The Swedish Transport Agency's Code of Statutes

THE SWEDISH TRANSPORT AGENCY

The Swedish Transport Agency's regulations and general advice on technical requirements for vehicle combinations with a length over 25.25 metres;

TSFS 2025:17

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adopted on 6 March 2025.

By virtue of Chapter 4, Sections 12, 13 and 17f of the Traffic Regulation (1998:1276) and Chapter 8, Section 16 of the Vehicles Ordinance (2009:211), the Swedish Transport Agency issues the following regulations[1].

Introductory provisions

Section 1 These regulations lay down detailed provisions on the design and equipment of:

1. vehicle combinations exceeding 25.25 metres in length but not exceeding 34.5 metres in length; and
2. vehicles forming part of vehicle combinations as referred to in point 1.

The regulations apply when driving on roads where the road operator, by virtue of Chapter 4, Section 17f of the Traffic Regulation (1998:1276), has issued regulations stipulating that the length of a vehicle combination may not exceed 34.5 metres.

Section 2 For the purposes of these regulations, the following definitions apply:

A-double combination	vehicle combination consisting of a *tractor unit* coupled to a semi-trailer and a dolly with an attached semi-trailer;
AB-double combination	vehicle combination consisting of a truck coupled to a dolly with an attached *link semi-trailer*, which, in turn, is coupled to a semi-trailer;
actively steered axle	steering axle, the steering angle of which is determined by an electric or hydraulic steering unit;
B-double combination	vehicle combination consisting of a *tractor unit* coupled to a *link semi-trailer* which, in turn, is

[1] See Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services.

	coupled to a semi-trailer, where the distance between the front coupling device of the link semi-trailer and the rear edge does not exceed 12.0 metres;
C-double combination	vehicle combination consisting of a truck coupled to two centre-axle trailers;
tractor unit	truck without a load compartment, equipped with a coupling device (fifth wheel) for a semi-trailer;
link semi-trailer	semi-trailer with a rear fifth wheel for coupling to another semi-trailer;
self-tracking axle	steering axle, the steering angle of which is determined by the cornering forces caused by tyre-road adhesion;
Nordic combination	vehicle combination consisting of a truck coupled to a dolly with an attached semi-trailer;
performance value	value determined by the manufacturer, indicating the load a vehicle and its coupling device can withstand;

Other terms used in these regulations have the same meaning as in the Road Traffic Definitions Act (2001:559).

For illustrations of the vehicle combinations, see Figures 1 to 5 of Annex 1.

Section 3 For the purposes of these regulations, the following definitions apply:

– ECE Regulation 13: Regulation No 13 of the Economic Commission for Europe of the United Nations – Uniform provisions concerning the approval of vehicles of categories M, N and O with regard to braking;

– ECE Regulation 55: Regulation No 55 of the Economic Commission for Europe of the United Nations – Uniform provisions concerning the type-approval of mechanical coupling components of combinations of vehicles.

These ECE Regulations are adopted by the European Union and published in the *Official Journal of the European Union*.

General requirements

Section 4 A-, AB-, B, C-double combinations or Nordic combinations, and the vehicles forming part of these vehicle combinations shall meet the general requirements set out in Sections 5 to 11.

In addition,

1. A-double combinations shall meet the conditions set out in Sections 12 to 23;

2. AB-double combinations shall meet the conditions set out in Sections 24 to 32;

3. B-double combinations shall meet the requirements set out in Sections 33 to 37;

4. C-double combinations shall meet the requirements set out in Sections 38 to 42; and

5. Nordic combinations shall meet the requirements set out in Sections 43 to 46.

Section 5 The heavy-duty vehicle must have at least three axles. The trailers included in the road train shall have at least two axles.

Section 6 No axle other than the front axle(s) of the truck shall be steering axles at speeds exceeding 40 km/h.

General advice
On a truck, a steerable running axle located in front of the driving axle should be considered a front axle.

Section 7 Vehicles with no more than three axles shall have stability systems in accordance with ECE Regulation 13, 11 series of amendments, Appendix 3, or later.

Section 8 The heavy-duty vehicle shall have equipment that allows the driver to observe the right side of the road train from the driver's seat.

Section 9 All vehicles in the vehicle combination shall be equipped with electronic braking systems with anti-lock function and automatic brake adaptation in accordance with ECE Regulation 13, 11 series of amendments, or later.

Section 10 For dollies forming part of A-double and AB-double combinations, the fifth wheel shall be mounted rotatably about a vertical axis through the coupling point.

Signs

Section 11 The vehicle combination shall be fitted with a rearward-facing sign as shown in Figure 1 of Annex 2. The sign shall be positioned on the rearmost trailer and shall be to the left of the centre line of the vehicle. The lower edge of the sign shall be no more than 2.0 metres above the road.

The sign shall have:

1. a yellow bottom and a red border, which are is retro-reflective,
2. a border width of 3.0 centimeters,
3. text with the font Tratexsvart, a text size of 75 millimetres,
4. a width of not less than 0,90 metres, and
5. a height of at least 0.45 metres.

The ratio of width to height shall be 2:1. If the size of the sign is increased, the width of the border and the text size shall also be increased accordingly.

Driving axles and engine power

Section 12 If the gross weight of the vehicle combination exceeds 64 tonnes, the truck must have at least two driving axles and an engine power of at least 310 kW.

Special conditions for A-double combinations

Front semi-trailer

Section 13 On the front semi-trailer, the last axle shall be self-tracking or actively steered at speeds up to 30 km/h.

Section 14 If the front semi-trailer has two axles, the distance between the centre of the coupling pin and the centre of the first axle shall be at least 7.7 metres.

If the front semi-trailer has three axles, the distance between the centre of the coupling pin and the centre of the first axle shall be at least 7.0 metres.

Section 15 On the front semi-trailer, the distance between the centre of the last axle and the centre of the shackle coupling shall not exceed 1.4 metres.

Section 16 If the front semi-trailer has at least three axles, the first axle shall be retractable. It shall be possible to raise and lower the axle from the driver's seat during the journey.

Rear semi-trailer

Section 17 On the rear semi-trailer, the distance between the centre of the coupling pin and the centre of the first axle shall be at least 6.2 metres.

Coupling devices

Section 18 The coupling devices shall be approved in accordance with ECE Regulation 55, 01 series of amendments, or later. With respect to performance values, the devices shall meet the requirements set out in the Swedish Transport Agency's regulations (TSFS 2019:127) on the coupling of vehicles and trailers, or in Sections 19 to 22.

Section 19 Both the tractor unit and its coupling device shall have a D value of at least 130 kN.

Section 20 The front coupling device of the front semi-trailer shall have a D value of at least 130 kN. The rear coupling device shall have a DC value

of at least 120 kN, a D value of at least 130 kN and a V value of at least 32 kN.

Section 21 The dolly's front coupling device shall have a DC value of at least 120 kN, a D value of at least 130 kN and a V value of at least 32 kN. The rear coupling device shall have a D value of at least 130 kN.

Section 22 The coupling device of the rear semi-trailer shall have a D value of at least 130 kN.

Derogation from provisions on distances between axles

Section 23 Notwithstanding Chapter 4 Section 13 first paragraph point 4 of the Traffic Regulation (1998:1276), the distance between axles on the road belonging to load capacity class 1 may be less than 5 metres but not 4 metres. This applies if the total weight of bogie and triple axle is less than the maximum permissible gross mass for the corresponding distance between the first and last axles for those axle groups as set out in Annex 1 to that Regulation.

Special conditions for AB-double combinations

Truck

Section 24 On the truck, the distance between the centre of the shackle coupling and the rear edge of the truck must not exceed 0.8 metres.

Link semi-trailer

Section 25 On the link semi-trailer, the last axle shall be self-tracking or actively steered at speeds of up to 30 km/h.

Rear semi-trailer

Section 26 On the rear semi-trailer, the distance between the centre of the coupling pin and the centre of the first axle shall be at least 6.2 metres.

Coupling devices

Section 27 The coupling devices shall be approved in accordance with ECE Regulation 55, 01 series of amendments, or later. With regard to performance values, the devices shall comply with Sections 27 to 32.

Section 28 The truck and its coupling device shall have a DC value of at least 140 kN and a V value of at least 30 kN, if the gross weight of the vehicle combination does not exceed 64 tonnes. The DC value may,

however, be less than 140 kN but not less than 130 kN, if the D value is at least 150 kN and the V value is at least 60 kN.

If the gross weight of the vehicle combination exceeds 64 tonnes but does not exceed 70 tonnes, the truck and its coupling device shall have a DC value of at least 145 kN and a V value of at least 30 kN. However, the DC value may be less than 145 kN but not less than 130 kN if the D value is at least 180 kN and the V value is at least 60 kN.

If the gross weight of the vehicle combination exceeds 70 tonnes but does not exceed 74 tonnes, the truck and its coupling device shall have a DC value of at least 160 kN and a V value of at least 30 kN. However, the DC value may be less than 160 kN but not less than 130 kN if the D value is at least 200 kN and the V value is at least 60 kN.

Section 29 The front coupling device of the dolly shall have a DC value of at least 140 kN and a V value of at least 30 kN, if the gross weight of the vehicle combination does not exceed 64 tonnes. However, the DC value may be less than 140 kN but not less than 130 kN, if the coupling device has a D value of at least 150 kN and a V value of at least 60 kN.

If the gross weight of the vehicle combination exceeds 64 tonnes but does not exceed 70 tonnes, the coupling device shall have a DC value of at least 145 kN and a V value of at least 30 kN. However, the DC value may be less than 145 kN but not less than 130 kN, if the coupling device has a D value of at least 180 kN and a V value of at least 60 kN.

If the gross weight of the vehicle combination exceeds 70 tonnes but does not exceed 74 tonnes, the coupling device shall have a DC value of at least 160 kN and a V value of at least 30 kN. However, the DC value may be less than 160 kN but not less than 130 kN, if the coupling device has a D value of at least 200 kN and a V value of at least 60 kN.

Section 30 The rear coupling device of the dolly shall have a D value of at least 130 kN.

Section 31 The front coupling device of the link semi-trailer shall have a D value of at least 130 kN. The rear coupling device shall have a D value of at least 130 kN.

Section 32 The coupling device of the rear semi-trailer shall have a D value of at least 130 kN.

Special conditions for B-double combinations

Link semi-trailer

Section 33 The link semi-trailer in a B-double combination shall have at least three axles, and the last axle shall be self-tracking or actively steered at speeds up to 30 km/h.

Section 34 If the distance between the centre of the coupling pin and the centre of the first axle of the link semi-trailer is less than 7.0 metres, the first axle shall be retractable. It shall be possible to raise and lower the axle from the driver's seat during the journey.

Rear semi-trailer

Section 35 On the rear semi-trailer, the distance between the centre of the coupling pin and the centre of the first axle shall be at least 6.2 metres.

Coupling devices

Section 36 The coupling devices shall be approved in accordance with ECE Regulation 55, 01 series of amendments, or later. With respect to performance values, the devices shall meet the requirements set out in the Swedish Transport Agency's regulations (TSFS 2019:127) on the coupling of vehicles and trailers, or in Section 37.

Section 37 The truck and the coupling devices of the vehicle combination shall have a D value of at least 135 kN.

Special conditions for C-double combinations

Truck

Section 38 On the truck, the distance between the centre of the last axle and the centre of the shackle coupling shall not exceed 0.8 metres.

Centre-axle trailers

Section 39 Each of the centre-axle trailers:

1. shall have at least three axles fitted with twin wheels;
2. may have a height, including the load, not exceeding 4.0 metres;
3. shall have a minimum distance of 6.6 metres from the drawbar eye to the centre of the group of axles; and
4. may have a load length of not more than 7.82 metres.

Section 40 On the front centre-axle trailer, the distance from the centre of the group of axles to the centre of the shackle coupling shall not exceed 2.1 metres.

Coupling devices

Section 41 The coupling devices shall be approved in accordance with ECE Regulation 55, 01 series of amendments, or later. With respect to performance values, the devices shall meet the requirements set out in the

Swedish Transport Agency's regulations (TSFS 2019:127) on the coupling of vehicles and trailers, or, if all vehicles in the vehicle combination are equipped with air suspension, the requirements in Section 42.

Section 42 The truck and the coupling devices of the vehicle combination shall have a DC value of at least 140 kN and a V value of at least 60 kN if the gross weight of the vehicle combination does not exceed 64 tonnes. However, the DC value may be less than 140 kN but not less than 130 kN if the D value is at least 190 kN and the V value is at least 70 kN.

If the gross weight of the vehicle combination exceeds 64 tonnes but does not exceed 68 tonnes, the truck and the coupling devices of the vehicle combination shall have a DC value of at least 145 kN and a V value of at least 60 kN. However, the DC value may be less than 145 kN but not less than 130 kN if the D value is at least 200 kN and the V value is at least 75 kN.

If the gross weight of the vehicle combination exceeds 68 tonnes but does not exceed 74 tonnes, the truck and the coupling devices of the vehicle combination shall have a DC value of at least 150 kN and a V value of at least 60 kN. However, the DC value may be less than 150 kN but not less than 130 kN if the D value is at least 250 kN and the V value is at least 75 kN.

Special conditions for Nordic combinations

Coupling devices

Section 43 The coupling devices shall be approved in accordance with ECE Regulation 55, 01 series of amendments, or later. With respect to performance values, the devices shall meet the requirements set out in the Swedish Transport Agency's regulations (TSFS 2019:127) on the coupling of vehicles and trailers, or in Sections 44 to 46.

Section 44 The truck and its coupling device shall have a DC value of at least 156 kN and a V value of at least 30 kN, if the gross weight of the vehicle combination does not exceed 64 tonnes. However, the DC value may be less than 156 kN but not less than 130 kN if the D value is at least 200 kN and the V value is at least 50 kN.

If the gross weight of the vehicle combination exceeds 64 tonnes but does not exceed 70 tonnes, the truck and its coupling device shall have a DC value of at least 172 kN and a V value of at least 30 kN. However, the DC value may be less than 172 kN but not less than 150 kN if the D value is at least 210 kN and the V value is at least 50 kN.

If the gross weight of the vehicle combination exceeds 70 tonnes but does not exceed 74 tonnes, the truck and its coupling device shall have a DC value of at least 182 kN and a V value of at least 30 kN. However, the DC value may be less than 182 kN but not less than 140 kN if the D value is at least 220 kN and the V value is at least 75 kN.

Section 45 The front coupling device of the dolly shall have a DC value of at least 156 kN and a V value of at least 30 kN, if the gross vehicle weight does not exceed 64 tonnes. However, the DC value may be less than 156 kN but not less than 130 kN, if the coupling device has a D value of at least 200 kN and a V value of at least 50 kN.

If the gross weight of the vehicle combination exceeds 64 tonnes but does not exceed 70 tonnes, the coupling device shall have a DC value of at least 172 kN and a V value of at least 30 kN. However, the DC value may be less than 172 kN but not less than 150 kN, if the coupling device has a D value of at least 210 kN and a V value of at least 50 kN.

If the gross weight of the vehicle combination exceeds 70 tonnes but does not exceed 74 tonnes, the coupling device shall have a DC value of at least 182 kN and a V value of at least 30 kN. However, the DC value may be less than 182 kN but not less than 140 kN, if the coupling device has a D value of at least 220 kN and a V value of at least 75 kN.

Section 46 The rear coupling device of the dolly shall have a D value of at least 130 kN.

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1. This statute shall enter into force on 15 April 2025.
2. This statute repeals the Swedish Transport Agency's regulations (TSFS 2023:42) on technical requirements for vehicle combinations with a length over 25.25 metres.

On behalf of the Swedish Transport Agency

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Annex 1

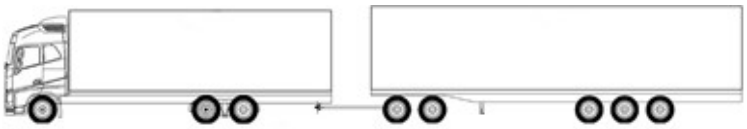
Figure 1. A-double combination.

Figure 2. AB-double combination.

Figure 3. B-double combination.

Figure 4. C-double combination.

Figure 5. Nordic combination.



Annex 2

Figure 1. Sign design for a long road train.