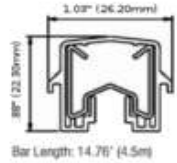




## ACI Hoist & Crane Conductor Bar Specification



### TECHNICAL DATA

CONDUCTOR BAR COVER	STANDARD	
Material	PVC	
Dielectric Strength	A80KV/cm	A203.2KV/in
Surface resistivity	1011Ω	
Volume resistivity	>1015Ω /cm	>2578.1Ω /in.
Maximum operating temperature	80°C	176°F
Minimum operating temperature	-30°C	-22°F
Flame-test	Self-Extinguishing	
Oxygen index	54%	
Specific density	1.5 g/cm <sup>2</sup>	

CONDUCTOR BAR	GALVANISED STEEL		COPPER			ALUMINIUM/ STAINLESS STEEL	
	100A	125A	160A	250A	400A	200A	315A
Normal Current	100A	125A	160A	250A	400A	200A	315A
Cross sectional area							
Maximum system voltage (AC)(contact ACI Hoist & Crane for other voltages) (DC)(contact ACI Hoist	600V		600V			600V	
Resistance R (for DC) at 95°F(35°C) (Ω/m)	0.002867	0.001933	0.000342	0.000274	0.000184	0.000301	0.000261
Impedance Z (for AC) at 95°F(35°C)(Ω/m)	0.002891	0.001968	0.000364	0.000300	0.000221	0.000325	0.000288
Maximum allowable ambient temperature	95°F (35°C)	95°F (35°C)	95°F (35°C)	95°F (35°C)	95°F (35°C)	95°F (35°C)	95°F (35°C)
Bar Length (ft/mm)	(14.76/4500)	(14.76/4500)	(14.76/4500)	(14.76/4500)	(14.76/4500)	(14.76/4500)	(14.76/4500)
Support pitch standard (in/mm)	(44.29/1125)	(44.29/1125)	(44.29/1125)	(44.29/1125)	(44.29/1125)	(44.29/1125)	(44.29/1125)
Minium pitch centers standard (in/mm)	(1.69/43)	(1.69/43)	(1.69/43)	(1.69/43)	(1.69/43)	(1.69/43)	(1.69/43)
lateral (in/mm)	(2.36/60)	(2.36/60)	(2.36/60)	(2.36/60)	(2.36/60)	(2.36/60)	(2.36/60)
Expansionn sections: not required runs less than (ft/m)	(492/150)	(492/150)	(492/150)	(492/150)	(492/150)	(492/150)	(492/150)
minimum bending radius (horizontal only) (ft/m)	(4.92/1.5)	(4.92/1.5)	(4.92/1.5)	(4.92/1.5)	(4.92/1.5)	(4.92/1.5)	(4.92/1.5)

An accurate choice of conductors can be made when all the following information is known:

- The type of current single or three phase AC; continuous (DC)
- The maximum current power and duty cycle
- The allowable volt drop for the machines being supplied
- The ambient temperature
- Environment (dusty, coastal, humid, acidic etc.)