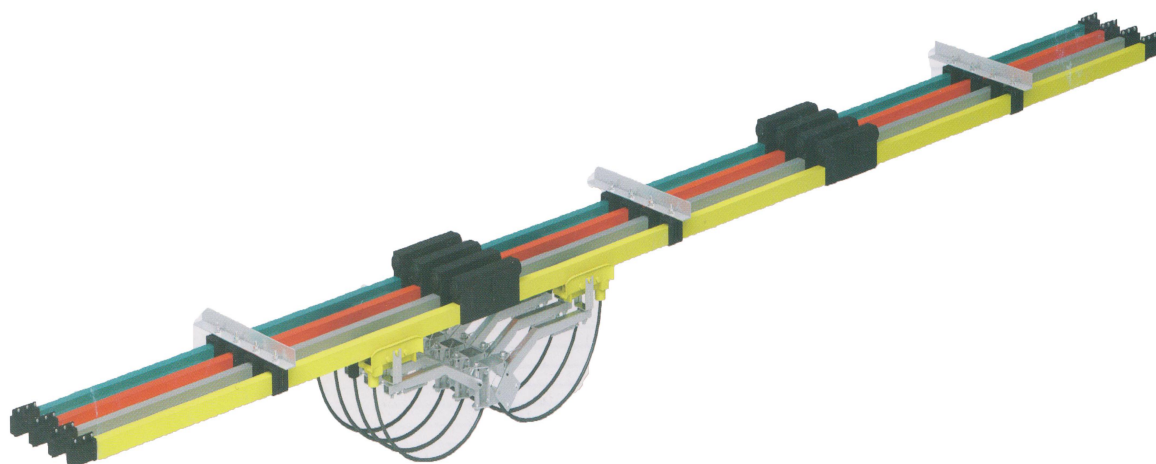


KLIFTING INDUSTRIAL CO., LTD.

Insulated Copper Conductor System



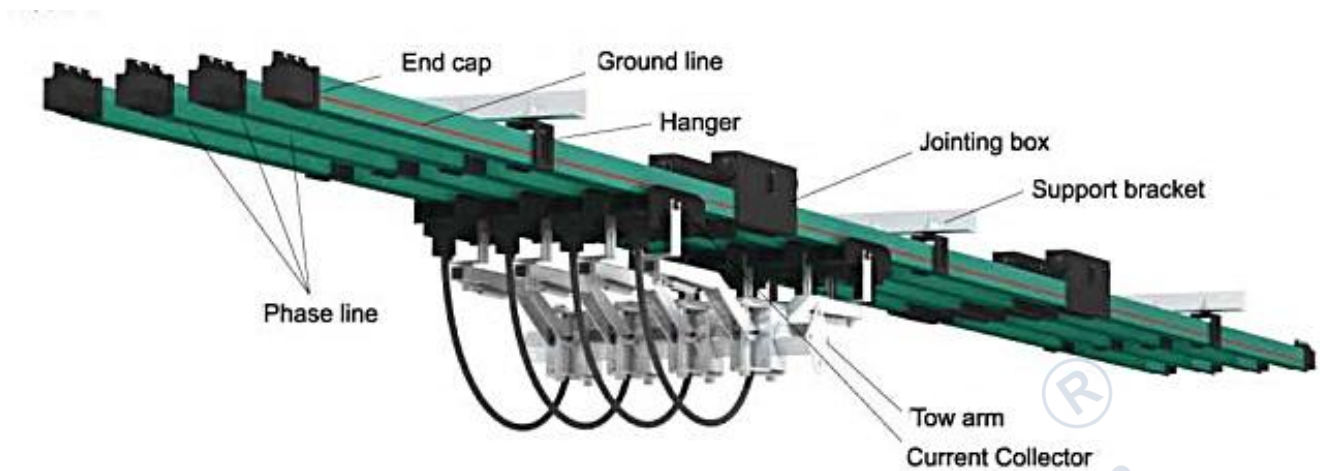
Catalogue

www.klifting.com

Catalogue

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Insulated Copper Conductor System



General

1. The KW-H conductor rail system is a modern power supply system using single-pole insulated conductor rails. It complies with the latest regulations and provides the electric energy for mobile consumers. The conductor rail is material copper (200A-5000A). Any numbers of poles can be installed vertically or horizontally, on straight or curved systems.

2. The conductor rail system can be installed indoor or outdoor. For high temperature conditions, a high temperature insulation cover up to $+115^{\circ}\text{C}$ is available, also for low temperature conditions, it could be up to -40°C . The entire conductor rail system is insulated to current safety regulations, it is entirely protected against direct contact.

3. Ground insulation cover is marked yellow-green on one side over the entire length of the rail. Type-R: Curves for $R \geq 1200\text{mm}$.

Approved and listed by: CCC, ISO9001 and CE.

Insulation

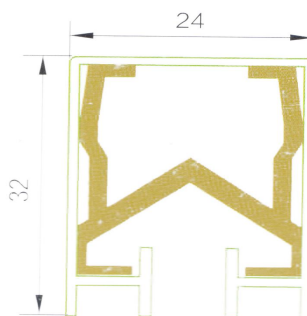
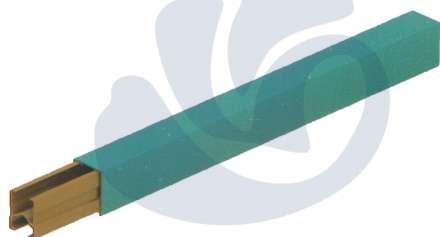
Generally, the phase line is color green, the ground line is yellow-green plastic housing for system, the standard length is 4.5m long. For other systems, the standard length is 6.0 m long. Other sections are available.

Technical Parameters

	W Copper Conductor Bar System		
Type	W24	W32	W52
Nominal Current at 100% DC and 35 °C (A)	500-800	800-1600	1250-5000
D.C resistance at 35 °C (Ω/km)	0.043-0.015	0.067-0.039	0.036-0.007
Impedance at 35 °C (Ω/km)	0.118-0.069	0.069-0.040	0.038-0.008
Support spacing (m)	1.5	1.8	2.0
Rail length (m)	6.0	6.0	6.0
Housing length (m)	5.88	5.83	5.75
Max.Voltage	690V		
Travelling speed	≤600m/min		
Expansion joint	Not required up to 200m installation length		
Flame retardant	Class B1-no flaming particles, self-extinguishing		
Permissible Ambient temperature	Standard insulation -20°C-+70°C High temperature insulation -20°C-+70°C Low temperature insulation -20°C-+70°C		

W24 Copper Conductor Bar (500A--800A)

➤ Conductor Bar



Copper conductor bar support spacing :1.5m Standard Length: 6.0m

Other lengths on request.

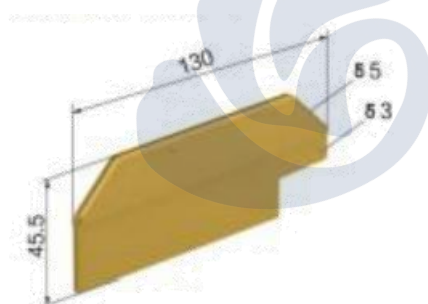
Type	Material	Cross section (mm ²)	Nominal current (A)	Leakage-distance (mm)	Resistance (Ω/km)	Weight (Kg/m)	No.
KW-HD-160/500	Copper	160	500	45 or 80	0.112	1.70	240500
KW-HD-180/600	Copper	180	600	45 or 80	0.098	1.90	240600
KW-HD-200/700	Copper	200	700	45 or 80	0.087	2.10	240700
KW-HD-230/800	Copper	230	800	45 or 80	0.076	2.30	240800

➤ W24 Current Collector



Be used for conductor rail W24 system.

Type	Weight (kg)	Hardware	Nominal Current	No.
JD-200	1.45	Galvanized	200Amp	242110
JD*2-200	2.72	Galvanized	400Amp	242120
JDL-200	1.18	Aluminum	200Amp	242130
JDL*2-200	2.25	Aluminum	400Amp	240140



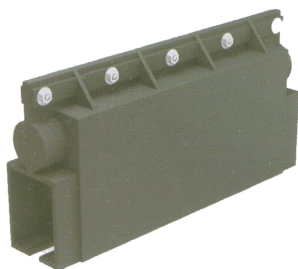
Brush material	Copper-graphite brush
Temperature	-40℃~+115℃
Speed	≤360m/min
Voltage	ACV : ≤750V DCV: ≥1000V
Contact voltage drop	0.20-0.25V
Abrasion loss of brush	6-8mm
Contact pressure	F≤25N
Horizontal movement	±100 mm
Vertical movement	±40 mm

➤ Hanger



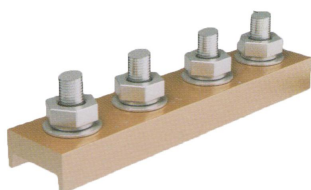
Type	Weight (kg)	Material	No.
W24HD-1	0.05	Plastic	241101
W24HD-2	0.04	Plastic	241102
W24HD-5	0.05	Polyseter	241103

➤ **Joint Box**



Type	Weight (kg)	Material	No.
W24JD-1	0.12	Plastic	241201
W24JD-5	0.13	Polyseter	241202

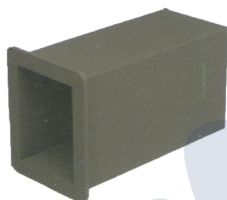
➤ **Joints**



Every joint could be used for feeding joint.

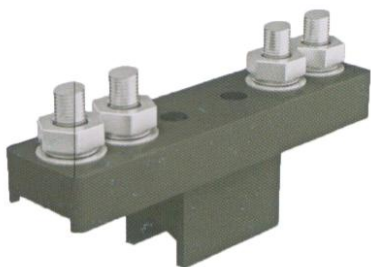
Type	Weight (kg)	Material	No.
W24JD-250A	0.15	Aluminum	241301
W24JD-500A	0.23	Copper	241302
W24JD-800A	0.31	Copper	241303

➤ **End Cap**



Type	Weight (kg)	Material	No.
W24EC	0.02	Plastic	241401

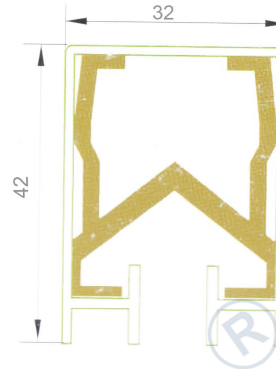
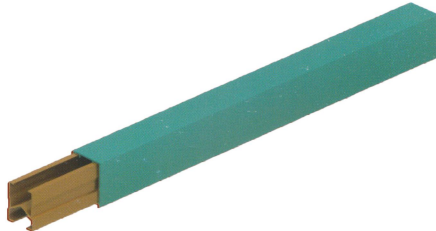
➤ **Isolating Section**



Type	Weight (kg)	Material	No.
W24SE	0.07	Plastic	241501

W32 Copper Conductor Bar (800A--1600A)

➤ Conductor Bar



Copper conductor bar support spacing :1.8m or 2.0m. Standard length :6.0m
 Other lengths on request.

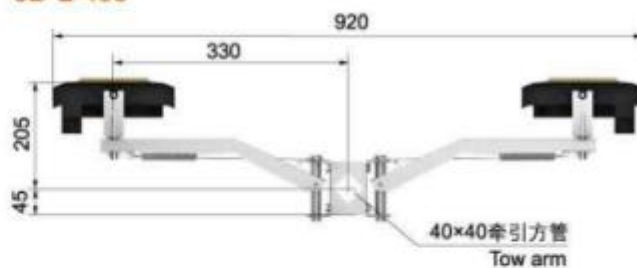
Type	Material	Cross section (mm ²)	Nominal current (A)	Leakage-distance (mm)	Resistance (Ω/km)	Weight (kg/m)	No.
KW-HD-230/800	Copper	230	800	80	0.067	2.50	320800
KW-HD-300/1000	Copper	300	1000	80	0.058	3.10	321000
KW-HD-360/1250	Copper	360	1250	80	0.046	3.60	321250
KW-HD-450/1600	Copper	450	1600	80	0.039	4.40	321600

➤ W24 Current Collector

JD-400



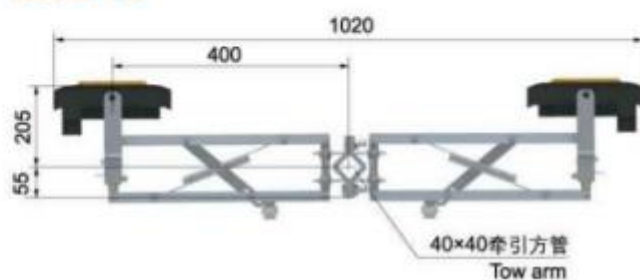
JD*2-400



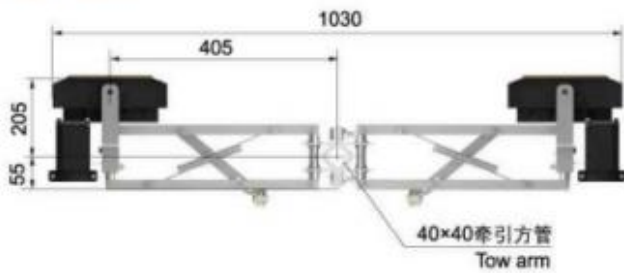
JDL-400



JDL*2-400



JDT-500

JDT*2-500


Type	Weight (kg)	Hardware	Nominal current	No.
JD-400	1.75	Steel	400 Amp	320101
JD*2-400	3.45	Steel	800 Amp	320102
JDH-400	2.35	Aluminum	400 Amp	320103
JDH*2-400	4.61	Aluminum	800 Amp	320104
JDT-400	3.05	Aluminum	500 Amp	320105
JDT*2-400	6.01	Aluminum	1000 Amp	320106

➤ Tow Arm



Be used for conductor rail W32 system.

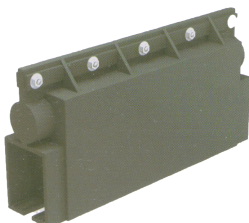
Type	Weight (kg)	Material	Length (mm)	No.	Remark
HTA-400	1.00	Steel	400	320201	4P
HTA-400	0.85	Steel	350	320202	3P
HTA-X	>1.00	Steel	>400	320203	-

➤ Hanger



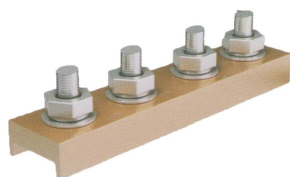
Type	Weight (kg)	Material	No.
W32HD-1	0.075	Plastic	320301
W32HD-2	0.085	Plastic	320302
W32HD-5	0.088	Polyster	320303

➤ Joint Box



Type	Weight (kg)	Material	No.
W32HJ-1	0.21	Plastic	320401
W32HJ-5	0.23	Polyster	320402

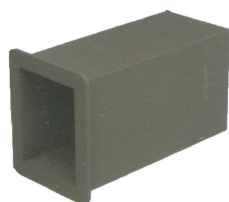
➤ Joints



Be used for feeding joint.

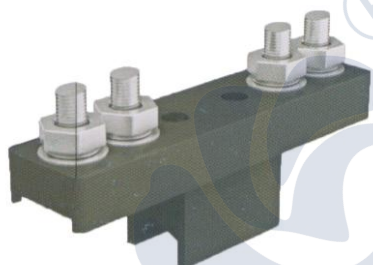
Type	Weight (kg)	Material	No.
W32HT-800A	0.41	Copper	320501
W32HT-1250A	0.66	Copper	320502
W32HT-1600A	0.82	Copper	320503

➤ End Cap



Type	Weight (kg)	Material	No.
W32EC	0.04	Plastic	320601

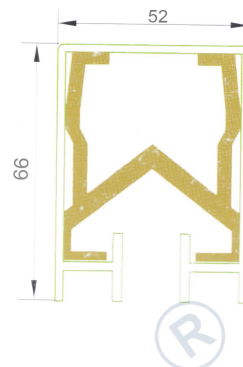
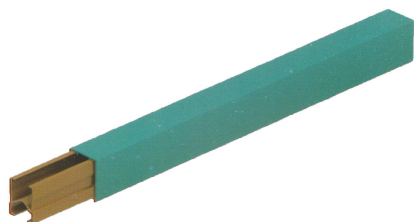
➤ Isolating Section



Type	Weight (kg)	Material	No.
W32SE	0.13	Plastic	320701

W52 Copper Conductor Bar (1600A--5000A)

➤ Conductor Bar

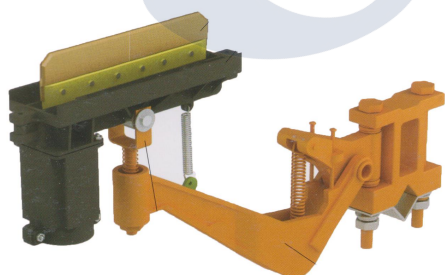


Copper conductor bar Standard Length : 6.0m

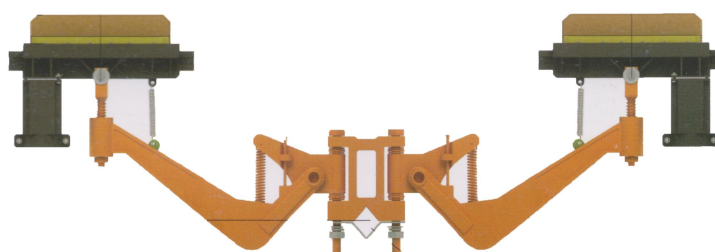
Other lengths on request.

Type	Material	Cross section (mm ²)	Nominal current (A)	Leakage-distance mm	Resistance (Ω/km)	Weight (Kg/m)	No.
KW-HD-500/1700	Copper	500	1700	100	0.036	5.20	520101
KW-HD-700/2000	Copper	700	2000	100	0.026	6.91	520102
KW-HD-850/2500	Copper	850	2500	100	0.018	8.30	520103
KW-HD-1000/3000	Copper	1000	3000	100	0.011	9.70	520104
KW-HD-1200/3500	Copper	1200	3500	100	0.009	11.50	520105
KW-HD-1600/4500	Copper	1600	4500	100	0.008	15.00	520106
KW-HD-1800/5000	Copper	1800	5000	100	0.007	16.80	520107

➤ W52 Current Collector



JD-800



JD*2-800

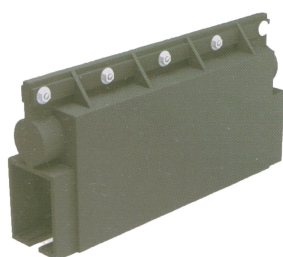
Type	Weight (kg)	Hardware	Nominal Current	No.
JD-800	5.10	Steel	800Amp	520201
JD*2-800	10.20	Steel	1600Amp	520202

➤ **Hanger**



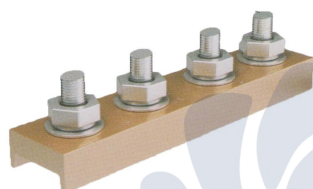
Type	Weight (kg)	Material	No.
W52HD-1	0.13	Plastic	520301
W52HD-2	0.14	Polyseter	520302

➤ **Joint Box**



Type	Weight (kg)	Material	No.
W52HJ	0.23	Plastic	520401
W52HJ	0.24	Polyseter	520402

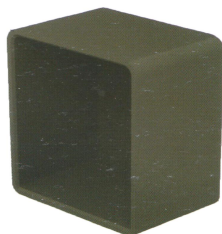
➤ **Joints**



Be used for feeding joint.

Type	Weight (kg)	Material	No.
W52HT-1	4.95	Copper	520501
W52HT-2	5.35	Copper	520502

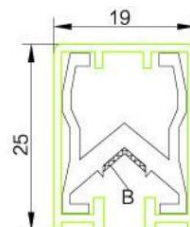
➤ **End Cap**



Type	Weight (kg)	Material	No.
W52EC	0.04	Plastic	520601

W19 Copper Conductor Bar (1600A--5000A)

➤ Conductor Bar



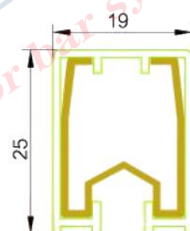
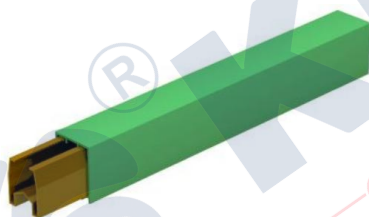
Aluminum conductor bar.

Standard Length : 4.5m, other lengths on request.

Support spacing: 1.5m. For production line, the support space is 0.5-0.8m

Curves min. R=0.8m

Type	Conductor Material	Cross section (mm ²)	Nominal current (A)	Leakage-distance mm	Resistance (Ω/km)	Weight (Kg/m)	No.
KW-HD-100/150	Aluminum	100	150	35 or 80	0.376	0.46	190150



Copper conductor bar.

Standard Length : 4.5m, other lengths on request.

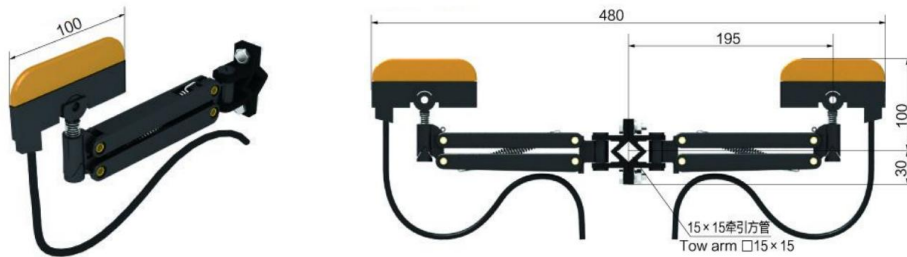
Standard insulated shell suitable for ambient temperature from -20°C to +70°C

High temperature insulated shell suitable for ambient temperature from -10°C to +115°C

Low temperature insulated shell suitable for ambient temperature from -40°C to +85°C

Type	Conductor Material	Cross section (mm ²)	Nominal current (A)	Leakage-distance mm	Resistance (Ω/km)	Weight (Kg/m)	No.
KW-HD-50/150	Copper	50	150	35 or 80	0.376	0.63	191150
KW-HD-65/200	Copper	65	200	35 or 80	0.289	0.75	190200
KW-HD-110/300	Copper	110	300	35 or 80	0.195	1.15	190300
KW-HD-130/500	Copper	130	400	35 or 80	0.156	1.33	190500

➤ **W19 Current Collector -JD100**



KW-JD-100

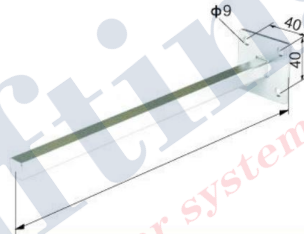
KW-JD*2-100

Type	Weight (kg)	Hardware	Nominal Current	No.
KW-JD-100	0.25	Plastic	100Amp	190201
KW-JD*2-100	0.49	Plastic	200Amp	190202

➤ **W19 Carbon Brush (W19TS-2) & Tow Arm**



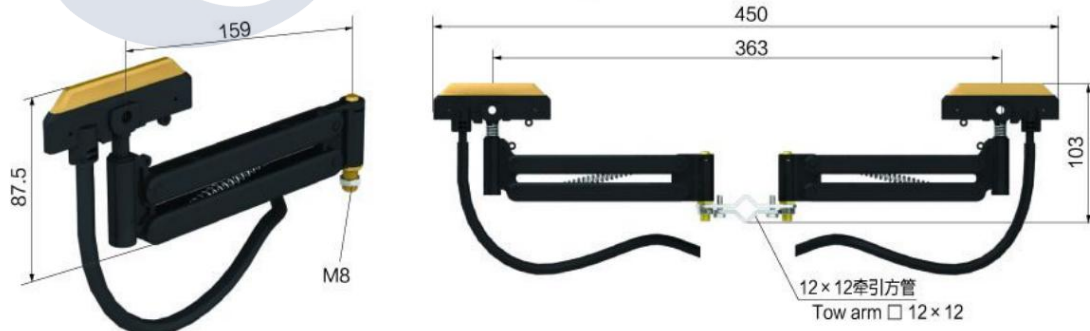
KW19TS-2



KWQS-350

Product	Type	Weight (kg)	Material	No.
Carbon Brush	KW19TS-2	0.10	Plastic&Carbon brush	190203
Tow Arm	KWQS-350	0.45	Steel	190204

➤ **W19 Current Collector - JDS100**



KW-JDS-100

KW-JDS*2-100

Type	Weight (kg)	Hardware	Nominal Current	No.
KW-JDS-100	0.17	Plastic	100Amp	190301
KW-JDS*2-100	0.34	Plastic	200Amp	190302

➤ W19 Carbon Brush (W19TS-1) & Tow Arm & Tow Bracket



KW19TS-1



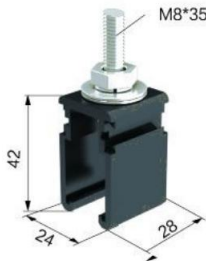
KW19TB-1



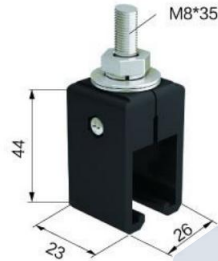
KW19BC-1

Product	Type	Weight (kg)	Material	No.
Carbon Brush	KW19TS-1	0.075	Plastic&Carbon brush	190303
Tow Bracket	KW19TB-1	0.055	Steel	190305
Tow Arm	KW19BC-1	0.25	Steel	190304

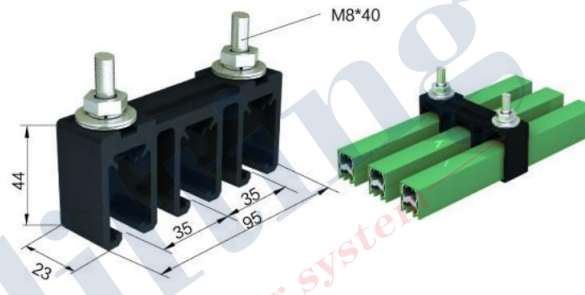
➤ W19 Hanger



KW19DJ-2



KW19DJ-1

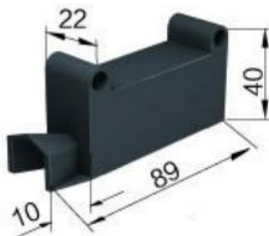


W19DJ-13

Product	Type	Weight (kg)	Material	No.
Single-pole hanger	KW19DJ-1	0.043	Plastic	190401
Single-pole hanger	KW19DJ-2	0.035	Plastic	190402
Single-pole hanger	KW19DJ-5*	0.043	Plastic	190403
Three-pole hanger	KW19DJ-13	0.088	Plastic	190404
Three-pole hanger	KW19DJ-35*	0.092	Polyseter	190405

* be used for high temperature

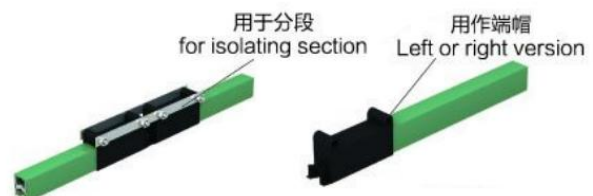
➤ W19 End Cap



KW19DM-1



KW19DM-2

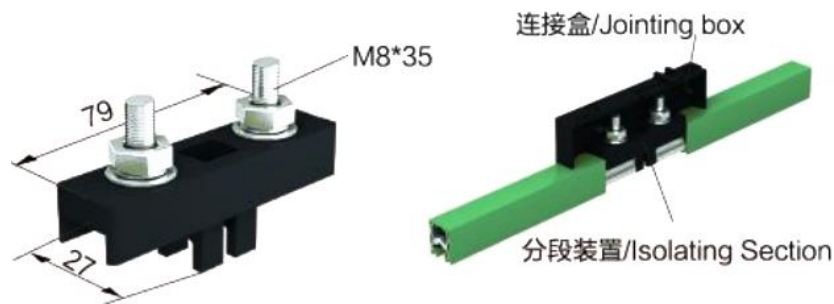


Installation

The end cap can be used for switch or isolation section

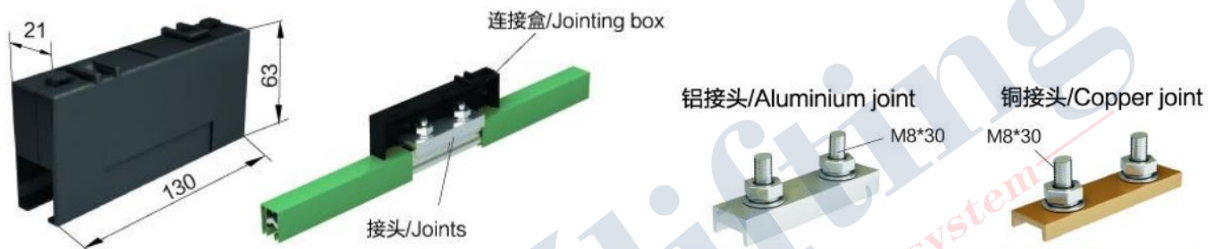
Product	Type	Weight (kg)	Material	No.
End Cap	KW19DM-1	0.020	Plastic	190701
End Cap	KW19DM-2	0.019	Plastic	190702

➤ W19 Isolating Section



Product	Type	Weight (kg)	Material	No.
Isolating Section	KW19FD	0.063	Plastic	190801

➤ W19 Jointing Box & Joints



Product	Type	Weight (kg)	Material	No.
Jointing Box	KW19LJ-1	0.078	Plastic	190501
Jointing Box	KW19LJ-5*	0.083	Polyseter	190502
Joints	KW19JT-150A	0.071	Aluminum	190601
Joints	KW19JT-200A	0.085	Copper	190602
Joints	KW19JT-300A	0.092	Copper	190603
Joints	KW19JT-500A	0.119	Copper	190604

* be used for high temperature

Calculation

Please offer this information if you need our products.

Company Name: _____ Contact: _____
Project: _____ Address: _____
E-mail: _____ Project: _____
Telephone: _____ Fax: _____
Date: _____

1. Type of crane/machine to be electrified: _____
2. Voltage: _____ Volts $\sim/\equiv$: _____ Phases: c/s: _____
3. Length of conductor system: _____
4. Number of conductors required: _____
power lines: _____ control lines: _____ neutral (ground): _____
5. Indoor: _____ Outdoor: _____
6. Special site conditions (humidity, dust, chemical influence etc.): _____
7. Temperature conditions: _____ °C min., _____ °C max.
8. Type of conductors preferably wanted: _____
9. Number and position of feeder points: _____
10. Mounting position envisaged: _____
(prints and sketches should be submitted whenever obtainable)
11. Number of cranes / machines fed from the one system: _____
12. Ampere load of each crane / machine: _____
13. Other pertinent data: _____

For curved tracks, breaks in system etc. please submit prints and sketches.

Motor (please mark run simultaneously and at the same time start the motor)	Crane 1						
	P/(KW)	Rated current			Starting current		
		A	$\cos\phi^N$	%ED	A	$\cos\phi^A$	Start Method
Main Hoisting							
Aux. Hoisting							
Main Traverse							
Aux. Traverse							
Main Travel							
Aux. Travel							
Slewing							
Luffing and any other Service							
The type of motor: K:Squirrel-cage motors; S:Slip-ring motors; F:Inverter motor							

Motor (please mark run simultaneously and at the same time start the motor)	Crane 2						
	P/(KW)	Rated current			Starting current		
		A	$\cos\phi^N$	%ED	A	$\cos\phi^A$	Start Method
Main Hoisting							
Aux. Hoisting							
Main Traverse							
Aux. Traverse							
Main Travel							
Aux. Travel							
Slewing							
Luffing and any other Service							
The type of motor: K:Squirrel-cage motors; S:Slip-ring motors; F:Inverter motor							

Contact

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For further information of KW Insulated Conductor Bar System, please contact us in the above ways.

We commit ourselves to constant improvement of our design and processing of the products.

We keep the right of perfecting the instruction book and the product design to achieve the goal.

It's important to select the suit Safe Conductor Bar for each application. Otherwise it will cause serious consequences , such as property damage or personal injury.