## Wampfler SAF-T-BAR

Insulated Electrification Systems



65-200 Amperes

### For cranes, conveyors, hoists, monorails, automated storage and retriever systems and other electrification applications.

The advanced Saf-T-Bar system reflects the basic engineering concept of an integral insulated conductor which provides years of safe, economical, trouble-free service. It is designed for compact, low cost installation and minimum maintenance.

Series T conductors are fabricated of galvanized steel rated at 65 amperes and electrolytic copper rated at 200 amperes. Insulating covers are rigid PVC extrusions rated at 160°F operating temperature and Lexan extrusions rated at 260°F. Both materials are self-extinguishing. Furnished in 10' lengths, complete with insulating cover and joint fittings. Multiple hanger supports should be used only in clean, dry indoor locations.

"T" Bar is not recommended for dirty applications.

# TE 50-1 5

#### SERIES T FEATURES:

TWIN CONTACT CONDUCTOR.

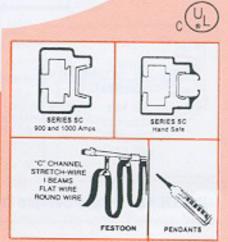
Two internal contact groupes track the

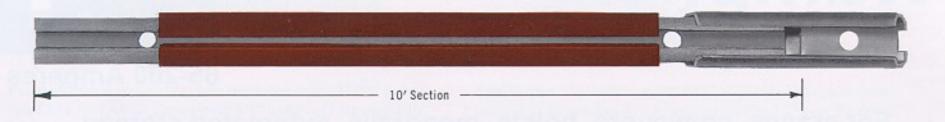
Two internal contact grooves track the collector. Conductor configuration provides for excellent ventilation with high amperage capacity for its weight.

- CONTAINED COLLECTOR. Twin shoes of collector, sprung back to back into contact grooves within conductor, contain collector in correct contact alignment of conductor. Alignment of collector is not dependent on other equipment.
- COMPACT DIMENSIONS for efficient use of minimal space. One square inch per conductor.
- MODULAR DESIGN of this system facilitates use of multiple conductors easily mounted in various combinations with multiple collector assemblies. (See page 2.)
- SKIN-TIGHT INSULATION runs cooler; will not deform under clamp pressure.
- RAPID INSTALLATION. Slide-on or snap-on joint clips and multi-bar, one unit mountings are features designed for quick, easy erection.
- 7. NEW, HAND SAFE DESIGN.

Conductor Catalog No.	Material	Resistance Factor Ohms/Ft. AC-Z DC-R	Weight Per Ft.	Amperage Capacity 30°C	мсм	Joint Kit
TA65	Steel	.0018 .0009	.30	65	107	TJ65
TA200	Copper	.00015 .00011	.33	200	107	TJ200

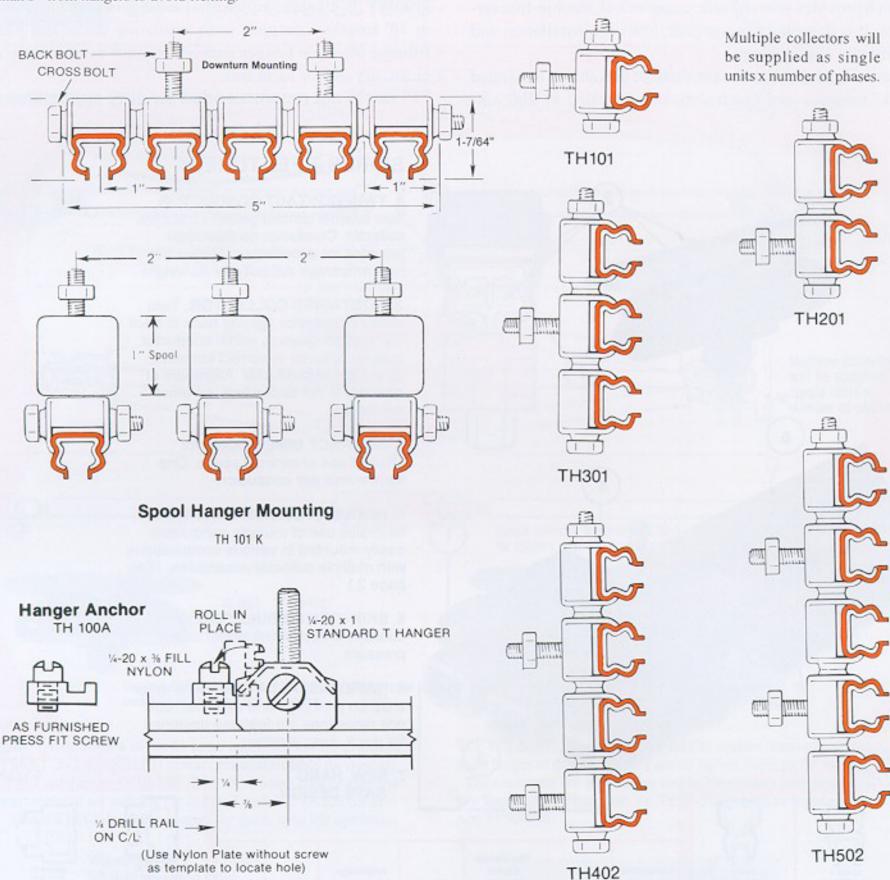
**◆ OTHER PRODUCTS** ▶





#### Hanger Clamps

Hanger Clamps are stamped cold rolled steel, nylon coated. May be furnished in multiples on 1" centers. Can be mounted using cross bolt or back bolt. Bolts are 1/4" and require a 5/16" mounting hole. Hangers are required every 5' of conductor. Joints should not be located more than 3" from hangers to avoid flexing.



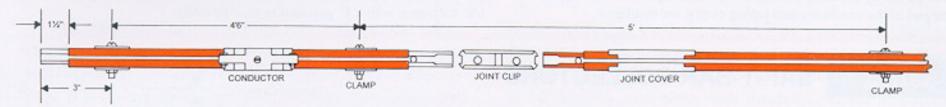
#### JOINING CONDUCTOR SECTIONS

The joint splice assembly connects and aligns standard 10' conductor lengths. The joint clip is furnished in place on one end of the conductor. End of adjacent conductor slides into joint clip and is pulled up tight with joint tool.

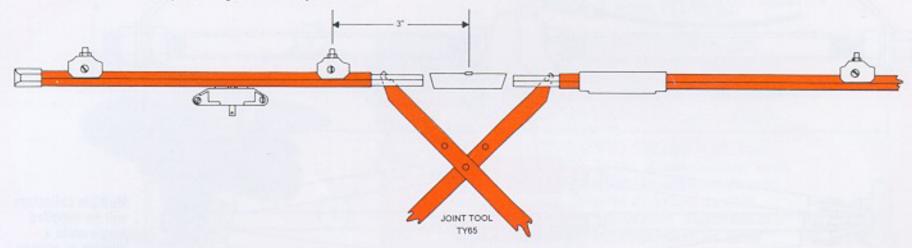
A 4" joint cover slides over the exposed joint area to complete the insulation. The joint cover locks in place by means of indents and is formed of the same material as the insulating conductor cover.



#### Joining Sections is Quick as ABC . . .



- A Slide Hanger Clamps on Bar. Secure Clamps in mounting holes on Brackets. Be sure Bar slides smoothly inside each Clamp (until joining operation is completed). Maintain 3" spacing at ends of Bars.
- B Slide Joint Cover over Bar.
- C Insert Joint Tool (TY-65 recommended) into holes at ends of Bars. Draw Bars together until they butt. Slide Cover over joint. Tighten Clamps on Bar.

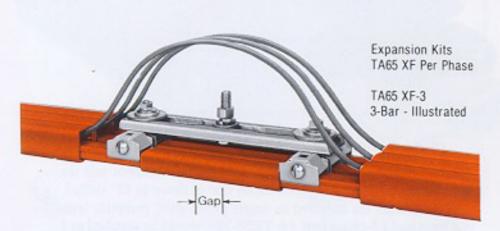


Note: Single conductor is shown here for purpose of simple illustration. Multiple conductor installations follow same step-by-step procedure concurrently. Joints may be secured from either front or back of bars.

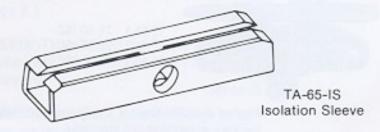


#### Conductor Drop Section — TA65DS x 10'

An assembly of two 5' conductor sections with a relief style joint which allows removal of collectors (single unit) from closed loop systems.

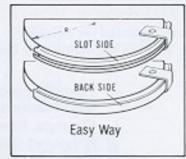


Expansion Gaps — Expansion gaps may be required every 150 feet for steel conductors, and every 100 feet for copper conductors, this length expanding 1" in 100°F temperature change. Set up gap with jumper as shown, e.g.: 0°F 1" gap, 50°F ½" gap, 100°F 0" gap. Two extra power-feeds and a jumper bridge the gap electrically. Hanger clamps held in the grooved Gap Guide Bracket align the two conductors. Extended joint cover and insulating cover complete the installation. The support bolt on the guide frame must go to a conductor mounting bracket. (For low amperage applications, if there are no runway expansion gaps to match, expansion gaps may be omitted. If in doubt, consult the factory.)



Isolation Points — A rigid plastic sleeve, providing ½" oversurface gap electrically, for electrical segmentation of conductor bars. A self-supporting sleeve. TA65-IS.

Bending and Cutting — Saf-T-Bar may be bent against the back, or the open face, of the conductor (the easy way). Minimum radius 18". Bending against the side of the conductor (the hard way) requires factory bending to order. Minimum radius 24". Conductor may be cut with a hacksaw and filed smooth. Drill



a ¼" hole, 1½" from end to receive the joint tool. 12" radii may be formed if 30-amp collectors are used. Factory bends are recommended.



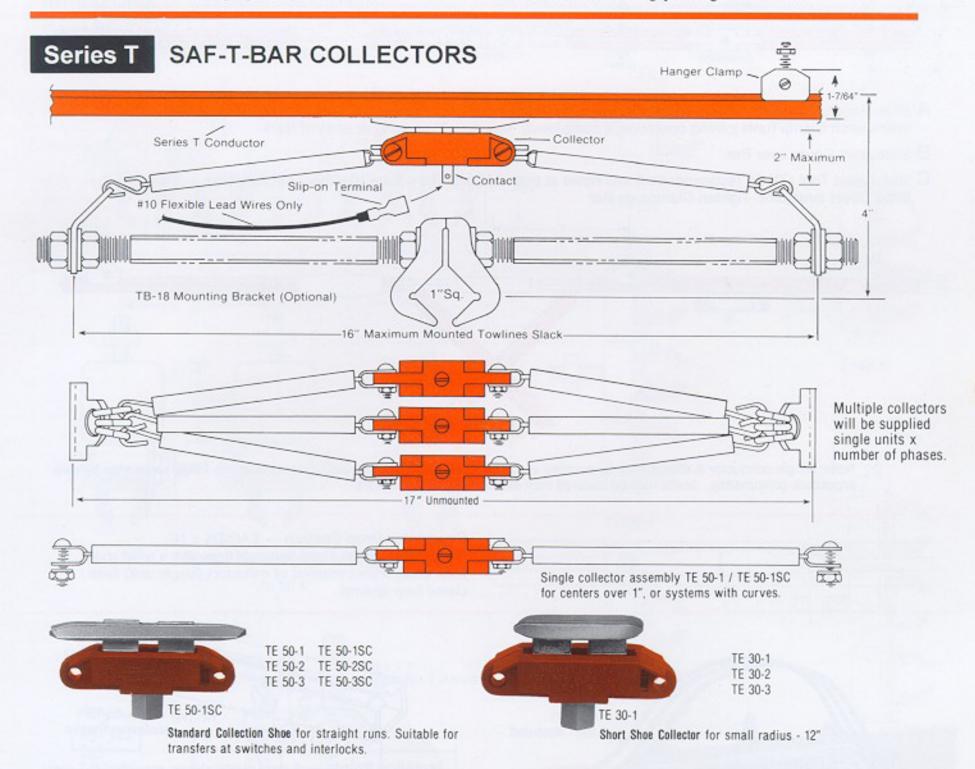
Power Feed Cover TF 100



End Cover TN 100C

Power Feed. A terminal lug with insulating cover, TF100, is provided as a feed which clamps onto 3/4" length of bare conductor and which will accept wires up to #6 flex. Rated at 100 amperes it is used in pairs for higher ampere requirements. The conductor may also be fed by securing a standard terminal lug to the 1/4" hole in the end of the conductor and taping over it for insulation.

End Cover. The end cover, TN100C, required to complete the insulation of the conductor, is a sleeve extending 1/2" over the end of the bar. As an alternative, the conductor may be cut back so that the regular insulating cover extends 1/2" beyond the end of the conductor. This end cover may also be used as a transfer end cap having a ± 1/8" tolerance with a 1" gap setting on interlocks.



Series T Collectors in the 50 amps configuration are available as TE50-1 /2 /3 using BECU contact material suitable for use only on TA65 conductor. TE50-1SC /2SC /3SC using copper-graphite contact material are suitable for use on TA65 and TA200 conductor. This is a self-lubricating contact for quiet, long life operation.

The TE30-1 /2 /3 collector uses BECU contact material and the short length of the shoe allows use on curves down to 12" radius.

The collectors are supplied as single phase units complete with tow lines and a 3-phase unit. i.e. TE50-3SC would be supplied as 3 pcs. TE50-1SC.

Wampfler, Inc.

8091 Production Drive Florence, Kentucky 41042-3096

Phone: +1 859 814 2100 Toll Free (USA): 800 326 2899

Fax: +1 859 814 2110 wampfler.usa@wampfler.com www.wampfler.com

