

Technical Data

**Formation:**

6 - Axle Articulating

Track Gauge:

4ft – 8.5in / 1435mm

Electric System:

1500 Vdc

Overhead Trolley
System

A large and spacious 70% Low-Floor LRV specifically designed for Seattle's riding public. This 95 foot long LRV incorporates specialized features including multiple bicycle racks and extra ADA areas.

This LRV is capable of operating in trains up to four cars and utilizes 1500 VDC traction power for fewer substations.



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| Seattle - Sound Transit | |
|--------------------------------|--|
| General | |
| Manufacturer | KINKISHARYO International |
| Quantity | 35/27 |
| Yr. Delivered (Last) | 2009/2014 |
| Body Type | 6-axle articulating |
| Empty Weight | 102000 lbs (46266 kg) |
| Seats | 74 passengers |
| Minimum Radius | 82 ft (25 m) |
| Voltage (VDC) | 1500 |
| Maximum Speed (Balance) | 58 mph (93 kph) |
| Full Acceleration | 3.0 mphps (1.34 m/s ²) |
| Deceleration, Service | 3.0 mphps (1.34 m/s ²) |
| High/Low Platform | Low |
| ADA Accessibility | Level boarding |
| Maximum Cars to Train Line | 4 in revenue & 8 for emergency moves |
| Noise Level at 40 mph & 50 Ft | 75 dBA |
| Carbody | |
| Manufacturer | Kinki Sharyo Co. Ltd. |
| Material | LAHT |
| Buff Load (Lbs) | 204,000 - 2g |
| Length (Over Coupler Faces) | 95 ft (28956 mm) |
| Width | 8.7 ft (2654 mm) |
| Height | 12.29 ft (3746 mm) |
| Ceiling Height | 8.21 ft (2502 mm) |
| Floor Height (TOR) | Low floor 14 in (355 mm) |
| Floor Construction/Covering | High floor 36 in (914 mm) |
| Passed ASTM E119 | Composite with rubber covering |
| Articulation-Manufacturer | Yes |
| Seat Manufacturer | Kinkisharyo with Rotek bearing and Hubner bellows |
| Seat Type | American Seating Cantilevered support, SS frame with fabric /wool covered inserts |
| Window Type | Single pane, tinted, laminated safety glass with vandal shield, mounted in gasket to carbody |
| Couplers | |
| Manufacturer | Dellner |
| Location of Electric Heads | Retractable Sides & 1 fixed top head |
| Isolation Method | Retractable Heads |
| Coupler Height (TOR to CL) | 18.5 in (470 mm) |
| Couplers stowed when uncoupled | Yes |
| Electrical Equipment | |
| LVPS Manufacturer | Rhienmetall (RhC) (formerly Oerlikon) |
| LVPS Output (kW) | 10 |
| APS Manufacturer | RhC 208Vac, 3- Φ inverter, redundant design in 1 package |
| APS Output (KVA) | 66 @ 0.85 PF |
| Battery Manufacturer | SAFT |
| Battery Capacity (A.h.) | 250 |
| APS | Redundant APS |
| Lighting | |
| Manufacturer | Translite |
| Ballast Type | DC |
| Fixtures Contain Air Diffusers | Yes |
| Railroad Headlight | Yes |
| ATP | |
| Manufacturer: | US&S Cab Signals, Brake Assurance |

| Destination Signs | |
|--|--|
| Manufacturer | Translite |
| Type | LED |
| Number per Car | 4 + 4 passenger information signs |
| Location | Front /Side. (Side signs are double-sided). |
| Propulsion | |
| Manufacturer | Elin EBG, Vienna |
| Motors/Powered Truck | 2 |
| Method of Cooling for Motors | Self ventilated, enclosed |
| Control Type | IGBT VVVF Inverter |
| Control Package/Car | 2 |
| Control State-of-the-Art | μ -processor |
| Method of Cooling for Control | Forced air |
| Pantograph Manufacturer | Transtech |
| Motor Rating (kW) | 140 |
| Type Gearing | Double reduction-resilient mount |
| Gear Ratio | 6.63:1 |
| Friction Brakes | |
| Manufacturer | Knorr |
| Type | Spring-applied, hydraulic release on 4-discs. Hydraulic applied on center truck. |
| Separate Control | All trucks |
| Track Brake Manufacturer | Knorr |
| Number of Axles With Brakes | 6 |
| Doors | |
| Type | Sliding Plug |
| Number per Side | 4 |
| Manufacturer (Controls) | IFE |
| Controls (Location/Type) | 1 per opening/ μ -proc |
| Sensitive Edge | Tape switches |
| Passenger Activated | Yes |
| Trucks and Suspension | |
| Manufacturer | Kinki Sharyo Co. Ltd. |
| Primary Suspension | Chevron |
| Secondary Suspension | Air Spring |
| Load Leveling | Yes |
| Wheel Base | Motor: 75 in (1905 mm) Trailer: 71 in (1803 mm) |
| Wheel Manufacturer | Penn Machine |
| Wheel Type | Bochum 84 |
| Wheel Size | 26 in (660 mm) |
| Truck Centers | 35.83 ft (10921 mm) |
| Frame Location | Inside |
| Wheel Profile | 1:20 taper |
| HVAC | |
| Manufacturer | Faiveley |
| Heating Configuration | Overhead 2-stage & floor (208Vac 3- Φ) |
| Heating Capacity (kW) | 18.3KW overhead 19.6KW floor |
| Cooling Configuration | 2 roof mounted units with 2-stage scroll compressors |
| Cooling Capacity (Tons) | 13 total 6.5 per end |
| Communications | |
| Manufacturer: GeoFocus • Systems include PA System—Inside/Outside, Intercom (4 per car), Prerecorded Announcements & Message signs, Ethernet trainline, CCTV rear view mirrors with CCTV interior/exterior storage, Passenger Counters, Event Recorder, Monitoring Diagnostic System, WLAN maintenance connection to the shop. | |

