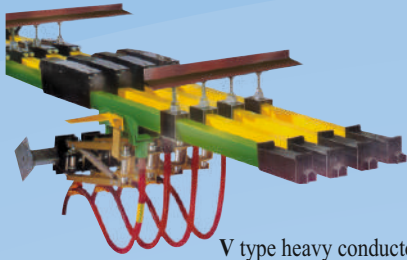


DEUS RRC PVT. LTD.



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

- Plot No.4319, G.I.D.C, Vatva, Phase IV, Ahmedabad - 382445, Tel: 079-40399885, E-mail:sales@deusrrc.com
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Tel. : +91 7506507534 / 9821092946 E-mail: mail@deusrrc.com



Heavy Conductor Bar System

V Type 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.

V type heavy conductor bar system is 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.

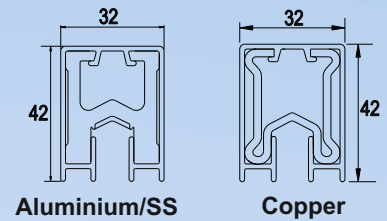
The conductor material is copper / aluminium (500 Amps, 800 Amps., 1000 Amps, 1250 Amps). The aluminium conductor bar is provided provided proven and patented stainless steel contact surface. For high temperature conditions; a high temperature insulation cover up to 140° C is available. The phase conductor 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



COMPONENTS / PARTS



250A Current Collector



Hanger Clamp

Collector bracket

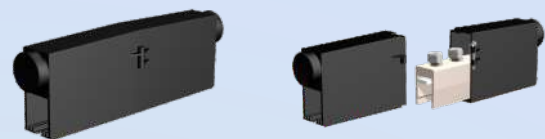
Web bracket



Power Feed Cover For Copper / Aluminium (assembly)



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



End Cover For Copper / Aluminium (assembly)



TECHNICAL DATA 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		$LVD = \frac{L}{10}$	

