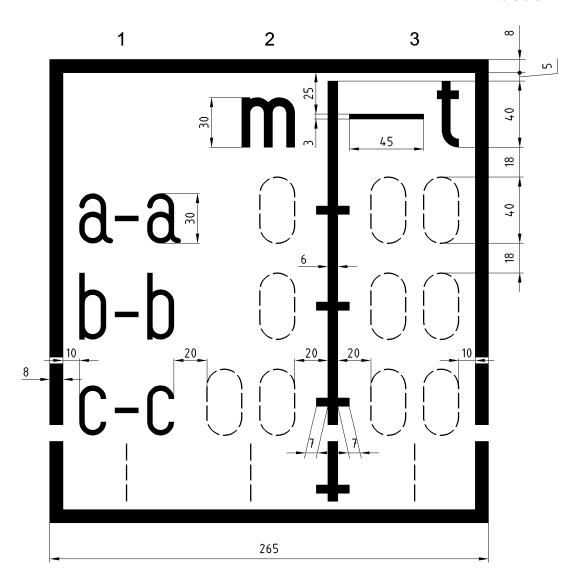
Dimensions in millimetres



# Key:

- 1 indication of the length of the supporting surfaces of the concentrated loads or distance between supporting points
- $2\quad distance, in \ metres, between \ the \ length \ markers$
- 3 maximum value, in tonnes, of the concentrated loads. Maximum value for different lengths of concentrated loads:

## Legend

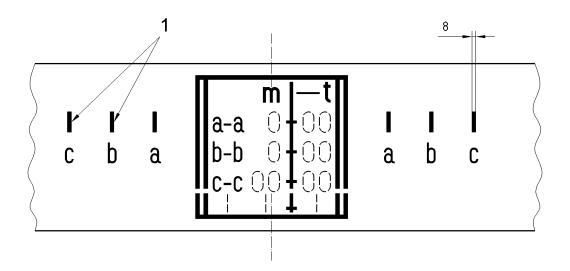
maximum value for different lengths:

spread over the lengths of the supporting surface

Figure 51b

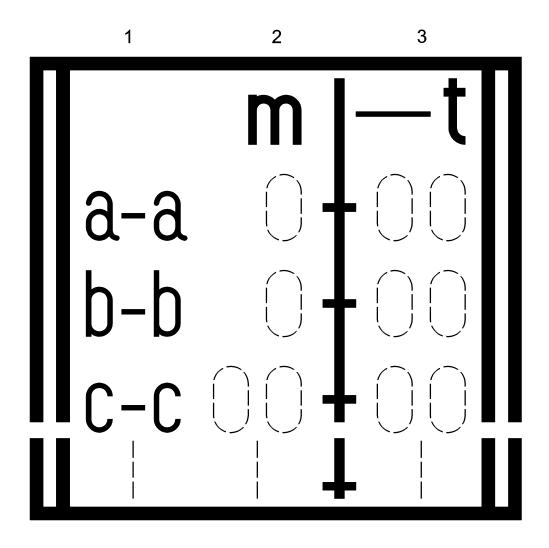
# 4.5.22.2.2 Width of bearing surface $\ge$ 1,20 m

Dimensions in millimetres



**Key:** 1 markers on solebars

Figure 52a



## Key:

- 1 indication of the length of the supporting surfaces of the concentrated loads or distance between supporting points
- 2 distance, in metres, between the length markers
- 3 maximum value, in tonnes, of the concentrated loads.

#### Legend

maximum value for different lengths of concentrated loads:

— spread over the lengths of the supporting surface

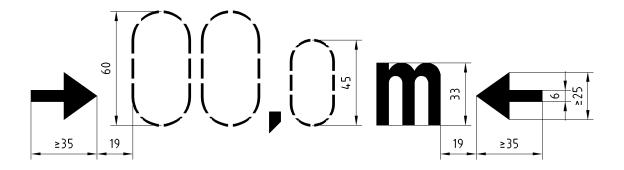
**Position:** At centre of each solebar, or on parts covering the solebar or on special panels fitted at the same height as the solebars.

**Meaning:** On flat wagons, this marking indicates the maximum values for concentrated loads. This is optional for other wagons which may, if required, carry this specified marking.

Figure 52b

## 4.5.23 Distance between end axles or bogie centres

Dimensions in millimetres



**Position:** On the right of each solebar or on the bogie frame (it is sufficient for the marking to feature on the

left-hand side of the bogie, on each side of the wagon) or on parts covering the solebar or on special

boards fitted at the same height as the solebars.

NOTE On articulated wagons, the marking needs to be on each solebar.

**Meaning:** Indicates the distance between

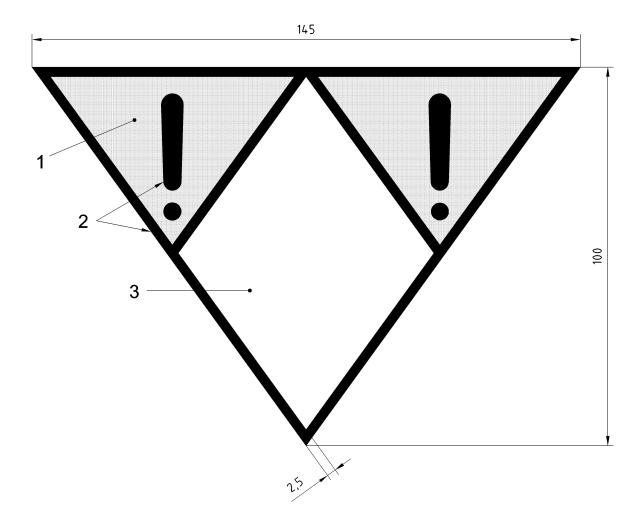
- the end axles of wagons without bogies,
- bogie pivots,
- outer axles of each bogie,
- the bogie centres per each unit of articulated wagons.

Figure 53

### 4.5.24 Wagons which need special care when being shunted

#### 4.5.24.1 Wagons not to be loose-shunted

Dimensions in millimetres



Key: 1 red

black

white

Position: On the left of each solebar or on parts covering the solebar or on special boards fitted at the same height as the solebars.

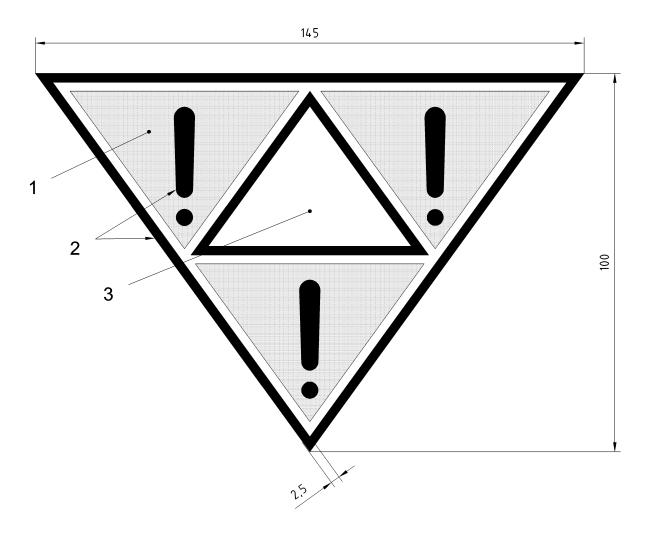
Special care should be taken when marshalling trains to avoid damaging the wagon. Wagon shall Meaning: not be loose-shunted (shall not impact or be impacted) with other rolling stock without taking special precautions.

NOTE This marking is compulsory on wagons with special fittings (electronic equipment, refrigerator units, etc.) for which normal buffing impacts are not authorised as they are liable to damage the equipment. These wagons may not carry the TEN / RIV marking but can be covered by bilateral agreements.

Figure 54a

## 4.5.24.2 Wagons that shall not be fly- or gravity-shunted

Dimensions in millimetres



1 red Key:

black

white

**Position:** On the left of each solebar or on parts covering the solebar or on special boards fitted at the same

height as the solebars.

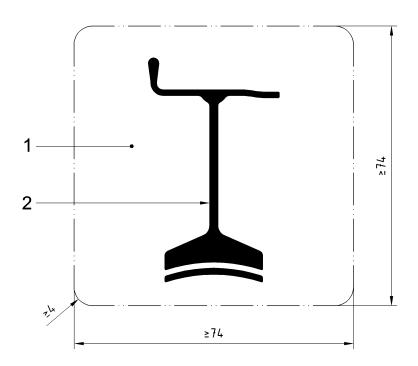
**Meaning:** Wagon shall not be fly- or gravity-shunted,

- Wagon shall be marshalled by a motive power unit,
- Wagon shall not be loose-shunted.

Figure 54b

# 4.5.25 Manually applied parking brake

Dimensions in millimetres



**Key:** 1 white or yellow

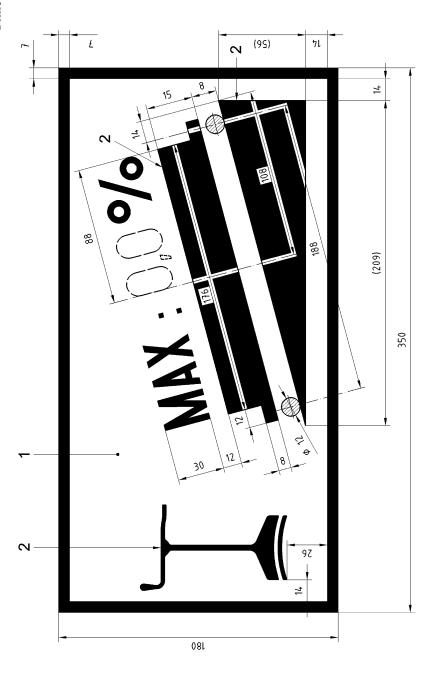
2 black

**Position:** On the solebar on both sides of the wagon near to the access point for the hand brake.

**Meaning:** For wagons fitted with a handbrake which is not externally visible.

Figure 55a

Dimensions in millimetres



**Key:** 1 white or yellow

2 black

If Handbrake operated from ground level: On the operating shaft, close to each handbrake wheel Position:

— If Handbrake operated from the platform: Next to the marking shown in Figure 8

The marking is needed for wagons fitted with composite brake blocks and hand brake which are not capable of meeting a 4 % gradient. The figure shown indicates the maximum gradient at which the handbrake may be used with no risk of the wagon Meaning:

rolling away.

Figure 55b - Additional marking for the manually applied parking brake for wagons with composite brake blocks

# 4.5.26 Isolating brake handle

Dimensions in millimetres

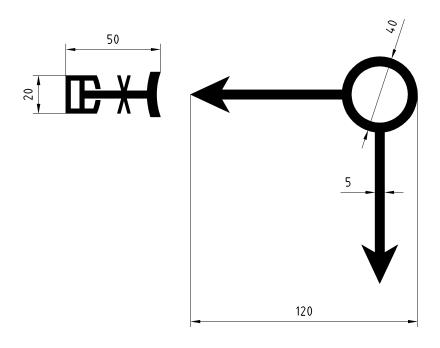


Figure 56a — Marking for one side of the wagon

Dimensions in millimetres

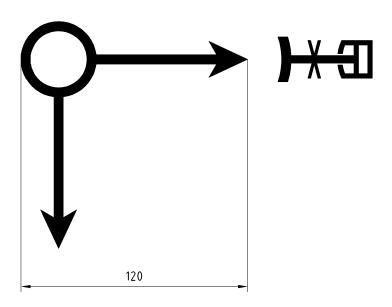
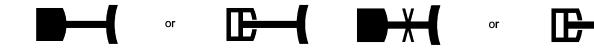


Figure 56b — Marking for the other side of the wagon



#### **Figure 56c - Alternative markings**

#### Figure 56d - Alternative markings

Position: On both sides of the wagon near to each distributor isolating handle with corresponding left or

right marking.

Alternative markings 56c and 56d may be used to complete Figures 56a and 56b or as stand

alone items at lever end positions.

**Meaning:** The pneumatic brake is isolated when the handle is in the horizontal position.

#### Figure 56

#### 4.5.27 Instructions and safety advices for special equipment

Examples of Markings for wagons with special fittings (wagons with automatic discharge facility, opening roof, etc.).

Wandarretierung lösen durch Schließen und Öffnen mit Bedienhebel. Débloquer l'arrêt mural en l'ouvrant et le fermant avec le levier de commande.

Release wall locking device by closing and opening with control lever.

Allentare il blocco della parete mediante chiusura e apertura con la leva di servizio.

**Position:** At suitable places on both sides of the wagon.

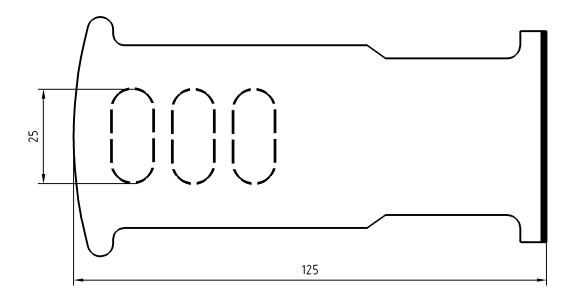
Meaning: Instructions on how to operate these fittings and the safety measures to be taken, if possible in

several languages in addition to the four shown.

Suitable pictograms can be added to these instructions.

## 4.5.28 Buffer stroke

Dimensions in millimetres



**Position:** On the headstocks between the buffers near the left buffer

**Meaning:** This marking indicates the buffer stroke. It is needed if the buffer stroke is greater than 105 mm.

Figure 57