
Load handling chart book

LTM 1055 - 3. 2

085130

EPROM: 23. 06. 2010

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Product identification

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DANGER

Risk of accident!

The guidelines in the operating instructions are definitive for operation of the crane.

► Observe the notes and details in the operating instructions!

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II. LOAD CAPACITY TABLES

1. Explanations

- 1.1 The load capacity values in the tables are stated in metric tons [t].
- 1.2 The working radius is the horizontal gravity center distance of the load from the rotational axis of the crane superstructure measured at the ground. The radius stated is valid under load conditions, i.e. including boom flexure.
- 1.3 Boom positions differing from those given in the load capacity tables are not permissible.
- 1.4 The boom may only be manoeuvred into those areas specified in the load chart, even if no load is suspended, otherwise there is a risk of the crane toppling.
- 1.5 The stated load capacities contain the weights of the load bearing, lifting and slinging tackle. The possible weight for the load to be lifted is therefore reduced according to the weights of the afore-mentioned tackle.
- 1.6 If the boomnose is mounted on the jib head during crane operation, then the possible load is reduced further corresponding the weight of the boomnose (0.046 t).

2. Crane operating mode "Crane supported"

- 2.1 Before the crane is raised on its supports, the axle suspension must be blocked.
- 2.2 The sliding arms of the hydraulic support jack must be extended (to a uniform length on both sides) to the extent stated in the applirope load capacity table.
- 2.3 The sliding arms must be secured by pins.
- 2.4 It is necessary to place stable underlay material under the support pads of the support jacks over a large surface area according to ground conditions.
- 2.5 All wheels must be raised clear of the ground.
- 2.6 Use the BluetoothTM Terminal (BTT) to align the crane horizontally. Horizontal positioning of the crane must also be checked from time to time and adjusted as necessary.

3. Crane operating mode "Free-standing on tires"

The crane can be operated in this mode if the following instructions are observed:

- 3.1 The telescopic boom may be extended to a maximum length of 13.6 m.
- 3.2 The ground beneath the crane must be in a position to securely bear the maximum operating weight of the crane supplemented by the weight of the load.
- 3.3 The ground beneath the crane must be level and not sloping.
- 3.4 The suspension of the axles must be set to the specifications in the load capacity table. *See „Crane operations "Crane freestanding on tires"“ on page 21.*
- 3.5 The sliding rods must be extended to the maximum possible extension point, in relation to the available place at the application site, and pinned.
- 3.6 The support plates fixed on the support cylinders must be maintained a slight distance above the ground. The clearance between the support plates and the ground may not exceed 50 mm.
- 3.7 All wheels must comply with the air pressure specified for the tyres in the load charts .

4. Crane travel with load

See operating instructions, chapter 4.11.

5. There is a danger of tipping, or risk of the load-bearing structural members becoming overloaded:

- 5.1 if the loads, boom lengths and radius indicated in the appropriate load chart are not strictly adhered to.
- 5.2 if the load begins to swing due to improper control of crane movements.
- 5.3 if loads are pulled at an angle. Pulling diagonally to the boom's longitudinal axis is the most dangerous movement and must never be carried out. Pulling at an angle is prohibited!
- 5.4 if there is insufficient distance from trenches, cellars, and holes.
- 5.5 if in operating condition "crane supported":
 - 5.5.1 the crane is not properly supported on all 4 hydraulic supports and the crane is not adjusted horizontally.
 - 5.5.2 the sliding outrigger arms are not extended to the exact length stated in the applicable load chart (to a uniform length on both sides).
 - 5.5.3 the sliding arms are not secured with pins.
 - 5.5.4 the support pads are not provided with a suitable foundation of stable material in accordance with the relevant ground conditions.
- 5.6 if in operating condition "crane freestanding on tires, working over rear":
 - 5.6.1 the telescopic boom is extended to a length of more than 13.6 m.
 - 5.6.2 the axle suspension is not set to the specifications in the load capacity table.
 - 5.6.3 the ground is not capable of bearing the max. operating weight of the crane supplemented by the weight of the load.
 - 5.6.4 the ground is not even and the ground is sloped.
 - 5.6.5 the crane is driven too fast with a load suspended and braking or other movements are sudden.

6. Telescopic boom

- 6.1 The lifting capacity of the telescopic boom with its 4 extendable telescopic sections is limited. The loads stated in the load capacity tables must not be exceeded.
- 6.2 The specifications for the telescopic sections to be extended according to load and required boom length must be observed under all circumstances.
- 6.3 As a general rule, the boom should first be extended to the required length, and then loaded. However, it is possible to extend and retract the boom under partial load. The weight of this partial load is dependent on bearing pad lubrication and the available useable lengths of the telescopic sections.
- 6.4 Even without a load, the telescopic boom may only be moved within the working radius ranges for which values are listed in the load capacity table.

7. Rope winches (hoisting gears)

7.1 Winch 1

Winch 1 is designed for a maximum rope tension of 45 kN. This rope tension must not be exceeded under any circumstances. Accordingly, the minimum number of hoisting rope lines (rope reeving) should be selected according to the weight of the load to be lifted (see table "hoisting rope reeving" in chapter II).

7.2 Winch 2

Winch 2 is designed for a maximum rope tension of 45 kN. This rope tension must not be exceeded under any circumstances. Accordingly, the minimum number of hoisting rope lines (rope reeving) should be selected according to the weight of the load to be lifted (see Table "Hoisting rope reeving" in chapter II).

7.3 Prevention of rope slack formation:

- 7.3.1 When retracting the telescopic boom, the winch must be operated in the direction of lifting simultaneously in order to prevent the hook block from descending to the ground and creating rope slack. The speed of the hoisting rope movement should be matched to that used for retraction!
- 7.3.2 The rope guides on the winches must be supervised by a member of the workforce when additional equipment is being mounted!

8. Hoisting rope reeving

- 8.1 The hoisting rope must be reeved in between boom head and hook block in accordance with the maximum rope tension of the winch and the weight of the load to be lifted.
- 8.2 If several hoisting rope lines are reeved in, the efficiency of the hook block is reduced due to pulley friction and rope flexure.
In consequence, with a rope tension of e.g. 45 kN, only 423 kN (42.3 t) can be pulled with a 10-fold line reeving, instead of 450 kN (45.0 t).
- 8.3 Consult the table "Hoisting rope reeving" in chapter II of this manual for the maximum loads in dependence on the number of hoisting rope lines.
- 8.4 The number of hoisting rope lines reeved must be set on the control and display unit of the LICCON-overload safety device according to the current hoisting rope reeving total.
- 8.5 If the block hook is operated with a higher reeve number than necessary for the respective boom length loads, then the block hook weight will not be sufficient and can slacken the cable when lowering, which can lead to damage to the cable.

8.6 Maximum rope pull values for countries applying a rope safety factor of 5 in accordance with ASME B30.5 (Canada, USA and Taiwan)



Note

In countries where the national standard ASME B30.5 applies (Canada, USA and Taiwan), a rope safety factor of 5 for non-rotating hoist ropes is mandatory. The loads derived from the rope pull values as detailed in the "Hoist rope reeving" table in Chapter II of this manual were calculated using a rope safety factor of 4.5 in accordance with DIN EN 13000.

In contrast to ASME B30.5, DIN EN 13000 also factors in rope drive efficiency. For this reason the loads derived from the rope pull values detailed in the following tables must be applied in the case of a reeving factor of up to 13 in countries where the national standard ASME B30.5 applies (Canada, USA and Taiwan). In the case of a reeving factor greater than 13, the rope safety factor of 4.5 as per DIN EN 13000 is safer than the rope safety factor of 5 as per ASME B30.5!

Where the normative standards detailed in Chapter 5.3.2.1.1 (d) of ASME B30.5 are complied with, rope pull values as per DIN EN 13000 can also be applied.

8.6.1 Maximum loads are dependent on reeving factor used

Reeving	Maximum load (DIN EN 13000) [t]	Maximum load (ASME B30.5) (Canada, USA, Taiwan) [t]
1	4,5	4,1
2	9,0	8,3
3	13,4	12,4
4	17,7	16,5
5	21,9	20,6
6	26,1	24,8
7	30,2	28,9
8	34,3	33,0
9	38,3	37,2
10	42,3	41,3
11	46,1	45,4
12	50,0	49,5
13	53,7	53,7

9. Changing between material handling and installation operation

9.1 Load carrying capacity of the crane

The load carrying members of the crane have been designed according to the load criteria for installation / set up operations (load collective classification = "light" = Q1 or L1). Stress collective S1 according to DIN 15018 part 3 and stress margin range N1 according to DIN 15018 part 1 or ISO 4301, group A1.

If an installation / set up crane is used for material handling, the stress margin range increases. Therefore the loads must be reduced since a higher stress group now becomes applicable. This is especially true if the calculated loads are limited by strength values.

NOTICE

For crane value calculation, it has been assumed that the crane will be utilized as an installation crane (load collective classification = "light" = Q1 or L1). If the crane is also used in material handling application, premature wear of all drive sections must be expected and cracks may occur in load carrying steel members.

- We therefore strongly recommend, that if the crane is utilized in material handling application, the load values are reduced by 50 % as compared to the data given in the corresponding load carrying capacity chart.
-

For details, have material handling data ready and then contact your Liebherr Service Dept.

The size of the cables as well as drive sections of hoist gears are configured according to the load collectives applicable for installation operation (load collective classification = "light" = Q1 or L1):

ISO 4301/2 or 4308/2
Group A1
Hoist gears M3
Intake gears M2

If an installation / set up crane is used material handling (load collective classification = "light" = Q1 or L1), the stress margin range increases, the rope runs must therefore be reduced. If this is not assured, then the hoist rope wear out rate will be reached much earlier, and / or the hoist gear must be rebuilt / serviced much earlier.

Please refer to the information regarding wear out criteria for ropes according to DIN 15020, part 2 or ISO 4309 in chapter 8.01 "Repeat crane inspections" in the crane's operating instructions.



Note

- In order to keep wear out rate of hoist ropes as low as possible during material handling operation (load collective classification = "medium" or higher), we recommend the use of a special length rope, so that during material handling operation the rope is rolled onto drum of the hoist winch in only one rope layer.

If several layers are on the rope drum, the wear rate increases. In addition, the winch drive will run cooler, if the crane is operated with only one rope layer.

10. LICCON-overload safety device and limit switch

If the permissible load moment is exceeded, the electronic LICCON-overload safety device shuts down the hoisting, boom topping and boom extension movements. It is possible to decrease the load by means of movements in the opposite direction. The LICCON-overload safety device must be checked for correct operation on each occasion before operating the crane.

- 10.1 The LICCON-overload safety device must be set to the current equipment mode of the crane by means of function keys or by entering the corresponding 4-digit code.
- 10.2 The LICCON-overload limit switch is a safety device and must not be used as a shutdown device for operating purposes. The crane operator must assure himself of the weight of a load before attempting to lift it. The fact that the crane is equipped with the LICCON-overload safety device does not free the operator from responsibility with regard to operating safety.
- 10.3 The control and display unit of the LICCON-overload safety device indicates among other things the working radius, boom length, pulley height, load and degree of crane load utilization. This provides the operator with a constant overview of the working range and crane utilization.
- 10.4 Hoisting limit switches at the head of the telescopic boom and folding fly jib prevent the hook block from running up against the boom head. The hoisting limit switches must be checked for correct operation on each occasion before the crane is operated.
- 10.5 Winch speed sensor on the rope winches ensure that 3 safety turns remain on the rope drums. When the final rope layer is reached, a visual check is also necessary to ensure that the 3 safety turns are available. If the hoisting gears have been overturned in the lifting direction, or if the hoisting rope has been changed, then the corresponding limit switch must be reset before resuming operation.
- 10.6 The crane operator must check correct operation of the LICCON-overload safety device on each occasion before operating the crane. The crane manufacturer will accept no liability for damage to the crane and consequential damage resulting from non-function or disactivation of the LICCON-overload safety device.

11. Hook blocks and load hooks

11.1 Load capacity, rope pulleys and operating weight

NOTICE

Damage to ropes due to insufficient weight of the load hook!

If the hook block features insufficient weight to attain sufficient tension in the hoist rope, winding problems could occur at the winches as a result of the formation of slack rope during lifting and lowering of the hook block. This may in turn cause damage to the ropes!

- To avoid these winding problems at the winches, the weight of the hook block can be increased using additional weights or conversion kits wherever required. It should be noted here that the additional weights must be removed again if problems arise during the assembly and set-up conditions as a result of the increase in the dead weight!

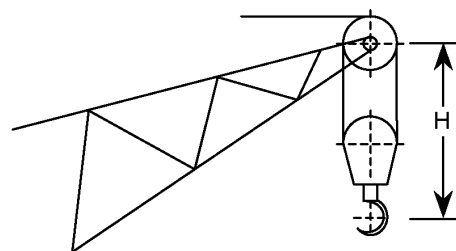
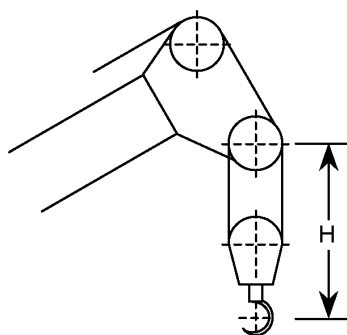
Load [t]	Number of rope pulleys	Strings	Weight [t]	Dead weight with mounted additional weight [t]
57.4	7	14	0.400	0.600 with 2 auxiliary weights 0.800 with 4 auxiliary weights 1.000 with 6 auxiliary weights
57.4	7	14	0.320	-
46.1	5	11	0.400	0.600 with 2 auxiliary weights 0.800 with 4 auxiliary weights
30.2	3	7	0.280	-
13.4	1	3	0.195	-
4.5	-	1	0.075	-

11.2 Distance between hook and pulley set in the boom head

To determine the hook height, the hoist height must be reduced by the distance between the hook and the centre of the pulley set in the boom head.

The distances for the hook blocks being used can be obtained from the following table.

Load [t]	Distance [H]	
	at the pulley head from the telescopic boom [m]	at the pulley head of the tip [m]
57.4	3.3	-
46.1	3.3	-
30.2	3.3	-
13.4	3.2	3.2
4.5	3.1	3.1



12. Load capacity reduction with folding jib mounted

- 12.1 The load capacity values stated for the telescopic boom in the load capacity tables apply to the boom without installation of a folding fly jib for transport or operating purposes.
- 12.2 When operating the crane, the folding jib is mounted at an angle from 0° to the telescopic jib, the possible load capacities of the telescopic jib are reduced according to the chart below.
The weight of the hook block for TK operation of 0.200 t and 0.090 t respectively must be considered.

Position of the folding jib	[m]	T-10.2	T-13.6	T-17.0	T-20.5	T-23.9
Entire folding jib sideways on the jib pivoting section	[t]	0.46	0.34	0.27	0.23	0.19
K-9.5 m on the jib head, the rest on the jib pivoting section	[t]	1.40	2.10	1.50	1.30	1.30
K-16.0 m on the jib head	[t]	1.70	2.90	2.00	1.70	1.70

Position of the folding jib	[m]	T-27.3	T-30.8	T-34.2	T-37.6	T-40.0
Entire folding jib sideways on the jib pivoting section	[t]	0.17	0.15	0.14	0.12	0.12
K-9.5 m on the jib head, the rest on the jib pivoting section	[t]	1.30	1.20	1.10	1.10	1.00
K-16.0 m on the jib head	[t]	1.70	1.50	1.40	1.40	1.30

12.3 When operating the crane, the folding jib is mounted at an angle from **20°** to the telescopic jib, the possible load capacities of the telescopic jib are reduced according to the chart below.

The weight of the hook block for TK operation of 0.200 t and 0.090 t respectively must be considered.

Position of the folding jib	[m]	T-10.2	T-13.6	T-17.0	T-20.5	T-23.9
K-9.5 m on the jib head, the rest on the jib pivoting section	[t]	1.40	2.00	1.60	1.40	1.40
K-16.0 m on the jib head	[t]	1.90	3.10	2.40	2.00	2.00

Position of the folding jib	[m]	T-27.3	T-30.8	T-34.2	T-37.6	T-40.0
K-9.5 m on the jib head, the rest on the jib pivoting section	[t]	1.40	1.30	1.20	1.10	1.10
K-16.0 m on the jib head	[t]	2.00	1.80	1.70	1.60	1.50

12.4 When operating the crane, the folding jib is mounted at an angle from **40°** to the telescopic jib, the possible load capacities of the telescopic jib are reduced according to the chart below.

The weight of the hook block for TK operation of 0.200 t and 0.090 t respectively must be considered.

Position of the folding jib	[m]	T-10.2	T-13.6	T-17.0	T-20.5	T-23.9
K-9.5 m on the jib head, the rest on the jib pivoting section	[t]	1.50	2.40	1.90	1.60	1.60
K-16.0 m on the jib head	[t]	2.20	3.90	3.00	2.50	2.50

Position of the folding jib	[m]	T-27.3	T-30.8	T-34.2	T-37.6	T-40.0
K-9.5 m on the jib head, the rest on the jib pivoting section	[t]	1.60	1.50	1.40	1.30	1.30
K-16.0 m on the jib head	[t]	2.50	2.20	2.00	1.80	1.80

13. Maximum turning speed of the crane's superstructure with a nominal load



WARNING

Risk of accident!

The boom system could become overloaded if the maximum permissible turning speeds are not adhered to. This could lead to serious accidents.

- It is imperative that the max. permissible turning speeds for the operating modes and boom lengths are adhered to!

13.1 EN 13000 - load charts

Boom [m]	Permissible slewing speed	
	LICCON [%]	$\left[\frac{1}{\text{min}} \right]$
T-10.2	70	0.80
T-13.6	70	0.80
T-17.0	55	0.50
T-20.5	55	0.50
T-23.9	55	0.50
T-27.3	55	0.50
T-30.8	55	0.50
T-34.2	40	0.30
T-37.6	40	0.30
T-40.0	40	0.30
TK-operation	40	0.30

*EN 13000-capacity load charts are marked in the upper left-hand area of the corresponding pages of the tables with the symbol “**EN 13000**”.

13.2 85% - load charts

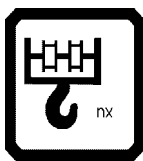
Boom [m]	Permissible slewing speed	
	LICCON [%]	$\left[\frac{1}{\text{min}} \right]$
T-10.2	50	0.40
T-13.6	50	0.40
T-17.0	40	0.30
T-20.5	40	0.30
T-23.9	40	0.30
T-27.3	40	0.30
T-30.8	40	0.30
T-34.2	40	0.30
T-37.6	40	0.30
T-40.0	40	0.30
TK-operation	40	0.30

***85%**-capacity load charts are marked in the upper left-hand area of the corresponding pages of the tables with the symbol “**85%**”.

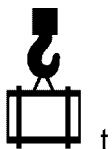
With 85%-capacity load charts, nominal loads may only be moved with the slowest lifting or luffing speeds.

14. Explanation of symbols

Hoisting rope reeving



This symbol appears on the hoisting rope reeving table (1st table of chapter II) and indicates the required number of hoisting rope reevings to achieve a certain load capacity.



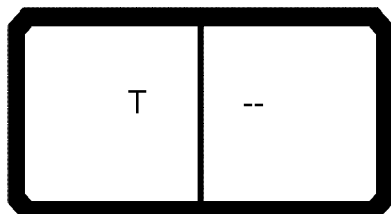
Load capacity in metric tons [t]

This symbol appears on the hoisting rope reeving table (1st table of chapter II) and indicates the max. permissible load capacity depending on hoisting rope reeving.

Operating mode

2part symbol

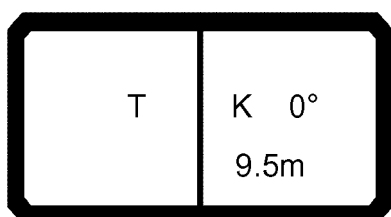
Example:



Left side = Main boom mode

- Main boom type

ex.: T = Telescopic boom



Left side = Main boom mode

- Main boom type

ex.: T = Telescopic boom

Right side = Auxiliary boom mode

- Auxiliary boom type

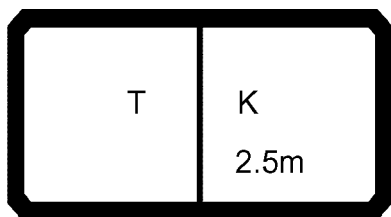
ex.: K = Folding fly jib

- Auxiliary boom angle

ex.: 0° = mounted at an angle of 0° to the telescopic boom.

- Auxiliary boom length

ex.: 9.5 m



Left side = Main boom mode

- Main boom type

ex.: T = Telescopic boom

Right side = Auxiliary boom mode

- Auxiliary boom type

ex.: K = Folding fly jib

- Auxiliary boom length

ex.: 2.5 m

Operating mode that can only be operated with accessories!

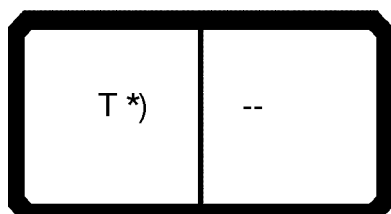


DANGER

Risk of accident!

If the crane is operated without the required auxiliary device in operating modes designated with *), load-bearing structural members will become overloaded!

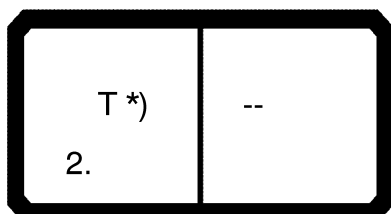
- The auxiliary device required for crane operation must be mounted on the crane in compliance with the manufacturer's instructions!



Left side = Main boom mode

- Main boom type

ex.: T *) = Telescopic boom with auxiliary device

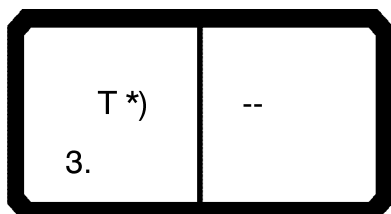


Left side = Main boom mode

- Main boom type

ex.: T *) = Telescopic boom with auxiliary device

ex.: 2. = variant 2

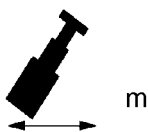


Left side = Main boom mode

- Main boom type

ex.: T *) = Telescopic boom with auxiliary device

ex.: 3. = variant 3



Working radius of the telescopic boom

The working radius is the horizontal distance of the center of gravity of the load to the slewing axis of the crane superstructure as measured from the ground beneath the load.



Working radius of the additional jib

The working radius is the horizontal distance of the center of gravity of the load to the slewing axis of the crane superstructure as measured from the ground beneath the load.



Telescopic boom length

In the row beneath this symbol the different boom lengths of the crane are indicated in columns. The letters next to the symbol indicate the units of measurement in the actual load chart, for example “m> <t” means that all lengths are given in meters [m] and all weights are given in metric tons [t].

CODE > 0001 <

Short code

4-digit short code; specifies in coded form the set operating mode / current set-up stage. The short code can be entered directly into the LICCON-overload safety device to call up the respective load capacity table.

* n *

Hoisting rope reeving

Appears in the load charts as a line below the load capacity values. Indicates the number of hoisting rope reeving required to hoist the maximum load in the corresponding load chart column. If a load capacity value in the column exceeds the load which can be lifted with the maximum reeving, then an exclamation mark (!) is next to the reeving number to signify that special equipment is required to lift this load.

- Loads over 42.3 t with additional pulley block

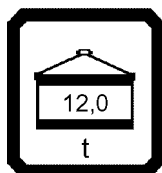


Extension conditions of the telescopic boom sections

Indications in percent for the individual telescopic sections (Tele 1 / Tele 2 / Tele 3 / Tele 4). Indication 0 = completely retracted, 100 = completely extended. Extension conditions other than those specified in the load charts are prohibited.

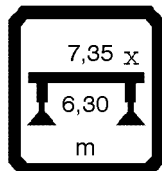
A + sign following the percentage details means that the respective telescopic section must be pinned.

A - sign following the percentage details means that the respective telescopic section can be telescoped with load up to the percental extension point value (in accordance with the load capacity table).



Counterweight

In this symbol, the size of the counterweight is indicated in metric tons [t] which must be on the crane's superstructure in order to achieve the values of the given load chart.



Crane operations "Crane supported"

Indication of the support base (ex.: 7.35 m x 6.30 m = length x width). The hydraulic supports of the crane must be extended to the dimensions specified in this symbol and pinned when the corresponding load chart is being worked with.



Crane operations "Crane freestanding on tires"

I--I = All axles blocked

10 = Details of the prescribed tyre pressure (ex.: 10 bar)



Slewing range

Specifications for the slewing range of the crane's uppercarriage for the respective load chart:

- 360° = unrestricted slewing possible
- ! 0° = operating range to the rear
- ! +/-10° = operating range to the rear with a slewing range of +/- 10° to left and right

If the (!) symbol is indicated for the slewing range, the LICCON will switch automatically to the load chart for the 360° slewing range, immediately upon exiting the specified slewing range.



Notes

Load charts indicating a (!) symbol do not always feature all load chart columns with the telescopic boom extension conditions of the respective 360° load charts.

If a load chart has been selected with chart changeover (!) by pressing O.K., slewing from outside of the slewing range indicated with (!) into the slewing range indicated with (!) will only be possible if it is featured for the actual telescopic boom extension condition in the load chart indicated with (!)!



Permissible wind speed

Indication of wind speed in [m/s] up to which crane operation is permissible depending on boom length. If the wind speed exceeds the indicated value, crane operations must be terminated and, if necessary, equipment must be removed from the crane.

15. Observation of wind conditions

15.1 Wind influence on the LICCON-overload safety device

When working in operation modes involving long boom systems and steeper boom positions in particular, the wind can either increase or ease additional duress on the crane system. The load will then be incorrectly displayed, and the LMB can shut down too early or too late.

15.1.1 Wind from the rear

With wind from the rear the boom system will be under increased duress. The load being displayed is too high. LMB-shutdown occurs with loads smaller than the max. load.

15.1.2 Wind from the front

With wind from the front the boom system will be eased of duress. The load being displayed is too low. LMB-shutdown will only occur with loads greater than the max. load.



DANGER

Risk of accident!

Wind from the front will not relieve duress from the hook, hoist cable, cable pulleys or the hoisting winch. These units can become overloaded through lifting to the point of LMB-shutdown with wind from the front!

The entire crane can become overloaded when wind from the front eases, if it has previously been loaded to the point of LMB-shutdown!

- The operator must therefore be aware of the load weight and may not then exceed the max. load!
-

15.2 Permissible wind speed and surface susceptibility to wind

15.2.1 Crane operation is permissible up to the wind velocity stated in the load capacity table corresponding to the current boom length.



DANGER

Risk of accident!

The crane operator must consult the local meteorological office for information on the expected wind velocity prior to commencing operations. If unacceptable wind velocities are forecast, it is not permissible to lift a load.

15.2.2 The wind surface A_W of the load must not exceed certain values. These values are stated in diagram 1 (see next page).

If the wind surface of the load exceeds the diagram values, the wind velocity up to which crane operation is permissible is reduced correspondingly (note example below).



DANGER

Risk of accident!

Even if the wind surface of the load is smaller than the reference surface, it is prohibited to operate the crane if wind velocity exceeds the limits stated in the load capacity tables!

15.2.3 Example:

- Weight of load according to load capacity chart: $m = 50.0 \text{ t}$
- Permissible wind velocity acc. to load capacity table: $v = 9.0 \text{ m/s}$
- Permiss. load wind surface acc. to diag. 1: $A_{Wz} = 55.0 \text{ m}^2$
- Actual wind surface of load: $A_{Wr} = 100.0 \text{ m}^2$
- Diagram 2 yields for $v = 9 \text{ m/s}$ the impact pressure: $p = 50.0 \text{ N/m}^2$

Hence a load with the permissible wind surface $A_{Wz} = 55 \text{ m}^2$ is influenced by a force F :

$$F = \text{impact pressure } p \times \text{wind surface } A_{Wz} = 50 \text{ N/m}^2 \times 55 \text{ m}^2 = 2750 \text{ N}$$

For the actual wind surface $A_{Wr} = 100 \text{ m}^2$, a permissible impact pressure p results for the same force F :

$$p = \frac{F}{A_{Wr}} = \frac{2750 \text{ N}}{100 \text{ m}^2} = 27,5 \frac{\text{N}}{\text{m}^2}$$

For $p = 27.5 \text{ N/m}^2$, diagram 2 yields a maximum permissible wind velocity of $v = 6.7 \text{ m/s}$.

Diagramm 1

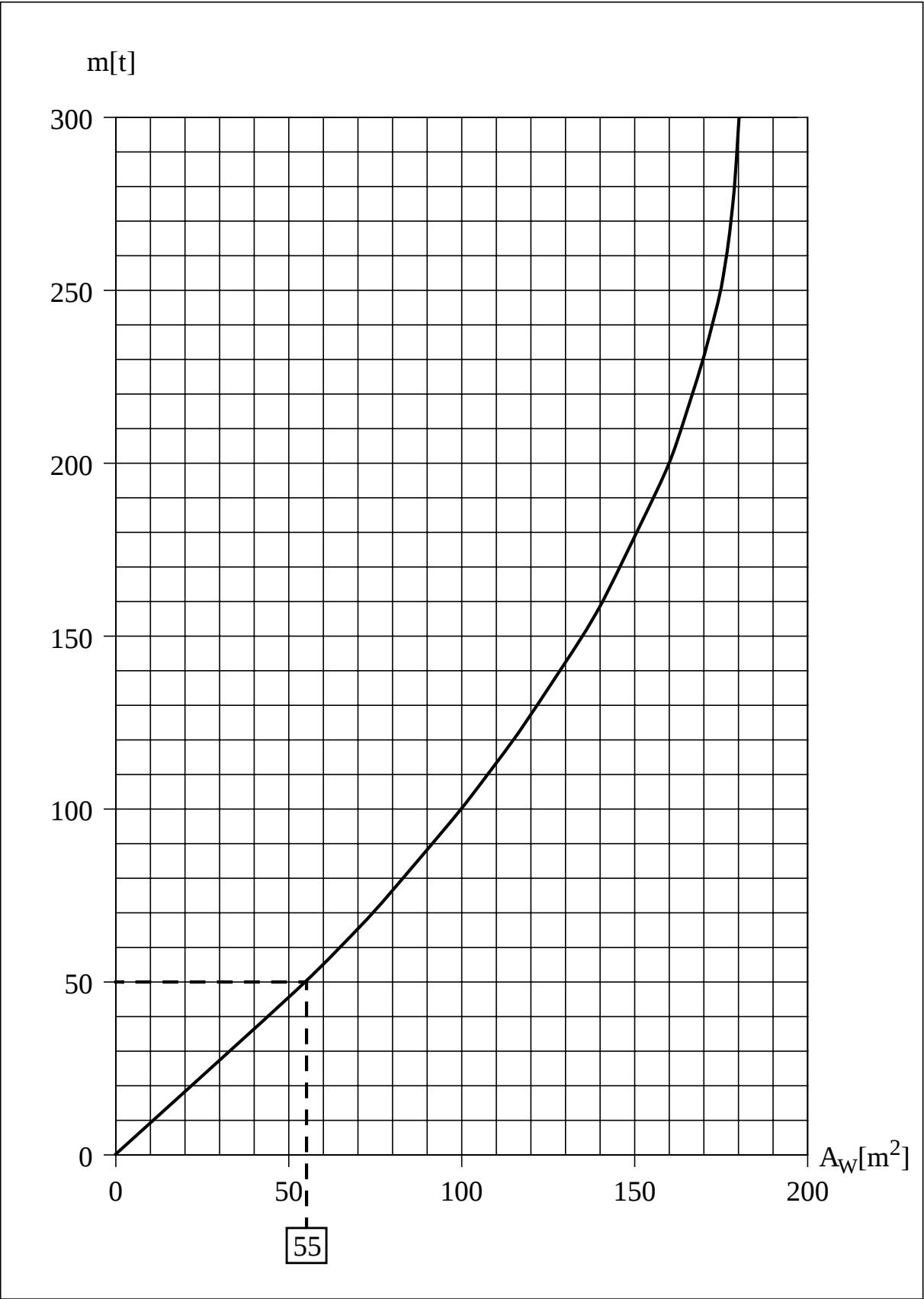
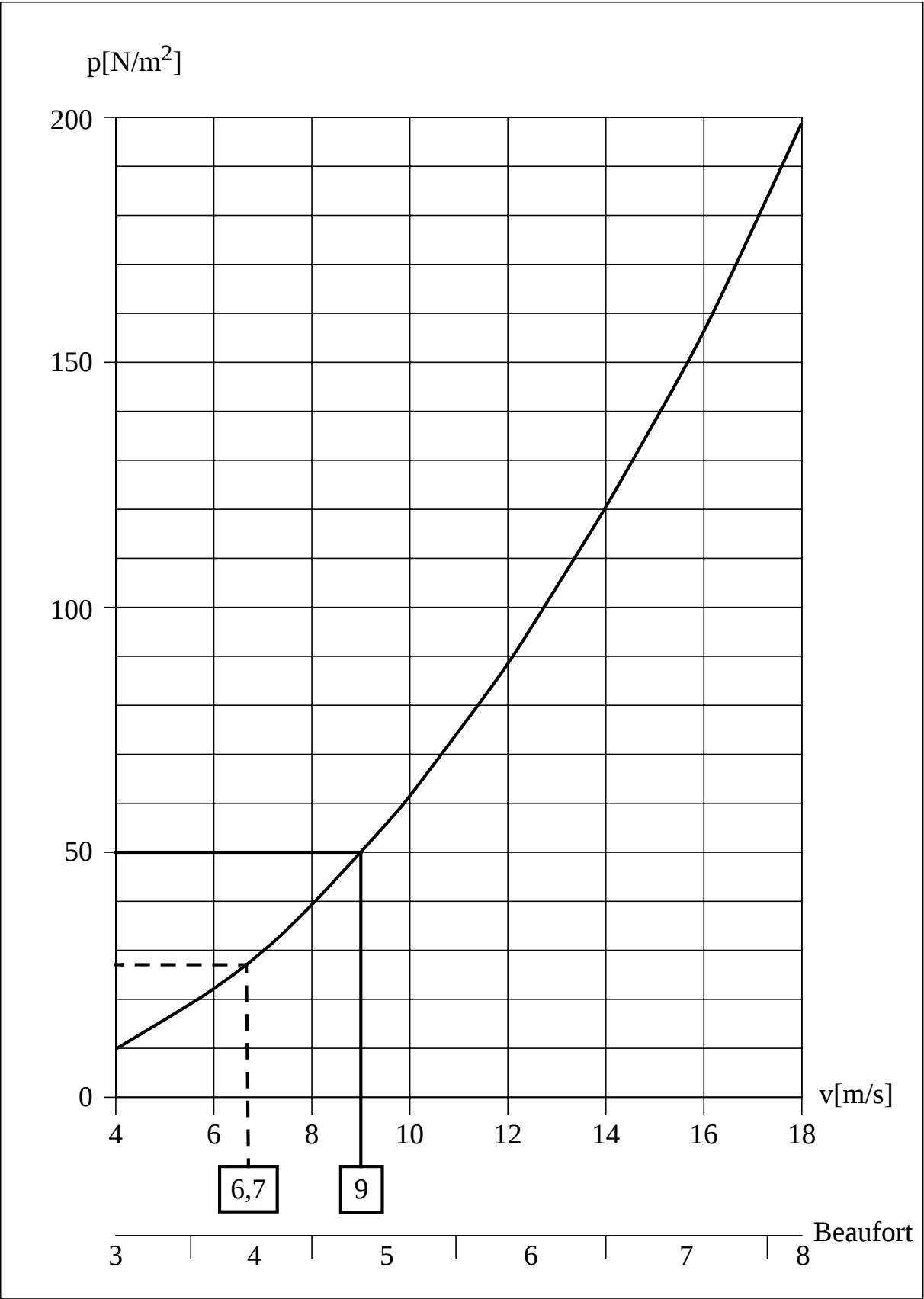
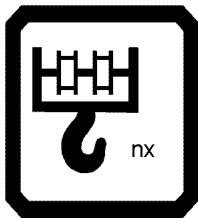
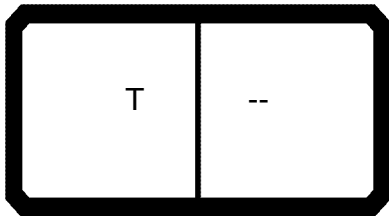


Diagramm 2

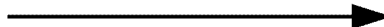
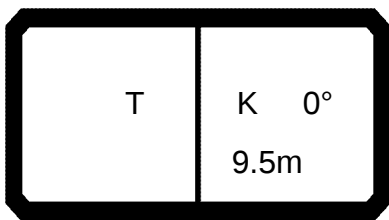




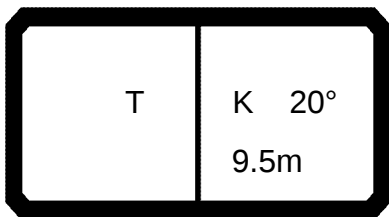
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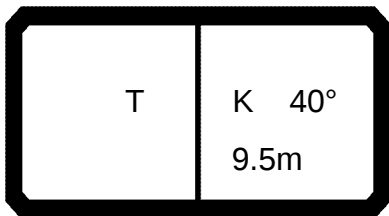
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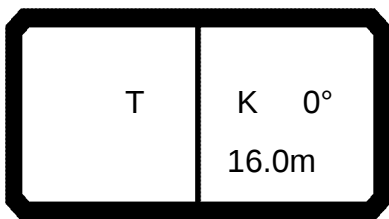
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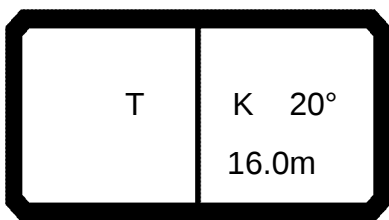
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177

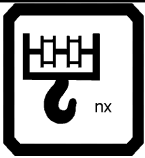
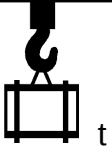


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183



	
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7	30,2
8	34,3
9	38,3
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14	57,4

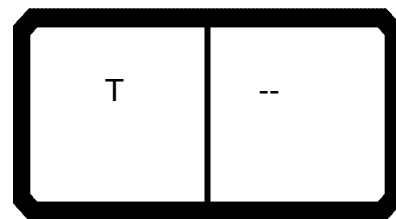


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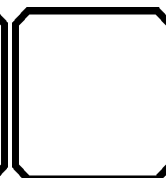
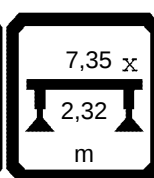
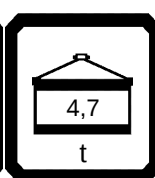
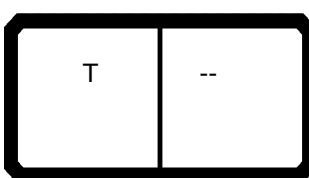
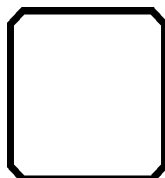
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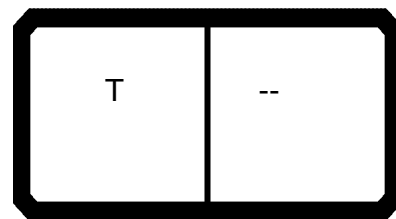
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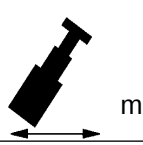
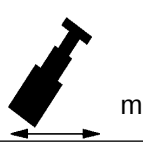
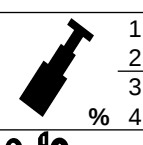
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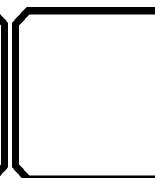
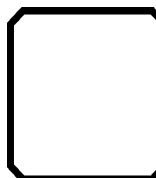
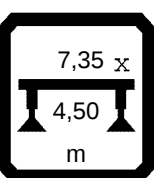
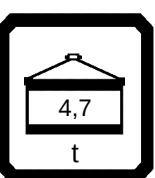
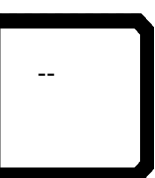
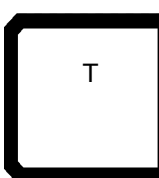
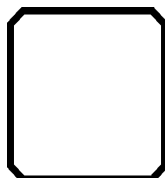
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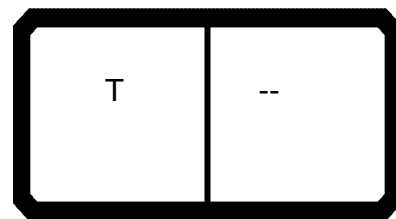
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	24,0	1,1				0,9	0,9	0,8		1,1	1,1	1,0	0,7	0,7	
	26,0	0,8								0,9	0,9	0,8			
* n *	3	3	4	3	2	3	3	2	2	3	3	2	2	2	
	1	46 -	0 +	0 +	0 +	0 +	0 -	46 -	92 -	0 +	0 -	46 -	92 -	92 -	100 -
	2	46 +	0 +	0 -	46 -	92 -	92 +	92 +	92 +						



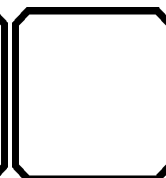
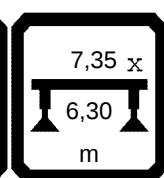
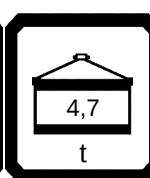
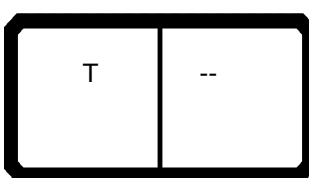
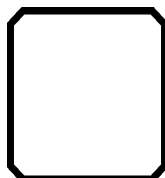
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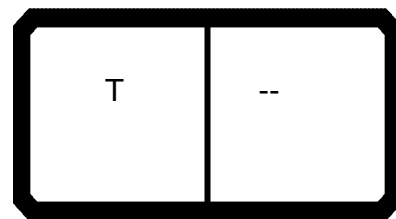
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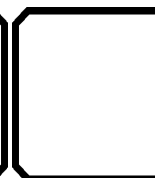
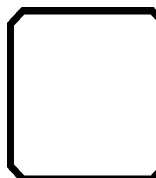
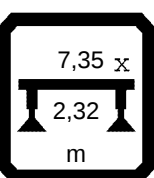
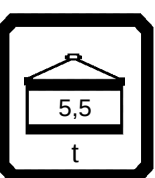
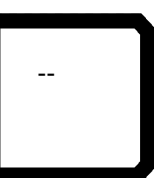
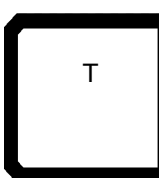
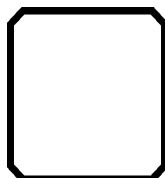
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	3	0 +	0 +	46 +	0 +	0 +	0 +	46 +	46 +	0 +	0 +	0 +	46 +	46 +	46 +
	% 4	0 +	0 +	0 +	46 +	0 +	0 +	0 +	46 +	92 +	0 +	0 +	0 +	46 +	92 +
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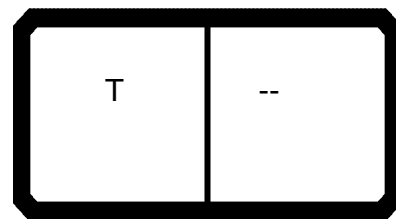


02.02

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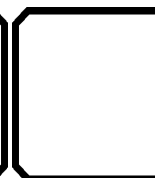
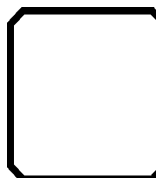
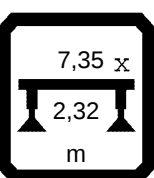
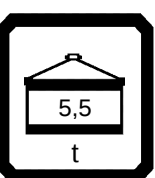
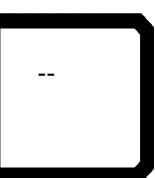
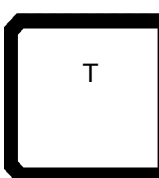
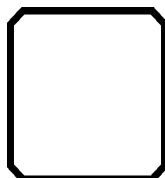
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			t	m	360°		



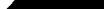
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	3,5	12,4	11,9	10,9		14,9	14,3	14,3	13,4	13,3					10,8
	4,0	11,0	11,0	9,9	7,4	12,5	12,2	12,2	11,6	11,6	10,7	10,7			10,6
	4,5	9,5	9,5	8,6	7,1	10,6	10,5	10,5	10,1	10,1	9,4	9,4	8,2		10,0
	5,0	8,3	8,3	7,5	6,7	9,2	9,2	9,2	8,9	8,9	8,2	8,2	7,4	6,3	9,0
	6,0	6,5	6,5	5,8	5,1	7,0	7,1	7,1	7,0	7,0	6,5	6,5	5,9	5,3	7,1
	7,0	5,1	5,1	4,6	4,0	5,4	5,7	5,7	5,7	5,7	5,3	5,3	4,7	4,2	5,7
	8,0	4,1	4,1	3,6	3,1		4,6	4,6	4,6	4,6	4,3	4,3	3,8	3,4	4,7
	9,0	3,3	3,3	2,9	2,4		3,7	3,7	3,8	3,8	3,6	3,6	3,1	2,7	3,9
	10,0	2,7	2,7	2,3	1,9		3,1	3,1	3,2	3,2	3,0	3,0	2,5	2,1	3,3
	12,0	1,8	1,8	1,3	0,8				2,2	2,2	2,0	2,0	1,6	1,2	2,3
	14,0	1,1	1,1						1,5	1,5	1,4	1,4	0,9		1,6
	16,0										0,8	0,8			
	18,0														
* n *		3	3	3	2	4	4	4	4	4	3	3	2	2	3
	1	0 +	0 -	46 -	92 -	0 +	0 +	0 +	0 +	0 +	0 +	0 -	46 -	92 -	0 +
	2	46 -	46 +	46 +	46 +	0 +	0 +	0 +	0 +	0 -	46 -	46 +	46 +	46 +	0 +
	3	46 +	46 +	46 +	46 +	0 +	0 +	0 -	46 -	46 +	46 +	46 +	46 +	46 +	0 +
%															

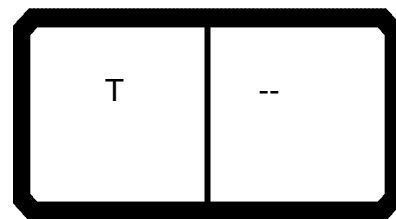


02.02

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			t	m	360°		

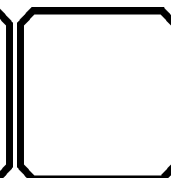
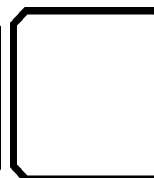
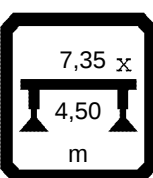
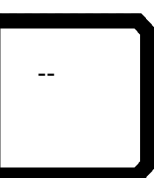
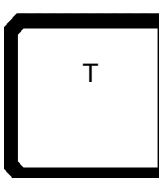
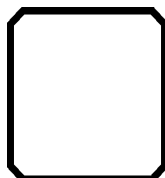
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			t	m	360°		



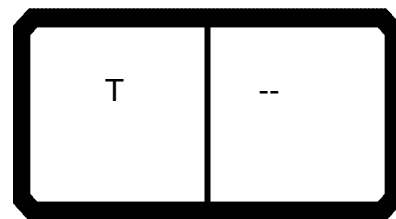
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[illegible]

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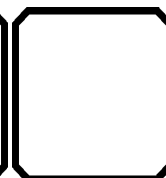
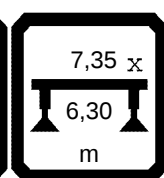
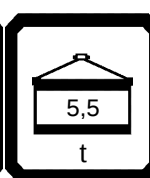
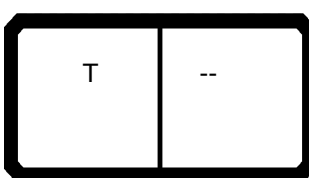
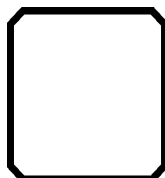
	T	--					
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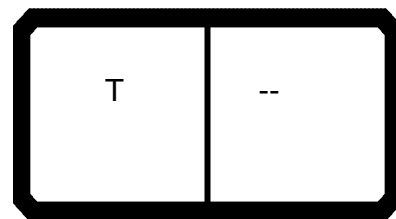


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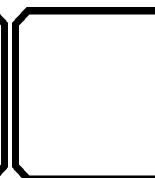
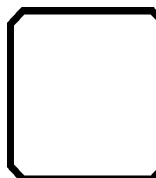
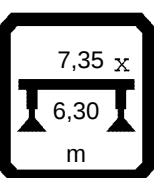
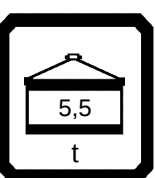
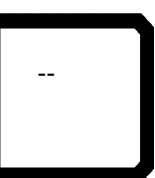
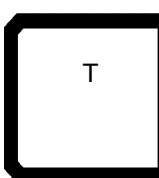
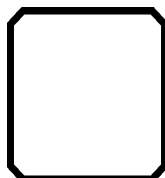
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	4,0	40,1	40,0	34,0	32,5	39,1	39,0	32,4	31,6	22,1	34,2	37,0	31,8	31,8	21,8
	4,5	36,0	36,1	34,8	30,9	34,9	35,1	32,8	30,8	20,7	32,0	32,8	31,8	32,2	20,5
	5,0	32,4	32,4	32,7	29,3	30,4	30,7	30,9	29,4	19,5	27,6	28,2	28,6	29,7	19,4
	6,0	26,0	25,2	25,8	26,1	23,2	23,5	24,2	24,9	17,4	21,4	21,9	22,3	23,3	17,3
	7,0	19,7	19,7	20,2	20,5	18,6	18,8	19,4	20,1	15,6	17,2	17,8	18,1	19,0	15,7
	8,0		15,5	15,9	16,2	15,3	15,5	16,0	16,6	14,2	14,2	14,7	15,0	15,9	14,3
	9,0		12,6	13,0	13,3	12,5	12,6	13,1	13,6	12,9	11,8	12,3	12,6	13,5	13,0
	10,0		10,5	10,9	11,1	10,4	10,5	11,0	11,5	11,5	10,0	10,4	10,7	11,4	11,8
	12,0					7,3	7,5	7,9	8,4	8,5	7,1	7,5	7,7	8,4	8,8
	14,0					5,5	5,6	6,0	6,5	6,5	5,3	5,6	5,8	6,4	6,8
	16,0										3,9	4,3	4,5	5,1	5,4
	18,0														
	20,0														
	22,0														
	24,0														
	26,0														
	28,0														
	30,0														
	32,0														
* n *		10	10	9	8	10	10	8	8	6	8	9	8	8	6
	1	0 +	0 +	0 +	0 +	46 +	0 +	0 +	0 +	0 +	92 +	46 +	46 +	0 +	0 +
	2	0 +	46 +	0 +	0 +	46 +	92								





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02.02

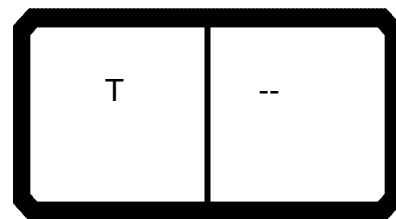
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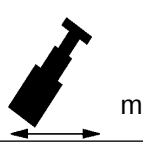
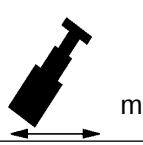
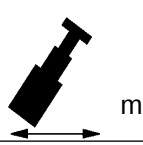
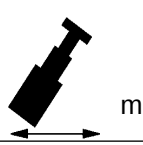
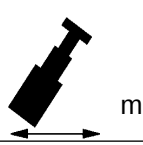
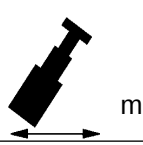
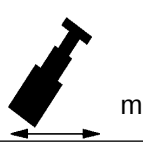
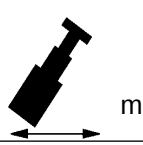
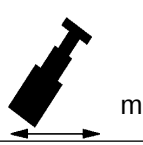
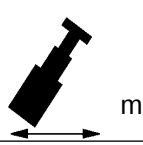
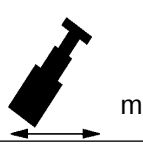
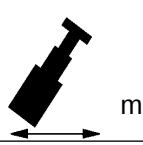
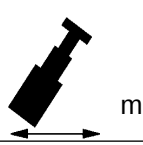
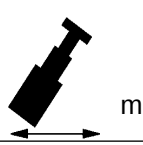
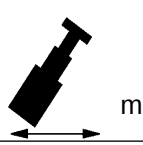
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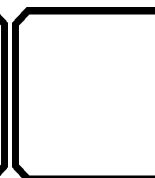
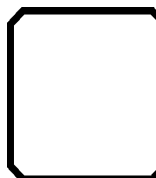
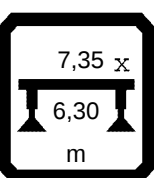
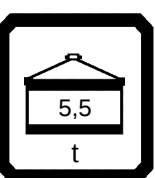
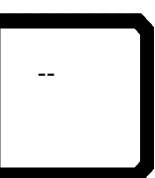
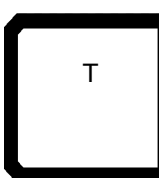
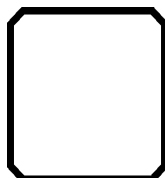
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	3,0														
	3,5								20,0	28,2	35,4	40,8			
	4,0	17,0	17,7	16,2					18,8	26,6	33,4	38,5			
	4,5	16,5	17,7	15,8	14,7	13,4			17,7	25,0	31,5	34,1			
	5,0	16,0	17,5	15,3	14,9	13,4			16,6	23,5	29,5	29,0			
	6,0	14,9	16,5	14,3	15,0	13,2	11,8	10,1	14,9	20,9	23,1	22,1	13,2	18,2	19,9
	7,0	13,8	15,3	13,2	14,4	12,8	11,7	10,1	13,4	18,6	18,6	17,7	12,0	16,5	16,2
	8,0	12,8	13,9	12,2	13,1	12,1	11,3	9,9	12,3	16,1	15,4	14,5	10,9	14,7	13,5
	9,0	11,9	12,0	11,3	11,3	11,4	10,8	9,7	11,3	13,2	12,6	11,9	10,0	12,5	11,5
	10,0	10,8	10,5	10,5	9,8	10,4	9,8	9,3	10,4	11,1	10,5	9,9	9,2	10,8	9,8
	12,0	8,5	8,2	8,6	7,7	8,2	7,7	7,6	8,6	8,2	7,7	7,1	7,9	8,3	7,4
	14,0	6,8	6,6	6,9	6,1	6,7	6,2	6,1	6,7	6,3	5,8	5,3	6,9	6,4	5,6
	16,0	5,5	5,3	5,5	5,0	5,5	5,1	5,0					5,7	5,1	4,3
	18,0	4,5	4,2	4,6	4,0	4,4	4,2	4,1					4,7	4,1	3,3
	20,0	3,7	3,5	3,8	3,3	3,7	3,4	3,4					3,9	3,4	2,6
	22,0	3,1	2,9	3,2	2,7	3,1	2,8	2,8					3,4	2,7	2,0
	24,0	2,6	2,4	2,7	2,2	2,6	2,4	2,3							
	26,0	2,2	2,0	2,3	1,8	2,2	2,0	2,0							
	28,0	1,9	1,6	1,9	1,4	1,8	1,6	1,6							
	30,0				1,1	1,5	1,3	1,3							
	32,0						1,0	1,0							
	34,0						0,8	0,8							
															
															
															



02.02

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			t	m	! +/-10°		

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	T	--					
			t	m	! +/-10°		

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	T	--					
			t	m	! +/-10°		

02.02

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	T	--					
			t	m	360°		

02.02

[illegible]

02.02

	T	--					
			t	m	360°		

02.02

	T	--					
			t	m	360°		

02.02

	T	--					
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02.02

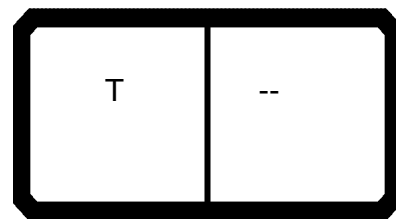
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02.02

	T	--					
			t	m	360°		

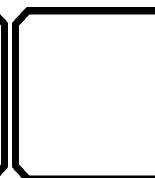
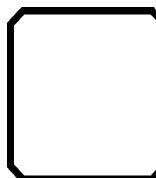
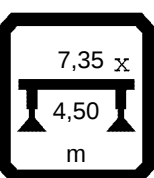
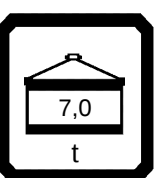
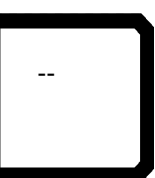
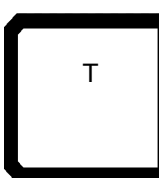
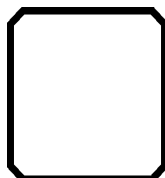
02.02

The diagram shows a mobile system with three masses and a rotating support. The first mass is labeled 'T' and has a weight of '7,0'. The second mass is labeled 't' and has a weight of '7,35 x'. The third mass is labeled 'm' and has a weight of '4,50'. The support is labeled '360°' and has a weight of '7,0'.



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02.02

[illegible]

02.02

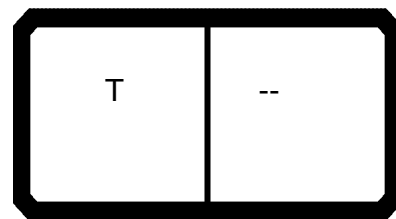
	T	--					
			t	m	360°		

02.02

	T	--					
			t	m	360°		

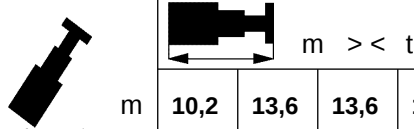
02.02

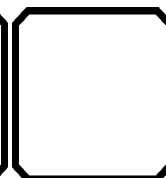
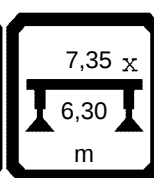
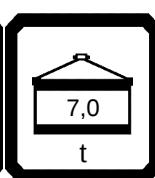
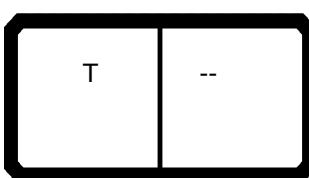
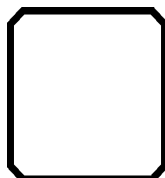
	T	--					
			t	m	360°		



085130

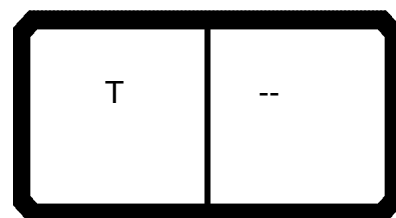
02.02

		CODE > 0004 < T204.01006x(x)													
m		10,2	13,6	13,6	13,6	17,0	17,0	17,0	17,0	17,0	20,5	20,5	20,5	20,5	20,5
	3,0	42,3	42,3	32,8	33,1	41,6	42,2	31,6	31,7	25,1	34,3	38,2	31,3	31,3	24,8
	3,5	42,3	42,1	33,4	33,1	42,1	41,4	32,0	32,0	23,5	34,3	37,8	31,5	31,6	23,2
	4,0	40,3	40,3	34,0	32,5	39,1	39,0	32,4	31,6	22,1	34,2	37,0	31,8	31,8	21,8
	4,5	36,6	36,6	34,8	30,9	36,0	36,1	32,8	30,8	20,7	32,9	34,0	32,1	32,2	20,5
	5,0	32,9	33,0	33,2	29,3	32,3	32,5	32,0	29,4	19,5	29,6	30,2	30,6	31,6	19,4
	6,0	26,8	26,8	27,1	26,6	24,9	25,2	25,9	26,0	17,4	23,0	23,5	23,9	24,9	17,3
	7,0	21,1	21,2	21,6	21,9	20,0	20,2	20,9	21,5	15,6	18,6	19,1	19,4	20,4	15,7
	8,0		16,7	17,1	17,4	16,4	16,6	17,2	17,7	14,2	15,4	15,9	16,2	17,0	14,3
	9,0		13,6	13,9	14,2	13,4	13,6	14,1	14,6	12,9	13,0	13,5	13,8	14,5	13,0
	10,0		11,4	11,7	12,0	11,3	11,4	11,9	12,3	11,9	11,0	11,4	11,6	12,3	12,0
	12,0					8,1	8,3	8,7	9,2	9,2	7,9	8,3	8,5	9,1	9,5
	14,0					6,1	6,2	6,6	7,1	7,1	5,9	6,2	6,4	7,0	7,4
	16,0										4,5	4,8	5,0	5,6	6,0
	18,0														
	20,0														
	22,0														
	24,0														
	26,0														
	28,0														
	30,0														
	32,0														
	34,0														
* n *	10	10	9	8	10	10	8	8	6	8	9	8	8	6	
	1	0 +	0 +	0 +	0 +	46 +	0 +	0 +	0 +	0 +	92 +	46 +	46 +	0 +	0 +
	2	0 +	46 +	0 +	0 +	46 +	92 +	46 +	0 +	0 +	46 +	92 +	46 +	46 +	0 +
	3	0 +	0 +	46 +	0 +	0 +	0 +	46 +	46 +	0 +	0 +	0 +	46 +	46 +	46 +
	% 4	0 +	0 +	0 +	46 +	0 +	0 +	0 +	46 +	92 +	0 +	0 +	0 +	46 +	92 +
	 m/s	14,3	14,3	14,3	14,3	14,3	14,3	14,3	14,3	14,3	14,3	12,8	12,8	12,8	12,8



02.02

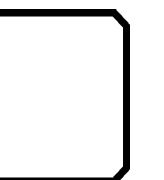
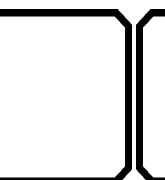
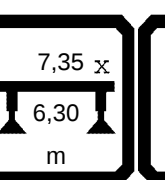
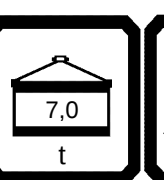
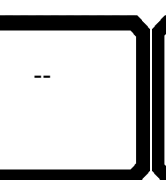
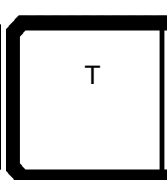
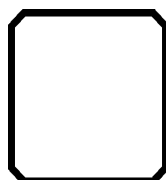
	T	--					
			t	m	360°		



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02.02

				CODE > 0004 < T204.01006x(x)											
m		32,5	32,5	10,2	13,6	13,6	17,0	20,5	17,0	17,0	20,5	23,9	10,2	13,6	13,6
	3,0			14,7	13,8	12,0	11,6	8,0	10,0	11,7	11,3	7,7	15,5	14,6	13,9
	3,5			15,2	13,9	12,4	11,5	7,8	9,8	11,8	11,1	7,5	15,9	14,7	14,1
	4,0			15,8	13,9	13,5	11,5	7,6	9,6	12,0	11,0	7,3	16,8	14,7	14,4
	4,5			16,7	14,0	13,8	11,4	7,5	9,4	12,1	11,0	7,1	18,2	14,8	14,7
	5,0			18,5	14,1	14,0	11,4	7,3	9,3	12,2	10,9	6,9	19,2	14,9	15,0
	6,0			21,0	14,4	14,5	11,4	7,0	9,0	12,4	10,7	6,5	22,3	15,2	15,4
	7,0			21,1	14,9	15,1	11,4	6,7	8,1	12,8	10,6	6,2	21,1	15,6	16,0
	8,0	11,2	14,0		15,5	15,8	11,4	6,4	8,0	13,5	10,5	5,9		16,1	17,1
	9,0	10,4	12,0		13,6	13,6	11,4	6,2	7,9	13,4	10,5	5,6		13,9	13,9
	10,0	9,7	10,4		11,4	11,4	10,9	6,1	7,8	11,4	10,5	5,4		11,7	11,7
	12,0	8,4	8,0				8,1	5,8	7,8	8,3	8,3	5,0			
	14,0	7,3	6,3				6,1	5,6	6,2	6,2	6,2	4,7			
	16,0	5,9	5,0					4,5			4,8	4,1			
	18,0	4,8	4,0									3,6			
	20,0	4,0	3,2									2,8			
	22,0	3,4	2,6												
	24,0	2,8	2,1												
	26,0	2,4	1,6												
	28,0	2,0	1,3												
	30,0	1,7	1,0												
	32,0														
	34,0														



02.02

	T	--					
			t	m	360°		

02.02

	T	--					
			t	m	360°		

02.02

	T	--					
			t	m	360°		

02.02

	T	--					
			t	m	! +/-10°		

02.02

	T	--	 t	 m	 ! +/-10°		
--	---	----	--	--	--	--	--

02.02

	T	--					
--	---	----	---	---	--	--	--

02.02

Diagram of a table with dimensions and rotation:

- Table length: 12,0
- Table width: 7,35 x
- Table height: 2,32
- Table rotation: 360°

02.02

	T	--					
			t	m	360°		

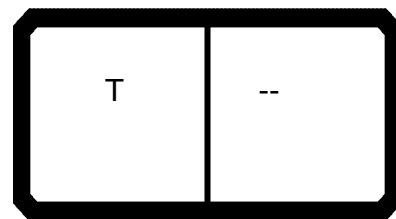
02.02

02.02

02.02

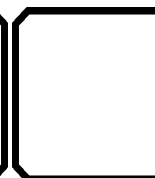
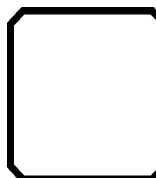
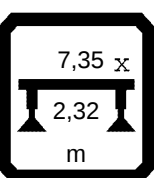
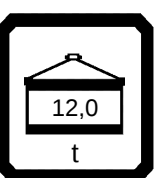
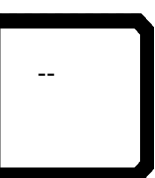
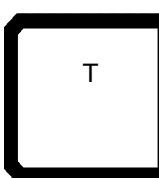
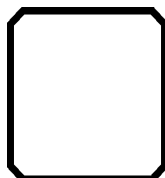
Diagram of a table with dimensions and rotation:

- Table length: 12,0
- Table width: 7,35 x
- Table height: 2,32
- Table rotation: 360°



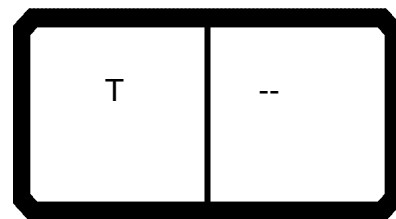
085130

02.02

[illegible]

02.02

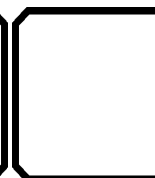
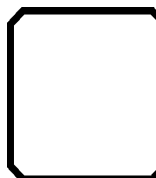
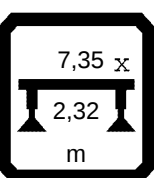
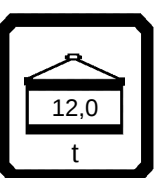
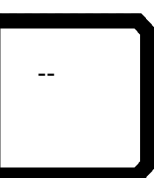
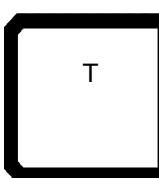
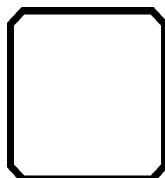
	T	--					
			t	m			



085130

02.02

				CODE > 0104 < T204.12021x(x)											
m		30,8	20,5	20,5	23,9	27,3	27,3	30,8	34,2	30,8	30,8	34,2	37,6	37,6	40,0
	3,0		10,1	13,4	12,0										
	3,5		9,8	13,5	11,9	8,1	11,5								
	4,0	10,3	9,6	13,6	11,8	7,8	11,5	10,0		7,7	10,4				
	4,5	9,8	9,4	13,6	11,6	7,6	11,0	9,5	6,7	7,5	9,9	8,6			
	5,0	9,4	9,2	13,6	11,5	7,4	10,5	9,1	6,5	7,3	9,5	8,3			
	6,0	8,6	8,2	13,1	11,2	7,0	9,6	8,3	6,1	6,8	8,7	7,6	6,0	6,0	4,7
	7,0	8,0	7,9	11,9	10,3	6,6	8,8	7,7	5,7	6,5	8,0	7,1	5,7	5,7	3,8
	8,0	7,4	7,6	10,9	9,5	6,3	8,2	7,1	5,4	6,2	7,5	6,6	5,4	5,4	3,5
	9,0	6,9	7,4	10,1	8,8	6,0	7,6	6,6	5,1	5,9	7,0	6,1	5,1	5,1	3,3
	10,0	6,4	7,2	9,4	8,2	5,8	7,0	6,1	4,8	5,6	6,5	5,7	4,8	4,8	3,0
	12,0	5,7	6,9	8,3	7,2	5,3	6,2	5,4	3,9	5,1	5,7	5,1	3,8	3,8	2,7
	14,0	5,0	6,7	7,5	6,5	5,0	5,5	4,8	3,5	4,7	5,1	4,5	3,4	3,4	2,3
	16,0	4,5	6,6	7,1	5,9	4,7	4,9	4,3	3,2	4,1	4,6	4,0	3,2	3,2	2,1
	18,0	4,1			5,5	3,9	4,5	3,8	3,0	3,7	4,2	3,6	2,9	2,9	1,8
	20,0	3,8			5,2	3,8	4,2	3,5	2,8	3,5	3,8	3,3	2,7	2,7	1,6
	22,0	3,5				3,7	4,0	3,3	2,6	3,3	3,6	3,1	2,5	2,5	1,4
	24,0	3,3				3,7	3,8	3,1	2,3	3,2	3,4	2,8	2,2	2,2	1,3
	26,0	3,2						3,0	2,2	3,2	3,3	2,7	2,1	2,1	1,1
	28,0	3,0						2,8	2,1	3,0	3,1	2,5	1,9	1,9	1,0
	30,0								2,0			2,5	1,8	1,8	0,9
	32,0												1,7	1,7	0,8
	34,0												1,7	1,7	
	36,0														
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															
															



02.02

	T	--					
			t	m			

02.02

	T	--					
			t	m	360°		

02.02

	T	--					
			t	m	360°		

02.02

	T	--					
			t	m	360°		

02.02

	T	--	 t	 m	 ! +/-10°		
--	---	----	--	--	--	--	--

02.02

	T	--					
			t	m			

02.02

	T	--	 t	 m	 ! +/-10°		
--	---	----	--	--	--	--	--

02.02

Diagram showing a table with a lamp. The table has a top width of 7,35 m and a height of 6,30 m. The lamp has a width of 12,0 m. A rotation arrow indicates a 360° rotation.

02.02

	T	--					
			t	m	360°		

02.02

	T	--					
			t	m	360°		

02.02

The diagram shows a bridge structure with the following components labeled:

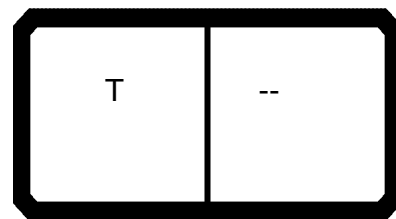
- T**: A vertical support or pier.
- : A horizontal line segment, possibly representing a road or a section of the bridge deck.
- t**: A trapezoidal shape, likely representing a section of the bridge deck or a support.
- m**: A horizontal line segment, possibly representing a road or a section of the bridge deck.
- 7,35 x**: A dimension or length measurement.
- 6,30**: A dimension or length measurement.
- ! 0°**: A curved arrow indicating a rotation or angle.

02.02

	T	--	 t	 m	 ! +/-10°		
--	---	----	--	--	--	--	--

02.02

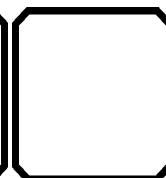
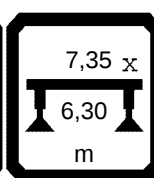
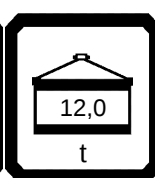
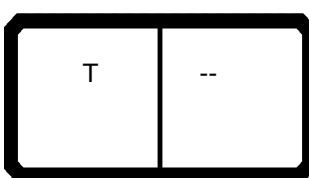
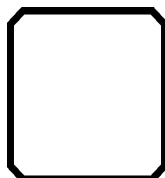
	T	--	 t	 m	 ! +/-10°		
--	---	----	--	--	--	--	--



085130

02.02

				CODE > 0096 <								T204.12001x(x)			
m		40,0	17,6	17,6	17,6	17,6	25,1	25,1	25,1	32,5	32,5				
3,0															
3,5			9,0	8,2	7,7	7,1									
4,0			8,2	7,9	7,5	6,9									
4,5			8,0	7,7	7,3	6,8									
5,0			7,8	7,6	7,1	6,6									
6,0	4,7	7,4	7,2	6,8	6,3	6,2	5,7	5,1							
7,0	3,8	7,1	6,9	6,5	6,0	5,8	5,3	4,7							
8,0	3,5	6,9	6,7	6,3	5,8	5,5	5,0	4,2	4,7	3,6					
9,0	3,3	6,6	6,4	6,1	5,6	5,2	4,7	3,6	3,9	3,3					
10,0	3,0	6,4	6,3	5,9	5,5	4,9	4,0	3,4	3,6	3,1					
12,0	2,7	6,2	6,0	5,7	5,3	4,2	3,6	3,0	3,3	2,7					
14,0	2,3	6,1	6,0	5,7	5,3	3,7	3,3	2,7	2,9	2,4					
16,0	2,1					3,5	3,0	2,5	2,7	2,1					
18,0	1,8					3,3	2,9	2,3	2,4	1,9					
20,0	1,6					3,1	2,8	2,2	2,2	1,7					
22,0	1,4					2,9	2,5	1,9	2,1	1,5					
24,0	1,3								2,0	1,4					
26,0	1,1								1,9	1,3					
28,0	1,0								1,6	1,0					
30,0	0,9								1,2						
32,0	0,8														
34,0															
36,0															
* n *		2	3	2	2	2	2	2	2	1					
1	100 -	0 +	0 +	0 +	100 -	0 +	0 +	100 -	0 +	100 -					
2	100 -	0 +	0 +	100 -	0 +	0 +	100 -	100 +	100 -	100 +					
3	100 -	0 +	100 -	0 +	0 +	100 -	100 +	0 +	100 +	100 +					
% 4	100 -	100 -	0 +	0 +	0 +	100 +	0 +	0 +	100 +	0 +					
m/s	11,1	14,3	14,3	14,3	14,3	12,8	12,8	12,8	11,1	11,1					



02.02

	T	K 0° 9.5m					
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02.02

	T	K 0° 9.5m	 t	 m	 360°		
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02.02

The diagram shows a lighting fixture with the following specifications:

- Material:** T
- Color:** K 20°
- Height:** 9.5m
- Label:** 12,0
- Label:** t
- Dimensions:** 7,35 x 4,50
- Material:** m
- Rotation:** 360°

02.02

The diagram shows a building facade with the following elements labeled:

- T**: A rectangular window on the left.
- K 20°**: A triangular roof section on the right.
- 9.5m**: A dimension line below the roof section.
- t**: A small rectangular window below the roof section.
- 12,0**: A dimension line across the width of the small window.
- 7,35 x**: A dimension line above a horizontal beam.
- 6,30**: A dimension line below the horizontal beam.
- m**: A dimension line below the horizontal beam.
- 360°**: A circular arrow indicating a full rotation.

02.02

	T	K 40° 9.5m					
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02.02

	T	K 40° 9.5m					
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02.02

	T	K 40° 9.5m	 t	 m	 360°		
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02.02

Diagram of a room layout with dimensions and furniture:

- Room dimensions: T (Total length) = 9.5m, K (Total width) = 40°.
- Door (t): 7,0m wide.
- Table (m): 7,35m long, 6,30m wide.
- Rotation: 360°.

02.02

	T	K 40° 9.5m	 t	 m	 360°		
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02.02

	T	K 40° 9.5m	 t	 m	 360°		
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02.02

	T	K 0° 16.0m	 t	 m	 360°		
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02.02

Technical drawing of a table with the following specifications:

- Material:** T
- Color:** K 20°
- Length:** 16.0m
- Tabletop:** t, 5,5
- Legs:** m, 4,50
- Height:** 7,35 x
- Rotation:** 360°

02.02

Technical drawing of a table with the following specifications:

- Table (T):** Dimensions 16.0m (length) and 7.0m (width). Material: K 20°.
- Tabletop (t):** Dimensions 7.0m (length) and 4.50m (width). Material: 7,35 x.
- Table legs (m):** Dimensions 4.50m (length) and 360° (rotation).

02.02

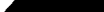
The diagram shows a lighting fixture with the following specifications:

- Material:** T
- Color:** K 20°
- Height:** 16.0m
- Label:** 12,0
- Label:** t
- Dimensions:** 7,35 x 4,50
- Material:** m
- Angle:** 360°

02.02

	T	K 40° 16.0m	t	7,35 x 6,30 m	360°		
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02.02

	T	K 40° 16.0m	 t	 m	 360°		
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02.02

	T	K 40° 16.0m	 t	 m	 360°		
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