

# Dallas - Dallas Area Rapid Transit

## Technical Data



**Formation:**  
8 - Axle Articulating

**Track Gauge:**  
4ft – 8.5in / 1435mm

**Electric System:**  
750 Vdc  
Overhead Trolley  
System

The “Super” LRV (SLRV) is borne by the installation of a custom designed low-floor center section added in the middle of the service proven high-floor DART LRVs. This center section not only increases passenger capacity, but improves throughput by reducing dwell times with greatly improved level-boarding ADA access.



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Dallas - Dallas Area Rapid Transit	
<b>General</b>	
Manufacturer	KINKISHARYO International
Quantity	115/48
Yr. Delivered (Last)	2010/2013
Body Type	8-axle double articulating
Empty Weight	140000 lbs (63500 kg)
Seats	98 passengers
Minimum Radius	82 ft (25 m)
Voltage (VDC)	750
Maximum Speed (Balance)	70 mph (112 kph)
Full Acceleration	2.3 mphps (1.03 m/s <sup>2</sup> )
Deceleration, Service	3.0 mphps (1.34 m/s <sup>2</sup> )
High/Low Platform	High/Low
ADA Accessibility	Level Boarding
Maximum Cars to Train Line	4
Noise Level at 40 mph & 50 Ft	76 dBA
<b>Carbody</b>	
Manufacturer	Kinki Sharyo Co. Ltd.
Material	LAHT
Buff Load (Lbs)	220,000
Length (Over Coupler Faces)	123.5 ft (37643 mm)
Width	8.83 ft (2691 mm)
Height	12.5 ft (3810 mm)
Ceiling Height	6.75 ft (2057 mm)
Floor Height (TOR)	Low floor 16 in (406 mm) High floor 39.5 in (1003 mm)
Floor Construction/Covering	Plymetal/Neoprene Rubber
Passed ASTM E119	Yes
Articulation-Manufacturer	SIG
Seat Manufacturer	Artcraft / Kustom
Seat Type	SS Fabric-covered / SS fabric covered Wool-covered ILD Foam
Window Type	Laminated Safety Glass
<b>Couplers</b>	
Manufacturer	WABCO
Location of Electric Heads	Side
Isolation Method	Drum Switch
Coupler Height (TOR to CL)	20 in (508 mm)
<b>Electrical Equipment</b>	
LVPS Manufacturer	Stone Safety/ Transtechnik / Faiveley
LVPS Output (kW)	10
APS Manufacturer	Transtechnik / Faiveley inverter
APS Output (KVA)	80
Battery Manufacturer	SAFT
Battery Capacity (A.h.)	240
APS	Transtechnik (C-Unit)
<b>Lighting</b>	
Manufacturer	Luminator
Ballast Type	AC/DC
Fixtures Contain Air Diffusers	Yes
Railroad Headlight	Yes

<b>Destination Signs</b>	
Manufacturer	Translite
Type	Curtain
Number per Car	6
Location	Front/Side
<b>Propulsion</b>	
Manufacturer	AEG (95 GTO) / Toyo Denki (68 IGBT)
Motors/Powered Truck	2
Method of Cooling for Motors	Forced Air
Control Type	AC
Control Package/Car	2
Control State-of-the-Art	Integrated Circuits GTO
Method of Cooling for Control	Forced air
Pantograph Manufacturer	Transtech
Motor Rating (kW)	140 / 135
Type Gearing	WR, Double reduction parallel helical gear unit
Gear Ratio	6.058 AEG / 6.42 Toyo Denki
<b>Friction Brakes</b>	
Manufacturer	WABCO
Type	Air-applied
Separate Control	Yes
Track Brake Manufacturer	Knorr
Number of Axles With Brakes	8
<b>Doors</b>	
Type	Sliding pocket
Number per Side	6
Manufacturer (Controls)	Faiveley/IFE
Controls (Location/Type)	Overhead Air - Faiveley / Overhead electric IFE
Sensitive Edge	Yes
Photo Cells	Yes
Passenger Activated	Yes
<b>Trucks and Suspension</b>	
Manufacturer	Kinki Sharyo Co. Ltd.
Primary Suspension	Chevron
Secondary Suspension	Air Spring
Load Leveling	Yes
Wheel Base	Motor: 84 in (2133 mm) Trailer: 70 in (1778 mm)
Wheel Manufacturer	Penn Machine
Wheel Type	Bochum 84
Wheel Size	28 in (711 mm)
Truck Centers	31 ft (9449 mm)
Frame Location	Inside
Wheel Profile	Modified Worn Wheel Profile
<b>HVAC</b>	
Manufacturer	Stone Safety / Merak
Heating Configuration	Overhead & Floor Heat
Heating Capacity (kW)	28.5 KW overhead 22.2 KW floor
Cooling Configuration	Roof
Cooling Capacity (Tons)	9 per unit (27 tons)
<b>Communications</b>	
Manufacturer: Midwest GFI • Systems include PA System—Inside/Outside, Intercom, Prerecorded Announcements—Init part VBS system, Passenger Counters - Init part VBS system, Event Recorder—Part of Brake Monitor, GPS Positioning—Init VBS System.	

