



DSL Conductor Systems

Designed and manufactured in South Africa

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PRODUCTS

Slide Support Clips (Hangers)

Poly-Propylene construction for a quick "Snap-in" operation supplied with 8mm stud, nut and washer or nyloc nut.
Required at 2 or 1.5 metre intervals



Fixed Support Clip (Anchors)

Poly-Propylene construction as sliding support clip but with Nylon top-bolt for anchoring conductor



Conductor Rail

Galvanised Steel (100A,130A,150A), Aluminium Stainless Steel (220A,250A), Aluminium and Copper (300A) or Copper (400A) covered in rigid UV stabilised PVC shroud in yellow or green, supplied in 4 metre lengths.



Joint Assembles - Galvanised Steel

Joint Assembles – Aluminium Joint Assembles – Copper

Made of galvanised steel or aluminium, simply slide on end of rail & lock in to place with four M6 screwsets and washers



Joint Covers

u-PVC extrusion simply snapped over joint assembly and secure with Nylon M6 scew. Comes in both yellow & green.



Power Feed

Power feed can be positioned on any joint along the system.



Expansion Section

Expansion section assembles are pre-assembled on to a 1metre rail ready for installation. Only require for lengths exceeding 150 metres.



Towing Arm (Collector Mounting Bracket)

Made from 25mm Square tube electroplated



50Amp Collector



100AMP Tandem Collector



L-Shaped bolt on Brackets

Weld on Brackets



End Cap

The end cap is simply slid on to end of rail and cable tied to insulate end of conductor rail.



GENERAL SPECIFICATIONS

SAFEBAR	100A STEEL	150A STEEL	160A COPPER	250A COPPER	400A COPPER
Nominal Current	100 amp	150 amp	160 amp	250 amp	400 amp
Intermittent Current	140 amp	175 amp	190 amp	300 amp	450 amp
Cross Sectional Area	63mm	102mm	63mm	63mm	102mm
Resistance in Ohms	0.00187	0.00114	0.000342	0.000250	0.000169
Coefficient of Expansion	0.0000122	0.0000122	0.0000162	0.0000162	0.0000162
Max Temp for 100% Duty	250	250	250	250	250
Insulating Shroud	PVC	PVC	PVC	PVC	PVC
Bar Length	4.5m	5m	4.5m	4.5m	5m
Hanger Support Pitch	1.5m	2m	1.5m	1.5m	2m
Pitch btw Hanger	60mm	60mm	60mm	60mm	60mm
Pitch btw Cluster Hanger	40mm	N/A	40mm	40mm	N/A
Expansion Section Above	130m	130m	80m	80m	80m

When selecting Liftco Safebar first determine the electrical load requirements of the machinery. Secondly calculate the potential volt drop along the length of the system:

Volt Drop = Length x Resistance x Current x 1.73

When determining volt drop remember to take into account start up current demands which are higher than normal running currents. Consult relevant motor manufacturer's specifications. Volt drop must not exceed 5% along the length of the system.

To reduce volt drop the following options can be considered:

- Install a centre feed or multiple feeds. A centre feed effectively halves the length of the system in terms of volt drop requirements.
- Use a larger capacity Safebar or a Copper Safebar with low resistance and high conductivity properties Note that the ambient temperature, the heating of the conductor bar itself as a result of the duty cycle as well as the type of environment can also influence the choice of Safebar required.

Please consult the factory if in doubt as to the correct Safebar to select.