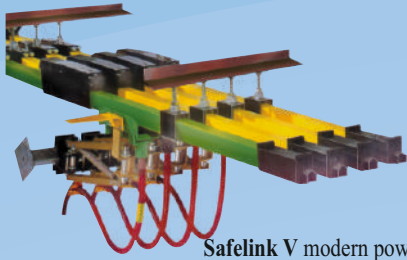


DEUS RRC PVT. LTD.



Leading manufacturer of SNT Radio Remote Control Systems & other Crane Control Equipments.

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- 120, Acharya Ind. Estate, Tejpal Compound, Andheri-kurla Road, Sakinaka, Mumbai-400 072
Tel. : +91 7506507534 / 9821092946 E-mail: mail@deusrrc.com



Heavy Conductor Bar System

Safelink V insulated conductor bar system are used for power transmission for mobile Machinery.

Current capacity from 500 Amps to 2000Amps rated at 100% duty cycle and 35°C ambient temperature with nominal voltage up to 600V Conductor Bar provide a safe and economical power for track guided mobile machinery.

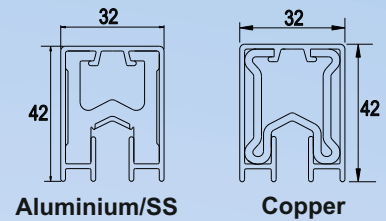
Safelink V modern power supply system using single pole insulated conductor bars. The applications of this system are travelling cranes, container traffic and special application used for high energy consumption under difficult conditions. The conductor material is copper (500 Amps., 800 Amps., 1000 Amps., 1250 Amps) aluminium (500 Amps., 800 Amps., 1000 Amps., 1250 Amps) The aluminium conductor bar is provided proven and patented stainless steel contact surface. For high temperature conditions; a high temperature insulation cover up to 140° C is available. The phase conductor are yellow colour and earth insulation cover is green.

FEATURES

- Insulated Conductor Bar are touch proof.
- Quick & easy Installation.
- 500, 800, 1000 & 1250 in same standard.
- 500, 800, 1000, 1250 Amps Aluminium / Stainless Steel.
- 500, 800, 1000, 1250 Amps. Copper.
- No expansion joint upto 200 meter long system.
- Horizontal Installation.
- Spring loaded Current Collectors 250A / 500A.

MAIN APPLICATION

- Crane and Hoist
- Monorail
- Automated storage System.
- Moving equipment
- Elevators
- Amusement Park Rides
- Transfer Car
- People mover



Aluminium/SS

Copper

COMPONENTS / PARTS



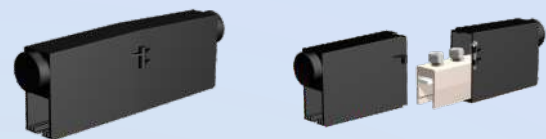
250A Current Collector



Power Feed Cover For Copper / Aluminium (assembly)



AL Conductor Joint / Joint Cover (for Aluminium & Copper DSL)



Hanger Clamp



Collector bracket



Web bracket



End Cover For Copper / Aluminium (assembly)



TECHNICAL DATA SAFELINE - V - HEAVY BAR SYSTEM

| Conductor Bar System | Aluminium / Stainless Steel | | | | Copper | | | |
|---|---|-------|--------|--------|--------|-------|--------|--------|
| Type | VA500 | VA800 | VA1000 | VA1250 | VC500 | VC800 | VC1000 | VC1250 |
| Nominal Current (A) AT 100% Duty and 35°C | 500 | 800 | 1000 | 1250 | 500 | 800 | 1000 | 1250 |
| DC resistance (Ω/KM) At +35° | 0.098 | 0.074 | 0.051 | 0.028 | 0.104 | 0.057 | 0.044 | 0.033 |
| Imedence (Ω/KM)At 80mm bar spacing And +35°C | 0.157 | 0.145 | 0.137 | 0.099 | 0.161 | 0.136 | 0.130 | 0.127 |
| Voltage grade [V] | 1000 | | | | | | | |
| Support Spacing [mm] | 2250 | | | | | | | |
| Bar Length [mm] | 4500 | | | | | | | |
| Minimum pitch centre [mm] | 80 | | | | | | | |
| Traveling speed [m/ m] | 600 max | | | | | | | |
| Permissible ambient temperature | -30°C + 55°C (Standard Insulation) -30°C+140 °C (High Temperature Insulation) | | | | | | | |

High temperature insulation on request up to 140° C

THE INTERMITTENT RATING FOR CONDUCTORS

| | | % RATING | | | |
|--------------------------------|------|----------|------|-----|--|
| ALLOWABLE CURRENT (AMPS) | 100% | 80% | 60% | 40% | |
| | 500 | 550 | 640 | 775 | |
| 800 | 880 | 1020 | 1240 | | |
| 1000 | 1100 | 1400 | 1550 | | |
| 1250 | 1375 | 1750 | 1980 | | |

CURRENT CAPACITY FACTOR FOR DIFFERENT AMBIENT TEMPERATURE

| Ambient Temperature | | 35°C | 40°C | 45°C | 50°C | 55°C |
|------------------------|-----------------|------|------|------|------|------|
| Standard Insulation | Galvanized Iron | 1.0 | 0.90 | 0.80 | 0.70 | 0.60 |
| | Aluminum rail | 1.0 | 0.92 | 0.81 | 0.76 | 0.68 |
| | Copper rail | 1.0 | 0.93 | 0.87 | 0.82 | 0.78 |

| Ambient Temperature | | 110°C | 115°C | 120°C | 125°C | 130°C | 135°C | 140°C |
|---------------------|-----------------|-------|-------|-------|-------|-------|-------|-------|
| High Temperature | Galvanized Iron | 1.0 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 |
| | Aluminum rail | 1.0 | 0.92 | 0.81 | 0.76 | 0.68 | 0.63 | 0.59 |
| | Copper rail | 1.0 | 0.93 | 0.87 | 0.82 | 0.78 | 0.74 | 0.72 |

Effects of various Power feed Positions on Volt Drop Calculations.

Selection of feed-in points. The feed-in point for every application must be selected because the length L between power feed and conductor rail end is used for calculating the voltage drop. Following feed-in points can normally be used.

| Powered Position | Schematic Diagram Collector symbol Indicates Positions of Maximum Volt Drop | Effective Length to be used in Volt Drop Calculations | Voltage Drop |
|--|--|--|--|
| Endfeed | | $LVD = L$ | The allowable volt drop determines, the maximum allowable resistance of conductor. The value of volt drop within a conductor system is effected by effective length of system and current drawn. Volt Drop Calculation For A. C. Machine 3 phase U Volt drop = length (D) x Impedance (Z) x Current (I) x 3√ $U \% = \frac{\Delta U}{U_n} \times 100 [\%]$ |
| Center-feed | | $LVD = \frac{L}{2}$ | |
| Two end feed | | $LVD = \frac{L}{4}$ | |
| Two feeds both in from end | | $LVD = \frac{L}{6}$ | |
| Three feeds at in from ends and centre | | $LVD = \frac{L}{10}$ | |

