

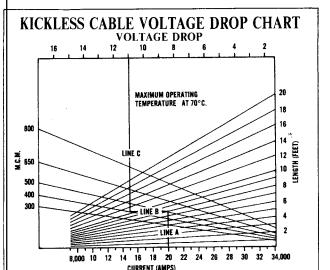
# USE OF VOLTAGE DROP CHART FOR KICKLESS CABLES

To calculate the voltage drop across both legs of a dual Conductor Kickless Cable, first determine the known factors.

# **EXAMPLE:**

Amperes per weld	20,000
Cable Length	
Circular Mil	

**STEP # 1:** Follow the vertical line "A" from 20,000 ampere point on the lower horizontal scale until it intersects the 8 ft. cable length curve, indicated by the vertical right hand scale.



STEP # 2: At the point of intersection, follow the horizontal line "B" to the left until it intersects the 400 M.C.M. cable curve indicated by the vertical left hand scale.

**STEP # 3:** Follow the vertical line "C" from this point until it intersects the voltage drop scale at the top of the chart, which in this case indicates 10.9 volt drop.

Always locate the known factors on the chart in the following sequence.

- 1. Current
- 3. Cable Circular Mil
- 2. Cable Length

4. Voltage Drop

# ATR COOLED JUMPER SELECTION CHART 5000 4500 4500 4500 5000 5000 THE ABOVE CURVES WERE 1500 RECORDED WITH EACH TERMINAL CONNECTED TO A WATER COOLED BUS WITH A RESULTING TEMPERATURE RISE OF 100°F. 6 8 10 12 14 16 18 20 22 24 LENGTH IN INCHES

# **How to Order Tipaloy Cables**

### TYPE "K" "KICKLESS" CABLES:

The length is measured from the bolt hole centers at each end of the cable. The following information should be provided:

TYPE	MCM SIZE	LENGTH	TERMINALS 1ST END 2ND ENI	
K	300MCM	72''	F75	FA

## TYPE "D" DRY JUMPERS:

The length is measured from the bolt hole centers at each end of the cable on straight or 45 deg. terminals. It is measured from the extreme ends at 90 deg. terminals. On terminals with two holes, measure from the outer holes. The following information should be provided:

TYPE	MCM SIZE	LENGTH	TERMINAL
D	300MCM	72''	DFF

# **TYPE "W" WATER COOLED CABLES:**

The length is measured from the bolt hole centers of each end of the cable on straight or offset terminals. It is measured from the extreme ends of 90 deg. or threaded terminals. On terminals with two holes, measure from the centers of the outer holes. The following information should be provided:

ТУРЕ	MCM SIZE		TERMINAL 1ST END 2ND ENI	
w	300MCM	72''	В6	В9

Refer to Page 51 to order these shunts. Supply a sketch of the same in its normal position and state the amount of movement in each direction, It is also a good policy to supply Tipaloy with either inside or outside lamination to assure proper hole spacing as these are all custom made conductors.