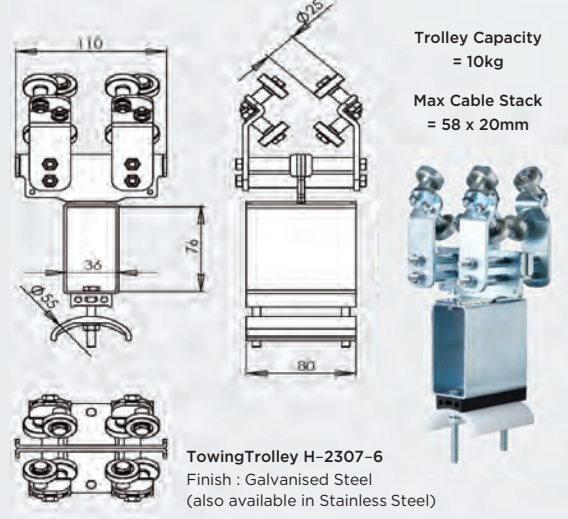
Cable Trolley Ref: H-2307-5



Trolley Capacity = 10kg
Max Cable Stack = 58 x 20mm

Trolley H-2307-5
Finish : Galvanised Steel
(also available in Stainless Steel)

Towing Trolley Ref: H-2307-6



Trolley Capacity = 10kg
Max Cable Stack = 58 x 20mm

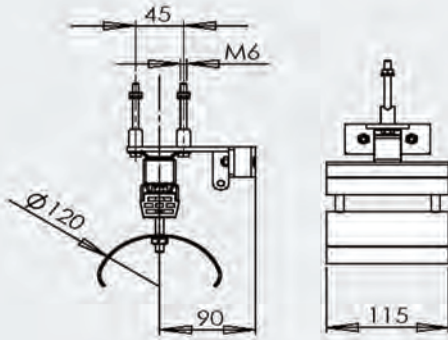
Towing Trolley H-2307-6
Finish : Galvanised Steel
(also available in Stainless Steel)

Diamond Track Festoon Systems – System 2307

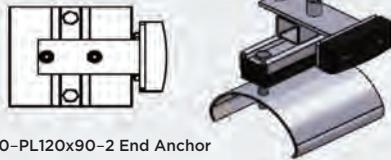
35 x 35mm Diamond Track System for carrying Round Cable & Hoses



End Anchor Ref: 2307-L180-PL120x90-2

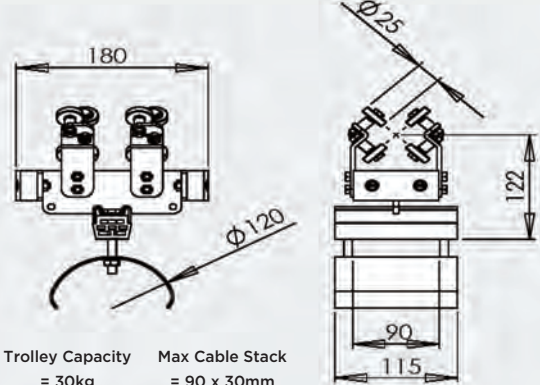


Trolley Capacity = 30kg
Max Cable Stack = 90 x 30mm

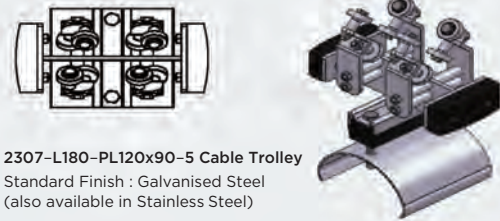


2307-L180-PL120x90-2 End Anchor
Standard Finish : Galvanised Steel
(also available in Stainless Steel)

Cable Trolley Ref: 2307-L180-PL120x90-5

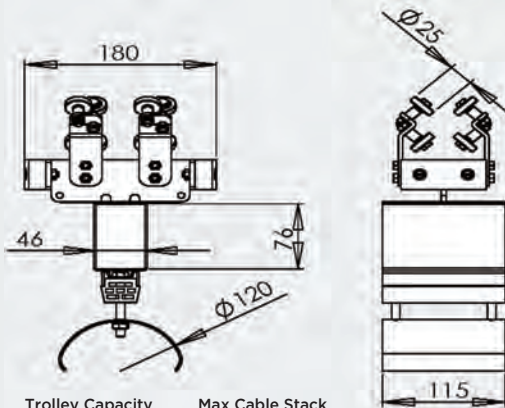


Trolley Capacity = 30kg
Max Cable Stack = 90 x 30mm



2307-L180-PL120x90-5 Cable Trolley
Standard Finish : Galvanised Steel
(also available in Stainless Steel)

Towing Trolley Ref: 2307-L180-PL120x90-6



Trolley Capacity = 30kg
Max Cable Stack = 90 x 30mm



2307-L180-PL120x90-6 Cable Trolley
Standard Finish : Galvanised Steel
(also available in Stainless Steel)