



In 1999, Kinkisharyo began delivering 73 of North America's first 70% low-floor LRVs to New Jersey Transit, spurring the redevelopment of an urban area where now ridership demands are greatly increasing. By adding two additional sections to the existing 3 Section LRVs, the new 5 Section LRV increases rider capacity by 50%. Kinkisharyo was awarded the 5 Section contract in 2014.

Formation:
8 - Axle Articulating

Track Gauge:
4ft – 8.5in / 1435mm

Electric System:
750 Vdc
Overhead Catenary
System



Hudson-Bergen Line - New Jersey Transit (5 Section LRV)	
General	
Manufacturer	KINKISHARYO International
Quantity	HBLRT 26 + Newark Subway 10
Yr. Delivered (Last)	Pilot Car 2014, Balance 2015-2016
Body Type	8-axle double articulated
Empty Weight	132057 lbs (59900 kg)
Seats	102 passengers
Minimum Radius	60 ft (18 m)
Voltage (VDC)	750
Maximum Speed (Balance)	55 mph (88 kph)
Full Acceleration	1.1 m/s ² (1.34 m/s ² for three section car)
Deceleration, Service	1.34 m/s ² (unchanged from three section car)
High/Low Platform	Low
ADA Accessibility	Level Boarding
Maximum Cars to Train Line	3
Noise Level at 40 mph & 50 Ft	75 dBA
Carbody	
Manufacturer	Kinki Sharyo Co. Ltd.
Material	LAHT
Buff Load (Lbs)	99,340
Length (Over Coupler Faces)	124.8 ft (38040 mm)
Width	8.79 ft (2679 mm)
Height	12.27 ft (3740 mm)
Ceiling Height	8.17 ft (2490 mm)
Floor Height (TOR)	Low floor 13.8 in (350 mm) High floor 35 in (889 mm)
Floor Construction/Covering	Plymetal/Neoprene Rubber
Passed ASTM E119	Yes
Articulation-Manufacturer	Kinkisharyo
Seat Manufacturer	American Seating
Seat Type	Cantilever VR50
Window Type	Laminated Safety Glass
Couplers	
Manufacturer	Dellner
Location of Electric Heads	Retractable Sides & 1 fixed top head
Isolation Method	Retractable Heads
Coupler Height (TOR to CL)	19.6 in (498 mm)
Electrical Equipment	
LVPS Manufacturer	Alstom
LVPS Output (kW)	10
APS Manufacturer	Alstom 208Vac, 3-Φ inverter
APS Output (KVA)	60
Battery Manufacturer	SAFT
Battery Capacity (A.h.)	180
APS	
Lighting	
Manufacturer	Translite
LED Passenger Area Lighting	Yes
Fixtures Contain Air Diffusers	Yes
Railroad Headlight	Yes
ATP	
Manufacturer:	GE Harris Cab Signals, Brake Assurance, Trip Stops, TWC

Destination Signs	
Manufacturer	Translite
Type	LED
Number per Car	6 (4 interior)
Location	Front/Side
Propulsion	
Manufacturer	GEC Alstom
Motors/Powered Truck	2
Method of Cooling for Motors	Self-ventilated vortex type
Control Type	AC IGBT Inverter
Control Package/Car	2
Control State-of-the-Art	Microprocessor
Method of Cooling for Control	Forced Air
Pantograph Manufacturer	UKM/Schunk
Motor Rating (kW)	140
Type Gearing	Double reduction parallel
Gear Ratio	6.64
Friction Brakes	
Manufacturer	Knorr
Type	Spring-applied Hydraulic Release (MT)
Separate Control	Yes
Track Brake Manufacturer	Knorr
Number of Axles With Brakes	8
Doors	
Type	Sliding Plug
Number per Side	5
Manufacturer (Controls)	Vapor
Controls (Location/Type)	Overhead/Electric
Sensitive Edge	Yes
Photo Cells	No
Passenger Activated	Pushbutton (Outside/Inside)
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
Wheel Type	Bochum 84
Wheel Size	26 in (660 mm)
Truck Centers	33.3 ft (10150 mm)
Frame Location	Inside
Wheel Profile	1:40
HVAC	
Manufacturer	Vapor/Stone Rail Systems
Heating Capacity (kW)	60 overhead, 45 Floor Heat
Cooling Configuration	Roof Mount - Three Units
Cooling Capacity (Tons)	28.5
Communications	
Manufacturer: KINKISHARYO International, LLC • Systems include PA System—Inside/Outside, Prerecorded Announcements, Event Recorder	

