



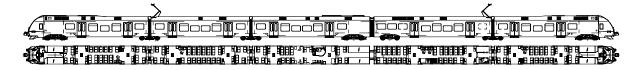
Electric Low-floor Multiple-unit FLIRT for the Norwegian State Railways (NSB), Norway

NSB has purchased 50 5-part electrical trains of the FLIRT family from Stadler. 26 of these have been equipped as Long Local version for the S-Bahn traffic in the Oslo area, with travelling times of up to 90 minutes. The other 24 trains are equipped as Short Regional, and will be used in the area of Southern Norway for connections with travelling times of up to 3 hours. The trains that have been ordered are a development of the well-proven FLIRT family, with a special focus on customer friendliness for families, the elderly and the disabled. They are also characterised by an advanced thermal and acoustic insulation and fulfil the high requirements needed for winter operation in Norway.

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Long Local



Short Regional

Technical features

- · Bright, passenger-friendly interior with customized design
- · Air-conditioned passenger and driver compartments
- · Vacuum toilet system, also suitable for the disabled
- Low floor section 69 %
- Spacious multipurpose area in entrance section
- Air-suspended bogies
- · Ergonomically designed driver's cab
- 3 redundant traction chains with water-cooled IGBT power converters
- · Vehicle control system with train bus and diagnostic computer
- · Crashworthiness according the actual EN-standard
- Train concept prepared for long distance design

Vehicle data	Long Local	Short Regional
Customer	Norwegian State Railways (NSB)	
Lines operated	S-Bahn Oslo	Southern Norway
Gauge	1435 mm	"
Catenary supply voltage	15 kV, 16.7 Hz	"
Axle arrangement	Bo'2'2'Bo'+2'2'Bo'	"
Number of vehicles	26	24
Service start-up	2012–2013	2011–2012
Seating capacity (comfort)	235	216 (44)
Resting seat	36	30
Fold up seats	24	18
Floor height Low floor High floor	800 mm 1180 mm	"
Door width	1300 mm	"
Longitudinal strength	1500 kN	"
Overall lenght	105.5 m	"
Vehicle width	3200 mm	"
Vehicle height	4380 mm	"
Tare weight	216.3 t	218.1 t
Bogie wheelbase Power bogie Trailer bogie	2500 mm 2750 mm	"
Powered wheel diameter	920 mm	"
Trailer wheel diameter	920 mm	"
Maximum output at wheel	4500 kW	"
Starting tractive power	240 kN	"
Maximum speed	200 kph	"

