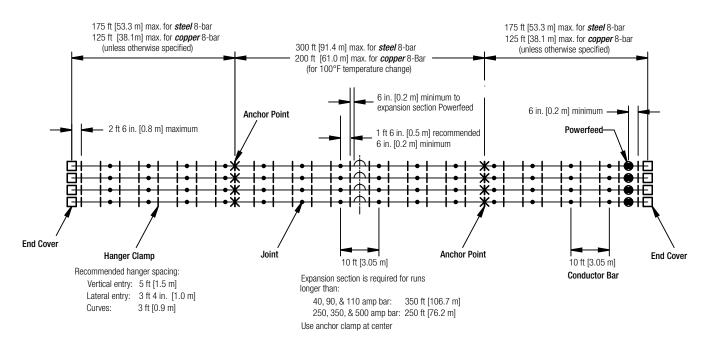
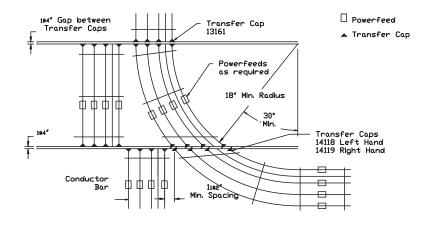
Conductor Bar Insul-8® 8-Bar | Side Contact | Cluster Bar Howell Saf-T-Bar®



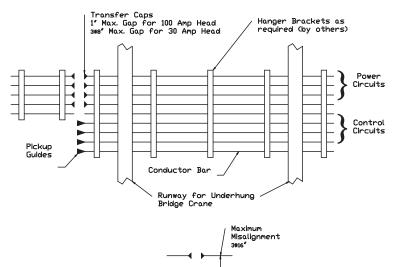
8-Bar Typical 4-Bar Layouts



2-WAY STUB SWITCH



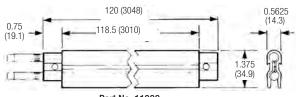
BRIDGE CRANE INTERLOCK



8-Bar Specifications

Conductor Bar Information

Please use the Specification Data Sheets on Pgs. 6-7 and the information in Appendices I through III at the back of this catalog to determine your conductor bar needs. Consult Conductix-Wampfler Sales if you have any questions about the suitability of this product to your application.



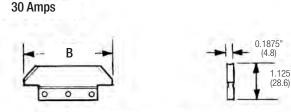
Roll formed of 1/16" (1.59 mm) material <u>except</u> laminates which are 1/32" (0.79 mm) copper, steel, or stainless steel, and the 90 A galvanized bar. The cross-section area is 188 mcm (95 mm²); except solid copper bar which is 313 mcm (158 mm²). The equivalent rectangle for all conductors is 1" x 1/4" (25.4 x 6.3 mm). Supports are required every 3 feet (0.91m) for curves, 3 feet 4 inches (1.01m) for lateral mount, and 5 feet (1.52m) standard.

Part No. 11000

	Ass	embled wi	ith Connect	or Pins and	Cover			Micro	-ohms per 1	foot *
			Part No.					initio	onno por i	001
Material	Lgth ft (m)	w/PVC Cover	w/Med Heat Cover	w/High Heat Cover	Expansion Coefficient in./in./ºF	Nominal Wt lb/ft (kg/m)	Max. Amps (cont duty)	Resist. R (DC)	Reac- tance X (60 Hz, 3-phase	Imp. Z (60 Hz)
Stainless Steel	10 (3.05)	14299	24304	24307	.000007	0.72 (0.0995)	40	2230	60	2231
Galvanized Steel	10 (3.05)	22135	22141	22147	.000007	0.46 (0.0636)	90	750	600	960
Galvanized Steel	10 (3.05)	11000	11019	11038	.000007	0.65 (0.0899)	110	354	600	702
Stainless Clad Copper Laminate	10 (3.05)	11004	11023	11042	.000009	0.65 (0.0899)	250	100	60	116
Copper Steel Laminate	10 (3.05)	11008	11027	11046	.000009	0.65 (0.0899)	250	100	60	116
Rolled Copper	10 (3.05)	11012	11031	11050	.000009	0.76 (0.1051)	350	60	60	84
Solid Copper	20 (6.10)	11016	11035	11054	.000009	1.16 (0.5262)	500	40	60	70

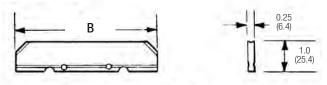
***** Example: 0.000060 ohms/ft. X values are calculated at 3 inch center-line spacing, adjusted for three conductors with multiplier 1:26 a nominal permeability m of 10-12 is used for the steel conductor calculations. For reference, X = m 52.9 log 10 3 x $\frac{1.26 + 34.5}{1250}$ Z = $\sqrt{R^2 1 X^3}$

Collector Shoe Information



Contoured Shoe: 18.0 (457) Minimum Radius

100 Amps



Contoured Shoe: 48.0 (1219) Minimum Radius

Standard collector shoe material is sintered copper graphite (CG).

Current F (Amp	-	"B" Lgth in. (mm)	Description	Part No.
30)	3.00 (73)	CG	13136
20)	3.00 (73)	Carbon	13137
30)	3.00 (73)	Cast Iron	13138
30)	3.00 (73)	Insuloy	19678
60)	3.00 (73)	CG	11154
30)	3.00 (73)	Carbon	11155
60)	3.00 (73)	Cast Iron	11156
10	C	4.75 (121)	CG	11157
50)	4.75 (121)	Carbon	11158
10	C	4.75 (121)	Cast Iron	11159
100)	4.75 (121)	Insuloy	19347

8-Bar Conductors

8-Bar conductor bars come with cover and connector pins installed. Bars are available in 40A, 90A, 110A, 250A, 350A, 500A capacities (@ 600 volts maximum). Expansion Sections are listed below. These are required to compensation for thermal expansion; every 350 feet (106.7 m) for 40A, 90A, and 100A systems or 250 feet (76.2 m) for 250A, 350A, and 500A systems. Power Feeds bring outside power to the conductor bar.

Factory installed covers are available in:

- Rigid PVC: -10° F to 160° F (- 23.3°C to 71.1°C)
- Medium Heat: - 25° F To 250° F (- 31.7°C to 121.1°C)
- High Heat: - 60° F To 400° F (-51.1°C to 204.2°C)

Stainless Steel, 40A



	Rigid PVC Cover		Med Heat Cover		High Heat Cover	
Item	Part No.	Wt Ib (kg)	Part No.	Wt Ib (kg)	Part No.	Wt Ib (kg)
Conductor Bar, 10 ft (3.05 m)	14299	7.0 (3.18)	24304	6.6 (2.29)	24307	7.5 (3.40)
Conductor Bar, 5 ft (1.52 m)	14823	3.5 (1.59)	24305	3.3 (1.50)	24308	3.8 (1.72)
Expansion Section, 10 ft (3.05 m)	24279	7.5 (3.40)	24306	7.0 (3.18)	24309	8.2 (3.72)
Power Feed	11091	0.4 (0.18)	11091	0.4 (0.18)	11122	0.4 (0.18)
End Cover	11088	0.1 (0.05)	11088	0.1 (0.05)	11633	0.1 (0.05)

Galvanized Steel, 90A



	Rigid PVC Cover		Med Heat Cover		High Heat Cover	
Item	Part No.	Wt Ib (kg)	Part No.	Wt Ib (kg)	Part No.	Wt Ib (kg)
Conductor Bar, 10 ft (3.05 m)	22135	4.4 (2.00)	22141	4.1 (1.86)	22147	4.9 (2.22)
Conductor Bar, 5 ft (1.52 m)	22136	2.2 (1.00)	22142	2.1 (0.95)	22148	2.5 (1.14)
Expansion Section, 10 ft (3.05 m)	22140	6.7 (3.31)	22146	6.3 (2.86)	22152	7.4 (3.36)
Power Feed	11091	0.4 (0.18)	11091	0.4 (0.18)	11122	0.4 (0.18)
End Cover	22070	0.1 (0.05)	22070	0.1 (0.05)	11633	0.1 (0.05)

Galvanized Steel,110A



	Rigid PVC Cover		Med Heat Cover		High Heat Cover	
Item	Part No.	Wt Ib (kg)	Part No.	Wt Ib (kg)	Part No.	Wt Ib (kg)
Conductor Bar, 10 ft (3.05 m)	11000	4.4 (2.00)	11019	4.1 (1.86)	11038	4.9 (2.22)
Conductor Bar, 5 ft (1.52 m)	11001	2.2 (1.00)	11020	2.1 (0.95)	11039	2.5 (1.13)
Expansion Section, 10 ft (3.05 m)	11057	6.7 (3.31)	11064	6.3 (2.86)	11070	7.4 (3.36)
Power Feed	11091	0.4 (0.18)	11091	0.4 (0.18)	11122	0.4 (0.18)
End Cover	11088	0.1 (0.05)	11088	0.1 (0.05)	11633	0.1 (0.05)

8-Bar Conductors

Cover Temperature Ratings: • Rigid PVC:

-10° F to 160° F (- 23.3°C to 71.1°C)

Medium Heat:

- 25° F To 250° F (- 31.7°C to 121.1°C)

• High Heat:

- 60° F To 400° F (-51.1°C to 204.2°C)

Stainless Clad Copper, 250A



ltem	Rigid PVC Cover		Med Heat Cover		High Heat Cover	
Item	Part No.	Wt lb (kg)	Part No.	Wt lb (kg)	Part No.	Wt lb (kg)
Conductor Bar, 10 ft (3.05 m)	11004	6.6 (2.99)	11023	6.2 (2.81)	11042	7.1 (3.22)
Conductor Bar, 5 ft (1.52 m)	11005	3.3 (1.47)	11024	3.1 (1.41)	11043	3.6 (1.63)
Expansion Section, 10 ft (3.05 m)	11059	8.5 (3.86)	11065	8.0 (3.63)	11071	9.2 (4.17)
Power Feed	11092	0.7 (0.32)	11093	0.7 (0.32)	11093	0.7 (0.32)
End Cover	11088	0.1 (0.05)	11088	0.1 (0.05)	11633	0.4 (0.18)

Copper Steel Laminate, 250A



Item	Rigid PVC Cover		Medium Heat cover		High Heat Cover	
nem	Part No.	Wt lb (kg)	Part No.	Wt lb (kg)	Part No.	Wt lb (kg)
Conductor Bar, 10 ft (3.05 m)	11008	6.2 (2.81)	11027	5.8 (2.63)	11046	6.7 (3.04)
Conductor Bar, 5 ft (1.52 m)	11009	3.1 (1.41)	11028	2.9 (1.32)	11047	3.4 (1.54)
Expansion Section, 10 ft (3.05 m)	11060	10.0 (4.54)	11066	9.4 (4.26)	11072	10.8 (4.90)
Power Feed	11092	0.7 (0.32)	11093	0.7 (0.32)	11093	0.7 (0.32)
End Cover	11088	0.1 (0.05)	11088	0.1 (0.05)	11633	0.4 (0.18)

Rolled Copper, 350A



Itom	Rigid PVC Cover		Medium Heat Cover		High Heat Cover	
Item	Part No.	Wt Ib (kg)	Part No.	Wt Ib (kg)	Part No.	Wt lb (kg)
Conductor Bar, 10 ft (3.05 m)	11012	7.0 (3.18)	11031	6.6 (2.99)	11050	7.5 (3.40)
Conductor Bar, 5 ft (1.52 m)	11013	3.5 (1.59)	11032	3.3 (1.50)	11051	3.8 (1.72)
Expansion Section, 10 ft (3.05 m)	11062	11.0 (4.99)	11068	11.0 (4.99)	11074	11.8 (5.35)
Power Feed	11092	0.7 (0.32)	11093	0.7 (0.32)	11093	0.7 (0.32)
End Cover	11088	0.1 (0.05)	11088	0.1 (0.05)	11633	0.4 (0.18)

Solid Copper, 500A



500 amp solid copper bar includes copper connector clamp rather than connector pins - See Pg. 15.

Item	Rigid PVC Cover		Medium Heat Cover		High Heat Cover	
Item	Part No.	Wt lb (kg)	Part No.	Wt lb (kg)	Part No.	Wt lb (kg)
Conductor Bar, 20 ft (6.10 m)	11016	23.6 (10.71)	11035	22.1 (10.02)	11054	24.6 (11.16)
Conductor Bar, 10 ft (3.05 m)	11017	11.8 (5.35)	11036	11.0 (4.99)	11055	12.3 (5.58)
Expansion Section, 10 ft (3.05 m)	11063	18.5 (3.39)	11069	17.3 (7.85)	11075	20.0 (9.07)
Power Feed	11094	2.6 (1.18)	11094	2.6 (1.18)	11094	2.6 (1.18)
End Cover	12171	0.2 (0.09)	11633	0.2 (0.09)	11633	0.4 (0.18)

8-Bar Replacement Covers, Connectors, & Joint Covers

Replacement 8-Bar Covers



Meets all requirements for plastic electrical insulation and may be used indoors or outdoors. Covers are included with the conductors listed on Pgs. 12-13.

Replacement length is 9 ft to 10.5 ft. (2.74m to 3.20m)

Material	Color	Temp-Rating	Part No.	Wt Ib (kg)
Rigid PVC	Orange	-10° F to 160° F	11114	1.2 (0.54)
Rigid PVC	Green	-10° F to 160° F	11114G	1.2 (0.54)
UV Stable PVC	Black	-10° F to 160° F	11114B	1.2 (0.54)
Medium Heat Lexan	Red	$-25^{\rm o}F$ to $250^{\rm o}F$	11115	0.8 (0.36)
High Heat Polyester	Dark Orange	-60° F to 400° F	11116	1.7 (0.77)

Replacement Connector Pins



Used to connect two bar sections together. For quick and easy installation. Supplied with conductors listed on Pgs. 12-13. Two required per connection.

Pin Used With:	Material	Part No.
Stainless steel 40A 8-Bar	Stainless steel	24196
Galvanized steel 90A 8-Bar	Zinc plated steel	21914
Galvanized steel 110A 8-Bar	Zinc plated Steel	11120
Rolled copper and laminated 8-Bar	Copper	11121
3 in. (76mm) Transition Pin: For joining 90 to 110A 8-Bar	Zinc plated steel	22885

Joint Covers



Insulated protective covers for conductor bar joining parts. Automatically included with the conductors on Pgs. 12-13 at a nominal charge.

Used with:	Part No.	Wt Ib (kg)
40A to 350A Rigid PVC Cover	13601	0.1 (0.05)
40A to 350A Medium Heat Cover	13600	0.1 (0.05)
40A to 350A High Heat Cover	11123	0.4 (0.18)

8-Bar Joint Parts & Tools

Copper Connector Clamp and Case



11117 (Shown with only half of the cover)

To connect 500A solid copper conductor together. For all cover types.

Description	Part No.	Wt Ib (kg)
Complete Assembly for Solid Copper 8-Bar	11117	1.5 (0.68)
Connector Case Only	11118	0.5 (0.23)
Connector Clamp Only	11119	1.0 (0.45)

Joint Keeper



To secure and stabilize all copper conductor bar. Automatically included with the appropriate system at a nominal charge.

Used With:	Part No.	Wt Ib (kg)
Rolled or laminated copper 8-Bar, 250A and 350A	11125	0.01 (0.004)

Joint Repair Kit



24632 (Shown with only half cover)

To repair joints of damaged conductor bar.

Used For:	Part No.	Wt lb (kg)
40A to 350A formed 8-Bar	24632	0.7 (0.32)
High Heat Systems	51666	0.7 (0.32)

Connector Pin Tool



Inserts into pre-punched holes of the conductor bar to pull conductor sections together securely. Supplied with the appropriate system at a nominal charge.

Used with:	Part No.	Wt Ib (kg)
40A to 350A 8-Bar Conductors	11134	2.3 (1.04)

8-Bar End Covers & Power Feeds

End Cover



For covering the exposed ends of 8-Bar Conductors.

Used With 8-Bar Conductors:	Max. Temp. °F (°C)	Part No.	Wt Ib (kg)
40A, 110A, and 350A	300 (149)	11088	0.03 (0.02)
90A	400 (204)	22070	0.03 (0.02)
110A, 250A, 350A	400 (204)	11633	0.03 (0.02)
500A Solid Copper	160 (71)	12171	0.40 (0.02)
500A Solid Copper w/ Stainless Steel Hardware	160 (71)	27102	0.40 (0.02)

Power Feeds

Provides attachment of incoming power to the conductor rails. Fully insulated, simple clamp design for easy installation anywhere on the system.

Current Cap.	Clamp Matl	Case Matl	Max. Temp ° F (°C)	Part No.	Wt Ib (kg)
90 or 110	Steel	Rigid PVC	160 (71)	11091	0.4 (0.18)
90 or 110	Steel	Polyester	400 (204)	11122	0.4(0.18)
250	Copper	Rigid PVC	160 (71)	11092	0.7 (0.32)
250	Copper	Polyester	400 (204)	11093	0.7 (0.32)
500	Copper	Polyester	400 (204)	11094	2.60 (1.19)
250	Copper Clamp w/Stainless Steel Hardware	Rigid PVC	160 (71)	27104	0.7 (0.32)
500	Copper Clamp w/Stainless Steel Hardware	Polyester	400 (204.2)	27106	2.60 (1.19)

Power Feed Parts/Accessories

11091

Description	Part No.	Wt Ib (kg)
Case & clip only. PVC 90/110, 250A	11131	0.2 (0.09)
Case & clip only. High heat. 90/110, 250A	11132	0.3 (0.14)
Case only. High heat 500A	11133	1.0 (0.45)
Power Feed Clamp only. For Galvanized Steel, 90/110A	11128	0.1 (0.04)
Power Feed Clamp only. For Copper, 250A	11129	0.4 (0.18)
Power Feed Clamp only. For Copper, 500A	11130	1.6 (0.73)

8-Bar Expansions & Isolation Sections

Expansion Section

Required every 300 feet (94.1 m) for steel conductors or every 200 feet (61.0 m) for copper conductors to compensate for thermal expansion. Power feeds and flexible jumpers are factory installed to meet electrical and mechanical requirements of your system.

Note: Part numbers are located in the Conductor tables - See Pgs. 12-13.



Isolation Section



Conductor isolation sections are used to electrically isolate control circuits, maintenance bays, etc. The kit includes 11127 Guide Assembly, PVC Cover, and Isolation Section for 40A to 350A (not including 90A). Consult our factory for proper selection.

Part No.	Wt Ib (kg)
21841	2.3 (1.04)

Isolation Section Parts



Components used for in-field modification.

Description	Part No.	Wt Ib (kg)
Molded plastic insulating piece; only for 21841	11427	0.3 (0.14)
Molded plastic 1" (25.4 mm) isolating pin. For 40-350A except for 90A; Two required per location.	11615	0.03 (0.01)
Molded plastic, 1" (25.4 mm) isolating pin. For 90A only. Two required per location.	11618	0.03 (0.01)
Galvanized Steel Guide Assembly. Provides rigid support at isolation areas.	11127	1.5 (0.68)

8-Bar Transfer Caps, Pickup Guides

Transfer Caps



Used in switches and interlocks to accomplish smooth collector transfer.

Item Description	Part No.	Wt lb (kg)
End Transfer cap for 90A bar.	22070	0.03 (0.01)
Left Transfer cap for 90A bar.	22395	0.03 (0.01)
Right Transfer cap for 90A bar.	22396	0.03 (0.01)
End Transfer cap for 40-350A bar	13161	0.03 (0.01)
Left-hand cap for 40-350A bar	14118	0.03 (0.01)
Right-hand cap for 40-350A bar	14119	0.03 (0.01)

Pick-Up Guides



The Pick-up Guide allows the collector to leave the conductor and re-track upon return. Requires use of Self-Centering J-Head Collectors, see Pgs. 24-25. Consult Factory for selection.

Used:	Part No.	Wt Ib (kg)
Indoors, for 3" bar spacing	13142	1.75 (0.79)
Indoors, for 4" bar spacing	11089	1.75 (0.79)
Outdoors, for 3" bar spacing	13143	2.00 (0.91)
Outdoors, for 4" bar spacing	11090	2.00 (0.91)

8-Bar Hanger and Anchor Clamps

Polycarbonate Snap-in Hanger Clamps



Steel Snap-in Hanger Clamp



Cross-Bolt Hanger Clamp



11076

Anchor Clamp



Hanger Clamps are designed to grip 8-Bar Conductors for stable support. Clamps are required every 5 foot (1.52m) standard. These Polycarbonate Snap-in Hanger Clamps are recommended for standard mount only; not recommended for curves or lateral mount.

Туре	Hardware	Part No.	Wt lb (kg)
Without Insulator	Zinc Plated	22800	0.3 (0.14)
Without Insulator	Stainless Steel	23370	0.3 (0.14)
With Insulator	Zinc Plated	24405	0.3 (0.14)
With Insulator	Stainless Steel	28122	0.3 (0.14)

The spring-steel Hanger Clamps are designed to grip 8-Bar Conductors for stable support.

Clamps are required every 5 foot (1.52m) standard. Steel Snapin Hanger Clamps are recommended for standard mounting; not recommended for curves or lateral mount.

Туре	Part No.	Wt lb (kg)
Without Insulator	21600	0.2 (0.09)
With Insulator	22000	0.3 (0.4)

Cross-Bolt Hanger Clamps are designed to lock to 8-Bar Conductors for stable support.

Hangers are required every 5' for vertical entry, 3' for curved systems and every 3' 4" for lateral entry. Cross-Bolt Hanger Clamps are recommended for standard mounting, lateral mounting, and curved systems.

Туре	Material	Part No.	Wt Ib (kg)
Without Insulator	Plated Steel	11076	0.2 (0.11)
Without Insulator	Stainless Steel	11078	0.3 (0.14)
With Insulator	Plated Steel	11082	0.4 (0.18)
With Insulator	Stainless Steel	11084	0.4 (0.18)

For standard mount, not recommended for curves or lateral mount.

Туре	Material	Part No.	Wt Ib (kg)
Without Insulator	Plated Steel	21833	0.3 (0.14)
Without Insulator	Stainless Steel	28123	0.3 (0.14)
With Insulator	Plated Steel	21982	0.5 (0.23)
With Insulator	Stainless Steel	28124	0.5 (0.23)

19

8-Bar Standard Brackets - Without Hangers

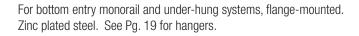
Web Bracket



For top running, web-mounted, bottom entry systems. Zinc plated steel. See Pg. 19 for hangers.

Distance to First Hole:	Part No.	Wt Ib (kg)
6.0 (152)	22014	2.4 (1.09)
9.0 (229); with three more holes - At 12.0 (305), 15 (381), and 18 (457)	29876	4.5 (2.04)

Flange Mount Brackets





Туре	Part No.	Wt lb (kg)
For 2 hangers each side	27762	2.5 (1.13)
For 4 hangers on one side	27767	2.5 (1.13)

8-Bar Standard Brackets - With Hangers

Brackets w/Pre-Assembled Hanger Clamps

The following brackets come with hanger clamps on 3" centers, brackets are zinc plated steel. Hanger Clamp styles are described on Pg. 19.



Web Bracket # 34189 shown

With Polycarbonate Snap-In Hanger Clamps

	Without Insulators		With In	sulators
Description	Part No.	Wt lb (kg)	Part No.	Wt Ib (kg)
Web type 5"	28829	2.0 (0.907)	51004	2.4 (1.09)
Web type 9"	34189	3.1 (1.402)	50314	3.5 (1.59)
Flange type, 2 hangers each side	51864	2.6 (1.179)	51865	3.1 (1.41)
Flange type, 4 hangers on one side	51870	2.6 (1.179)	51871	3.1 (1.41)

Steel Snap-In Hanger Clamps

	Without Insulators		With Insulators	
Description	Part No.	Wt lb (kg)	Part No.	Wt Ib (kg)
Web type 6"	30281	1.6 (0.726)	51005	2.0 (0.91)
Web type 9"	50312	2.7 (1.225)	50315	3.1 (1.41)
Flange type, 2 hangers each side	51866	2.1 (0.953)	51867	2.5 (1.11)
Flange type, 4 hangers on one side	51872	2.1 (0.953)	51873	2.5 (1.11)



Flange Bracket # 51864 shown

Cross-Bolt Hanger Clamps

	Without Insulators		With Ir	nsulators
Description	Part No.	Wt Ib (kg)	Part No.	Wt Ib (kg)
Web type 6"	31762	2.0 (0.907)	29534	2.3 (1.04)
Web type 9"	50312	3.1 (1.406)	50316	3.5 (1.59)
Flange type, 2 hangers each side	51868	2.5 (1.114)	51869	2.9(1.32)
Flange type, 4 hangers on one side	51874	2.5 (1.114)	51875	2.9 (1.32)

8-Bar Universal Brackets

You can order pre-assembled brackets with your choice of hangers on Pg. 21. Or, if these hanger locations don't work for the application, the "Universal Brackets" shown below should address most special applications. Holes are drilled on 1.0 inch (25.4 mm) centers.

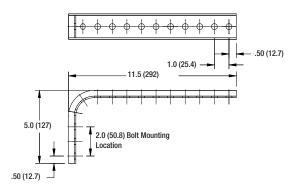
Туре	Length	Part No.	Wt Ib (kg)
Web Bracket, Short	11.5 (29)	31409	1.0 (0.45)
Web Bracket, Long	15.5 (39)	31407	1.3 (0.59)
Flange Bracket	18.0 (46)	31408	1.2 (0.54)
Flange Bracket with Beam Clips	18.0 (46)	31418	1.6 (0.73)
Flange Bracket with Beam Clips	24.0 (61)	31911	2.0 (0.91)

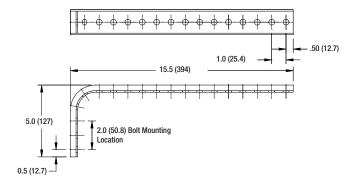
Web Bracket - Short (31409)

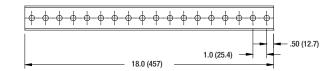


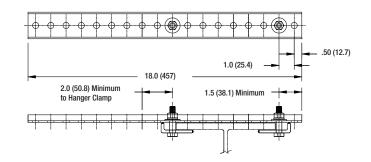
Web Bracket - Long (31407)

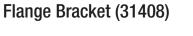














Flange Bracket with Clips (31418)



8-Bar Universal Brackets with Pre-assembled Hangers

Ordering Instructions:

- 1) Choose the desired bracket style by part number See bracket styles below.
- 2) Also referring to the drawings below, choose the hole number locations at which hangers are to be assembled. Here is the recommended hanger spacing:

Recommended Minimum Conductor Bar Spacing

	Indoor, inch (mm)	Outdoor, inch (mm)
8 Bar (bottom entry)	2.0 (50.8)	3.0 (76.2)
Side Contact (Lateral Mount)	3.0 (76.2)	Not for outside use

For less than 2.0" (50.8 mm) spacing, consult factory

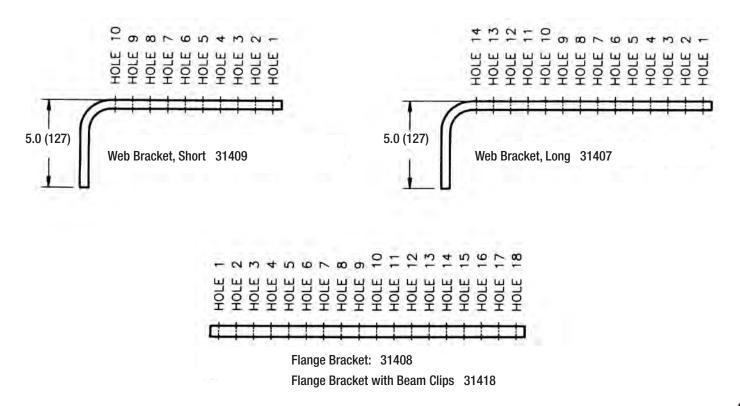
3) Select desired hanger type by part number - From Pg. 19.

Example Order lines:

Qty	Part No. (Hole #'s) where hangers are to be mounted	Description
10	31407 (1, 3, 5, 7)	Web Bracket, Long (from below)
40	22800	Polycarbonate Snap Hanger (from Pg. 19)

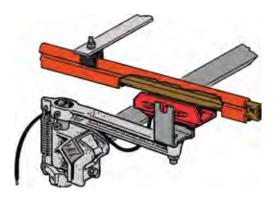
Note: When order is received, a unique part number will be created for the requested bracket/hangers combination.

Bracket Hole Position Numbers: 1.0" (25.4 mm) Spacing Between Holes



8-Bar Collector Assemblies

Sliding contact Collector Assemblies are offered in either single or double contact shoe types providing current capacities from 30A to 200A. Operational wear is confined to easily replaceable contact shoes. The shoes are supported by insulated holders on articulating, spring-loaded collector arms.



30A J-Head, C-Base Type



For systems up to 600 volts with straight runs and curves to 18" minimum radius. For lateral mount, consult factory. The "Self-Centering" versions are used with Pick-up Guides - See Pg. 18.

Туре	Part No.	Wt lb (kg)
Standard Mount	13128	2.5 (1.13)
Tandem Standard Mount	13082	4.7 (2.13)
Self-Centering Standard Mount	13130	2.6 (1.180)
Self-Centering Tandem Standard Mount	13084	4.9 (2.22)

Replacement Shoe30 amp replacement shoe131360.4 (0.18)

30A J-Head, H-Base Type



For systems up to 600 volts with straight runs and curves to 18" minimum radius. For lateral mount, consult factory. The "Self-Centering" versions are used with Pick-up Guides - See Pg. 18.

Description	Part No.	Wt Ib (kg)
Standard Mount	13131	1.4 (0.64)
Self-Centering Standard Mount	13132	1.7 (0.77)

Replaceme	nt Shoe	
30 amp replacement shoe	13136	0.4 (0.18)

8-Bar Collector Assemblies

100A J-Head, C-Base Type



For straight system runs of 600V or less. For lateral mount, consult factory. The "Self-Centering" versions are used with Pick-up Guides - See Pg. 18.

Description	Part No.	Wt lb (kg)
Standard Mount	13613	3.1 (1.41)
Standard tandem Mount	13626	5.8 (6.23)
Self-Centering Standard Mount	13625	3.2 (1.45)
Self-Centering Tandem Standard Mount	13628	6.0 (0.72)

Replacement Shoe				
100 amp replacement shoe	11157	0.9 (0.41)		

100A J-Head, H-Base Type



For straight system runs of 600V or less, and curves to a minimum of 48" radius. For lateral mount, consult factory. The "Self-Centering" versions are used with Pick-up Guides - See Pg. 18.

Description	Part No.	Wt Ib (kg)
Standard Mount	13629	1.4 (0.65)
Self-Centering Standard Mount	13630	1.7 (0.77)

Replacement Shoe

100 amp replacement shoe	11157	0.9 (0.41)
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8-Bar Curves & Slip Rings

Curved 8-Bar

Factory curved conductors. Refer to page 27 to specify your curve requirements. Consult Factory for your curved 8-Bar Requirements. Maximum length: 10 feet (3.05 meters).

Cover Type	Conductor Bar	Current Cap.	Part No.	Min. Radius in. (mm)
Rigid PVC	Galvanized Steel	110A	11003	18.0 (457)
Rigid PVC	Stainless Clad Copper Laminate	250A	11007	18.0 (457)
Rigid PVC	Copper Steel Laminate	250A	11011	18.0 (457)
Rigid PVC	Rolled Copper	350A	11015	18.0 (457)
Rigid PVC	Solid Copper	500A	11018	18.0 (457)
Lexan (Medium Heat)	Galvanized Steel	110A	11022	57.0 (1447)
Lexan (Medium Heat)	Stainless Clad Copper Laminate	250A	11026	57.0 (1447)
Lexan (Medium Heat)	Copper Steel Laminate	250A	11030	57.0 (1447)
Lexan (Medium Heat)	Rolled Copper	350A	11034	57.0 (1447)
Lexan (Medium Heat)	Solid Copper	500A	11037	57.0 (1447)
Polyester (High Heat)	Galvanized Steel	110A	11041	57.0 (1447)
Polyester (High Heat)	Stainless Clad Copper Laminate	250A	11045	57.0 (1447)
Polyester (High Heat)	Copper Steel Laminate	250A	11049	57.0 (1447)
Polyester (High Heat)	Rolled Copper	350A	11053	57.0 (1447)
Polyester (High Heat)	Solid Copper	500A	11056	57.0 (1447)

Slip Rings

Curved segments for factory manufactured ring. Consult Factory for your curved 8-Bar Requirements.

Conductor Bar (Current Rating)	Ring Radius Range in. (mm)	Cover Material	Pieces	Part No.
Galvanized Steel (110A)	18.0 to 35.0 (457 to 889)	Rigid PVC	2-180°	23626
Stainless Clad Copper Laminate (250A)	18.0 to 35.0 (457 to 889)	Rigid PVC	2-180°	23627
Copper Steel Laminate (250A)	18.0 to 35.0 (457 to 889)	Rigid PVC	2-180°	23628
Rolled Copper (350A)	18.0 to 35.0 (457 to 889)	Rigid PVC	2-180°	23629
Galvanized Steel (110A)	35.1 to 54.0 (892 to 1371)	Rigid PVC	3-120°	23630
Stainless Clad Copper Laminate (250A)	35.1 to 54.0 (892 to 1371)	Rigid PVC	3-120°	23631
Copper Steel Laminate (250A)	35.1 to 54.0 (892 to 1371)	Rigid PVC	3-120°	23632
Rolled Copper (350A)	35.1 to 54.0 (892 to 1371)	Rigid PVC	3-120°	23633
Solid Copper (500A)	35.1 to 54.0 (892 to 1371)	Rigid PVC	3-120°	24292
Galvanized Steel (110A)	54.1 to 72.0 (1374 to 1828)	Rigid PVC	4-90 ⁰	23634
Stainless Clad Copper Laminate (250A)	54.1 to 72.0 (1374 to 1828)	Rigid PVC	4-900	23635
Copper Steel Laminate (250A)	54.1 to 72.0 (1374 to 1828)	Rigid PVC	4-90 ⁰	23636
Rolled Copper (350A)	54.1 to 72.0 (1374 to 1828)	Rigid PVC	4-90 ⁰	23637
Solid Copper (500A)	54.1 to 72.0 (1374 to 1828)	Rigid PVC	4-90 ⁰	24293
Galvanized Steel (110A)	57.0 to 72.0 (1447 to 1828)	Lexan (Med Heat)	4-90 ⁰	23638
Stainless Clad Copper Laminate (250A)	57.0 to 72.0 (1447 to 1828)	Lexan (Med Heat)	4-90 ⁰	23639
Copper Steel Laminate (250A)	57.0 to 72.0 (1447 to 1828)	Lexan (Med Heat)	4-90 ⁰	23640
Rolled Copper (350A)	57.0 to 72.0 (1447 to 1828)	Lexan (Med Heat)	4-90 ⁰	23641
Solid Copper (500A)	57.0 to 72.0 (1447 to 1828)	Lexan (Med Heat)	4-90 ⁰	24294

8-Bar Curves & Slip Rings Specification Data

This worksheet is designed to help you choose the correct curved section for your application. Consult factory when calculating your requirements.

Customer:		
Project No.:	Item No.:	Date:
1. Bar type, Rating (Amps/Volts):		
2. Environment / Ambient Temp:		
3. Fill in		
Angle of curve:	\wedge	
Left tangent 6" (152mm) standard:	LEFT TANGENT	RIGHT TANGENT
Right tangent 6" (152mm) standard:	$\langle \langle \rangle$	ANGLE OF CURVE
Radius to contact surface: (Consult Pg. 26 for minimum radii.)		RADIUS RADIUS
4. Select style of bar:		
O Outside Contact	O Inside Contact	O Bottom Contact
5. For systems with parallel curves, sketch la	yout below and indicate the radius,	angle and tangent for each.

8-Bar Collector Dimensions

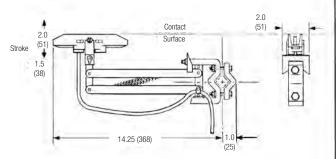
C Base Collectors

Dimensions common to all C-Base Collectors are not repeated.

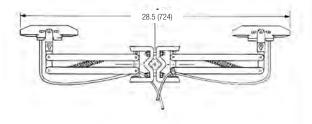
Туре	30 Amp	60 Amp Tandem	100 Amp	200 Amp Tandem
Standard Mount	13128	13082	13613	13626
Self-Centering	13130	13084	13625	13628

Standard Mount, Single - Part No. 13128 Shown Movemen 2,50 (64) Stroke 1.75 (44) 4.0 (102) Contact Surface 1.5 (38) 3.5 (89) 6.0 (152)alaman. 1.0 (25) Sq. Mounting Bar 11.0 (279) (By Others) 1.0 13.25 (336)

Self-Centering - Part No. 13625 Shown



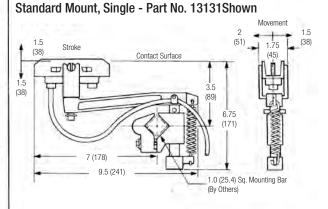
Standard Mount, Tandem - Part No. 13626



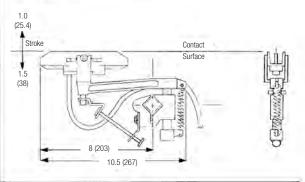
H Base Collector

Dimensions common to all H-Base Collectors are not repeated.

Туре	30 Amp	100 Amp
Standard Mount	13131	13629
Self-Centering	13132	13630



Standard Mount, Single - Part No. 13630 Shown



Collector Mounting

Standard Mount (Vertical Entry)

13131 Shown

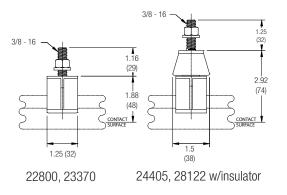
Shoe Pressure

30 amp: 3-5 lb 100 amp 6-9 lb

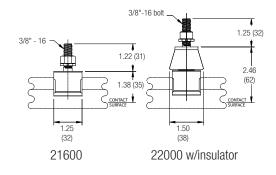
8-Bar Hanger and Anchor Dimensions

Note: Plastic or steel snap-in hangers are not recommended for lateral mounting or curves.

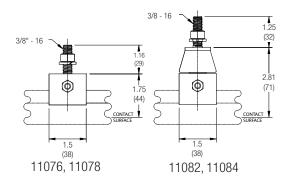
Plastic Snap-in Hanger Clamps, 250° F



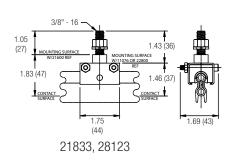
Spring Steel Snap-in Hanger Clamps, 400° F

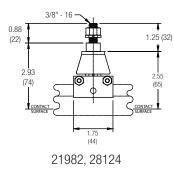


Cross-Bolt Hanger Clamps

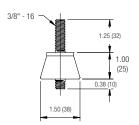


Anchor Clamp, 400° F





Insulator, 400° F



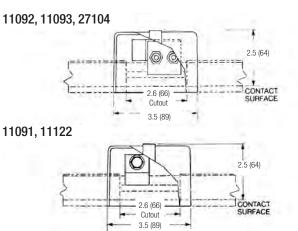
Transfer Cap, 300° F

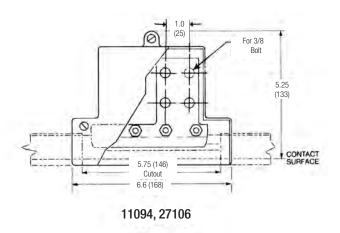
~		Center	Left	Right
1	40, 110, 250, 350 amp	13161	14118	14119
1.63	90 amp only	22070	22395	22396

11087 (plated inserts); 16424 (stainless inserts)

8-Bar Component Dimensions

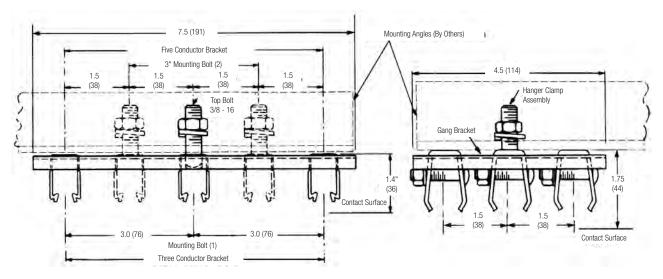
Powerfeeds





Part No.	Current Cap. (Amps)	Temp. Rating °F (°C)	Description
11091	90/110	160 (71.1)	Steel clamp type. Complete assembly of clamp and PVC case for steel systems only. Single bolt hole $1/4^{\prime\prime}$ for $3/0$
11122	90/110	400 (204.4)	Steel clamp type. Complete assembly of clamp and high-heat case for steel systems only.
11092 / 27104	250	160 (71.1)	Copper clamp type. Complete assembly of clamp and PVC case for systems with feed wires from #8 AWG to 1/0.
11093	250	400 (204.4)	Copper clamp type. Complete assembly of clamp and high heat case for systems with feed wires from #8 AWG to 1/0.
11094 / 27106	500	400 (204.4)	Copper clamp type with stub. Complete assembly of clamp with NEMA standard 4-hole stub and case. Feed wires to 500 MCM.

Gang Hanger Clamp Bracket

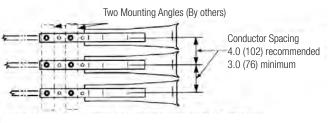


Snap-in Hanger 22646

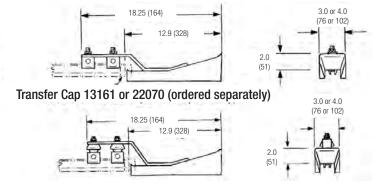
Cross-Bolt Hanger 22649

8-Bar Component Dimensions

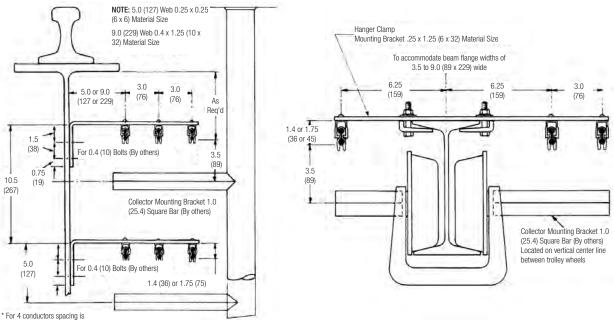
Pick-up Guides



13142 For 'J' head collectors, indoors, 3.0 (76) spacing 11089 For 'J' head collectors, indoors, 4.0 (102) spacing



Crane Bridges and Runways



6.0(152), 3.0 (76), 3.0 (76), 3.0 (76)