

Equipment Details

Bodies:	Aluminium extrusions welded and huck-bolted (FICAS Technology). Through gangways provided between cars with internal and external bellow and overlapping sliding plates, sliding gangway fire door fitted No.2 end of TS(W).
Bogies:	Bombardier FE50I 2.
Couplers:	Dellner I 2 auto-couplers (no electrical head) only on the front of DMS cars, intermediate couplers between cars.
Traction System:	Bombardier 3 phase AC, two motored axles per DMS, PMS and MS3 cars, four motored axles on MSI and MS2 cars. Full regenerative braking capability.
Compressor:	Knorr-Bremse VVI 80T oil free reciprocating – 3 phase motor.
Brakes:	Knorr-Bremse RZKK (trailer) and RZTS (motor) with 2 actuators per axle, DMS no.1 axle not braked.
Auxiliary Power:	Bombardier Auxiliary Converter, two primary modules per train fitted to DMS cars, with one secondary module fitted to MS2
Supplies:	1 1 0V dc control system with 1 08V, 1 90Ah battery fitted on DMS cars.
Saloon Lighting:	2 LED ceiling washlights per car, running longitudinally along entire length, LED spotlights (DMS 1 5, MS 1 6, PMS 1 4), 1 2 LED spotlights in low ceiling area (PMS), LED Gangway lights on either side of treadplate
Emergency Lighting:	8-1 0 LED spotlights per car normally forming part of the main saloon lighting, plus gangway lights and emergency equipment cupboard light
HVAC:	One roof mounted saloon air conditioning module per car supplying ceiling mounted air ducts. Separate module on DMS cars for cab air conditioning.
Passenger Information:	An LED external facing front destination display and one external platform facing LED display per vehicle side. Two double sided internal LCD displays per car.
CCTV:	DOO CCTV displayed on two monitors in cab, displaying images fed from platform cameras Saloon CCTV system viewable in cab and recorded digitally.
Doors:	Six electrically operated sliding plug doors per side configured as three double doorways per side. Fitted with obstacle detection plus threshold lighting when doors are open.



Class 345 Stock

Crossrail/Elizabeth Line



Built by Bombardier Transportation UK, Derby 2015 – 2019, Entered service in 2017
Maintained by: Bombardier Transportation

Principal Characteristics

Track Gauge:	1 435mm
Current system:	345/0 - 25kV ac OLHE
Types of vehicle:	DMS : Driving Motor Standard PMS : Pantograph Trailer Open Saloon MSI , MS2, MS3 : Motor Standard TS(W) : Trailer Standard (Wheelchair access)
Formation per Unit:	9 car full length unit/7 car Reduced length unit
Formation per unit (9):	DMS1 -PMS1 -MS1 -MS3/1 -TS(W)-MS3/2-MS2- PMS2-DMS2
Formation per unit (7):	DMS1 -PMS1 -MS1 -TS(W)-MS2- PMS2-DMS2
Number of Trains:	70 nine cars (once RLU conversion complete)
Operation:	Driver Only Operated (DOO)



9 car formation



7 car formation



Passenger accommodation (9car formation):

Please note that standing capacity figures exclude seating capacity

Seating capacity: (Number of full seats per train)	412
Seating capacity: (Number of tip up and perch seats, excluding wheelchair spaces)	454
Wheelchair spaces/additional tip up seats	4/12
Maximum standing capacity	1043
Maximum full load capacity (seated plus standing, no wheelchairs)	1497
Maximum full load capacity (seated plus standing, 4 wheelchairs)	1489

Passenger accommodation (7car formation):

Please note that standing capacity figures exclude seating capacity





Seating capacity: (Number of full seats per train)	314
Seating capacity: (Number of tip up and perch seats, excluding wheelchair spaces)	350
Wheelchair spaces/additional tip up seats	4/12
Maximum standing capacity	809
Maximum full load capacity (seated plus standing, no wheelchairs)	1159
Maximum full load capacity (seated plus standing, 4 wheelchairs)	1151

NOTE: Capacities here are figures calculated from floor area for design purposes

Vehicle details and statistics

	DMS	PMS	MS-1	MS-2	MS-3	TS(W)
Length over body end:	23615mm	22500mm	22500mm	22500mm	22500mm	22500mm
Width of Body:	2772mm	2772mm	2772mm	2772mm	2772mm	2772mm
Car Height:	3760mm	3760mm	3760mm	3760mm	3760mm	3760mm
Tare weight:	37 tonnes	31.5 tonnes	30 tonnes	39 tonnes	37 tonnes	36.5 tonnes
Tare weight of 9-car train:	318.5 tonnes					
Passenger door open width:	1450mm	1450mm	1450mm	1450mm	1450mm	1450mm
Car number series:	340701-340765	340401-340465	340501-340565	340101-340165	340201-340265	340301-340365
	340901-340965	340801-340865			340601-340665	
Vehicles in stock:	65	130	65	65	130	65

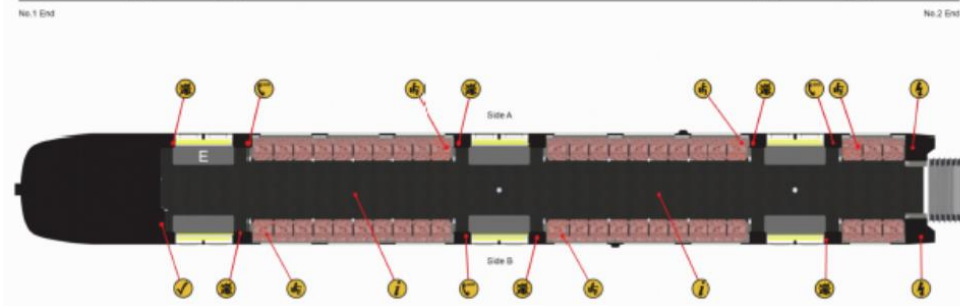
Key

-  Priority Seat
-  Electrical Cupboard
-  Passenger Alarm
-  Passenger Information System
-  Emergency Door Release

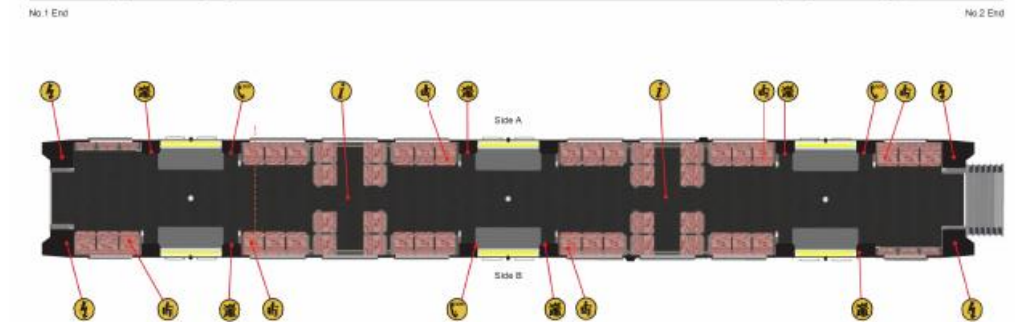


View on No.1 End

DMS car

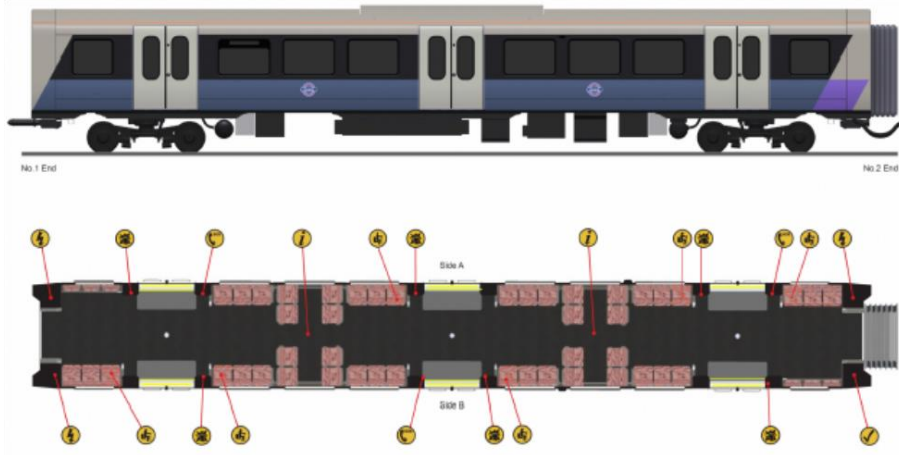


PMS car

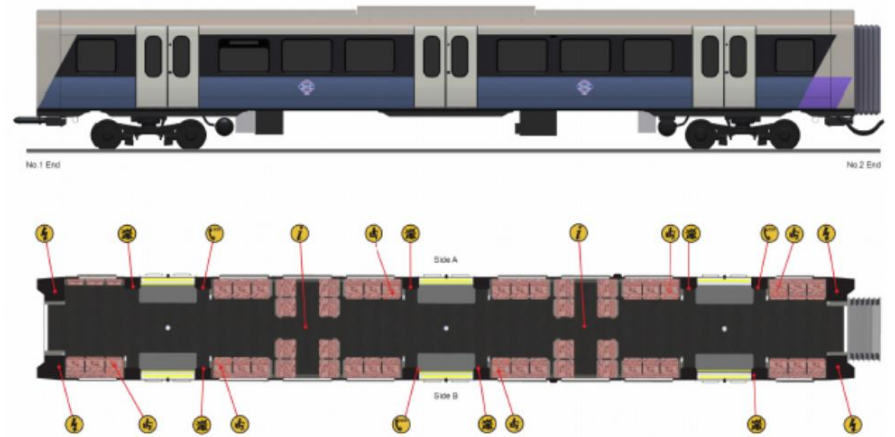


Note: "E" denotes the nominated vestibule for staff controlled evacuation

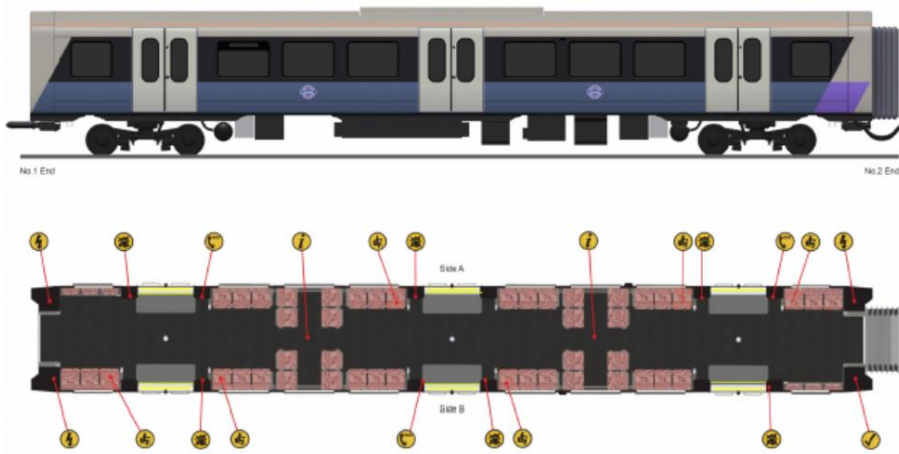
MS-1 car



MS-3 car



MS-2 car



TS(W) car

