

**Part 1 Design (P1)**

**Part 2 PVC Flat Cable (P4)**

**Part 3 C30 Track Design & Chart (P5)**

**Part 4 C40 Track Design & Chart (P7)**

**Part 5 Aluminum Track Design  
& Chart (P8)**

**Part 6 Installments (P10)**

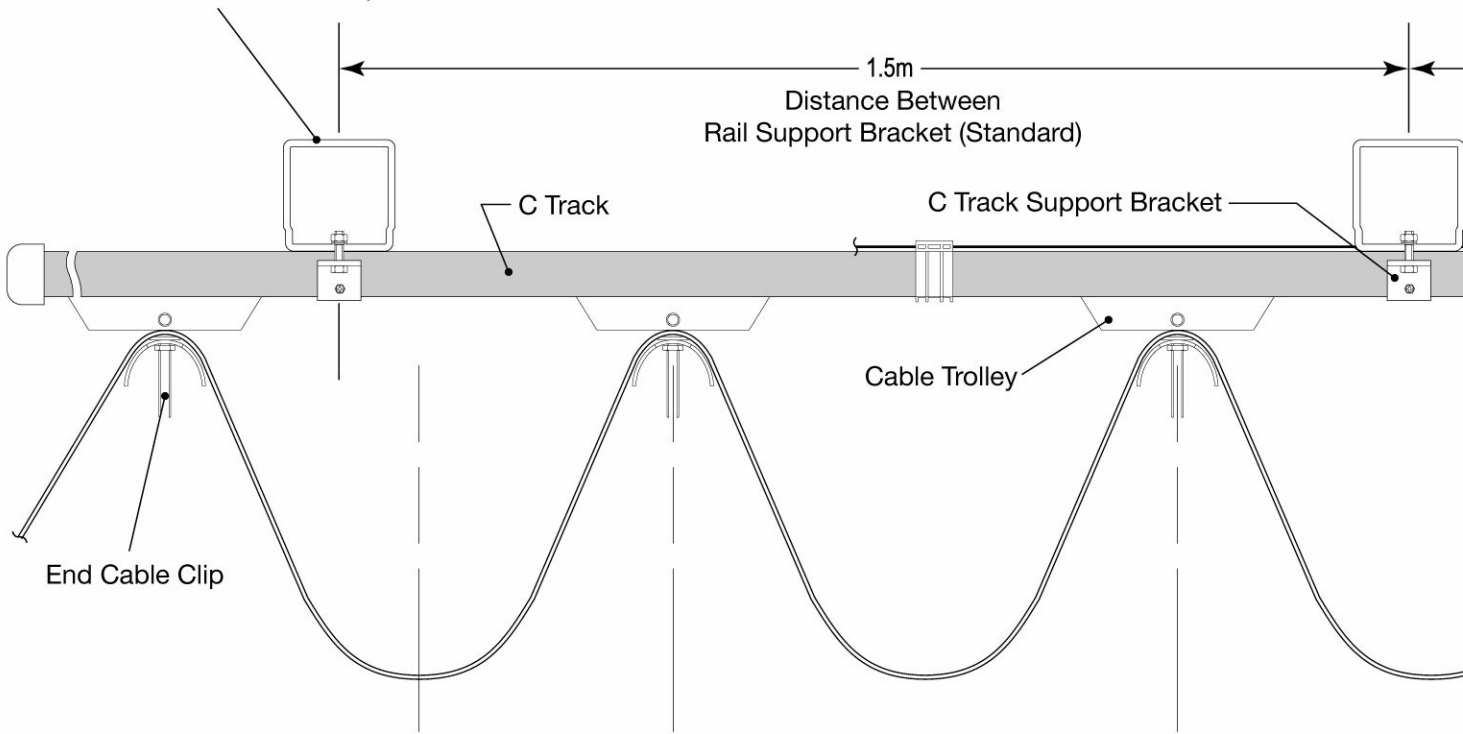
**Part 7 Diamond Track (P11)**

#### Application:

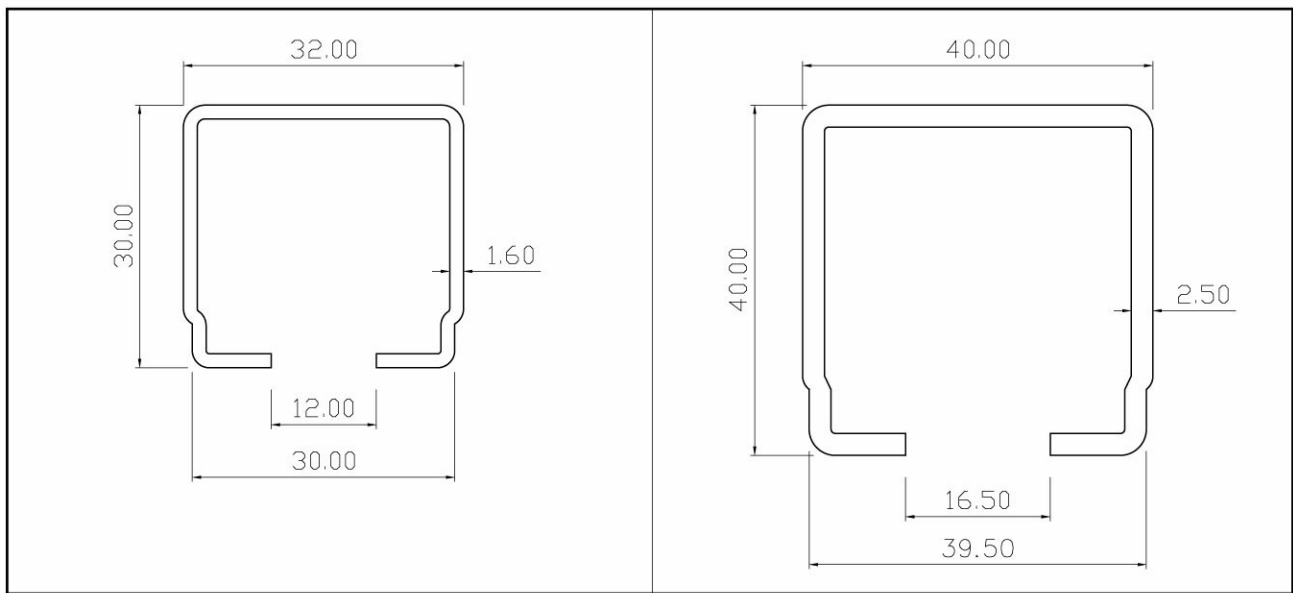
- For Span Hoist
- Automatic Plating Equipment
- Power Supply of Wastewater Treatment Facility
- Stone Factory \ Moving Control System
- Heavy Machines or Movable Power Supply

# Part 1 Design

Support Bracket (It's feasible to cut a short C Track as a substitute)



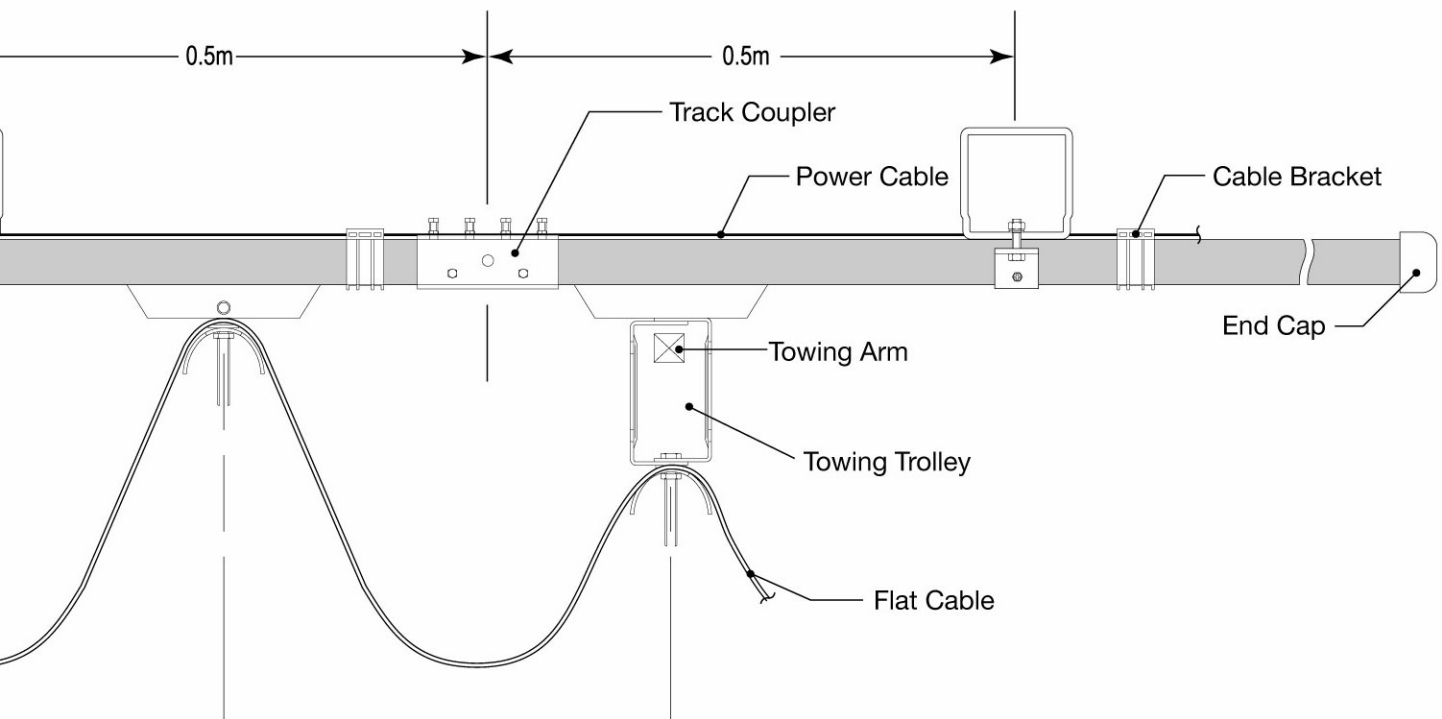
## 1. Structure Data



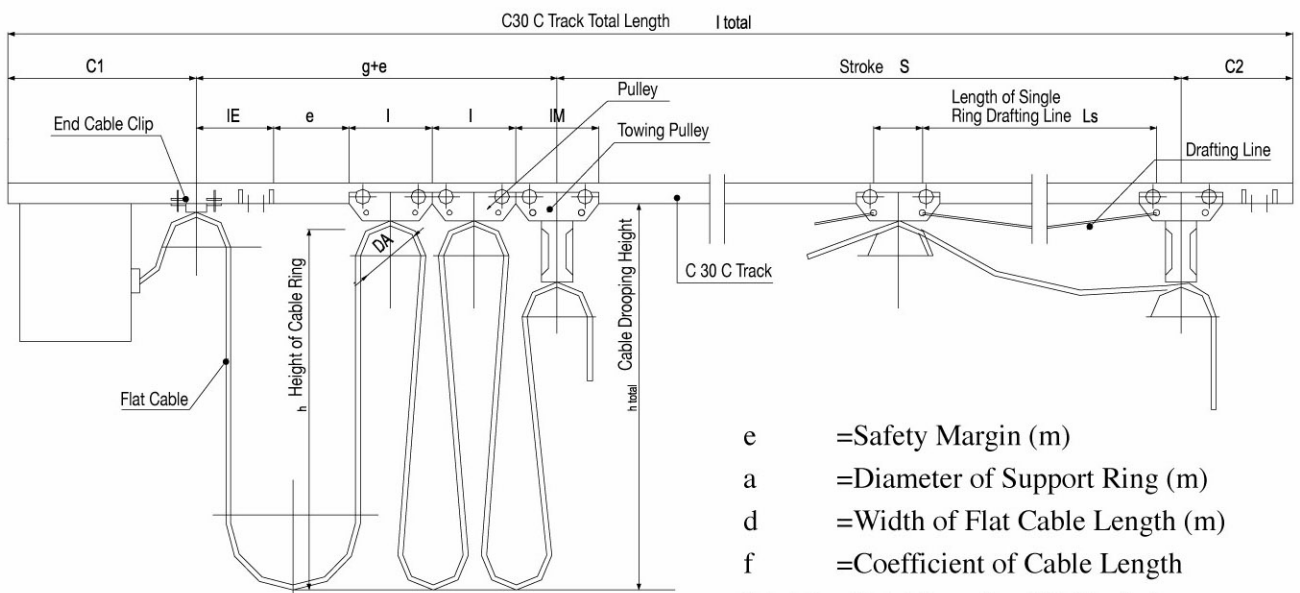
C30 C-rail Cross Section Chart

C40 C-rail Cross Section Chart

Type	Material	Length (mm)	Length Tolerance (mm)	Thickness (mm)	Physics Characteristic			Weight (kg/m)
					I <sub>x</sub> (cm <sup>4</sup> )	W <sub>x</sub> (cm <sup>3</sup> )	e (mm)	
KYEC-BC3030	Galvanized Steel	3000	± 4	1.6	1.97	1.23	16.0	1.24 kg/m
KYEC-BC4030	Galvanized Steel	3000	± 4	2.5	6.74	3.08	21.6	2.5 kg/m



## 2. Layout



- e = Safety Margin (m)
- a = Diameter of Support Ring (m)
- d = Width of Flat Cable Length (m)
- f = Coefficient of Cable Length
- L total = Total Length of Cable (m)
- L loop = Length of Single Ring Cable (m)
- Ls = Length of the Single Ring Drafting Line (m)

- I total = Total Length of C30 or C40 Track
- s = L Stroke (m)
- h = Height of Cable Ring (m)
- h Total = Cable Drooping Height (m)
- n = Quantity of Cable Ring
- g = Length Needed of Pulley and Its Accessories (m)
- l = Length of Pulley (m)

$$n = f \times \frac{s+g}{2h}$$

$$h = f \times \frac{s+g}{2n}$$

$$f = 1.1 \text{ (Sliding Speed 50m/min)}$$

### 3. C30、C40 Track Design Information

#### 1. C30 Track Known Data

P=4 Single Trolley Capacity (kg)

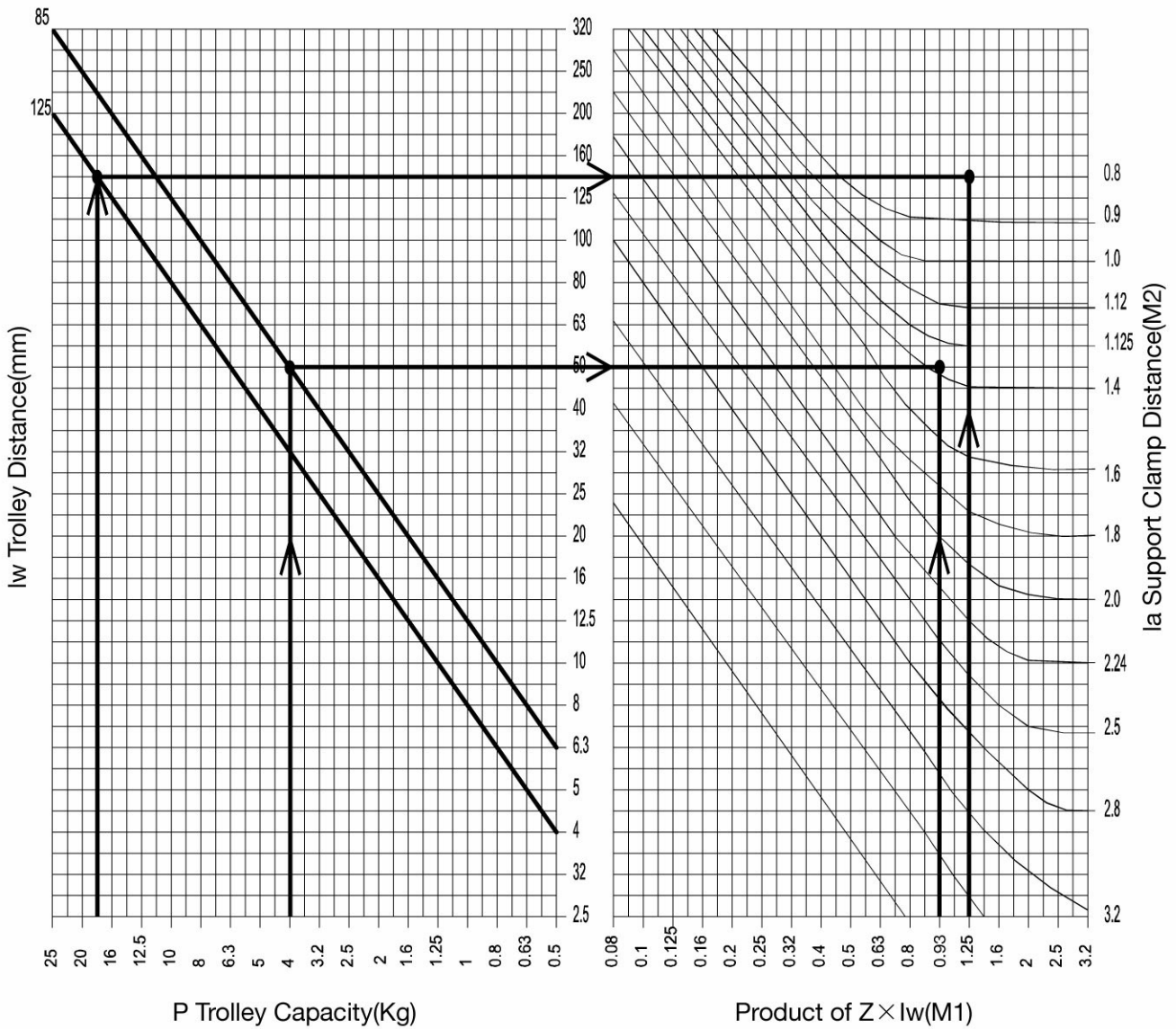
Iw =85 Length of Trolley (mm)

Z =11 Quantity of Trolley (set)

Calculated:  $L=Z \times Iw/1000=0.93(M)$

☆☆ Cross-refer the chart,

**la =1.3** C30 support clamp distance.



#### 2. C40 Rail Known Data

P=18 Single Trolley Capacity(kg)

Iw =125 Length of Trolley(mm)

Z =10 Quantity of Trolley(set)

Calculated:  $L =Z \times Iw/1000=1.25(M)$

☆☆ Cross-refer the chart,

$=10 \times 125/1000=1.25 (M)$

**la =0.8** C40 support clamp distance.

# Part 2 PVC Flat Cable

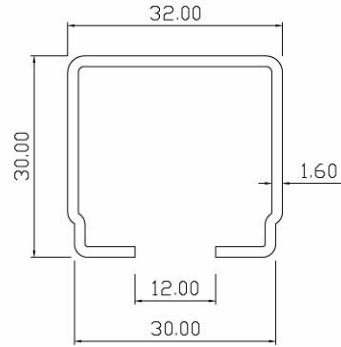
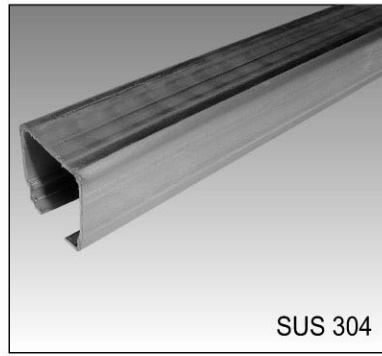
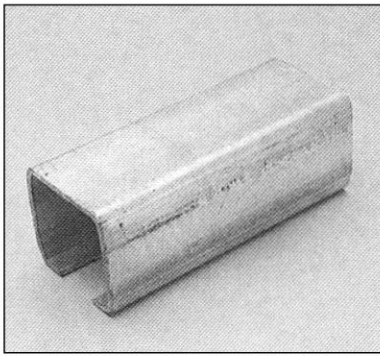


## DESCRIPTION:

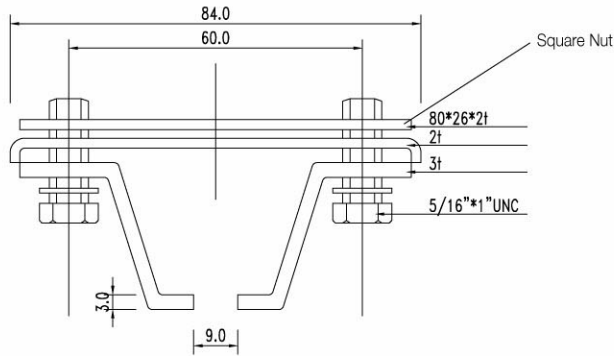
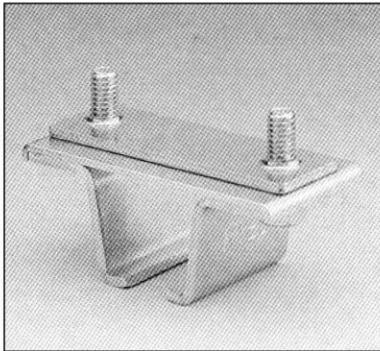
- Bare Stranded copper conductor.
- PVC insulation, Rated temp 60°C, 80°C or 1105% available.
- PVC jacket, Acid resistance available or UL Type

Conductor		No. of Core	Insulation Thickness mm	Insulation Diameter No. / mm	Overall Diameter mm	Character			Remark
Cross Section MM <sup>2</sup>	No. / Dim (mm)					20°C(Q/KM)	V/MIN	M/KM	
0.75	30/0.18	24	0.6	2.3	8.3×40.3	25.8	1500	50	
0.75	30/0.18	36	0.6	2.3	11×51	25.8	1500	50	
0.75	30/0.18	60	0.43	2.0	11.6×74	25.8	1500	50	
1.25	50/0.18	3	0.8	3.0	5.0×11.2	16	1500	50	
1.25	50/0.18	4	0.8	3.0	5.8×15.7	16	1500	50	
1.25	50/0.18	5	0.8	3.0	6.1×18.8	16	1500	50	
1.25	50/0.18	8	0.8	3.0	5.0×28.7	16	1500	50	
1.25	50/0.18	10	0.8	3.0	5.1×34.6	16	1500	50	
1.25	50/0.18	13	0.8	3.0	5.2×43	16	1500	50	
2.0	37/0.26	3	0.8	3.2	5.0×11.4	10.2	1500	50	
2.0	37/0.26	4	0.8	3.2	6.8×18.6	10.2	1500	50	
2.0	37/0.26	8	0.8	3.2	6.0×29.5	10.2	1500	50	
3.5	140/0.18	3	0.8	4.2	6.3×16.2	5.54	1500	50	
3.5	140/0.18	4	0.8	4.2	7.5×19.5	5.54	1500	40	
3.5	140/0.18	8	0.8	4.2	6.8×39	5.54	1500	40	
5.5	217/0.18	3	1.0	5.2	7.5×20	3.56	1500	40	
5.5	217/0.18	4	1.0	5.2	8.0×23	3.56	1500	40	
8	315/0.18	3	1.0	6.2	9.0×21.6	2.54	1500	40	
8	315/0.18	4	1.0	6.2	10×30	2.45	1500	40	
14	550/0.18	3	1.0	7.6	12×28.8	1.43	1500	40	
14	550/0.18	4	1.0	7.6	10.6×33	1.46	1500	40	
22	855/0.18	3	1.2	10.0	15×35	0.919	1500	40	
22	855/0.18	4	1.2	10.2	13×47	0.919	1500	40	
38	1480/0.18	3	1.2	12.5	17.8×42.5	0.75	1500	40	
38	1480/0.18	4	1.2	12.5	20×53	0.75	1500	40	

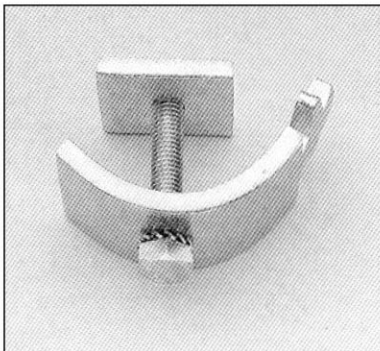
# Part 3 C30 Track & Parts Charts



<b>KY-BC3030</b>
C30 C Track 3M/pic
<b>KY-BCS3030</b>
SUS 304



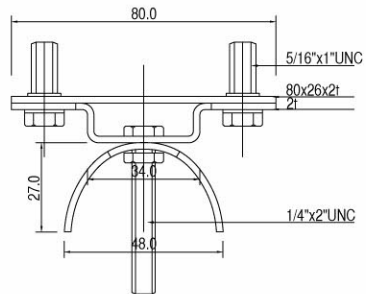
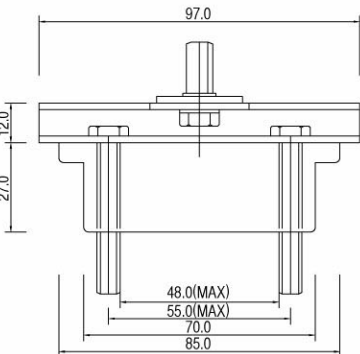
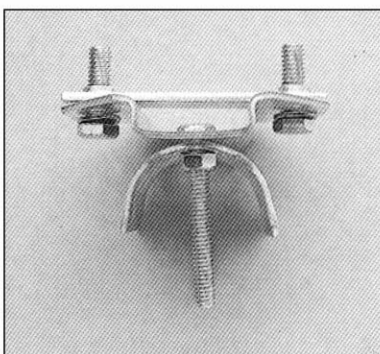
<b>KY-BC3100</b>
C30 C Track Support Bracket
<b>KY-BCS3100</b>
SUS 304



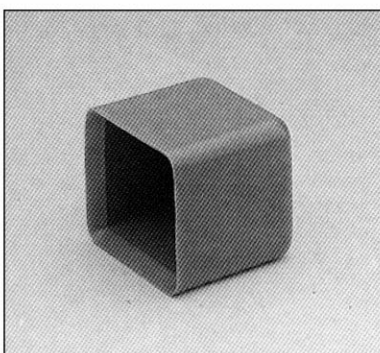
<b>KY-BC3103</b>
C Track Clip



<b>KY-BC3102</b>
C30 Support Arm



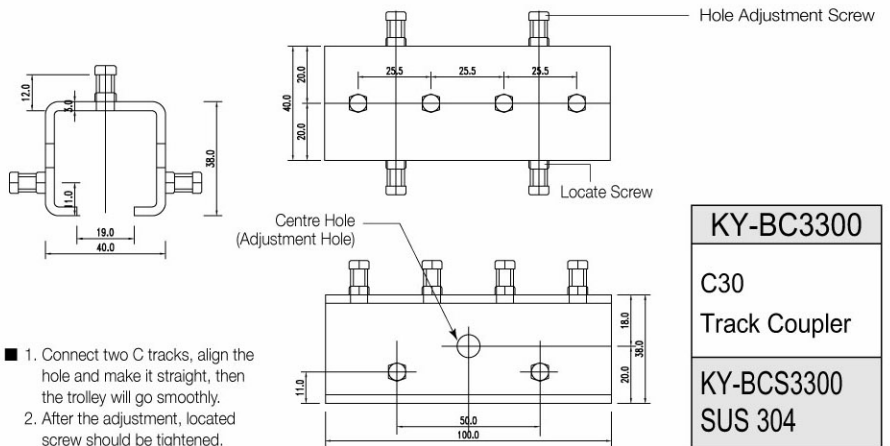
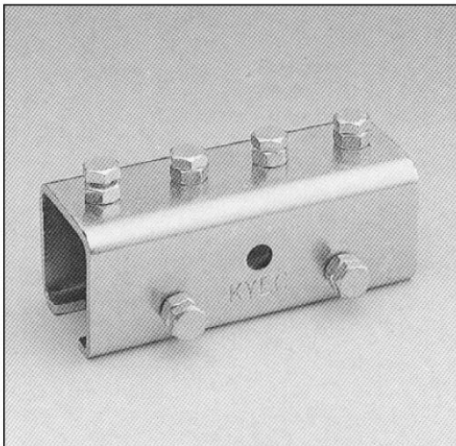
<b>KY-BC3200</b>
C30 End Cable Clip
<b>KY-BCS3200</b>
SUS 304



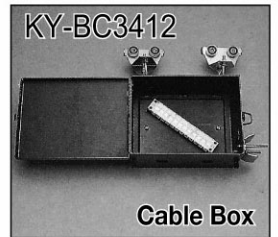
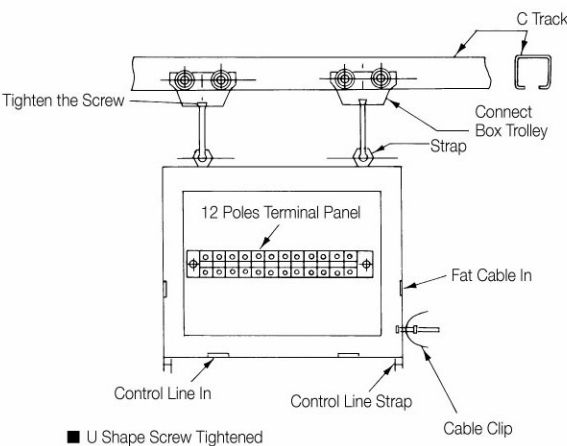
<b>KY-BC3201</b>
C30 End Cap



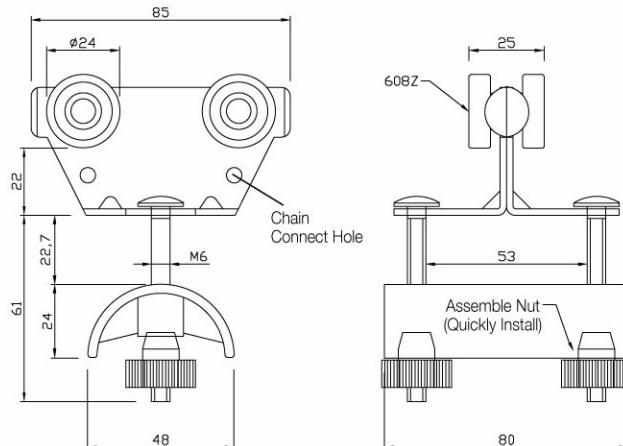
<b>KY-BC3202</b>
C30 Cable Bracket



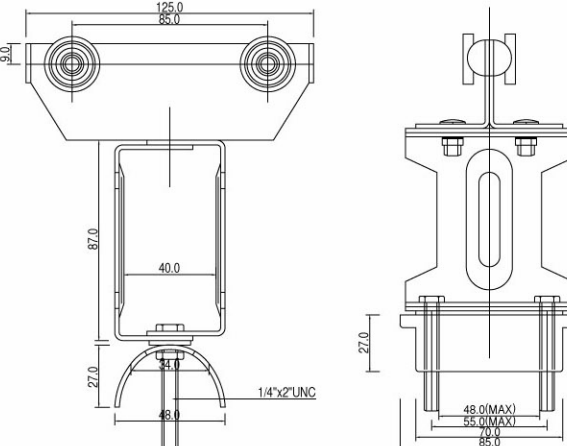
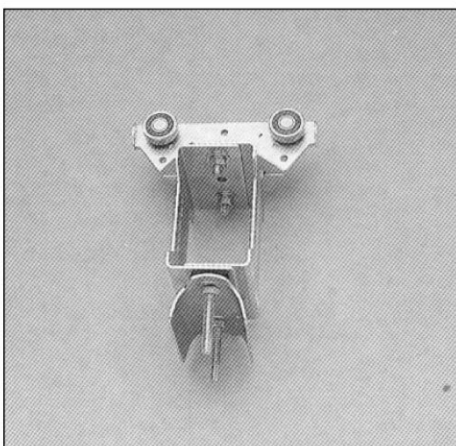
**KY-BC3300**  
C30  
Track Coupler  
KY-BCS3300  
SUS 304



**KY-BC3412**  
C30  
C Connect Box.

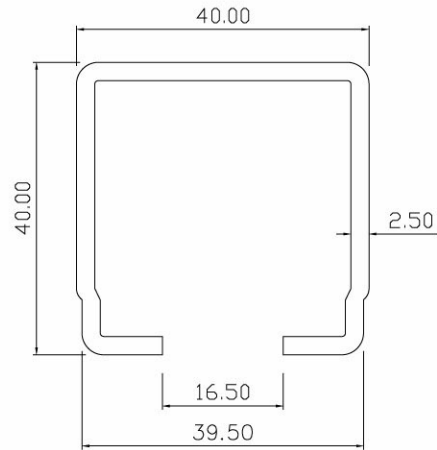


**KY-BC3525**  
C30 Cable  
Trolley/Wide  
KY-BCS3525  
SUS 304

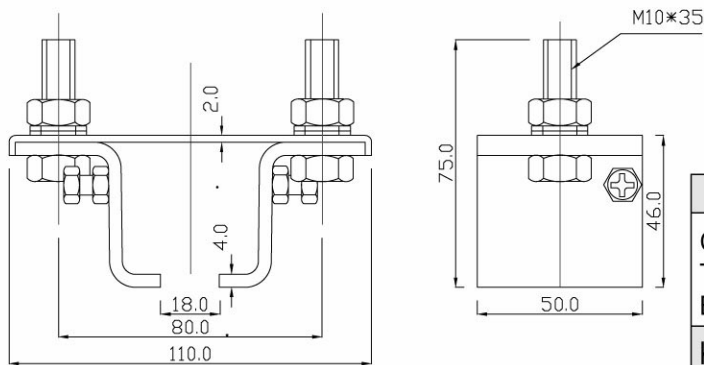
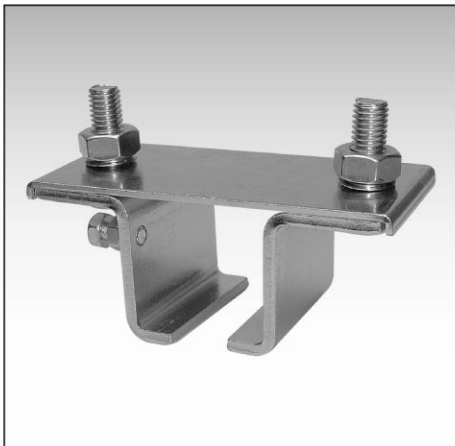


**KY-BC3625**  
C30  
Towing Trolley  
KY-BCS3625  
SUS 304

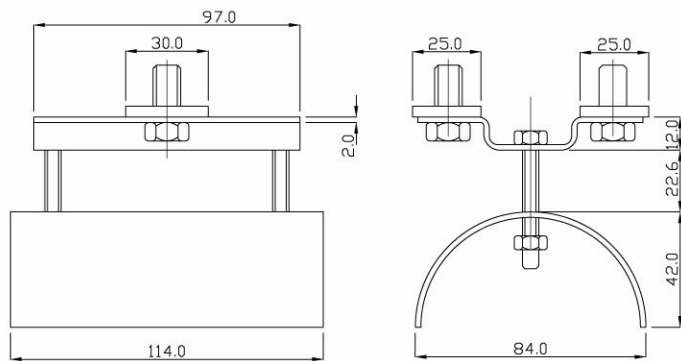
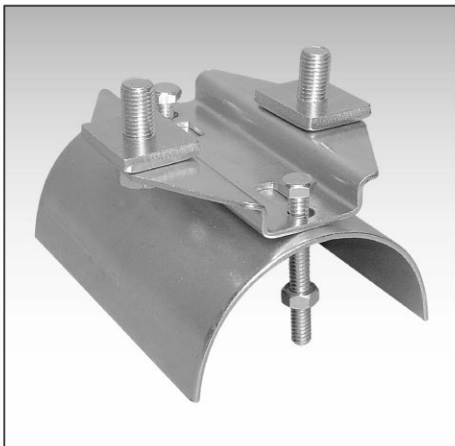
# Part 4 C40 Track & Parts Charts



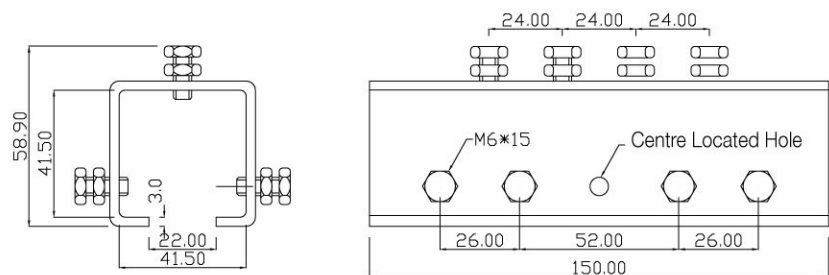
<b>KY-BC4030</b>
C40 C Track
KY-BCS4030 SUS 304



<b>KY-BC4100</b>
C30 Track Support Bracket
KY-BCS4100 SUS 304

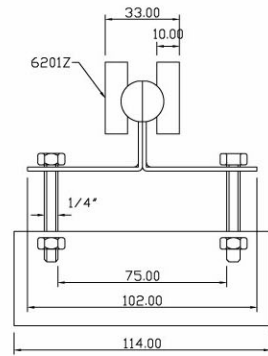
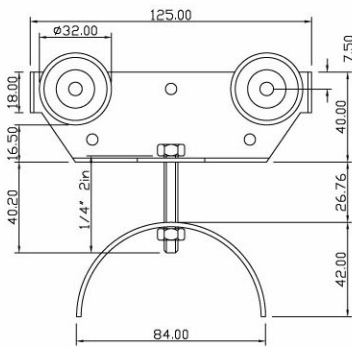


<b>KY-BC4200</b>
C40 End Cable Clip
KY-BCS4200 SUS 304

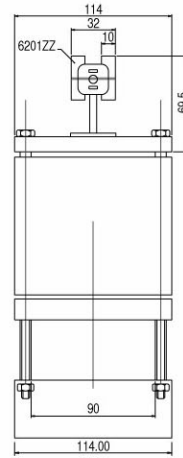
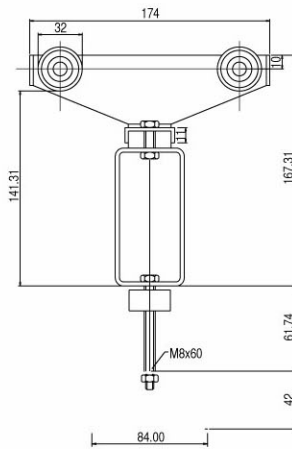


<b>KY-BC4300</b>
C40 Track Coupler
KY-BCS4300 SUS 304



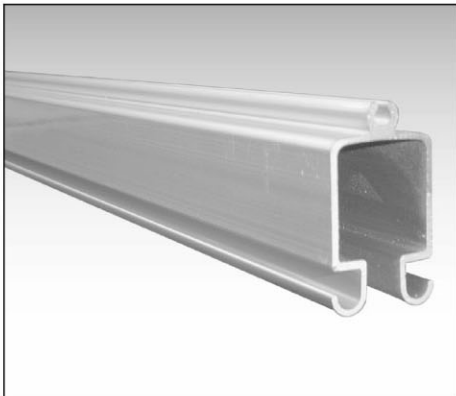


**KY-BC4533**  
C40  
Cable Trolley  
**KY-BCS4533**  
SUS 304



**KY-BC4633**  
C40  
Towing Trolley  
**KY-BCS4633**  
SUS 304

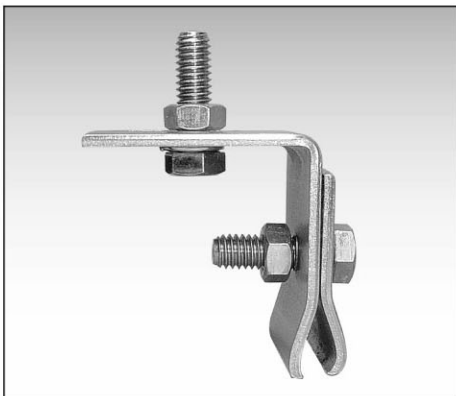
## Part 5 Aluminum Track & Parts Charts



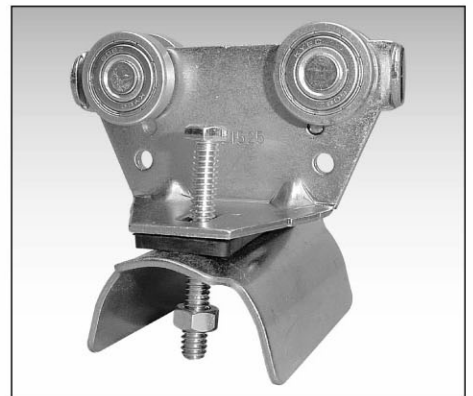
**KY-BD3030**  
Al. Track



**KY-BD3300**  
Coupler

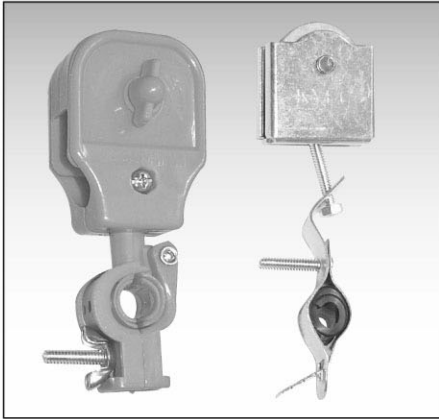


**KY-BD3100**  
Support Bracket



**KY-BD3522**  
Cable Trolley

## Wire Trolley



**KY-OWS005**

Steel Wire Trolley  
(Flat Cable Clip)  
(Wire Max Dim. 8mm)

**KY-OWS107**

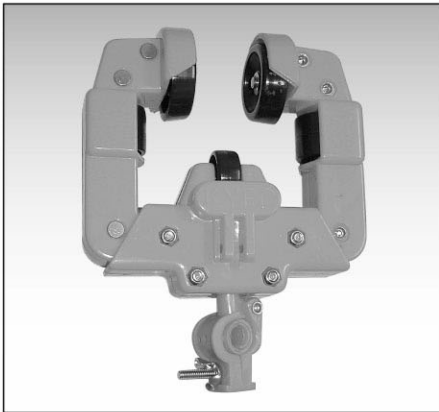
Steel Wire Trolley  
(Wire Max Dim. 8mm)

**KY-OWP206**

Patent Trolley



## I Steel Trolley

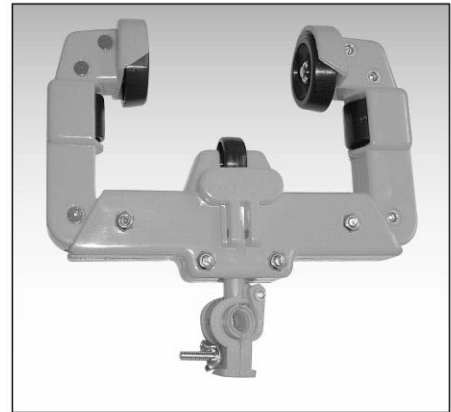


**KY-OIW125150**

W Type Trolley(L)

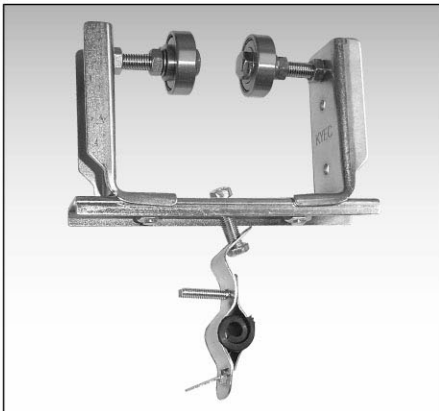
**KY-OIW075150**

W Type Trolley(S)



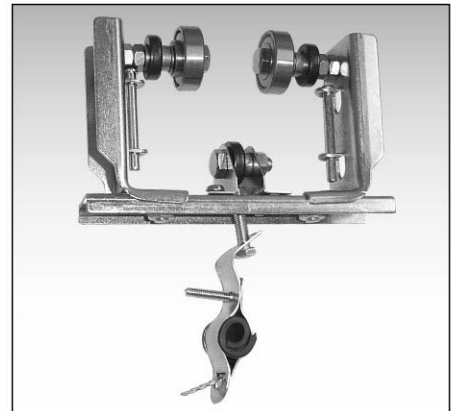
**KY-OIU075125C**

U Type Trolley  
(Swerve)



**KY-OIU075150**

U Type Trolley  
(Straight)

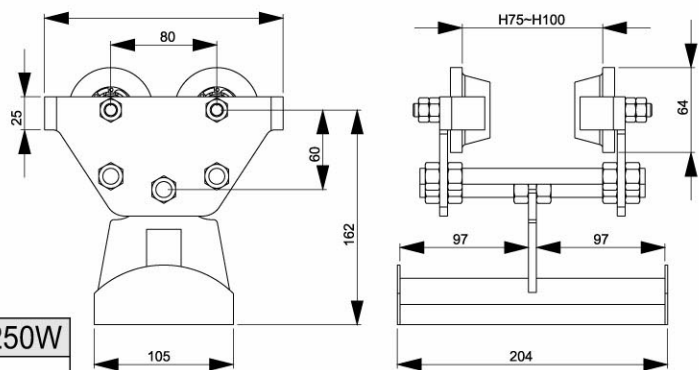


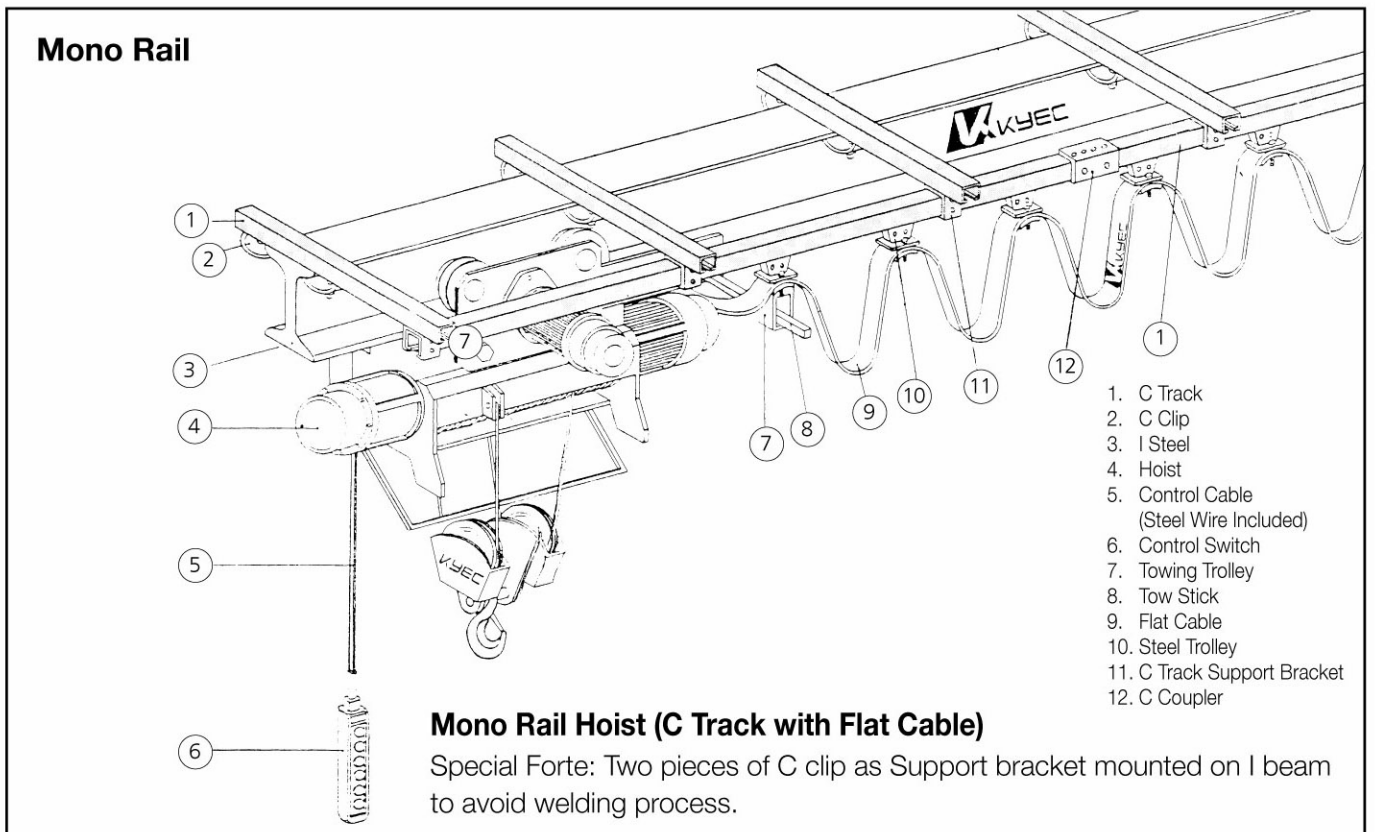
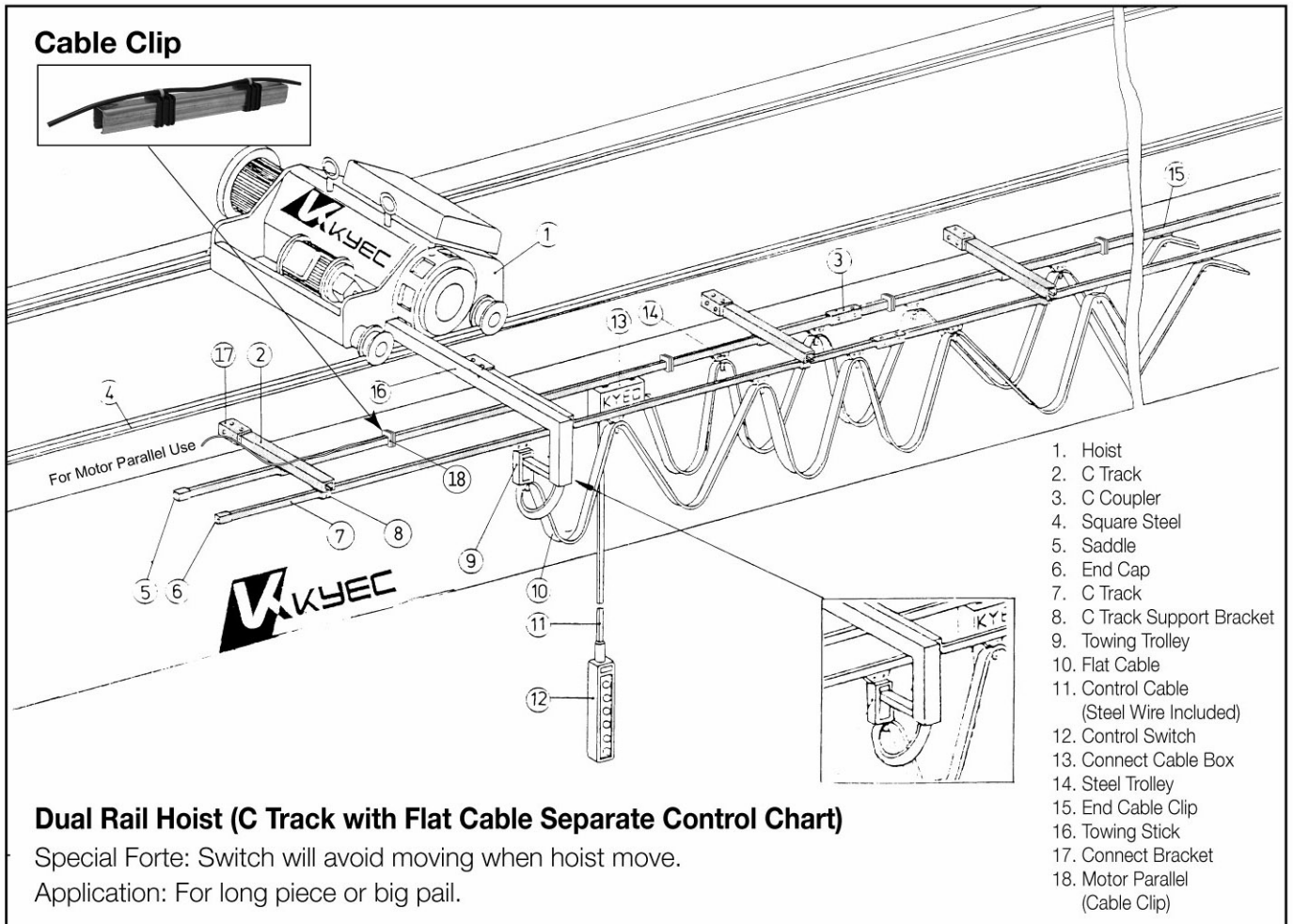
## Produce On Demand



**KY-OIH250W**

H Trolley





# Part 7 Diamond Track (For Curve)

## Flat Cable For Swerve Power Supply System

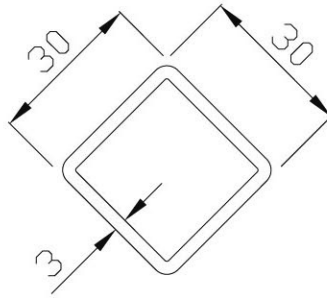
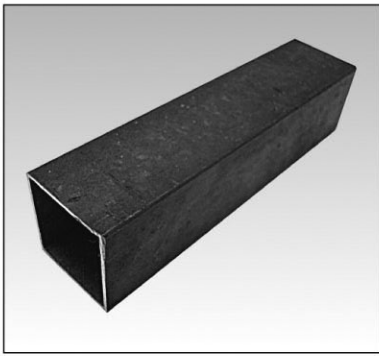


### Application:

- Swerve Power Supply System
- Explosion Proof Power Supply System
- For Span Hoist Power Supply System
- Automatic Galvanization Equipment
- Wastewater Treatment Factory
- Heavy Duty Machine Power Supply
- Movable Power Supply

Dim. 45 × 1.8L-100m

※Add a band will reduce the probability of cable broken.



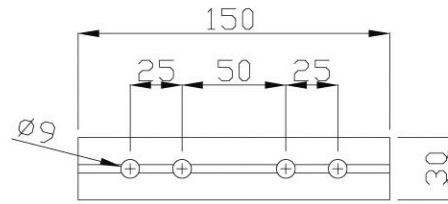
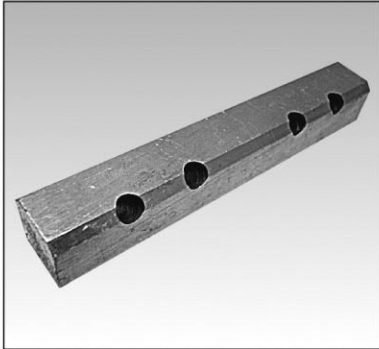
Length: 6M Each

**KY-BD3060**

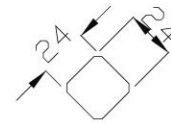
Diamond Track  
30×30×3

**KY-BD3066**

Diamond Track  
30×30×3  
(Arc Shape)  
Produce  
On Demand

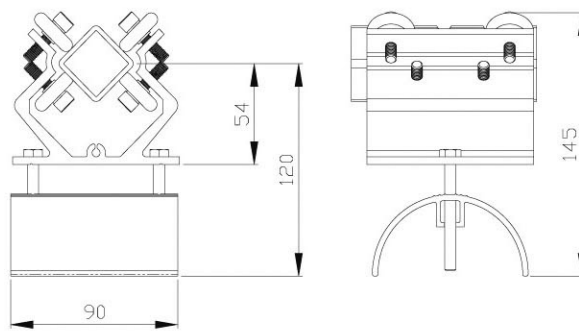
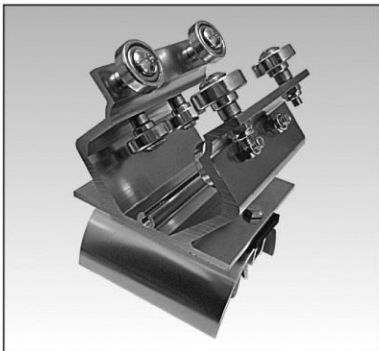


Connect Screw:  
Hexagon Screw M8×50



**KY-BD3300**

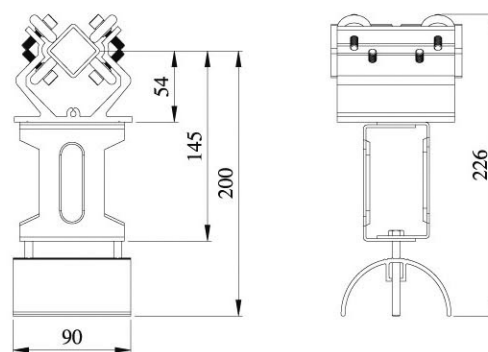
Track Coupler:  
Aluminum



606AB Dual cam  
(Galvanized Steel / Engineering  
Plastic available)  
• Hexagon Socket Button Head  
Cap Screw M6×35  
• Hexagon Screw M6×15  
• Hexagon Screw M6×50

**KY-BD3526**

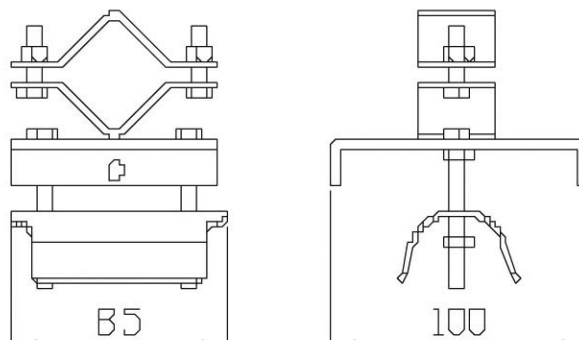
Diamond Track  
Trolley



606AB Dual cam  
(Galvanized Steel / Engineering  
Plastic available)  
• Hexagon Socket Button Head  
Cap Screw M6×35  
• Hexagon Screw M6×50

**KY-BD3626**

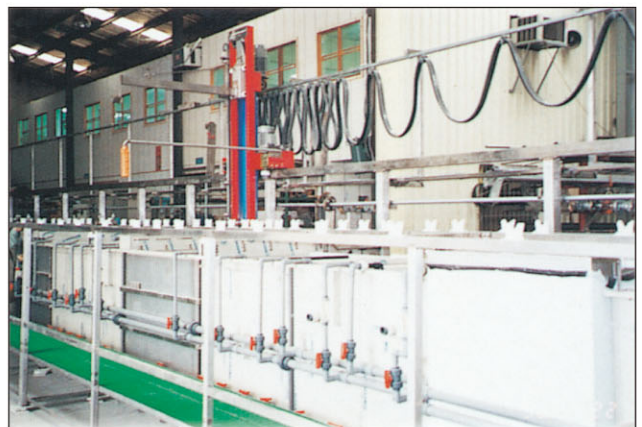
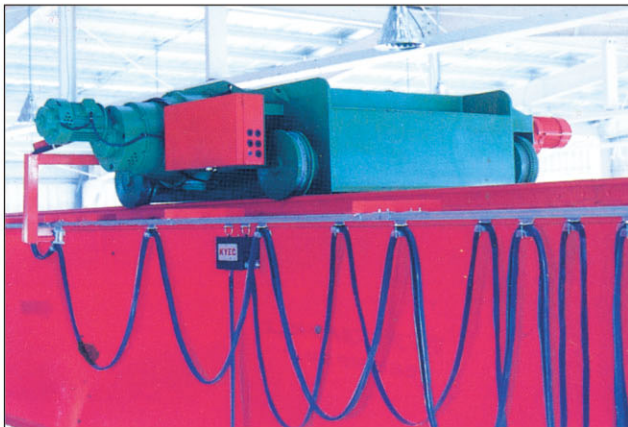
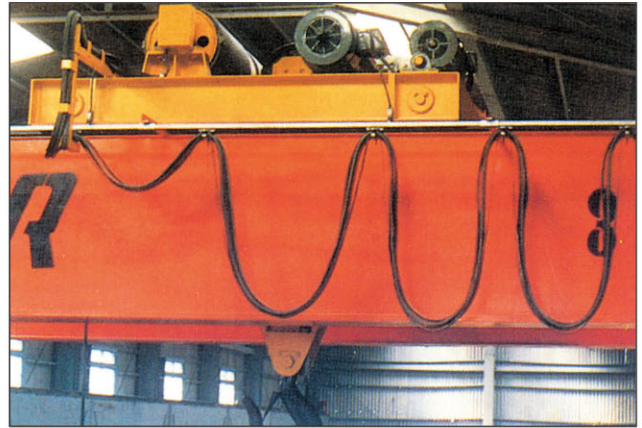
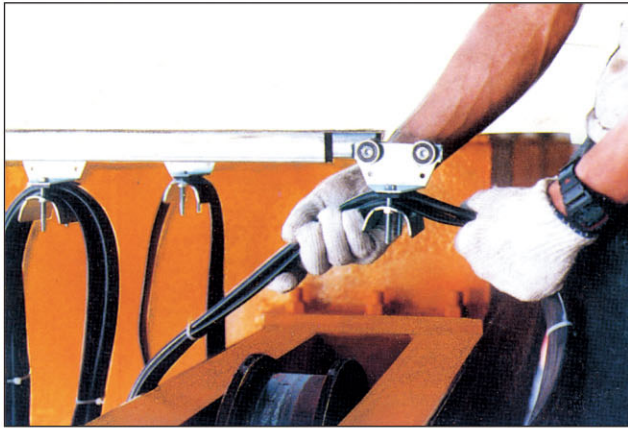
Diamond Track  
Towing Trolley



**KY-BD3200**

Diamond Track  
End Cable Clip

※No matter how hard or easy your require is, we are serious at your business to serve the best solution. **Please contact us for related product and technical information.**



Square Trolley (For Curve)



**KYEC**

<http://www.kyec-mit.com.tw>  
E-mail: taiwan.kyec@msa.hinet.net