



## ***Meter-gauge Multiple-units STAR for the Aare Seeland mobil (ASm), Switzerland***

ASm has placed an order of three innovative articulated trains STAR with Stadler Bussnang AG for service on the meter gauge line between Solothurn – Wiedlisbach – Niederbipp – Langenthal and the planned extension on to Oensingen. They are kind of a tram-train solution to deserve the city of Solothurn as well as the rural network. The main features are the powerful traction chain and the rapid acceleration, a large low-floor area as well as a spacious and bright passenger area. For service in the urban areas, these railcars are equipped with electromagnetic brakes and a shock absorbing front end. Additional technical features include a gradient capability of up to 70‰ as well as the ability to operate on tight curve radiuses of up to 40m.

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## Technical features

- Bright, passenger-friendly interior with customized design
- Low-floor section > 60%
- Spacious multipurpose area in entrance section
- 3 doors on each side for rapid passenger access
- Air-conditioned passenger and driver compartments
- Ergonomically designed driver's cab
- Welded extruded aluminium superstructure
- shock-absorbing front end to reduce damage in case of car collisions
- Air-suspended bogies
- Redundant traction chain with IGBT power converters
- Vehicle control system with train bus and diagnostics computer (CAN open bus)
- Multiple-unit control for up to three vehicles

## Vehicle data

Customer	Aare – Seeland – mobil AG
Lines operated	Solothurn-Niederbipp-Langenthal
Gauge	1'000 mm
Designation	Be 4/8
Catenary supply voltage	1200 VDC
Axle arrangement	Bo'2'2'Bo'
Number of vehicles	3
Service start-up	2008
Seating capacity 2 <sup>nd</sup> class	114
Fold up seats	7
Standing capacity (4 pers./m <sup>2</sup> )	108
Floor height	
Low floor	385 mm
High floor	950/1'050 mm
Door width	1'300 mm
Longitudinal strength	800 kN
Overall length	39'000 mm
Vehicle width	2'650 mm
Vehicle height	3'850 mm
Tare weight	54 t
Bogie wheelbase	
Power bogie	1'900 mm
Trailer bogie	1'700 mm
Powered wheel diameter (new)	750 mm
Trailer wheel diameter (new)	750 mm
Continuous output at wheel	660 kW
Maximum output at wheel	1'000 kW
Starting tractive power	
(up to 47 km/h)	110 kN
Minimal curve radius	40 m
Max.acceleration at gross weight	1.2 m/s <sup>2</sup>
Maximum speed	80 kph

