Gang-forms

For lifting and resetting, it is usual to assemble larger units (gangs) from Dokaset panels.
Max. width of the gang-forms: 5.40 m

Equipment needed for one 5.40 m wide gang-form with a platform:

<table>
<thead>
<tr>
<th>Designation</th>
<th>N° of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dokaset panel 2.70x2.70m with platform</td>
<td>2</td>
</tr>
<tr>
<td>Dokaset ladder 2.70m</td>
<td>1</td>
</tr>
<tr>
<td>Panel strut 340</td>
<td>2</td>
</tr>
<tr>
<td>Framax quick-acting clamp RU</td>
<td>3</td>
</tr>
<tr>
<td>Framax universal waling 0.90m</td>
<td>1</td>
</tr>
<tr>
<td>Framax wedge clamp</td>
<td>2</td>
</tr>
<tr>
<td>Dokaset 2-part chain 1.50m</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total weight:</strong> 2240 kg</td>
<td></td>
</tr>
</tbody>
</table>

Equipment needed for one 5.40 m wide gang-form with no platform:

<table>
<thead>
<tr>
<th>Designation</th>
<th>N° of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dokaset panel 2.70x2.70m</td>
<td>2</td>
</tr>
<tr>
<td>Panel strut 340</td>
<td>2</td>
</tr>
<tr>
<td>Framax quick-acting clamp RU</td>
<td>3</td>
</tr>
<tr>
<td>Framax universal waling 0.90m</td>
<td>1</td>
</tr>
<tr>
<td>Framax wedge clamp</td>
<td>2</td>
</tr>
<tr>
<td>Dokaset 2-part chain 1.50m</td>
<td>1</td>
</tr>
<tr>
<td>Dokaset railing holder</td>
<td>4</td>
</tr>
<tr>
<td>Handrail post 1.00m</td>
<td>4</td>
</tr>
<tr>
<td>Dokaset head anchor 12-36cm</td>
<td>4</td>
</tr>
<tr>
<td>Guard-rail boards (site-provided)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total weight:</strong> 1800 kg</td>
<td></td>
</tr>
</tbody>
</table>

Joining the panels to make gang-forms

The connector components are mounted to the panels when these are still face-down on the assembly bench.

Framax quick-acting clamp RU

The Framax quick-acting clamp RU provides a self-aligning, tension-proof link.

Framax universal waling

To provide additional stiffening of large gangs, a Framax universal waling 0.90m should be attached roughly half-way up the gang.

How to mount:

- Place the Quick-acting clamp RU over the panel joint apply and fix tightly by hitting the wedge with a hammer (formwork hammer max. 800 g).
- The panel joint is now tight.
- See "Vertical stacking" for instructions on where to position the Framax quick-acting clamps RU.

Joining the gang-form to adjoining gangs

Use 3 Quick-acting clamps RU per 2.77m of panel height to join the gangs.
**Lifting chain**

Every gang-form is equipped with a Dokaset 2-part chain 1.50m. This stays attached to the gang throughout the forming assignment.

The advantage of this is much greater safety:

- The operators can attach the gangs to the crane while working from ground level.

**Close-up showing how/where the chain is attached to the waling:**

**Note:**
The chain can be attached to either side of the U 240 waling.

- Maximum slinging load on the bolt of the Dokaset waling: 20 kN

> Use the right slinging points! (Always attach the 2-part chain to the inside bolts of the unit to be lifted)

**Single 2.70 m panel:**

**5.40 m gang (2 x 2.70 m):**

**1.35 m panel:**
### Vertical stacking of panels

The following information is given for each of the gang-forms mentioned below:

- position of the panel connectors
- position of the form-ties

---

**Panel width 2.70 m**

<table>
<thead>
<tr>
<th>Formwork height: 307 cm, 322 cm, 337 cm</th>
</tr>
</thead>
</table>

The form-ties across the top of the formwork are tension/pressure ties.

Formwork height: 367 to 412 cm

---

**Dokaset**

User information Dokaset
Panel width 1.35 m

Example with a formwork height of: 412 cm

X... When this configuration is used at the end of a gang-form (e.g. for stop-ends, wall junctions, etc.) extra form-ties must be fitted in the frame profile here.

☞ As a rule, do not locate 1.35 m wide panels next to one another, as this would necessitate an extra form-tie.
**Panel struts** brace the formwork against wind loads and make it easier to plumb and align.

**Important note:**
The formwork panels must be held stable in every phase of the construction work!
Please observe all applicable safety regulations!

For more information (wind loads etc.) see the section headed "Vertical and horizontal loads" in the Doka Calculation Guide.

**Number of struts per 5.40 m width of gang-form:**

<table>
<thead>
<tr>
<th>Formwork height [m]</th>
<th>Panel strut 340</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 4.12</td>
<td>2</td>
</tr>
<tr>
<td>Max. anchoring load: 13.5 kN</td>
<td></td>
</tr>
</tbody>
</table>

The values given here apply up to a height of 8 m above the surrounding ground. For heights of more than 8 m, the correct spacing of the props must be calculated as required by the higher wind loads.

**Note:**
Every gang-form must be supported by at least 2 panel struts.

**Connection in the waling profile**

**Fixing to the ground**

Anchor the plumbing accessories in such a way as to resist tensile and compressive forces!

**Drilled holes in the footplates**

<table>
<thead>
<tr>
<th>Panel strut 340</th>
</tr>
</thead>
<tbody>
<tr>
<td>a ... diam. 26 mm</td>
</tr>
<tr>
<td>b ... diam. 18 mm</td>
</tr>
</tbody>
</table>

**Anchoring the footplate**
The Doka Express anchor can be re-used many times over - the only tool needed for screwing it in is a hammer.

**Cube compressive strength of concrete:**

- min. 25 N/mm² or 250 kg/cm² (C20/25 grade concrete)

**Follow the Fitting Instructions!**

**Required load-bearing capacity of alternative dowels:**

- min. 13.5 kN

Follow the manufacturer’s applicable fitting instructions.
Panel strut 340

**Product features:**
- Can be telescopied in 8 cm increments
- Fine adjustment by screw-thread
- All parts are captively integrated - including the telescopic tube (has safety stop to prevent dropout)

![Diagram of panel strut 340](image)

a ... 193.0 - 340.9 cm  
b ... 114.9 - 165.4 cm
Length adjustment using closures

**with Framax Xlife panel**

Example: Symmetrical gang-form, 6.00 m wide
Distribution of panels: 2.70 - 0.60 - 2.70 m

**with fitting timber and Framax multi function clamp**

Combining Dokaset with Framax Xlife makes various different closure options possible.

Example:
Closure with fitting-timber and Framax universal waling – up to 15 cm

---

A Framax Xlife panel 0.60m
B Framax quick-acting clamp RU
C Framax universal waling 1.50m + Framax wedge clamps
D Xsafe platform extension 0.55m
E Guard-rail boards

A Framax multi-function clamp
B Framax fitting-timber
C Framax universal waling
D Framax wedge clamp
E Framax Xlife panel (max. width 60 cm)
F Dokaset panel
Stop-end formwork

The universal walings are mounted using universal fixing bolts and super-plates 15.0 fixed through the cross boreholes in the panels.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Framax universal waling</td>
</tr>
<tr>
<td>B</td>
<td>Framax universal fixing bolt + Super-plate 15.0</td>
</tr>
<tr>
<td>C</td>
<td>Squared timber</td>
</tr>
<tr>
<td>D</td>
<td>Formwork sheet</td>
</tr>
<tr>
<td>E</td>
<td>Dokaset panel</td>
</tr>
</tbody>
</table>

**Universal waling:**
permitted moment: 5.2 kNm

**Framax universal fixing bolt:**
Permitted tensile force in the transverse sleeve: 25.0 kN
90 degree corners

with Dokaset outside corner 3.30m

Up to a wall thickness of 30 cm, no form-ties are needed in corners where the Dokaset outside corner 3.30m is used.

Close-up of "Dokaset bottom angle for inside corner":

N° of clamps needed on Dokaset outside corner:

<table>
<thead>
<tr>
<th>Pour-height</th>
<th>N° of Framax quick-acting clamps RU or Framax multi-function clamps</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.70 m</td>
<td>10</td>
</tr>
<tr>
<td>3.30 m</td>
<td>12</td>
</tr>
</tbody>
</table>

Dokaset outside corner 3.30m

Framax Xlife inside corner

Hexagon screw M20 (width-across: 30 mm)
Example with a wall thickness of 20 cm

Example with a wall thickness of 25 cm

Example with a wall thickness of 30 cm

Dokaset outside corner: Number and position of universal walings or clamps

A  Dokaset outside corner 3.30m
B  Framax Xlife inside corner
C  Dokaset panel 1.35x2.70m
D  Dokaset panel 2.70x2.70m with platform
E  Xsafe platform extension 0.55m
F  Framax multi-function clamp
G  Framax quick-acting clamp RU
H  Framax fitting-timber 10cm
I  Framax fitting-timber 5cm
J  Framax universal waling 0.90m
K  Framax wedge clamp
Transporting, stacking and storing

Transporting the panels

Doka 4-part chain 3.20m

The Doka 4-part chain 3.20m is used for separating the Dokaset panels. Its centre-of-gravity position can be adjusted by shortening the individual lengths of chain.

➤ Attach the Doka 4-part chain 3.20m to the bolts in the Dokaset walings.

The bolts must be secured by linch pins.

Forklift truck

The integrated stacker brackets on the Dokaset panels allow them to be handled by forklift truck.

➤ The stacker brackets are designed to handle max. 2 panels at a time.

Note:

Load the truck in such a way that it can be unloaded using a forklift truck (stacker brackets).

<table>
<thead>
<tr>
<th>Carrying capacity</th>
<th>Spread-angle β</th>
<th>P_{\text{max}} (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0°</td>
<td>0°-30°</td>
</tr>
<tr>
<td>Using 1 chain</td>
<td>1400</td>
<td>-</td>
</tr>
<tr>
<td>Using 2 chains</td>
<td>-</td>
<td>2400</td>
</tr>
<tr>
<td>Using all 4 chains</td>
<td>-</td>
<td>3600</td>
</tr>
</tbody>
</table>

Follow the directions in the Operating Instructions!
Stacking the panels

Stacking shoes are captively integrated in the Dokaset panels. These stacking shoes have protective covers so that the Xlife sheet does not get damaged when the panels are stacked.

<table>
<thead>
<tr>
<th>Type of Panel</th>
<th>a [cm]</th>
<th>b [cm]</th>
<th>c [cm]</th>
<th>d [cm]</th>
<th>No. of Panels</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.70x2.70m panel with platform</td>
<td>49</td>
<td>245</td>
<td>270</td>
<td>282</td>
<td>5</td>
</tr>
<tr>
<td>2.70x2.70m panel</td>
<td>41</td>
<td>247</td>
<td>270</td>
<td>282</td>
<td>6</td>
</tr>
<tr>
<td>1.35x2.70m panel with platform</td>
<td>49</td>
<td>245</td>
<td>135</td>
<td>282</td>
<td>5</td>
</tr>
<tr>
<td>1.35x2.70m panel</td>
<td>38</td>
<td>228</td>
<td>135</td>
<td>282</td>
<td>6</td>
</tr>
</tbody>
</table>

A Sleeper, e.g. 3x15cm

- Clean the protective covers before stacking the panels.
- The stacking shoes of the Dokaset panels must be arranged exactly above one another when the panels are stacked.
Cleaning and care of your equipment

Cleaning

The special coating on the Xlife sheet greatly reduces the amount of cleaning that is needed. In order to keep formwork cleaning costs as low as possible, please observe the following points:

- Do not use any pointed or sharp objects, wire brushes, rotating grinding discs or pan scourers.
- For removing any concrete remnants, we recommend using a spatula and a concrete scraper.

The special coating of the Xlife sheet also makes it possible for the sheet to be cleaned with a high-pressure spray cleaner.

After pouring:

- Immediately remove any blobs of concrete from the back of the formwork, using water (without any added sand).

Immediately after the formwork is struck, or before every pouring operation:

- Apply release agent to the form-facing and the end faces extremely thinly, evenly and in a continuous layer (make sure there are no traces of release-agent running down the form-facing)! Applying too much release agent will impair the quality of the concrete surface.

To determine the right dosage and to make sure that you are using the agent correctly, test it on less important parts of the structure first.

Care

- No hammer-blows to the frame profiles
- Do not use nails on the formwork that are longer than 60 mm

A max. l=60 mm
Formwork planning with Tipos

Tipos-Doka helps you to form even more efficiently

Tipos has been developed to assist you in planning the use of your Doka formwork. For wall formwork, floor formwork and platforms, it puts the same tools into your hands that we at Doka use ourselves for formwork planning.

Easy to use, fast and accurate results

The easy-to-use interface makes for very fast working. From when you input your layout (with the “Schal-igel”® on-screen assistant), all the way through to when you manually put the finishing touches to the formwork solution the program gives you. All this saves time - yours.

The program contains a large number of templates from formwork practice, so you can be sure of always getting the optimum technical and economical solution to your formwork task. This makes for greater operational reliability, and cuts costs.

You can get to work right away with the piece-lists, plans, views, sections and perspective drawings that the program gives you. Operational reliability is also enhanced by the high level of detail of the plans.

Among other things, Tipos-Doka plans the following with Dokaset:

● Distribution of the framed formwork panels
● Any vertically stacked configurations that are needed
● Closures and accessories
● Pouring platforms, safety railings etc.

Always the right quantities of formwork and accessories

You can import the automatically generated piece-lists into many other programs for further processing. Formwork components and accessories that have to be organised at short notice, or replaced by improvisation, are the ones that cost the most. This is why Tipos-Doka offers complete piece-lists that leave no room for improvisation. Planning with Tipos-Doka eliminates costs before they have a chance to even arise. And your depot can make the best possible use of its stocks.

Drawings of formwork and platforms really can be this detailed! Both for the layout and for spatial representations, Tipos-Doka sets an impressive new standard of visual presentation.
**Doka service offerings**

**Doka Reconditioning Service**

**So that your formwork is in "top form" for its next assignment**

Inspecting, cleaning and maintaining your Dokaset – all jobs which the Doka Reconditioning Service will be pleased to take care of for you. Its highly qualified staff and special equipment will soon get your formwork back in top form, quickly and economically.

**The advantage for you:** You always have formwork that is ready for use, and also extend the service life of your equipment.

What’s more: It is only with well-maintained formwork that you will achieve the desired quality of concrete surface.

In our modern plants, your formwork will be carefully cleaned using energy-saving and environmentally sound technology.

The panels are then inspected for damage and dimensional accuracy and overhauled where necessary. Any damaged form-facing is repaired, or - if necessary - replaced.

**Doka customer training**

**Formwork training pays**

Forming operations account for the lion’s share of labour costs on concrete construction sites. Modern formwork equipment helps to rationalise operations. By improving the overall construction sequence at the same time, however, further very worthwhile gains in efficiency can be achieved.

This requires not only better equipment, but also greater skill in making optimum use of this equipment. Doka can help here, with its specialist training programme - to help each and every member of the team do his bit towards boosting efficiency and lowering costs.

Doka customer training events also look at the formwork equipment and handling methods that are needed in order to achieve optimum safety - knowledge and awareness which can only enhance workplace safety on the site.

**You’ll find the Doka training programme well worth looking into.**

**Your nearest Doka branch will be pleased to tell you more about Doka’s various training offerings.**
### User information Dokaset

<table>
<thead>
<tr>
<th>Article n°</th>
<th>Description</th>
<th>[kg]</th>
<th>Component overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>588900000</td>
<td>Dokaset panel 2.70x2.70m</td>
<td>835.0</td>
<td>Galvanised Height: 282 cm</td>
</tr>
<tr>
<td>588901000</td>
<td>Dokaset panel 2.70x2.70m with platform</td>
<td>986.0</td>
<td>Galvanised Height: 282 cm Delivery condition: folded closed</td>
</tr>
<tr>
<td>588902000</td>
<td>Dokaset panel 1.35x2.70m</td>
<td>454.0</td>
<td>Galvanised, powder-coated Height: 282 cm</td>
</tr>
<tr>
<td>588903000</td>
<td>Dokaset panel 1.35x2.70m with platform</td>
<td>538.0</td>
<td>Galvanised, powder-coated Height: 282 cm Delivery condition: folded closed</td>
</tr>
<tr>
<td>588912000</td>
<td>Dokaset counter railing holder</td>
<td>4.0</td>
<td>Length: 31 cm</td>
</tr>
<tr>
<td>588741000</td>
<td>Dokaset counter railing 2.70m</td>
<td>21.0</td>
<td>Height: 183 cm</td>
</tr>
<tr>
<td>588742000</td>
<td>Dokaset counter railing 1.35m</td>
<td>15.0</td>
<td>Height: 183 cm</td>
</tr>
<tr>
<td>588734000</td>
<td>Xsafe platform extension 0.55m</td>
<td>41.0</td>
<td>Timber parts varnished yellow Steel parts galvanised</td>
</tr>
<tr>
<td>588914000</td>
<td>Dokaset outside corner 3.30m</td>
<td>283.0</td>
<td>Height: 282 cm</td>
</tr>
<tr>
<td>588913000</td>
<td>Dokaset bottom angle for inside corner</td>
<td>7.9</td>
<td>Height: 7.5 cm</td>
</tr>
<tr>
<td>588904000</td>
<td>Dokaset ladder 2.70m</td>
<td>19.7</td>
<td>Galvanised Length: 212 cm Width: 37 cm</td>
</tr>
<tr>
<td>588915000</td>
<td>Dokaset railing holder 30 degrees</td>
<td>2.0</td>
<td>Galvanised Height: 18 cm</td>
</tr>
<tr>
<td>588916000</td>
<td>Dokaset railing holder 15 degrees</td>
<td>2.0</td>
<td>Galvanised Height: 18 cm</td>
</tr>
<tr>
<td>584335000</td>
<td>Handrail post 1.00m</td>
<td>3.8</td>
<td>Galvanised Length: 124 cm</td>
</tr>
<tr>
<td>588905000</td>
<td>Dokaset head anchor 12-36cm</td>
<td>4.7</td>
<td>Galvanised, powder-coated Length: 47 - 71 cm</td>
</tr>
</tbody>
</table>

---

**Galvanised**

- **Height**: 282 cm
- **Delivery condition**: folded closed

**Timber parts varnished yellow**

- **Steel parts galvanised**

**Height**: 282 cm

**Length**: 47 - 71 cm

---

**Dokaset**

The Formwork Experts
## Component Overview

### Dokaset Tension Tie 10-30 cm
- **Article Number**: 13.0 588910000
- **Description**: Galvanized
- **Dimensions**: Length: 115 cm
- **Permissible Load**: With safety factor of 1.6: 220 kN
- **Permissible Load to DIN 18216**: 150 kN

### Dokaset Ratchet 3/4" SW36
- **Article Number**: 3.9 588909000
- **Description**: Galvanized
- **Dimensions**: Length: 100 cm

### Dokaset Tie Hole Reducer 20.0
- **Article Number**: 1.2 588911000
- **Description**: Galvanized
- **Dimensions**: Length: 20 cm

### Framax Quick Acting Clamp RU
- **Article Number**: 3.3 588153400
- **Description**: Galvanized
- **Dimensions**: Length: 20 cm

### Framax Multi Function Clamp
- **Article Number**: 5.2 588169000
- **Description**: Galvanized
- **Dimensions**: Length: 40 cm

### Framax Universal Waling 0.90 m
- **Article Number**: 10.6 588150000
- **Description**: Painted blue

### Framax Universal Waling 1.50 m
- **Article Number**: 16.8 588148000
- **Description**: Painted blue

### Framex Wedge Clamp
- **Article Number**: 1.5 588152000
- **Description**: Galvanized
- **Dimensions**: Length: 21 cm

### Dokaset Universal Waling Holder
- **Article Number**: 1.5 588927000
- **Description**: Galvanized
- **Dimensions**: Length: 24.5 cm

### Framex Universal Fixing Bolt 10-16 cm
- **Article Number**: 0.60 588158000
- **Description**: Galvanized
- **Dimensions**: Length: 26 cm
- **Packing**: Packed in units of 60

### Panel Strut 340
- **Article Number**: 30.2 588246000
- **Consisting of**:
  - **A** Prop Head 2 pcs.
    - **Description**: Galvanized
    - **Dimensions**: Length: 40.8 cm
    - **Width**: 11.8 cm
    - **Height**: 17.6 cm
  - **B** Prop Shoe
    - **Description**: Galvanized
    - **Dimensions**: Length: 20 cm
    - **Width**: 11 cm
    - **Height**: 10 cm
  - **C** Plumbing Strut 340
    - **Description**: Galvanized
    - **Dimensions**: Length: 190 - 341 cm
  - **D** Adjusting Strut 120
    - **Description**: Galvanized
    - **Dimensions**: Length: 80 - 130 cm

### Doka Express Anchor 16 x 125 mm
- **Article Number**: 0.31 588631000
- **Description**: Galvanized
- **Dimensions**: Length: 18 cm
- **Packing**: Packed in units of 10
- **Note**: Follow fitting instructions!

### Doka Coil 16 mm
- **Article Number**: 0.009 588633000
- **Description**: Galvanized
- **Dimensions**: Diameter: 1.6 cm
- **Packing**: Packed in units of 10
- **Note**: Follow fitting instructions!

### Dokaset 2-Part Chain 1.50 m
- **Article Number**: 4.8 588917000
- **Description**: Dacromete coated
- **Max. Load**:
  - With angle of inclination $\beta = 45^\circ$: 2650 kg (with 2 cables)
  - Follow the directions in the "Operating Instructions"!

### Doka 4-Part Chain 3.20 m
- **Article Number**: 15.0 588620000
- **Description**: Max. load: With angle of inclination $\beta = 30^\circ$: 2400 kg (with 2 cables) or 3600 kg (with 4 cables)
- **Note**: Follow the directions in the "Operating Instructions"!

---

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<table>
<thead>
<tr>
<th>Article n°</th>
<th>[kg]</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>583011000</td>
<td>75.0</td>
<td>Doka multi-trip transport box 1.20x0.80m</td>
</tr>
<tr>
<td>589925000</td>
<td>0.50</td>
<td>Dokaset closure cone 20cm</td>
</tr>
<tr>
<td>589926000</td>
<td>0.10</td>
<td>Dokaset fibre concrete cone 30cm</td>
</tr>
<tr>
<td>588923000</td>
<td>0.11</td>
<td>Fibre concrete plug 35mm</td>
</tr>
<tr>
<td>588924000</td>
<td>0.14</td>
<td>Fibre concrete plug 40mm</td>
</tr>
<tr>
<td>581966000</td>
<td>0.91</td>
<td>Super plate 15.0</td>
</tr>
<tr>
<td>581964000</td>
<td>0.23</td>
<td>Hexagon nut 15.0</td>
</tr>
<tr>
<td>580594000</td>
<td>1.9</td>
<td>Tie rod wrench 15.0/20.0</td>
</tr>
<tr>
<td>581951000</td>
<td>0.45</td>
<td>Plastic tube 22mm 2.50m</td>
</tr>
<tr>
<td>581995000</td>
<td>0.005</td>
<td>Universal cone 22mm</td>
</tr>
<tr>
<td>581971000</td>
<td>1.1</td>
<td>Tie rod 15.0mm galvanised 0.75m</td>
</tr>
<tr>
<td>581972000</td>
<td>1.1</td>
<td>Tie rod 15.0mm galvanised 0.75m</td>
</tr>
<tr>
<td>581973000</td>
<td>1.1</td>
<td>Tie rod 15.0mm galvanised 0.75m</td>
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</tr>
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<td>Tie rod 15.0mm galvanised 0.75m</td>
</tr>
</tbody>
</table>

Perm. capacity with safety factor of 1.6: 120 kN
Perm. capacity to DIN 18216: 90 kN
Breaking load: 195 kN
Never weld or heat tie-rods - risk of fracture!

---

**User information**

Dokaset

**Dokaset Component overview**

- **Doka multi-trip transport box 1.20x0.80m**:
  - Height: 78 cm
  - Max. load: 1500 kg
  - Follow the directions in the "Operating Instructions"!

- **Dokaset closure cone 20cm**: Length: 19.2 cm

- **Dokaset fibre concrete cone 30cm**: Length: 29.2 cm

- **Fibre concrete plug 35mm**
  - Grey

- **Form tie system 15.0**
  - Perm. capacity with safety factor of 1.6: 120 kN
  - Perm. capacity to DIN 18216: 90 kN
  - Breaking load: 195 kN
  - Never weld or heat tie-rods - risk of fracture!

---

**Super plate 15.0**

<table>
<thead>
<tr>
<th>Description</th>
<th>[kg]</th>
<th>Article n°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superplatten 15,0</td>
<td></td>
<td>581966000</td>
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</tbody>
</table>

**Hexagon nut 15.0**

<table>
<thead>
<tr>
<th>Description</th>
<th>[kg]</th>
<th>Article n°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sechskantmutter 15,0</td>
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<td>581964000</td>
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**Tie rod wrench 15.0/20.0**

<table>
<thead>
<tr>
<th>Description</th>
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<th>Article n°</th>
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</thead>
<tbody>
<tr>
<td>Ankerstabschlüssel 15,0/20,0</td>
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**Plastic tube 22mm 2.50m**

<table>
<thead>
<tr>
<th>Description</th>
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<th>Article n°</th>
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<tbody>
<tr>
<td>Kunststoffrohr 22mm 2,50m</td>
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</table>

**Universal cone 22mm**

<table>
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<tr>
<th>Description</th>
<th>[kg]</th>
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</thead>
<tbody>
<tr>
<td>Universal-Konus 22mm</td>
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<td>581995000</td>
</tr>
</tbody>
</table>

---

**Form tie system 20.0**

- Perm. capacity with safety factor of 1.6: 220 kN
- Perm. capacity to DIN 18216: 150 kN
- Breaking load: 354 kN
- Never weld or heat tie-rods - risk of fracture!
<table>
<thead>
<tr>
<th>Component Overview</th>
<th>Article No.</th>
<th>[kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Super plate 20.0 B</strong></td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>Superplatten 20.0 B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Galvanised</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height: 7 cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diameter: 14 cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Width across: 34 mm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packed in units of 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perm. capacity with safety factor of 1.6: 220 kN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perm. capacity to DIN 18216: 150 kN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breaking load: &gt; rod breaking load (&gt; 354 kN)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Plastic tube 26mm 2.00m                        | 0.59        |      |
| Kunststoffrohr 26mm 2.00m                      |             |      |

| Universal cone 26mm                           | 0.008       |      |
| Universal-Konus 26mm                          |             |      |

Grey
Diameter: 5 cm