



## I-Beam Track

1. Install I-beam track parallel with runway of equipment; the side clearance to be sufficient to avoid interference with swinging cables.
2. The support structure for the I-beam must be adequately designed for the anticipated loads. Smooth out welded joints to ensure smooth traversing of cable carriers.

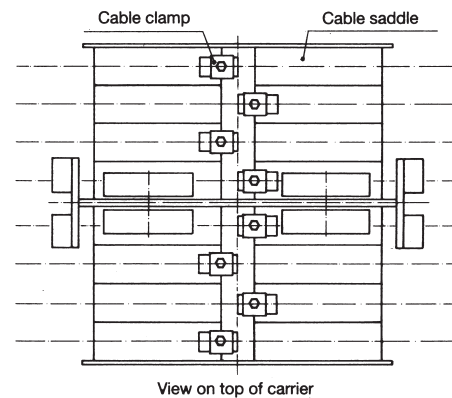
## Cable Carriers

The system must be installed in the following order:

1. Cable carriers: adjusted per chosen I-beam
2. Bolt track clamp: to the lower flange of the I-beam
3. Connect lead clamp: to equipment by an outrigger (e.g. channel iron) and install bumper extensions where applicable in accordance to the detail-drawings.

## Cables

When installing the cables make sure the cable length [L] (storage distance & open space + max. working travel x approx. 1.1 to 1.2 – with tow ropes 1.15 to 1.25) is equally distributed between the carriers. Secure cables on carriers with clamp pad (for W 110) or with single cable clamps – staggered per adjacent sketch – (for W 120 thru W 140) and lock nuts.



## Tow Rope assemblies

Tow ropes (see back) are to be installed on the cable carriers by means of shackles. Secure shackle screws by using a galvanized steel wire.

## Cable Loop Clamps

with cable loops of approx. 2 m it is recommended to use one cable clamp at the lower vertex of each loop. Use two cable clamps in the lower third (one each side of the loop) when the loop depth exceeds 2 m.

## Make test runs



Reg. No. 3140-02





# TOW ROPE ASSEMBLIES

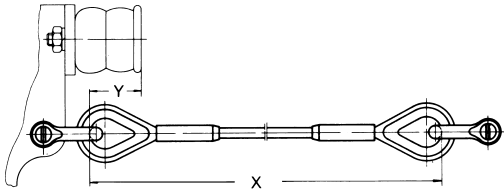
Type	Z 1	Z 2	Z 3
Rope diameter mm	6	8	10
for carriers	W 50 – W 70	W 80 – W 140 except W 110	
Material and finish	Stranded steel rope – galvanized, with fiberglass reinforcing		
Admissible tension force (6times safety factor)	3500 N	6100 N	9530 N
Scope of supply	Complete, cut to suit the application, incl. rope clamps, thimbles and shackles		

Choice of rope diameter for carriers W 80 – W 140 (except W 110) depends upon working travel and travelling speed

Travelling speed m/min.	working travel m			
	0–30	30–70	70–100	over 100
0–80	–	8 mm	8 mm	10 mm
80–160	8 mm	8 mm	10 mm	10 mm

We recommend to use tow ropes of 6 mm dia for the carriers W 50 – W 70 and a working travel exceeding 30 m with a travelling speed of 80 m/min.

## Length determination for tow ropes



$$x = \frac{(S \times 1,05) + Z}{n} + 2y$$

- x = Length of tow rope mm
- S = Working travel mm
- n = Number of cable loops
- y = Projecting bumper mm (see table)
- 1,05 = Safety factor
- Z = Open space  
(min. one carrier length)

## Bumper projection

Carrier type	dimension y mm
W 50 – W 70	6
W 80 – W 100	42
W 120	0
W 130 and W 140	42

Length of tow rope mm	Z 1 (6 mm Ø) Order-no.	Z 2 (8 mm Ø) Order-no.	Z 3 (10 mm Ø) Order-no.
2 000 – 3 000	344 410	344 510	344 610
3 001 – 4 000	344 420	344 520	344 620
4 001 – 5 000	344 430	344 530	344 630
5 001 – 6 000	344 440	344 540	344 640
6 001 – 7 000	344 450	344 550	344 650
7 001 – 8 000	344 460	344 560	344 660
8 001 – 9 000	344 470	344 570	344 670
9 001 – 10 000	344 480	344 580	344 680
10 001 – 11 000	344 490	344 590	344 690
11 001 – 12 000	344 500	344 600	344 700

Note: tow rope assemblies of polyamid ribbon with lateral stability as well as brake carriers and locking devices are available on request.