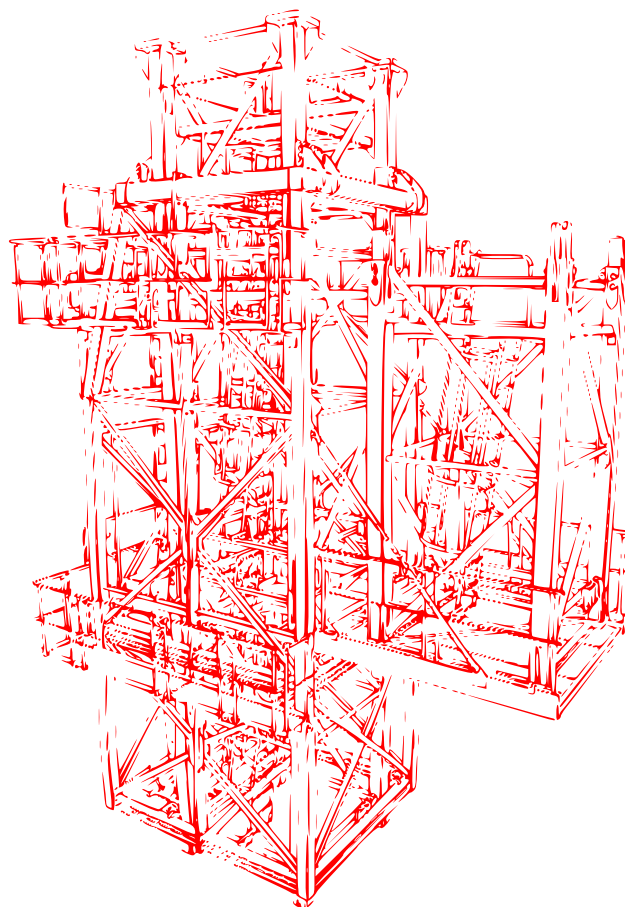


# WOLFFKRAN

System component

WOLFF Outer climbing device

Technical informations



English

English

WOLFF Outer climbing device



*Published by*

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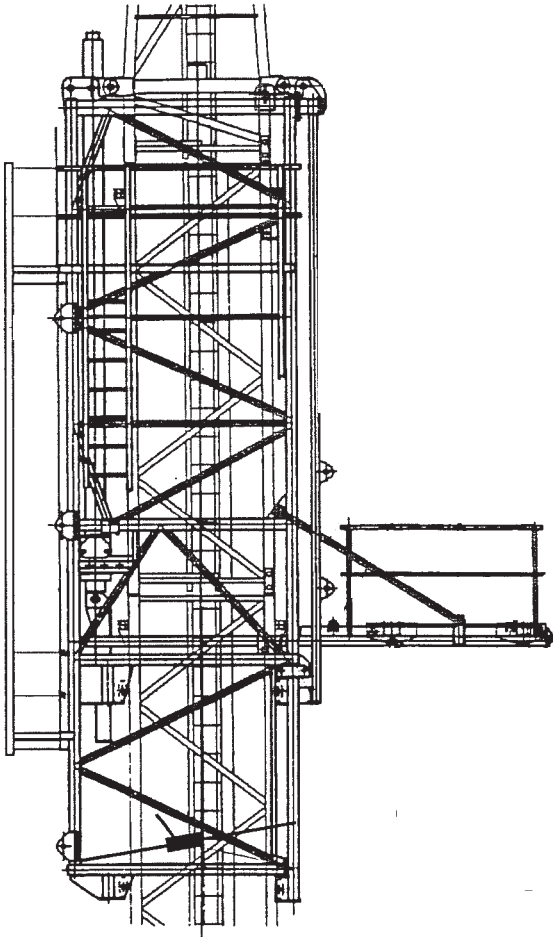
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## 1 Outer climbing device KWH 15.2



### Outer climbing device KWH 15.2

The climbing frame can be mounted or dismounted using the WOLFF slewing tower crane itself or a mobile crane.

For mounting the hydraulic outer climbing device, the WOLFF slewing tower crane must have the following minimum hook heights.

<b>Stationary on the foundation</b>	
▪ 2 tower elements	10.5 m hook height

<b>Mobile</b>	
▪ 3 tower elements	15.0 m hook height

After climbing has been completed, the climbing device must be lowered (down to the brace connected to the building or down to the tower base) or dismantled.

<b>Climbing device, complete</b>	
Weight	6600 kg

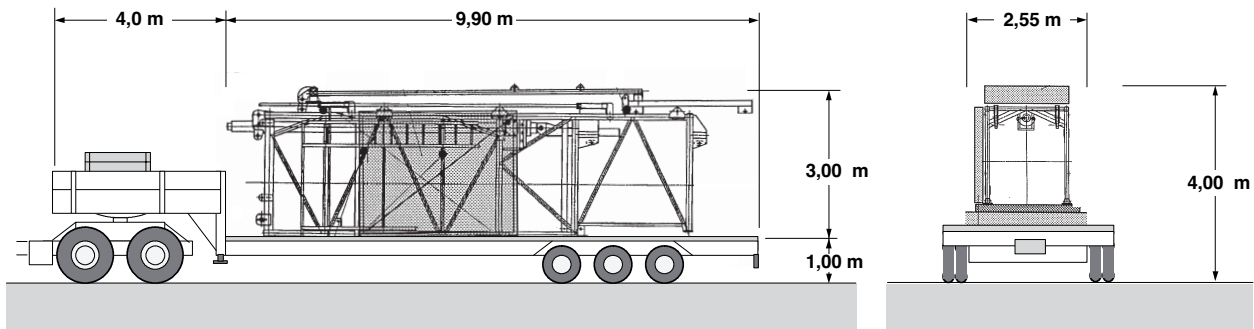
## 1 Outer climbing device KWH 15.2

<b>Hydraulic cylinder: 2190</b>	
Lifting time	Approx. 7 min
Force at 300 bar	600 kN
Operating pressure max.	300 bar
Piston surface, lifting, Ø 160 mm	201 cm <sup>2</sup>
Piston surface, lowering, Ø 160/140 mm	47 cm <sup>2</sup>
Stroke max.	5350 mm
Emergency lowering	Possible

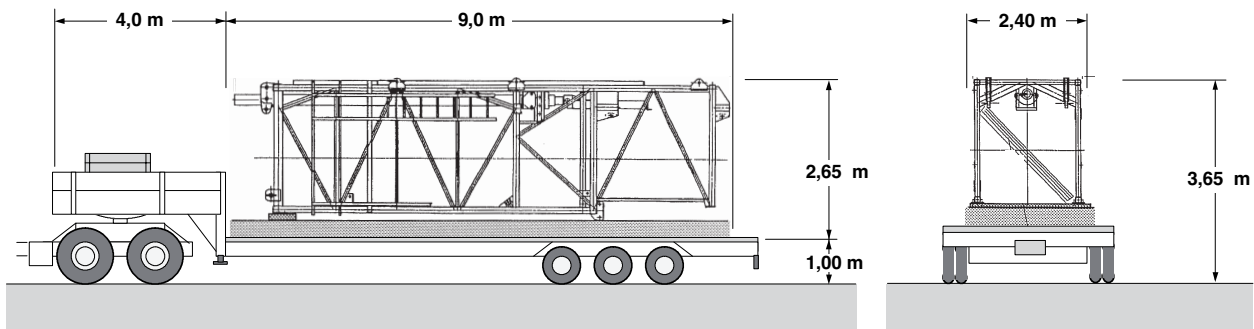
<b>Hydraulic unit: 2529</b>	
Fluid filling ISO VG 68	130 liters
Initial filling Aral Vitam GF 68	
Fluid filter with contamination indicator	
Pressure gauge	
Pressure relief valve set to	300 bar
Pump	17 l/min.
Three phase motor	7.5 kW, 1450 min <sup>-1</sup> , 100% duty cycle, 380 V, 50 Hz

<b>Control:</b>	
manual	via control lever

### 2 Transport dimensions KWH 15.2



#### Loading example 1 KWH 15.2



#### Loading example 2 KWH 15.2

For transport, the climbing device can be loaded as shown in the example below.

Always comply with relevant traffic regulations when driving on public roads, highways etc.

- For transport, the climbing device can be dismantled (refer to package list).
- Lock up the hydraulic unit.
- Secure the hydraulic cylinder using the transport lock.
- The piston cross bar must be secured for transport.
- The climbing frame must be secured for transport.

#### Loading example 1

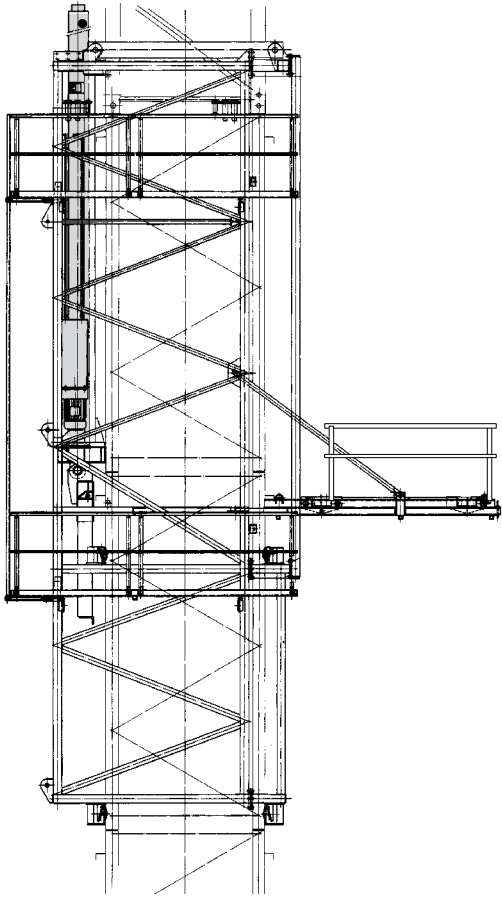
- Front assembly bolted to the climbing frame.
- Moving carriage support with tie bars and moving carriage bolted to the side of the climbing frame.

#### Loading example 2

- Front assembly dismantled and placed in the climbing frame.
- Moving carriage support and moving carriage placed in the climbing frame.

## 3 Outer climbing device KWH 20.3

## 3 Outer climbing device KWH 20.3



Outer climbing device KWH 20.3

The climbing frame can be mounted or dismounted using the WOLFF slewing tower crane itself or a mobile crane.

For mounting the hydraulic outer climbing device, the WOLFF slewing tower crane must have the following minimum hook heights.

<b>Stationary on the foundation</b>	
▪ 2 tower elements	10.5 m hook height
<b>Stationary on cross frame</b>	
▪ 2 tower elements	11.5 m hook height
▪ 1 cross frame	
<b>Stationary on cross frame element</b>	
▪ 2 tower elements	14.5 m hook height
▪ 1 cross frame element	



<b>Stationary on undercarriage</b>	
<ul style="list-style-type: none"> <li>▪ 2 tower elements</li> <li>▪ 1 undercarriage</li> </ul>	15.0 m hook height

After climbing has been completed, the climbing device must be lowered (down to the brace connected to the building or down to the tower base) or dismantled.

<b>Climbing device, complete</b>	
Weight	8400 kg

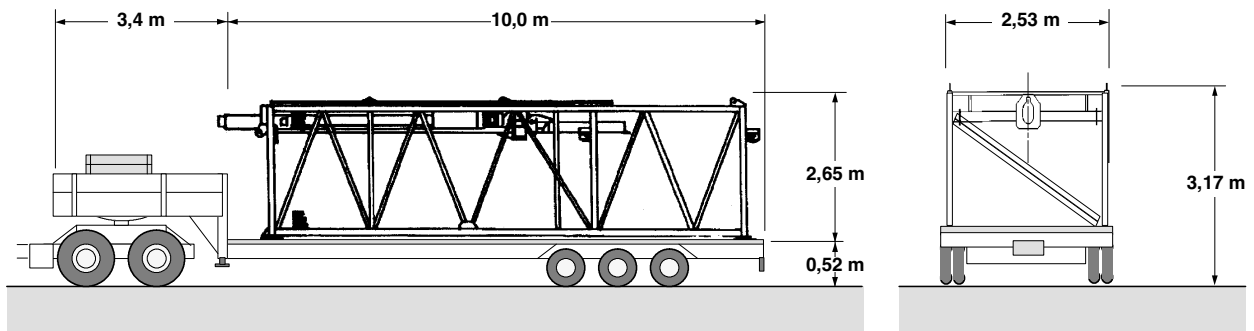
<b>Hydraulic cylinder: 2301</b>	
Weight	1700 kg
Lifting time	Approx. 10 min
Force at 220 bar	660 kN
Operating pressure max.	280 bar.
Piston surface, lifting, Ø 200 mm	314 cm <sup>2</sup>
Piston surface, lowering, Ø 200/150 mm	137 cm <sup>2</sup>
Stroke max.	5400 mm
Emergency lowering	Possible

<b>Hydraulic unit: 2530</b>	
Weight	370 kg
Fluid filling ISO VG 68 Initial filling: ESSO NUTO H 68	130 liters
Fluid filter with contamination indicator	
Pressure gauge	
Pressure relief valve set to	280 bar.
Pump	17 l/min.
Squirrel-cage motor	11 kW, 1465 min <sup>-1</sup> , 100% duty cycle, 400 V, 50 Hz

<b>Control:</b>	
manual	via hand lever

## 4 Transport dimensions KWH 20.3

### 4 Transport dimensions KWH 20.3



#### Loading example KWH 20.3

For transport, the climbing device can be loaded as shown in the example below.

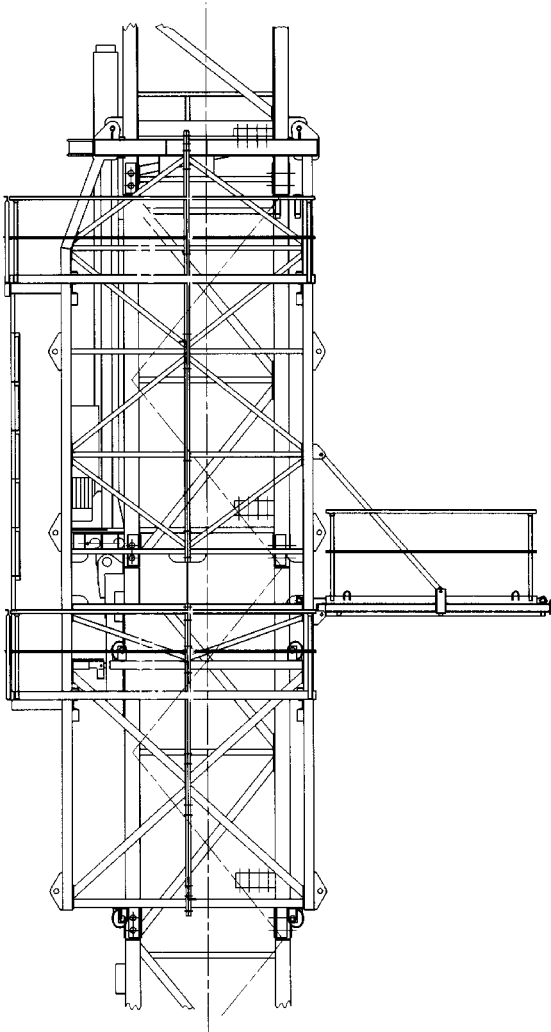
Always comply with relevant traffic regulations when driving on public roads, highways etc.

- For transport, the climbing device must be dismantled (refer to package list).
- Lock up the hydraulic unit.
- Secure the hydraulic cylinder using the transport lock.
- The piston cross bar must be secured for transport.
- The climbing frame must be secured for transport.

#### Loading example

- Front assembly dismantled and placed in the climbing frame.
- Side platforms and railings placed in the climbing frame.
- Moving carriage with tie bars and moving carriage support placed in the climbing frame.

## 5 Outer climbing device KWH 20.6



Outer climbing device KWH 20.6

The climbing frame can be mounted or dismounted using the WOLFF slewing tower crane itself or a mobile crane.

For mounting the hydraulic outer climbing device, the WOLFF slewing tower crane must have the following minimum hook heights.

<b>Stationary on the foundation</b>	
▪ 2 tower elements	10.5 m hook height
<b>Stationary on cross frame</b>	
▪ 2 tower elements	11.5 m hook height
▪ 1 cross frame	

## 5 Outer climbing device KWH 20.6

<b>Stationary on cross frame element</b>	
<ul style="list-style-type: none"> <li>▪ 2 tower elements</li> <li>▪ 1 cross frame element</li> </ul>	14.5 m hook height

<b>Stationary on undercarriage</b>	
<ul style="list-style-type: none"> <li>▪ 2 tower elements</li> <li>▪ 1 undercarriage</li> </ul>	15.0 m hook height

After climbing has been completed, the climbing device must be lowered (down to the brace connected to the building or down to the tower base) or dismantled.

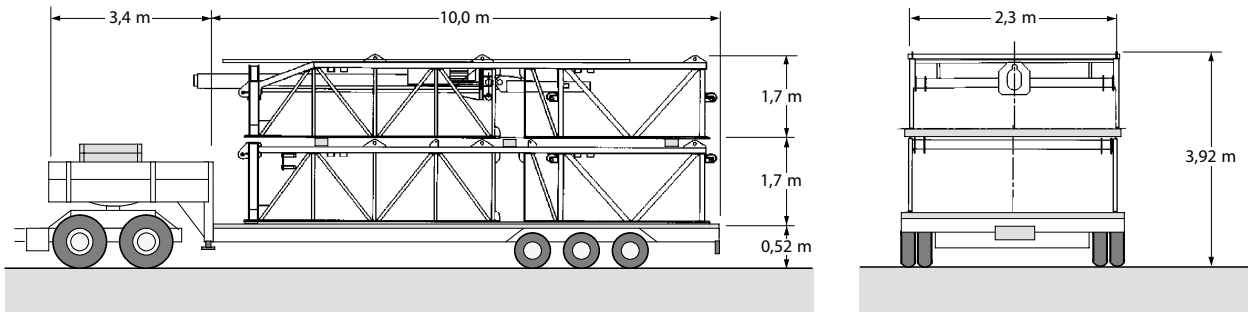
<b>Climbing device, complete</b>	
Weight	11380 kg

<b>Hydraulic cylinder: 3884</b>	
Weight	2500 kg
Lifting time	Approx. 15 min
Force at 280 bar	1250 kN
Operating pressure max.	300 bar
Piston surface, lifting, Ø 240 mm	452 cm <sup>2</sup>
Piston surface, lowering, Ø 240/170 mm	226 cm <sup>2</sup>
Stroke max.	5400 mm
Emergency lowering	Possible

<b>Hydraulic unit: 2884</b>	
Weight	425 kg
Fluid filling ISO VG 68 Initial filling: ESSO NUTO H 68	190 liters
Fluid filter with contamination indicator	
Pressure gauge	
Pressure relief valve set to	300 bar
Pump	17 l/min.
Squirrel-cage motor	11 kW, 1465 min <sup>-1</sup> , 100% duty cycle, 400 V, 50 Hz

<b>Control:</b>	
manual	via hand lever

### 6 Transport dimensions KWH 20.6



#### Loading example KWH 20.6

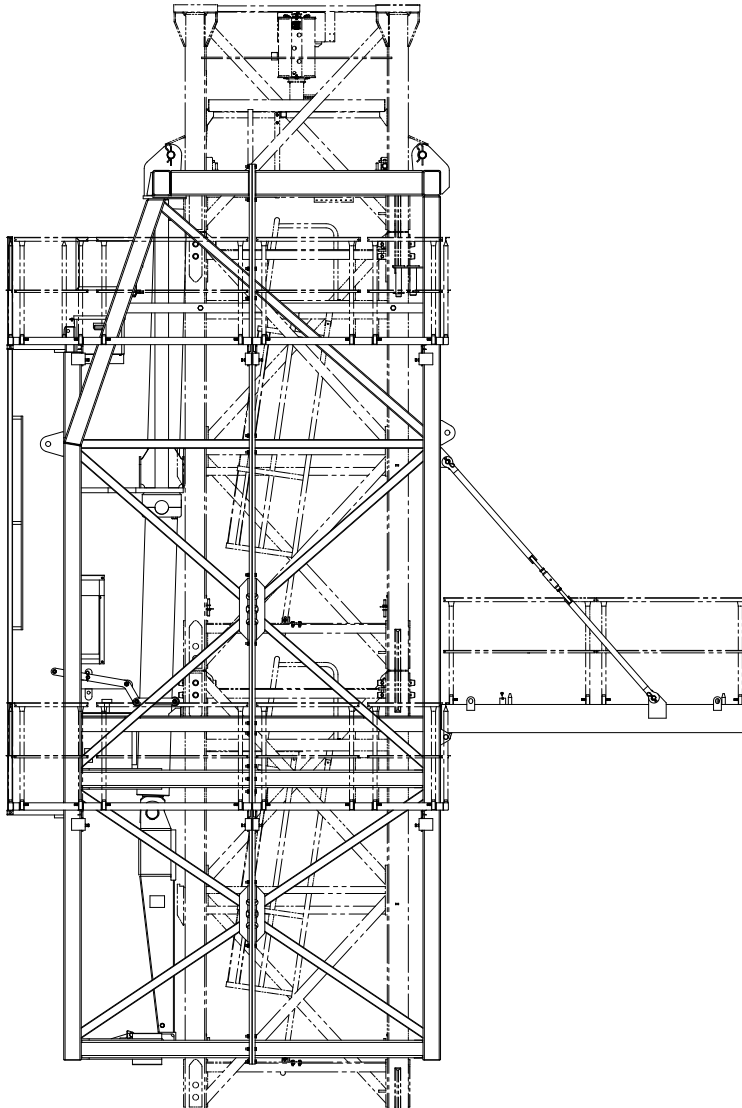
For transport, the climbing device can be loaded as shown in the drawing.

Always comply with relevant traffic regulations when driving on public roads, highways etc.

- For transport, the climbing device must be dismantled (refer to package list).
- Lock up the hydraulic unit.
- Secure the hydraulic cylinder using the transport lock.
- The piston cross bar must be secured for transport.
- The climbing frame must be secured for transport.

## 7 Outer climbing device KWH 23

## 7 Outer climbing device KWH 23



Outer climbing device KWH 23

The climbing frame can be mounted or dismounted using the WOLFF slewing tower crane itself or a mobile crane.

For mounting the hydraulic outer climbing device, the WOLFF slewing tower crane must have the following minimum hook heights.

<b>Stationary on the foundation</b>	
▪ 2 tower elements	10.5 m hook height

<b>Stationary on the cross frames (traveling cross frame):</b>	
<ul style="list-style-type: none"> <li>▪ 3 tower elements</li> <li>▪ 1 cross frame e.g. KR 12-60/80</li> <li>▪ (1 traveling cross frame e.g. KRF 12-60/80)</li> </ul>	14.7 m hook height

After climbing has been completed, the climbing device must be lowered (down to the brace connected to the building or down to the tower base) or dismantled.

<b>Climbing device, complete</b>	
Weight	17800 kg

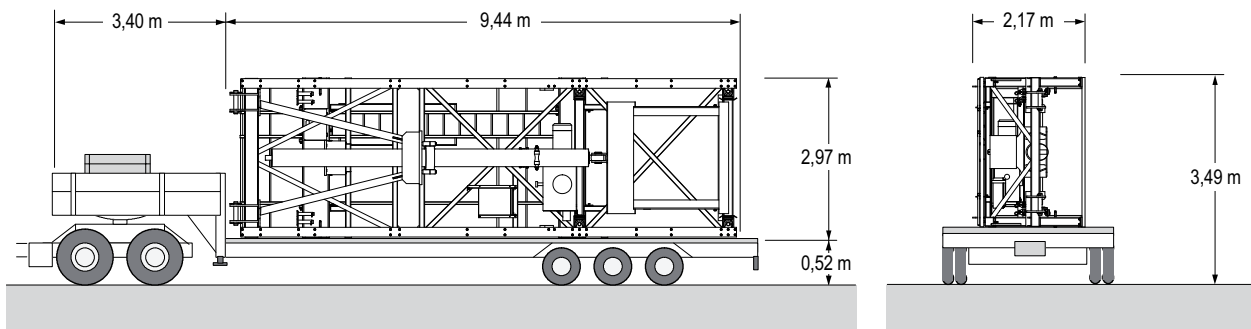
<b>Hydraulic cylinder: 151-41284</b>	
Weight	2925 kg
Lifting time	Approx. 12 min
Force at 300 bar	1700 kN
Operating pressure max.	300 bar
Piston surface, lifting, Ø 200 mm	616 cm <sup>2</sup>
Piston surface, lowering, Ø 200/160 mm	302 cm <sup>2</sup>
Stroke max.	5400 mm
Emergency lowering	Possible

<b>Hydraulic-unit: 299-40542</b>	
Weight	385 kg
Fluid filling ISO VG 32	420 liters
Initial filling ESSO NUTO H 32	
Fluid filter with contamination indicator	
Pressure gauge	
Pressure relief valve set to	300 bar
Pump	40 l/min.
Squirrel-cage motor	18.5 kW, 1500 min <sup>-1</sup> , 100% duty cycle, 400 V, 50 Hz

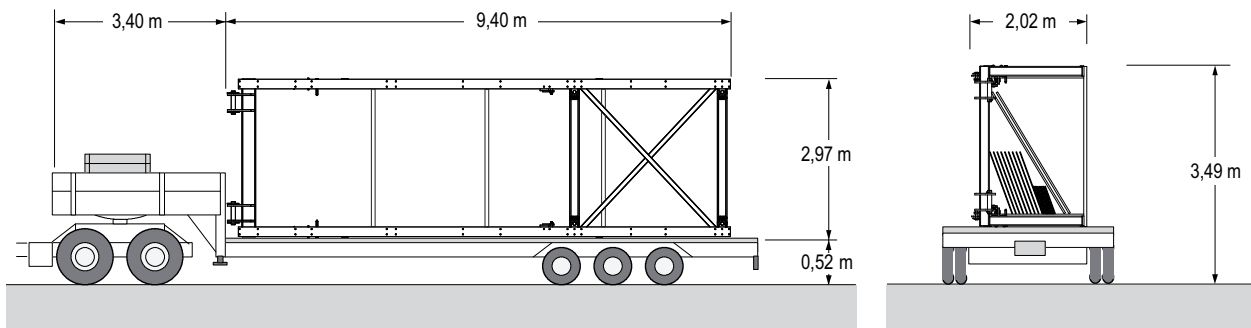
<b>Control system: 75040337</b>	
Electrical	Hand-held control console

## 8 Transport dimensions KWH 23

### 8 Transport dimensions KWH 23



Rear half of climbing frame



Front half of climbing frame with add-on elements

For transport, the climbing device can be loaded as shown in the example below.

Always comply with relevant traffic regulations when driving on public roads, highways etc.

- For transport, the climbing device must be dismantled (refer to package list).
- Lock up the hydraulic unit.
- Secure the hydraulic cylinder using the transport lock.
- The piston cross bar must be secured for transport.
- The climbing frame must be secured for transport.

#### Loading example for rear half of climbing frame

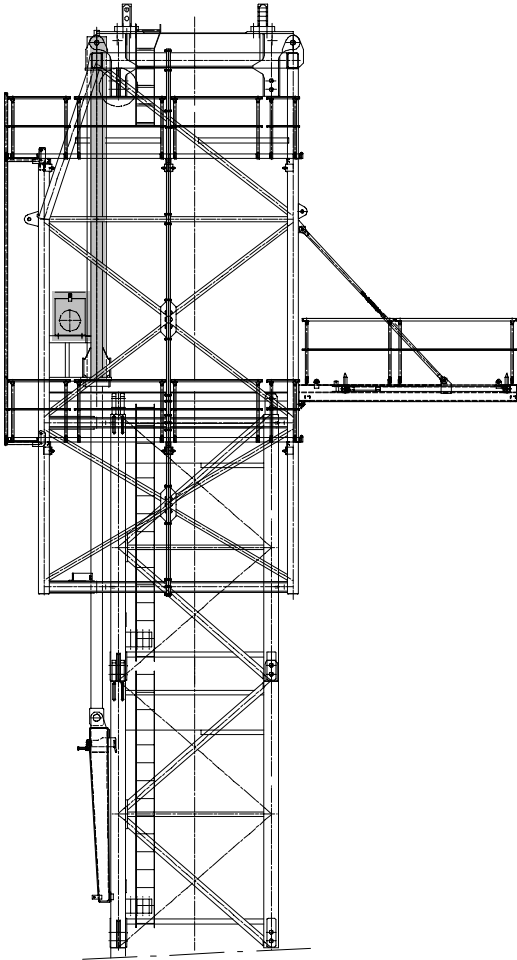
Rear half of the climbing frame with the hydraulic system installed and the mounting platform attached and folded away.

#### Loading example for front half of climbing frame

Place the side platforms and railings in the front half of the climbing frame. Moving carriage support with moving carriage, and tie bars may be placed on the elevated front part (gooseneck) of the low platform trailer.



## 9 Outer climbing device KWH 29



Outer climbing device KWH 29

The climbing frame can be mounted or dismounted using the WOLFF slewing tower crane itself or a mobile crane.

For mounting the hydraulic outer climbing device, the WOLFF slewing tower crane must have the following minimum hook heights.

<b>Stationary on the foundation</b>	
<ul style="list-style-type: none"> <li>▪ 1 joining frame VR2529</li> <li>▪ 2 tower elements</li> </ul>	10.2 m hook height
<b>Stationary on cross frame</b>	
<ul style="list-style-type: none"> <li>▪ 1 joining frame VR 2529</li> <li>▪ 2 tower elements</li> <li>▪ 1 cross frame</li> </ul>	12.0 m hook height

## 9 Outer climbing device KWH 29

After climbing has been completed, the climbing device must be lowered (down to the brace connected to the building or down to the tower base) or dismantled.

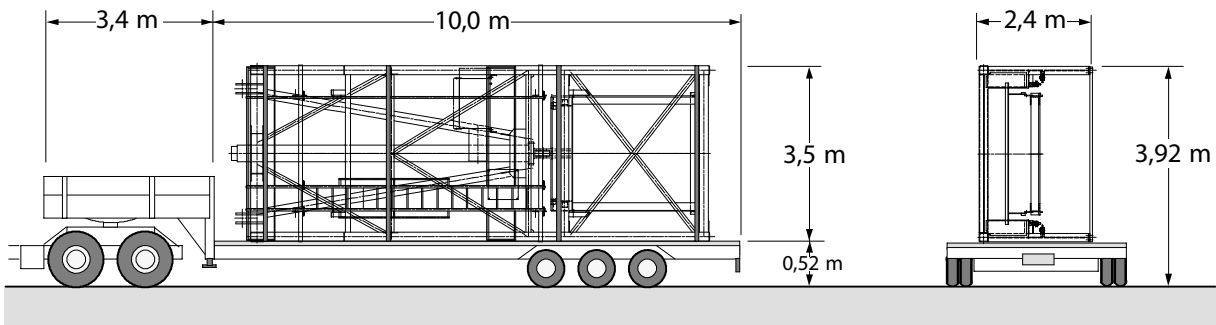
<b>Climbing device, complete</b>	
Weight	19330 kg

<b>Hydraulic cylinder</b>	
Weight	2150 kg
Lifting time	Approx. 12 min
Force at 290 bar	1700 kN
Operating pressure max.	300 bar
Piston surface, lifting, Ø 280 mm	616 cm <sup>2</sup>
Piston surface, lowering, Ø 280/200 mm	302 cm <sup>2</sup>
Stroke max.	5400 mm
Emergency lowering	Possible

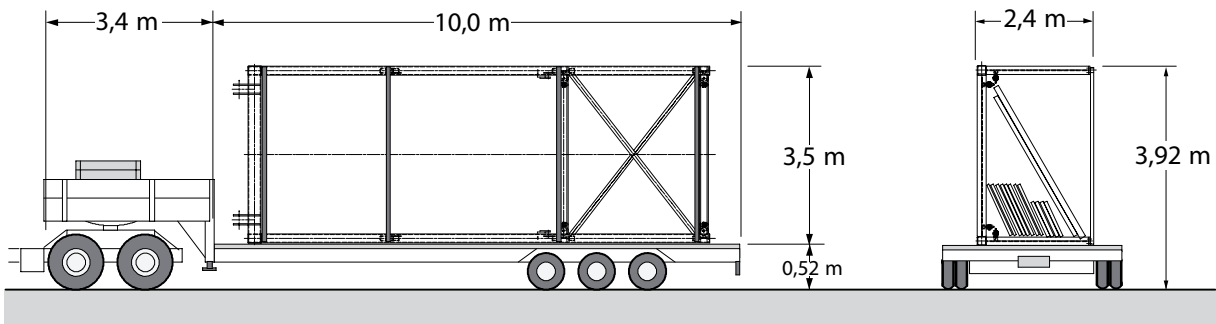
<b>Hydraulic-unit</b>	
Weight	620 kg
Fluid filling ISO VG 32 Initial filling: ESSO NUTO H 32	420 liters
Fluid filter with contamination indicator	
Pressure gauge	
Pressure relief valve set to	300 bar
Pump	40 l/min.
Squirrel-cage motor	18.5 kW, 1500 min <sup>-1</sup> , 100% duty cycle, 400 V, 50 Hz

<b>Control:</b>	
Electrical	Hand-held control console

## 10 Transport dimensions KWH 29



### Loading example 1 KWH 29



### Loading example 2 KWH 29

For transport, the climbing device can be loaded as shown in the example above.

Always comply with relevant traffic regulations when driving on public roads, highways etc.

- For transport, the climbing device must be dismantled (refer to package list).
- Lock up the hydraulic unit.
- Secure the hydraulic cylinder using the transport lock.
- The piston cross bar must be secured for transport.
- The climbing frame must be secured for transport.

### Loading example 1

Rear half of the climbing frame with the hydraulic system installed and the rear mounting platform attached and folded away.

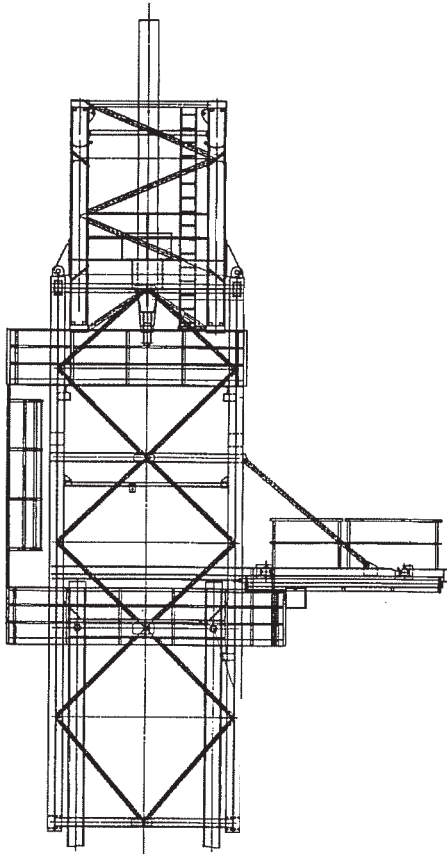
### Loading example 2

Front half of climbing frame secured with transport lock.

Side platforms, moving carriage support and moving carriage and standard railings placed in the front half of the climbing frame.

## 11 Outer climbing device KWH 33

## 11 Outer climbing device KWH 33



### Outer climbing device KWH 33

The climbing frame can be mounted or dismounted using the WOLFF slewing tower crane itself or a mobile crane.

For mounting the hydraulic outer climbing device, the WOLFF slewing tower crane must have the following minimum hook heights.

<b>Stationary on the foundation</b>	
<ul style="list-style-type: none"> <li>▪ 3 tower elements TV 33-5</li> <li>▪ 1 Climbing tower element</li> </ul>	

<b>travelling setup</b>	
<ul style="list-style-type: none"> <li>▪ 1 undercarriage</li> <li>▪ 3 tower elements TV 33-5</li> <li>▪ 1 Climbing tower element</li> </ul>	

After climbing has been completed, the climbing device must be lowered (down to the brace connected to the building or down to the tower base) or dismounted.

<b>Climbing tower element, complete</b>	
Weight	20700 kg

<b>Climbing frame, complete</b>	
Weight	22500 kg

<b>Hydraulic cylinder: climbing cross bar no. 3691</b>	
Lifting time	Approx. 15 min
Force at 310 bar	2860 kN
Piston surface, lifting, Ø 350 mm	961 cm <sup>2</sup>
Piston surface, lowering, Ø 350/220 mm	581 cm <sup>2</sup>
Stroke max.	5430 mm
Emergency lowering	Possible

<b>Hydraulic cylinder: climbing cross bar no. 3692</b>	
Fluid filling ISO VG 68 Initial filling: ESSO NUTO H 68	320 liters
Fluid filter with contamination indicator	
Pressure gauge	
Pressure relief valve	
Pump	35 l/min.
Three phase motor	15 kW, 1460 min-1, 100% duty cycle, 400 V, 50 Hz

<b>Control:</b>	
manual	via hand lever
remote controlled	via cable with portable control console

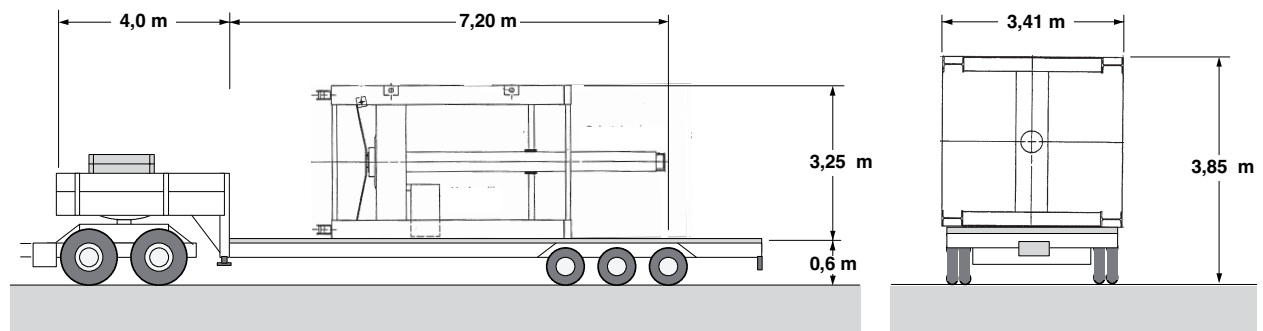
<b>Hydraulic cylinder: moving carriage Nr. 3694</b>	
Lifting time	approx. 1.5 min
Pressure at 60 bar	13 kN
traction force at 60 bar	6 kN
Piston surface, pushing, Ø 63 mm	31 cm <sup>2</sup>
Piston surface, pulling, Ø 63/45	15 cm <sup>2</sup>
Stroke max.	4000 mm

<b>Hydraulic unit: moving carriage no. 3695</b>	
Fluid filling ISO VG 68 Initial filling: ESSO NUTO H 68	10 liters
Oil filter	
Pressure gauge	
Pressure relief valve	
Pump	5.2 l/min.
Three phase motor	0.55 kW, 1390 min-1, 100% duty cycle, 400 V, 50 Hz

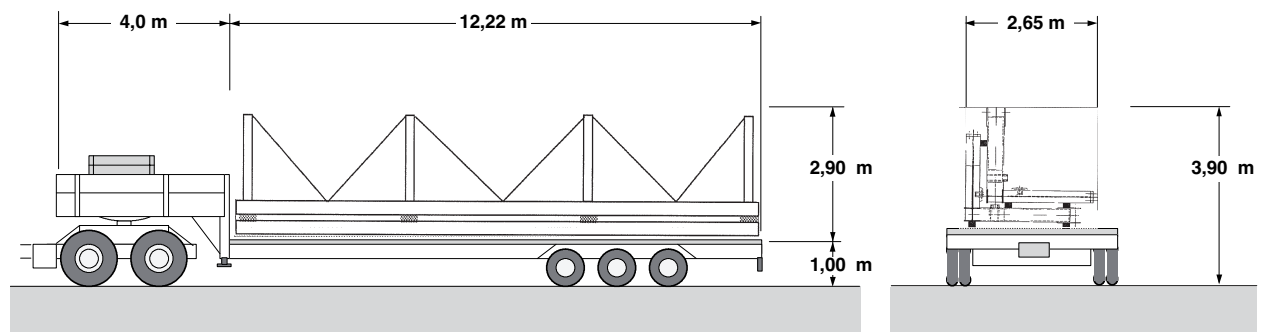
<b>Control:</b>	
manual	via hand lever

## 12 Transport dimensions KWH 33

## 12 Transport dimensions KWH 33



### Example for loading climbing tower element KWH 33



### Example for loading the climbing frame KWH 33

For transport, the climbing device can be loaded as shown in the example above.

Always comply with relevant traffic regulations when driving on public roads, highways etc.

- For transport, the climbing device must be dismantled (refer to package list).
- Lock up the hydraulic unit.
- Secure the hydraulic cylinder using the transport lock.
- The piston cross bar must be secured for transport.
- The climbing frame must be secured for transport.
- Disassemble the side-mounted lifting eyes for transport.



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