

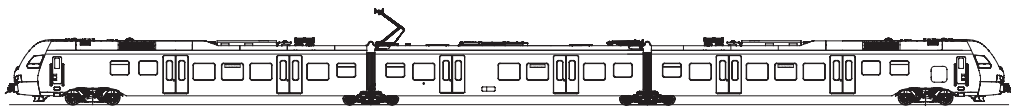


## **Electric low-floor multiple-unit FLIRT for NS the Netherlands**

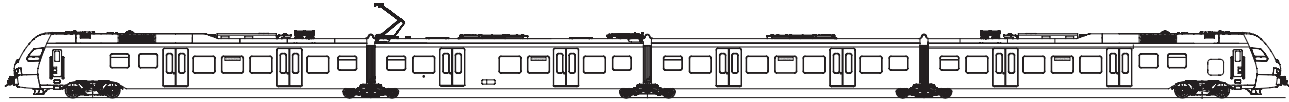
In April 2015, NS ordered 58 three- and four-car trains for the service on regional routes in the Netherlands and operated by NS Reizigers. Multiple-unit control is possible for up to three vehicles. The trains feature exceptionally high levels of passenger comfort thanks to air suspension, an inviting seating arrangement and climate control, and are also equipped with a closed toilet system. They have a maximum speed of 160 km/h. The Stadler FLIRTs fulfil TSI PRM requirements, and comply with the standards pertaining to energy absorption in the event of a crash (EN 15227). The vehicles offer a proven, modern and economical solution, providing excellent service in public transport systems.

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3-car



4-car

## Technical features

- Bright, friendly interior with large window areas
- Interior and exterior design in acc. with TSI PRM
- Air-conditioned passenger compartments and driver's cabs
- Closed toilet system
- Passenger compartment with wide doors, low floor section > 90%
- Welded extruded aluminium superstructure
- Body structure fulfils the EN standard for energy absorption in the event of collision (EN 15227)
- 2 entrance doors per carbody/side
- Air-suspended motor and trailer bogies
- Ergonomically designed driver's cab
- Redundant traction chain with water-cooled IGBT power converter and asynchronous drive motor
- Vehicle control system with train bus and diagnostics computer (CAN open bus)
- Multiple-unit control for up to three vehicles
- First class compartment
- Electric sockets
- Space for wheelchairs
- WLAN access
- Ethernet based passenger information system with wide TFT screens
- Prepared for installation of ETCS
- Prepared for conversion to 3kV catenary supply voltage

## Vehicle data

	3-car	4-car
Customer	NS	NS
Lines operated	The Netherlands	The Netherlands
Gauge	1435 mm	1435 mm
Axle arrangement	Bo'2'2'Bo'	Bo'2'2'2'Bo'
Supply voltage	1.5 kV DC	1.5 kV DC
Number of vehicles	33	25
Service start-up	2016	2016
Seating capacity 2 <sup>nd</sup> Class	114	170
Seating capacity 1 <sup>st</sup> Class	32	32
Fold-up seats	12	12
Floor height		
Low-floor	780 mm	780 mm
Low-floor PRM area	808 mm	808 mm
High-floor	1180 mm	1180 mm
Door width	1300 mm	1300 mm
Longitudinal strength	1500 kN	1500 kN
Overall length	63200 mm	80700 mm
Vehicle width	2820 mm	2820 mm
Vehicle height	4120 mm	4120 mm
Bogie wheelbase		
Motor bogie	2500 mm	2500 mm
Trailer bogie	2700 mm	2700 mm
Driving wheel diameter (new)	920 mm	920 mm
Trailer wheel diameter (new)	760 mm	760 mm
Maximum power at wheel	3000 kW	3000 kW
Starting tractive effort	200 kN	200 kN
Maximum speed	160 km/h	160 km/h

