

The tool-free assembled prop for loads up to 200 kN

Product Brochure – Issue 11/2017









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Important information

All current safety regulations and guidelines applicable in those countries where our products are used must be observed.

The images shown in this brochure feature construction sites in progress. For this reason, safety and anchor details in particular cannot always be considered as conclusive or final. These are subject to the risk assessment carried out by the contractor.

In addition, computer graphics are used which are to be understood as system representations. For ensuring a better understanding, these and the detailed illustrations shown have been partially

reduced to show certain aspects. The safety installations which have possibly not been shown in these detailed descriptions must nevertheless still be available. The systems or items shown might not be available in every country.

Safety instructions and load specifications are to be strictly observed at all times. Separate structural calculations are required for any deviations from the standard design data.

The information contained herein is subject to technical changes in the interests of progress. Errors and typographical mistakes reserved.



The tool-free assembled prop for loads up to 200 kN

PERI HD 200 is the solution for higher loads. Individual HD 200 props can carry up to 200 kN; furthermore, the system can be used as a main beam area.

In particular, the low weight and easy handling of the HD 200 guarantees fast assembly. The props have a maximum assembly height of 12.20 m and are extremely versatile; in addition, they can be connected together to form main beam areas.

Shoring prop consisting of coupled aluminium sections for medium-heavy shoring (steel sections for higher loads and larger support heights); can also be used as main beam area.

- For loads up to 200 kN.
- Assembly in 30 cm increments up to 12.20 m total height (without intermediate supports).
- 3 aluminium prop sections(30 cm | 90 cm | 270 cm) and 2 steel sections (90 cm | 210 cm).
- Head Spindle with Head Plate that can be tilted up to 3°.
- Lowering Device with 10 cm lowering range for easy lowering under full load.

Fast assembly requiring no tools

through integrated chord couplings for connecting the individual sections

Assembly by hand

with lightweight individual components – the largest aluminium section weighs less than 30 kg

Controlled lowering

up to 10 cm with the lowering device

Can also be used as a main beam area

by connecting the props by means of main beams; diagonal bracing with system components without requiring any welding





Uncomplicated, very light and extremely practical

The HD 200 is comprised of prop sections and can be assembled in 4 different lengths. Thanks to the chord couplings on the individual sections, assembly can be carried out without tools. This connection is permanently attached on each section.

One key objective during the development of the HD 200 was that the system components could be moved by hand. Therefore, aluminium sections are mainly used throughout. The largest aluminium individual section weighs less than 30 kg. As a result, the HD 200 is considerably lighter than conventional heavy-duty props.

Cross-sections of HD 200 individual sections. Any scaffold tube bracing required can be connected to the \varnothing 48.3 mm diameter chord section.

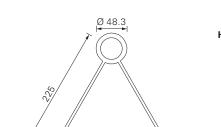
Two individual steel sections expand the range of applications; they are used for higher loads and achieve longer prop heights.

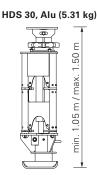
The lowering device allows controlled lowering of loads of up to 20 t – a simple procedure using a cordless screwdriver (no impact function).

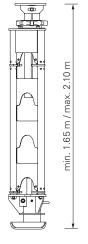
HDSS 210, Steel (63.50 kg)

Way 3.30 m

Way 3.40 min 3.45 min 3.45







HDS 90, Alu (11.20 kg) HDSS 90, Steel (28.20 kg)



The lowering device with a lowering range of 10 cm for easy striking under full load swivelling 3° to all sides.



The HD prop elements are simply placed on top of each other by hand ...



... and quickly connected by turning the chord couplings.

Can be extended to form main beam areas

Using HDT System Main Beams as top and base beams, HD 200 individual props are coupled together to form longer supporting structures.

This main beam area provides a very cost-effective solution in particular for bridge constructions. Tie Rods DW 15 are used for bracing the main beam frames whilst scaffold tubes Ø 48 and couplers form the diagonal bracing.



With this portal-like shoring construction comprised of standard components taken from the HD 200 heavy-duty system, traffic could flow freely during the construction period. In the heavily loaded middle section of the props, steel segments (easily identifiable through the red colour) ensure the safe transfer of loads.

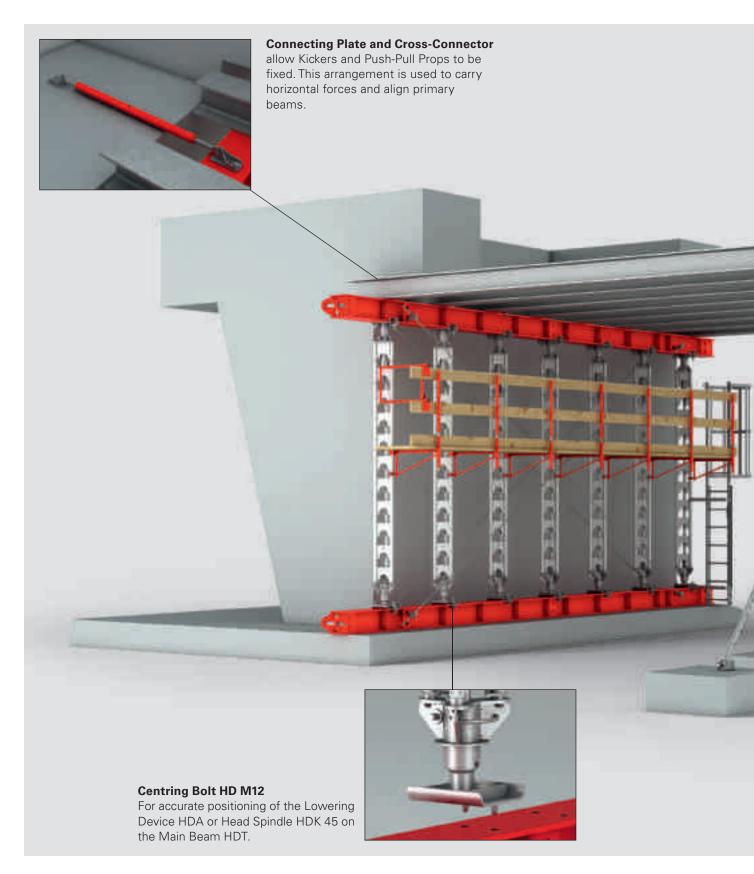


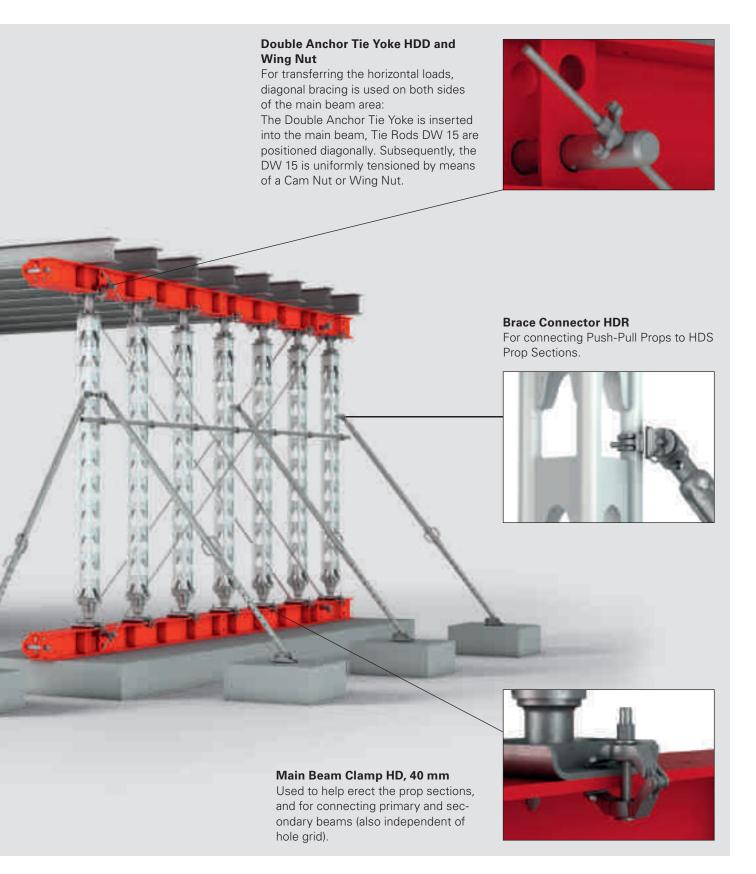
The main beam area is normally assembled horizontally – complete with diagonal bracing, working platform and access ladder.



HD 200 as main beam section for the building of a road crossing using a steel composite construction method.

Design details





Site-compliant accessories developed for easy use

PERI places great importance on the site benefits in terms of utilisation and accessories, and hence the cost-effectiveness of the construction. The HD 200 also has an extensive range of accessories.

Main Beam HDT

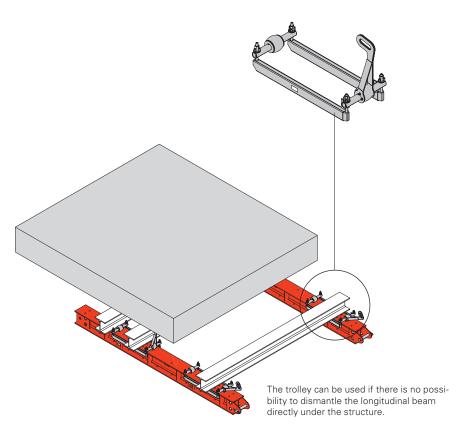
The beam comes in different lengths and has coupling connections, end-to-end perforations for centring the props, and holes for diagonal bracing with prestressed steel.

Trolley HD

The trolley is used for removing the longitudinal beams under the concreted member. It can move loads of up to 2,500 kg.

Scaffold Bracket 75 HD

The use of scaffold brackets provides safe working conditions on the shoring.





Ladders with safety cages, which are attached to the prop chords, guarantee safe access.



Diagonal bracing mounted on both sides of the main beam area stabilizes the unit and transfers the horizontal loads.



Main beam clamps can be used to fasten pre-assembled HD Props to the base and head beam.





The Wing Nut Spanner HD is used to release the Compression Brace Spindle HD, Head Spindle HDK 45 or spindles fitted with the Adjusting Nut TR 110.



Horizontal loads at right-angles to the level of the main beam frame are transferred directly from the Main Beam HDT into existing structures e.g. abutment.



With the Scaffold Bracket, a 75 cm wide working platform can be realised.

HD 200 Heavy-Duty Prop in use



HD 200 Heavy-Duty Props as a space-saving solution: 8 m high props transfer the loads from a working and safety scaffold in a confined area.



A lightweight but load-bearing solution: Below the shear walls, HD 200 Heavy-Duty Props transfer linear loads of up to 400 kN/m into the bottom



Transferring high loads with low space requirements – making full use of the advantages of the HD 200 Heavy-Duty Prop for the construction of a power plant.



HD 200 Props as bracing: The heavy-duty props offset the horizontal loads generated from the concrete pressure; this avoids costly and time-consuming anchor solutions.



HD 200 Heavy-Duty Props as a full-surface shoring structure. The HD 200 sections were joined together, also at great heights, in order to safely transfer the loads of the 3.20 m thick reinforced concrete slab for the generator.



The moveable longitudinal truss – taken from the HD 200 heavy-duty system – for this tunnel was designed as a portal. This allowed a continuous flow of site traffic at all times.

For the construction of this bridge, HD 200 main beam areas were used directly to support the precast girders of the superstructure.



For this underground structure, HD 200 individual props reliably carry the high loads resulting from the subsequent construction work.

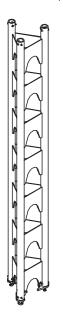


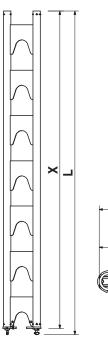


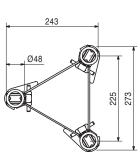
Item no.	Weight kg		
022006	5.090		
022005	11.200		
022004	29.600		
111276	28.200		
103993	63.500		

L	X	
340	300	
940	900	
2740	2700	
940	900	
2140	2100	
	940 2740 940	940 900 2740 2700 940 900

Prop sections made of aluminium or steel. With chord couplings for connecting to other sections.





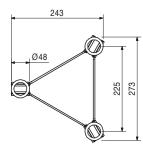


022020 3.310

Coupling Section HD 30

With connection possibility of chord couplings on both sides e.g. when using HD 200 segments with Head Spindle HDK at both ends.







1tem no. Weight kg 022003 32.100

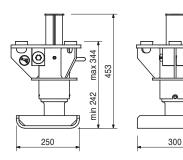
Lowering Device HDA

For easy release of higher loads with the HD 200. Lowering range max. 10 cm. Tiltable on all sides up to 3°.

Note

Follow Instructions for Assembly and Use!





Accessories

022018 0.002

Shear Pin HDA

022018

0.002

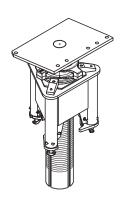
Shear Pin HDA

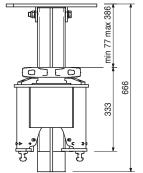
For mounting in the Lowering Device HDA.

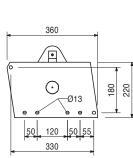
022007 24.600

Head Spindle HDK 45

Head spindle for Heavy-Duty Prop HD 200. With integrated chord couplings for connecting the chord tubes. Can be tilted up to 3° along one axis.







Accessories

022027 3.600

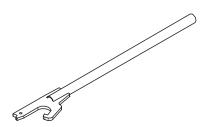
Wing Nut Spanner HD

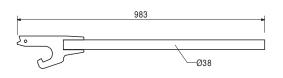
022027

3.600

Wing Nut Spanner HD

For easy release of the Head Spindle HDK 45, the Head Spindle TR 110-80/55 and the MULTIPROP Slab Prop.







 Item no.
 Weight kg

 022013
 0.137

Centring Bolt HD M12, galv.

For the HD 200 System.



Complete with

1 pc. 710330 Nut ISO 4032 M12-8, galv.



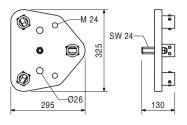
022019

18.500

Base Adapter HD

For using HD 200 Prop Sections directly on Main Beams HDT when lowering function is not required e. g. travelling truss of tunnel carriage.





131723

1.440

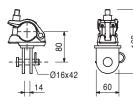
Brace Connector HDR-2

For connecting push-pull props and kicker braces to components \varnothing 48 mm.



Complete with

1 pc. 027170 Pin Ø 16 x 42, galv. 1 pc. 018060 Cotter Pin 4/1, galv.



022016

1.290

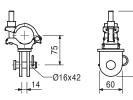
Brace Connector HDR

For connecting push-pull props and kicker braces to components \varnothing 48 mm.



Complete with

1 pc. 027170 Pin Ø 16 x 42, galv. 1 pc. 018060 Cotter Pin 4/1, galv.



028080

2.970

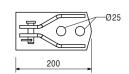
Connector Kicker/Push-Pull Prop, galv.

For connecting push-pull props and kicker braces to Main Beam HDT.



Complete with

1 pc. 018060 Cotter Pin 4/1, galv. 1 pc. 027170 Pin Ø 16 x 42, galv.



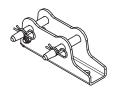




Item no. Weight kg 117343 3.250

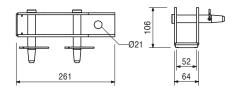
Base Plate-2 for RS 210 - 1400, galv.

For assembly of Push-Pull Props RS 210, 260, 300, 450, 650, 1000 and 1400.



Complete with

2 pc. 105400 Pin Ø 20 x 140, galv. 2 pc. 018060 Cotter Pin 4/1, galv.



Accessories

124777 0.210

Anchor Bolt PERI 14/20 x 130

124777

0.210

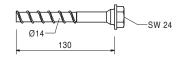
Anchor Bolt PERI 14/20 x 130

For temporary fixation to reinforced concrete structures.



Note

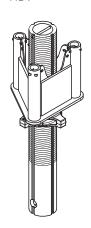
See PERI data sheet! Drilling Ø 14 mm.

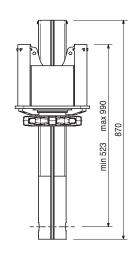


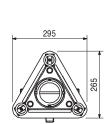
022023 21.800

Compression Brace Spindle HD

For using Prop Sections HDS and HDSS as props (also inclined). Only in connection with Base Plate HD!







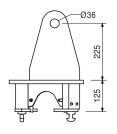
022022

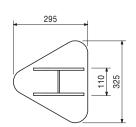
22.000

Compression Head HD

For using Prop Sections HDS and HDSS as props (also inclined).





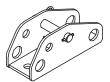




Item no. Weight kg 022024 13.200

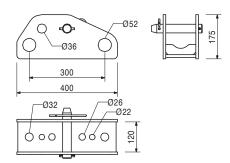
Base Plate HD

For using Prop Sections HDS and HDSS as props (also inclined).



Complete with

1 pc. 722465 Bolt 35 x 160, galv. 1 pc. 710304 Cotter Pin 7, galv.

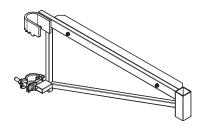


022017

5.190

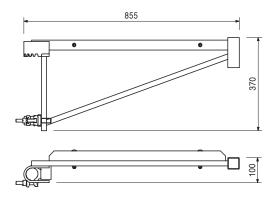
Scaffold Bracket HD 75

For assembly of working scaffold. With nailing batten



Complete with

1 pc. 116292 Guardrail Post HSGP-2



Accessories

116292 4.720

Guardrail Post HSGP-2

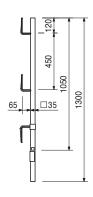
116292

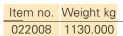
4.720

Guardrail Post HSGP-2

As guardrail for different systems.





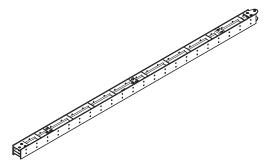


Complete with

1 pc. 105435 Bolt Ø 50 x 330

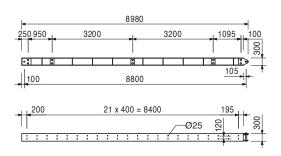
1 pc. 722457 Dowel Pin Ø 10 x 70, galv.

1 pc. 710618 Cotter Pin 8, galv.



System steel girder for use with HD 200 Main

Beam areas and special constructions.



022009

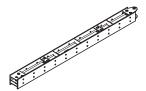
582.000

Main Beam HDT 440

Main Beam HDT 880

Profile HEB 300.

System steel girder for use with HD 200 Main Beam areas and special constructions. Profile HEB 300.

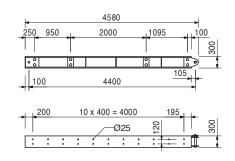


Complete with

1 pc. 105435 Bolt Ø 50 x 330

1 pc. 722457 Dowel Pin Ø 10 x 70, galv.

1 pc. 710618 Cotter Pin 8, galv.



022010 379.000

Main Beam HDT 280

System steel girder for use with HD 200 Main Beam areas and special constructions. Profile HEB 300.

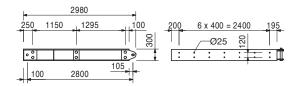


Complete with

1 pc. 105435 Bolt Ø 50 x 330

1 pc. 722457 Dowel Pin Ø 10 x 70, galv.

1 pc. 710618 Cotter Pin 8, galv.

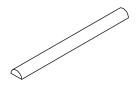


022025

1.970

Centering Bar 40 x 20 x 400

For centering crossbeams on the Main Beam HDT.





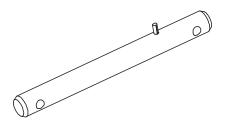


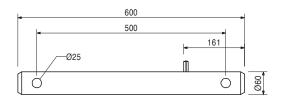


Item no. Weight kg 022011 13.200

Double Anchor Tie Yoke HDD

For anchoring with Tie Rod DW 15 and DW 20.

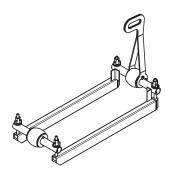




022021 31.900

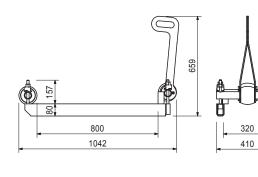
Trolley HD

For moving longitudinal girders on the Main Beam



Technical Data

Permissible load-bearing capacity 2.5 t.



106183

2.200

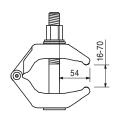
Main Beam Clamp HD 70 mm, galv.

For connecting crossed girders.



Note

Take official Approval into consideration! 2 for each Head Spindle.





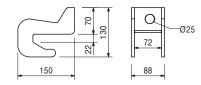
022026

1.780

Steel Beam Clamp IPB 300 - 1000

For providing protection against tipping.







Item no. Weight kg 051410 11.700

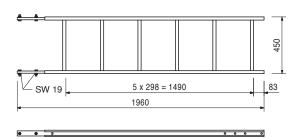
Ladder 180/6, galv.

As access for PERI Formwork Systems.



Complete with

4 pc. 710224 Bolt ISO 4017 M12 x 40-8.8, galv. 4 pc. 710381 Nut ISO 7042 M12-8, galv.



103718

0.684

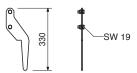
Ladder Hook, galv.

For adjusting the bottom ladder. Always use in pairs.



Complete with

2 pc. 710266 Bolt ISO 4017 M12 x 25-8.8, galv. 2 pc. 710381 Nut ISO 7042 M12-8, galv.



103724 10.400

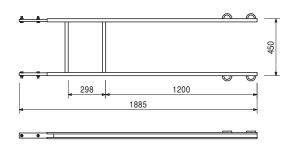
End Ladder 180/2, galv.

As access for PERI Formwork Systems.



Complete with

4 pc. 710224 Bolt ISO 4017 M12 x 40-8.8, galv. 4 pc. 710381 Nut ISO 7042 M12-8, galv.



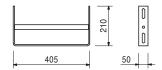
051460

2.180

Ladder Base, galv.

As bottom ladder connection and for securing ladders against sliding on the scaffold decks.



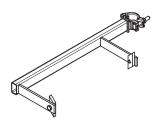




Item no. Weight kg 104646 4.220

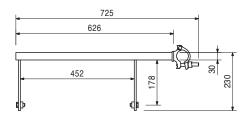
Ladder Connector HD 200

For connecting ladders to HD 200 Prop Sections.



Complete with

2 pc. 701763 Clamping Plate FI 25 x 10 x 90 1 pc. 710266 Bolt ISO 4017 M12 x 25-8.8, galv.



104132 15.600 051450 25.200 Ladder Safety Cages, galv. Ladder Safety Cage 75, galv. Ladder Safety Cage 150, galv.

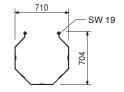
Ladder safety cage for PERI Access Ladders.



Complete with

4 pc. 710266 Bolt ISO 4017 M12 x 25-8.8, galv. 4 pc. 701763 Clamping Plate FI 25 x 10 x 90

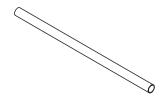


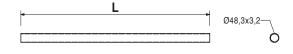


3.550		
0.000		
3.550		
7.100		
10.650		
14.200		
17.750		
21.600		

Scaffold Tubes Steel Ø 48.3 x 3.2 Scaff. Tube Steel Ø 48.3 x 3.2, special length Cutting Cost Scaffold Tube Scaff. Tube Steel Ø 48.3 x 3.2, I = 1.0 m Scaff. Tube Steel Ø 48.3 x 3.2, I = 2.0 m Scaff. Tube Steel Ø 48.3 x 3.2, I = 3.0 m Scaff. Tube Steel Ø 48.3 x 3.2, I = 4.0 m Scaff. Tube Steel Ø 48.3 x 3.2, I = 5.0 m Scaff. Tube Steel Ø 48.3 x 3.2, I = 6.0 m

1000 2000 3000 4000 5000 6000

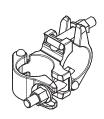


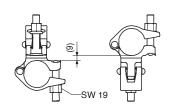


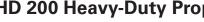
017020 1.120

Standard Coupler NK 48/48, galv.

For Scaffold Tubes Ø 48 mm.



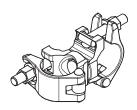




Item no. Weight kg 017010 1.400

Swivel Coupling DK 48/48, galv.

For Scaffold Tubes Ø 48 mm.



024590

32.000

Wedge Lowering Device 420 kN, painted

For releasing and lowering large loads.

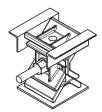
Note

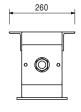
Take Type Test into consideration.

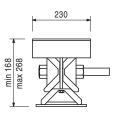
Wrench size SW 46.

Technical Data

Separate Design Information on request.







117930

53.300

Wedge Lowering Device 1000 kN, painted

For releasing and lowering large loads.

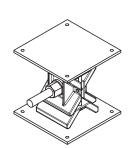
Note

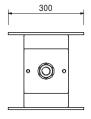
Take Type Test into consideration.

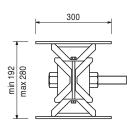
Wrench size SW 46.

Technical Data

Separate Design Information on request.





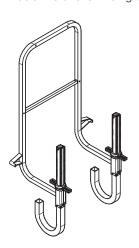


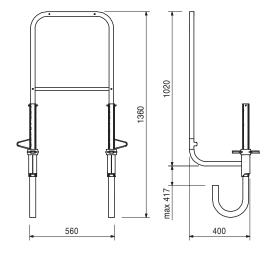


Item no. Weight kg 065066 15.100

End Guardrail Frame 55

Clampable end guardrail for all PERI Scaffold Platforms and Climbing Systems.







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