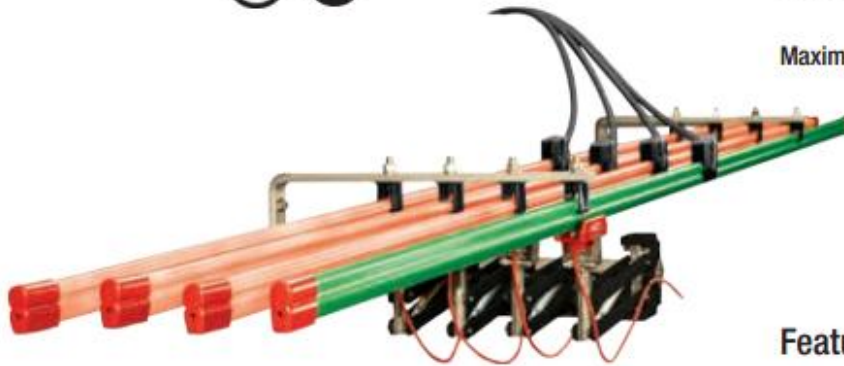


Insul 8® 8 Bar Design Features

Conductix-Wampfler "Insul 8® 8 Bar" was invented by Insul 8 Corporation over 60 years ago. This is the *original* "figure 8" conductor bar system! This innovative product was the first safe, insulated electrification solution for cranes, monorails, hoists, conveyors, and many other applications. Thousands of miles of 8 Bar are in use all around the world. There are many "copy cat" systems around. Don't settle for imitations; insist on the original 8 Bar system!

UL and CSA Listed



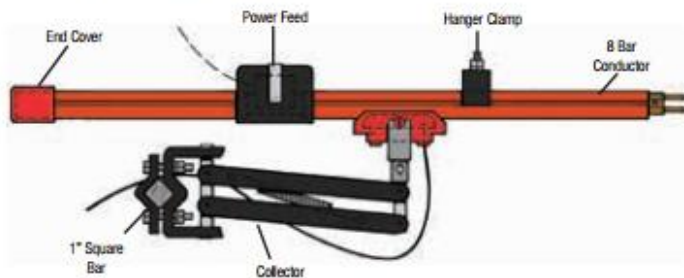
Insul 8® 8 Bar is Ideal for:

- Small/Medium sized cranes
- Hoists
- Conveyors
- Tightly curved systems
- Monorails
- Other mobile power applications

Current range: 40A, 90A, 110A, 250A, 350A, 500A @ 600 volts max.

Maximum Speed: 900 ft/min (274 M/min)

Basic 8 Bar Components



- | | |
|-----------------------|---|
| Power Feed | Conducts the power source to the conductor bar |
| Collector | Transfers power from the bar to the moving machine. Connects to a 1" mounting staff |
| Hanger Clamp | Suspends the conductor bar from hanger bracket |
| End Cover | Caps off the end of the conductor bar |
| Hanger Bracket | Attaches to crane beam or other structure to support multiple hangers |
| Anchor Clamp | Connects the bar to the structure and directs movement of the conductors during thermal expansion and contraction |

Features

- Designed and built in the USA under stringent ISO 9001:2008 standard
- In stock availability for quick shipment
- A large number of special options and adaptations developed over 60 years of usage to handle numerous industrial situations.
- The ability to be curved into a tighter radius than most other systems.
- Knurled joint pins for secure joints. Won't pull apart under normal conditions when properly installed.
- Backed by the best after-sale services in the industry.

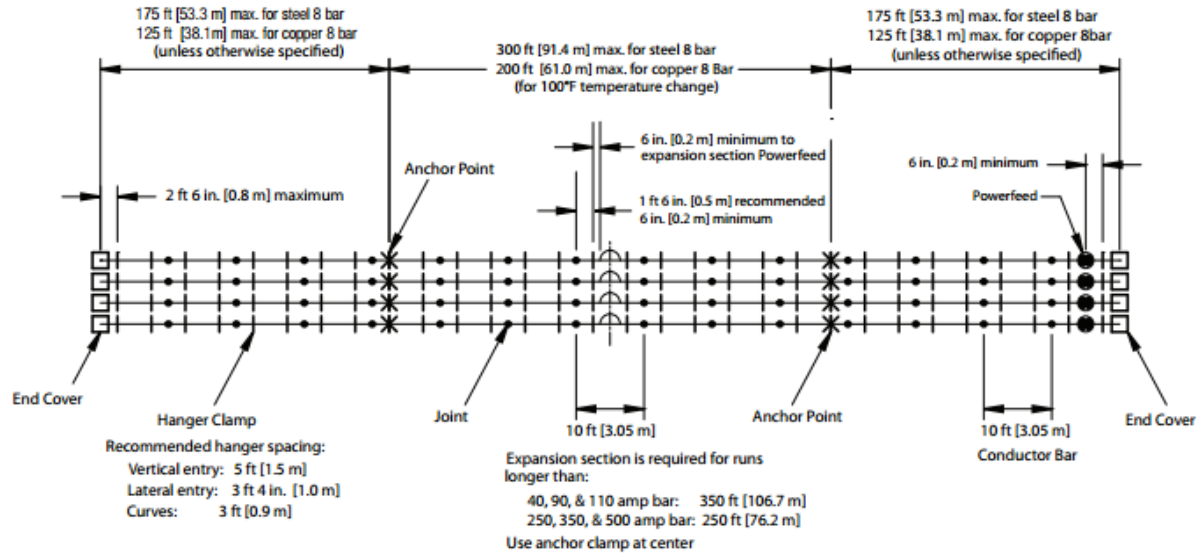
Installs Quickly and Easily

- Minimum number of basic parts
- Quick "pin-style" splice joints
- Bar snaps into mating hanger

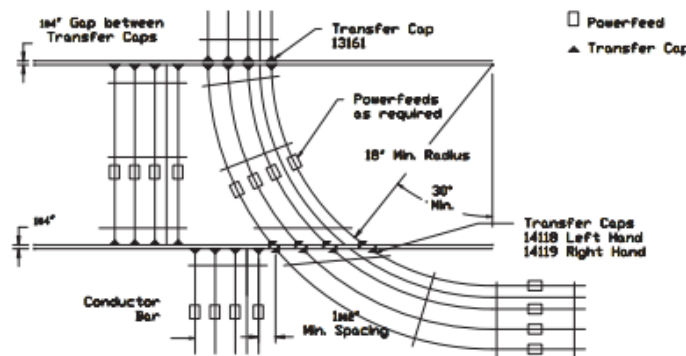
Many Options

- Stainless steel hardware
- Green bonding (ground) conductor covers
- Black "UV stable" outdoor covers
- Curved systems with low heat cover; can be curved to 18" minimum radius with the bar profile vertical (i.e. the "easy" way) or 45" the "hard way" (low heat cover).

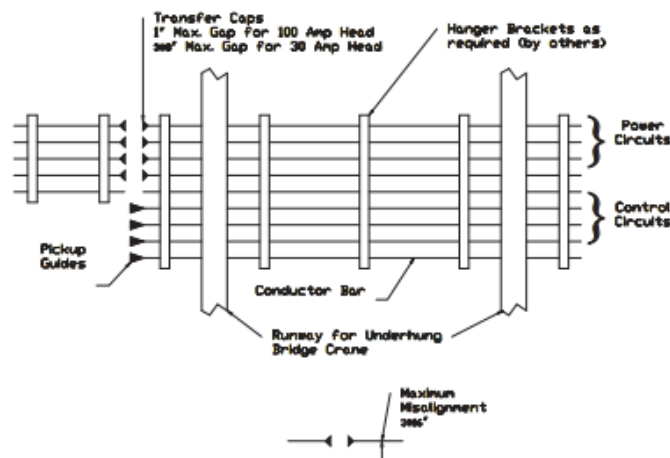
Typical 4-Pole 8 Bar Layout



2-WAY STUB SWITCH



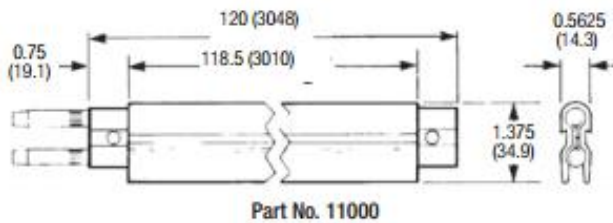
BRIDGE CRANE INTERLOCK



8 Bar Specifications

Conductor Bar Information

Please use the Specification Data Sheets on pages 6-7 and the information in Appendices I through III at the back of this catalog to determine your conductor bar needs. Contact 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 except 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 (0.91 M) for curves, 3 feet 4 inches (1.01 M) for lateral mount, and 5 feet (1.52 M) standard.

Assembled with Connector Pins and Cover							Micro-ohms per foot *			
Part No.							Max. Amps (cont. duty)	Resist. R (DC)	Reactance X (60 Hz, 3-Phase)	Impedance Z (60 Hz)
Material	Lgth ft (m)	w/PVC Cover	w/Med Heat Cover	w/High Heat Cover	Expansion Coefficient in./in./°F	Nominal Wt lb/ft (kg/M)				
Stainless Steel	10 (3.05)	14299	24304	24307	.000007	0.72 (0.0995)	40	2310	67	2311
Galvanized Steel	10 (3.05)	22135	22141	22147	.000007	0.46 (0.0636)	90	771	73	774
Galvanized Steel	10 (3.05)	11000	11019	11038	.000007	0.65 (0.0899)	110	500	67	505
Stainless Clad Copper Laminate	10 (3.05)	11004	11023	11042	.000009	0.65 (0.0899)	250	110	73	132
Copper Steel Laminate	10 (3.05)	11008	11027	11046	.000009	0.65 (0.0899)	250	110	77	127
Rollled Copper	10 (3.05)	11012	11031	11050	.000009	0.76 (0.1051)	350	55	66	86
Solid Copper	20 (6.10)	11016	11035	11054	.000009	1.16 (0.5262)	500	32	60	68

* 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 μ of 10-12 is used for the steel conductor calculations. For reference, $X = m 52.9 \log 10^3 \times \frac{1.26 + 34.5}{1250}$ $Z = \sqrt{R^2 + X^2}$