

# RS and RSS Push-Pull Props

Instructions for Assembly and Use – Standard configuration – Version 2.0





## Overview

Push-Pull Props RS main components	4
Push-Pull Props RSS main components	5
Kickers AV main components	5
Key	6

## Introduction

Target groups	7
Product description	8
Cleaning and maintenance instructions	9
Additional technical documentation	10
Instructions for Use	10
Foreseeable misuse	10

## Safety instructions

Cross-system	11
System-specific	13

## Component overview and tightening torques

Component overview	14
Tightening torques	15

## Application

A1 Storage and transportation	16
Pallets	16
Push-Pull Props RS	17
Push-Pull Props RSS	19
Kickers AV	19
A2 Push-Pull Props RS 210 – RS 1000	20
General information	20
RS 210 and RS 260	23
RS 300 and RS 450	23
RS 650 and RS 1000	24
A3 Push-Pull Props RS 1400	25
General information	25
Moving the push-pull prop	26
Adjusting the length	27
Releasing the chain	29
Erecting the push-pull prop	30
Transport position	31
A4 Push-Pull Props RSS	32
RSS Push-Pull Props	32
Kickers AV	33
A5 Base Plates	34
Base Plate RS	34
Base Plate RSS	35
A6 Brace connectors	36
A7 Quick connector	37
Quick Connector Head RS-2	37
Push-Pull Prop Adaptor RS	38
Attaching the Push-Pull Prop RS	39
Prefabricated concrete walls	40
Prefabricated concrete columns	41
Disassembly	41

## Tables

B1 Load-bearing capacities	42
RS Push-Pull Props	42
RSS Push-Pull Props and Kickers AV	43
B2 Base Plate loads	44
Push-Pull Props RS on the Base Plate	44
B3 Prefabricated concrete element loads	50
Quick Connector Head RS-2	50
Base Plate-3 f. RS 210-1400	51
Base Plate-2 f. RS 210-1400	51
Push-Pull Props RS	51

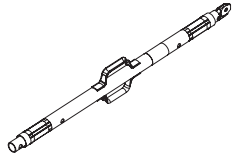
## Program overview

RS and RSS Push-Pull Props	52
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## Push-Pull Props RS main components

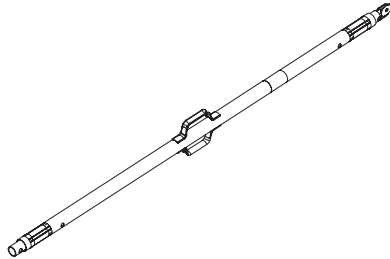
### RS 210

L = 1.30 – 2.10 m



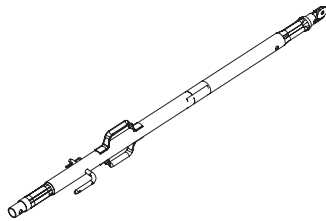
### RS 260

L = 2.30 – 2.60 m



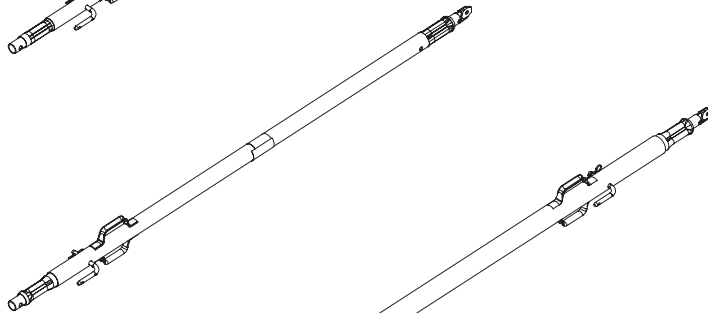
### RS 300

L = 1.90 – 3.00 m



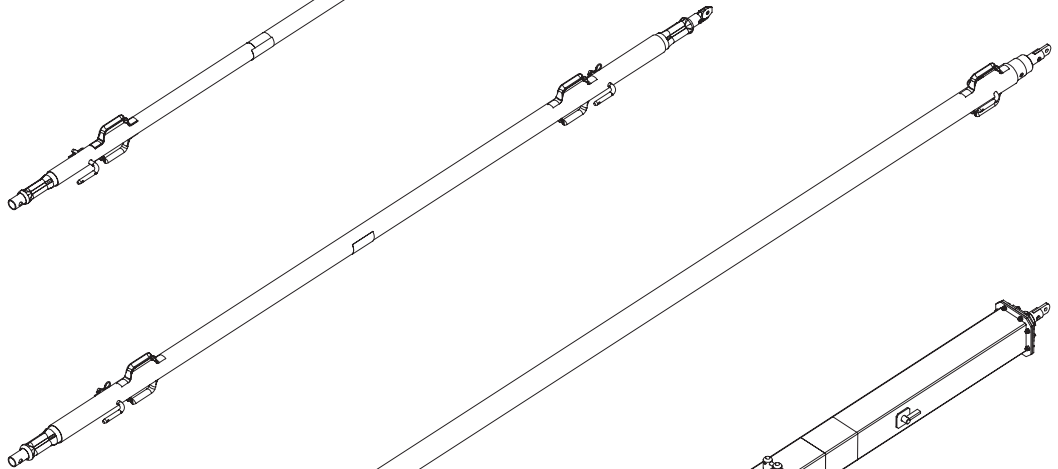
### RS 450

L = 2.80 – 4.50 m



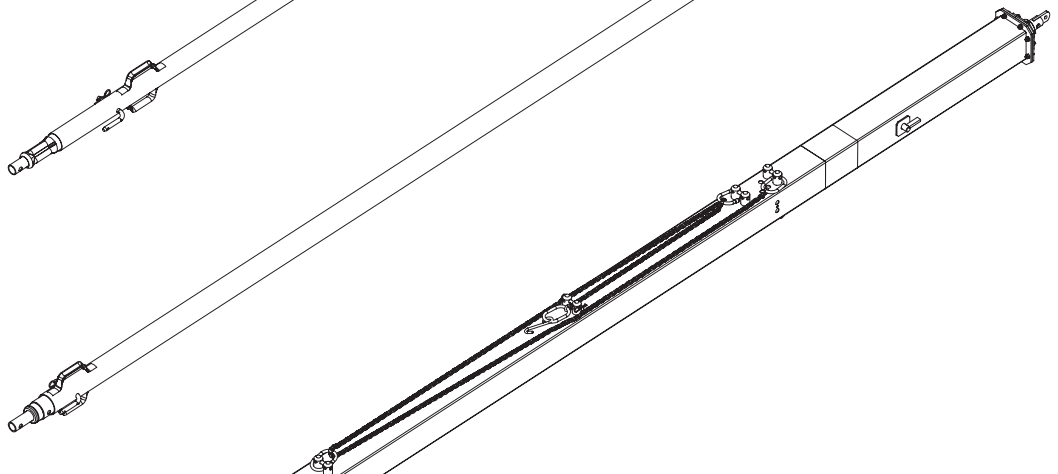
### RS 650

L = 4.30 – 6.50 m



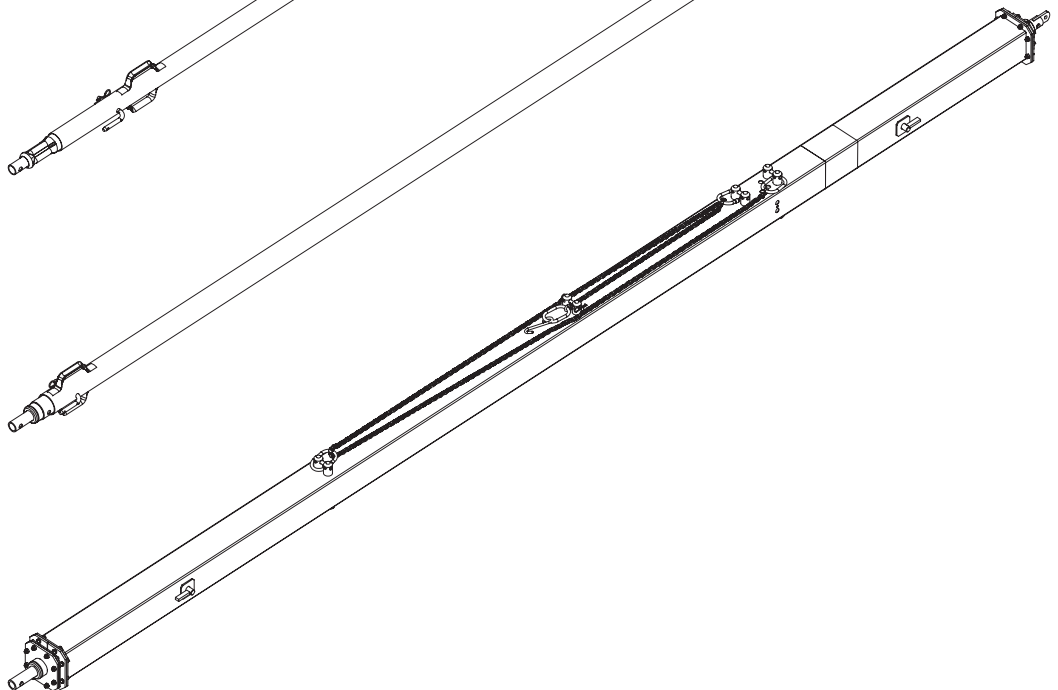
### RS 1000

L = 6.40 – 10.00 m



### RS 1400

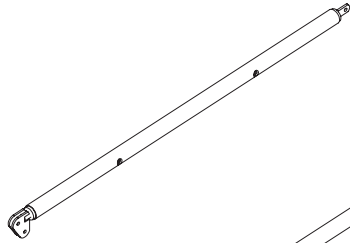
L = 6.40 – 14.00 m



## Push-Pull Props RSS main components

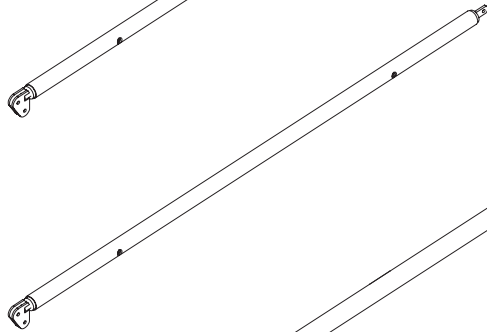
### RSS I

L = 2.05 – 2.94 m



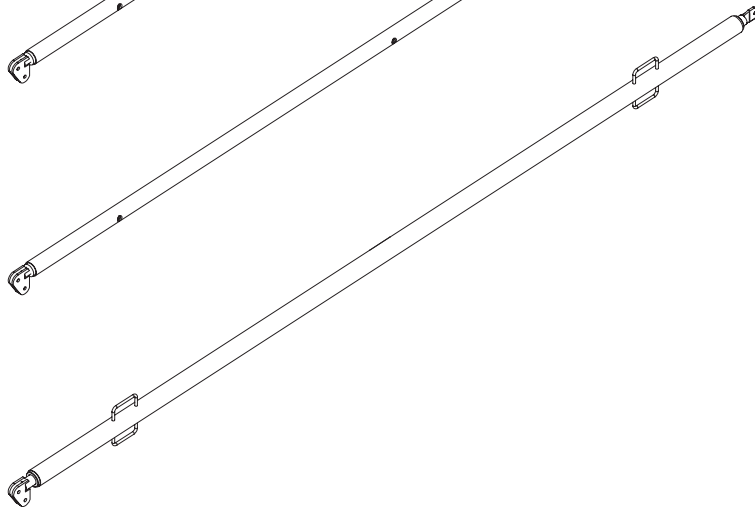
### RSS II

L = 2.91 – 3.80 m



### RSS III

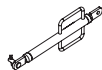
L = 4.60 – 6.00 m



## Kickers AV main components

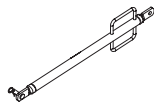
### AV 82

L = 0.50 – 0.82 m



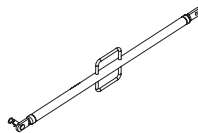
### AV 111

L = 0.79 – 1.11 m



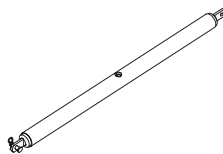
### AV 140

L = 1.08 – 1.40 m



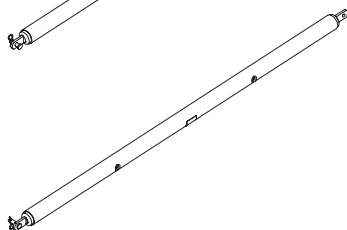
### AV 210

L = 1.26 – 2.10 m



### AV RSS III

L = 2.03 – 2.92 m
















## RS and RSS Push-Pull Props




Instructions for Assembly and Use – Standard configuration

## Key

### Pictogram | Definition

-  Danger/Warning/Caution
-  Note
-  To be complied with
-  Load-bearing point
-  Visual inspection
-  Tip
-  Incorrect use
-  Safety helmet
-  Safety shoes
-  Safety gloves
-  Safety goggles
-  Personal protective equipment to prevent falling from a height (PPE)
-  Observe additional documentation

### Arrows

-  Arrow representing an action
-  Arrow representing a reaction of an action\*
-  Arrow representing forces

\* If not identical to the action arrow.

### Safety instruction categories

The safety instructions alert site personnel to the risks involved and provide information on how to avoid these risks. Safety instructions can be found at the beginning of the section or before instructions for action and are highlighted as follows:

#### **Danger**

This sign indicates an extremely hazardous situation that could result in death or serious, irreversible injury if the safety instructions are not followed.

#### **Warning**

This sign indicates a hazardous situation that could result in death or serious irreversible injury if the safety instructions are not followed.

#### **Caution**

This sign indicates a hazardous situation that could result in minor or moderate injury if the safety instructions are not followed.

#### **Note**

This sign indicates situations in which failure to observe the information can result in material damage.

### Format of the safety instructions

#### **Signal word**

Type and source of hazard!  
Consequences of non-compliance.  
⇒ Preventative measures.

### Dimensions

Dimensions are usually given in cm. Other measurement units, e.g. m, are shown in the illustrations.

### Conventions

- Instructions are numbered with:  
1. ...., 2. ...., 3. ....
- The result of an instruction is shown by: →
- Position numbers are clearly provided for the individual components and are given in the drawing, e.g. **1**, in the text in brackets, for example (**1**).
- Multiple position numbers, i.e. alternative components, are represented with a slash: e.g. **1/2**.

### Notes on illustrations

The illustration on the front cover of these instructions is understood to be a system representation only. The assembly steps presented in these Instructions for Assembly and Use are shown in the form of examples with only one component size. They are valid for all component sizes contained in the standard configuration.

To facilitate understanding, illustrations are sometimes incomplete. The safety equipment that is not shown in these detailed descriptions must nevertheless be available.

### Terminology

Components are not always named in full so that they are easier to read.

## Target groups

### Contractors

These Instructions for Assembly and Use are designed for contractors who either

- assemble, modify and dismantle PERI systems, or
- use them, e.g. for concreting, or
- allow them to be used for other operations, e.g. carpentry or electrical work.

The contractor's procedures for the control of temporary works must ensure that suitably competent persons are appointed to manage the planning and use of PERI formwork systems.

The appointed person(s):

- must identify potential hazards during the planning phase,
- determines measures that provide protection against risks,
- creates a safety and health protection plan,
- coordinates the protective measures for the contractor and site personnel so that they do not endanger each other,
- monitors compliance with the protective measures.
- must be on site for all system operations,
- prepares and updates the plan for assembly, modification and dismantling,
- prepares and updates the plan for use of the system by the user,
- supervises the assembly, modification and dismantling work (supervisor).

### Competent persons qualified to carry out inspections

Due to the specialist knowledge gained from professional training, professional experience and recent professional activity, the competent person qualified to carry out inspections has a reliable understanding of safety-related issues and can carry out inspections correctly. Depending on the complexity of the inspection to be undertaken, e.g. scope of testing, type of testing or the use of certain measuring devices, a range of specialist knowledge is necessary.

### Qualified personnel

PERI systems may only be assembled, modified or dismantled by personnel who are suitably qualified to do so. Qualified personnel must have completed a course of training\*\* in the work to be performed, covering the following points at least:

- Explanation of the plan for the assembly, modification or dismantling of the system in an understandable form and language.
- Description of the measures for safely assembling, modifying or dismantling the system.
- Naming of the preventive measures to be taken to avoid the risk of persons and objects falling.

- Designation of the safety precautions in the event of changing weather conditions that could adversely affect the safety of the system, as well as the personnel concerned.
- Details regarding permissible loads.
- Description of all other risks and dangers associated with assembly, modification or dismantling operations.



- **Ensure that the respective current version of relevant national guidelines and regulations are complied with!**

\* Instructions are given by the contractor themselves or a competent person selected by them.

## Product description

### Product description

PERI products have been designed for exclusive use in the industrial and commercial sectors only by suitably trained personnel.

These Instructions for Assembly and Use are based on the approval, type test and static calculation.

Push-pull props:

- support formwork systems, scaffolding systems and prefabricated concrete elements vertically, and thus prevent them from falling over.
- transfer tension and compression forces.
- transfer wind loads.

Quick connector head:

- With the Quick Connector Head RS-2 and Adaptor Quick Connector RS, Push-Pull Props RS can be fixed to prefabricated concrete elements. The Adaptor Quick Connector RS tightly connects the Quick Connector Head RS-2 and push-pull prop.
- Always fit at least two Quick Connector Heads RS-2 with corresponding Push-Pull Props RS for each prefabricated element.
- Fix suitable fixing material, e.g. screw-on sleeves, bolts or permissible pigtail anchors, to horizontal prefabricated elements. The position and quantity of fixing material are calculated according to project specifications.
- Do not use the quick connector head with Push-Pull Props RSS.

Quick connector connecting parts:

- to the prefabricated element: Quick Connector Head RS-2.
- to the push-pull prop: Adaptor Quick Connector RS.

These Instructions for Assembly and Use describe the standard configuration of the Push-Pull Props RS and the alternative Push-Pull Props RSS with Kickers AV.

For the Push-Pull Prop RS system, these are also fitted as kicker braces. For the Push-Pull Prop RSS system, the Kickers AV are fitted as kickers.

### Features

- Safe and fast handling.
- Extensible – rough adjustment of the push-pull props in 10 cm increments. Exception: RS 1400 extensible in 20 cm increments.
- Fine adjustments – by means of the thread on the Outer Tube of the push-pull prop.
- Very long service life due to the hard-wearing corrosion prevention.
- Low maintenance costs.
- Push-Pull Props RS can also be used as kicker braces.

### Standard configuration

- |           |                    |
|-----------|--------------------|
| ■ RS 210  | L = 1.30 – 2.10 m  |
| ■ RS 260  | L = 2.30 – 2.60 m  |
| ■ RS 300  | L = 1.90 – 3.00 m  |
| ■ RS 450  | L = 2.80 – 4.50 m  |
| ■ RS 650  | L = 4.30 – 6.50 m  |
| ■ RS 1000 | L = 6.40 – 10.00 m |
| ■ RS 1400 | L = 6.40 – 14.00 m |

### Alternative push-pull props

- |           |                   |
|-----------|-------------------|
| ■ RSS I   | L = 2.05 – 2.94 m |
| ■ RSS II  | L = 2.91 – 3.80 m |
| ■ RSS III | L = 4.60 – 6.00 m |

### Kickers AV

- AV 82, AV 111, AV 140
- AV 210
- AV RSS III

## Cleaning and maintenance instructions

### For all general formwork applications

In order to maintain the value and operational readiness of the formwork materials over the long term, clean the panels after each use.

Some repair work may also be inevitable due to the tough working conditions.



The contractor must ensure that the personal protective equipment required for cleaning, maintenance and repair work such as

- Safety helmet,
- Safety shoes,
- Safety gloves,
- Safety goggles,

is available and used as intended.

The following instructions should help to keep cleaning and maintenance costs as low as possible.

Cleaning tools must be adapted to the respective surfaces of the components so that they are not damaged.

Spray the formwork on both sides with concrete release agent before each use; this makes the formwork easier and faster to clean. Spray the concrete release agent very thinly and evenly!

Do not spray work platforms and access routes with concrete release agent. Slip hazard.

Spray the rear side of the formwork with water immediately after concreting; this avoids any time-consuming and costly cleaning operations.

When used continuously, spray the formlining elements with concrete release agent immediately after deshuttering; then clean by means of a scraper, brush or rubber lip scraper. Important: do not clean formlining made of plywood with high-pressure equipment. This could result in the formlining being damaged.

Fix recesses and built-in parts with double-head nails; as a result, the nails can easily be removed later, and damage to the formlining is largely avoided.

Close all unused tie holes with plugs; this eliminates any subsequent cleaning or repair work.

Tie holes accidentally blocked with concrete are cleared by means of a steel pin from the formlining side.

When placing bundles of reinforcement bars or other heavy objects on horizontally supported formwork elements, suitable support, e.g. squared timbers, is to be used: this prevents impressions and damage to the formlining to a large extent.

Internal concrete vibrators should be fitted with rubber caps if possible; as a result, any damage to the formlining is reduced if the internal vibrator is accidentally inserted between the reinforcement and formlining.

Never clean powder-coated components, e.g. elements and accessories, with steel brushes or hard metal scrapers; this preserves the powder coating. Use spacers for reinforcements with large or flat supports; this largely avoids indentations in the formlining under load.

Mechanical components, e.g. spindles or gear mechanisms, must be cleaned of dirt or concrete residue before and after use, and then greased with a suitable lubricant.

Provide suitable support for the components during cleaning so that no unintentional change in their position is possible.

Do not clean components suspended on crane lifting gear.

## Additional technical documentation

- User information for pallets and stacking devices
- Technical Data Sheet for Tie Bolt PERI 14/20 x 130
- Approval Z-8.311-964
- Type tests:
  - Push-Pull Prop RS 1000
  - Push-Pull Prop RS 1400
  - PERI Kickers AV and PERI Push-Pull Props RSS

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## Instructions for Use

Use in a way not intended, deviating from the standard configuration or the intended use according to the Instructions for Assembly and Use, represents a misapplication with a potential safety risk, e.g. risk of collapse.

Only PERI original components may be used. The use of other products and spare parts is not allowed and represents a misapplication with associated safety risks.

Changes to PERI components are not permitted.

The system described in these Instructions for Assembly and Use may contain patent-protected components.

Additional wind loads on surfaces due to icing are not taken into account. Snow and ice loads are not taken into account.

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## Foreseeable misuse

Using Push-Pull Prop RS as a Heavy-Duty Spindle SLS.

Deviating from the installation procedure described in the Instructions for Assembly and Use.

Exceeding permissible load-bearing capacities and load limits.

Spindle lengths set unevenly.

Overtightening spindle locking.

Formwork units and prefabricated parts are not adequately secured to prevent tipping during and after assembly or have an insufficient number of push-pull props.

Unsecured or missing Pins / Bolts

## Cross-system



**Safety instructions apply to all service life phases of the system.**

### General information

The contractor must ensure that the Instructions for Assembly and Use supplied by PERI are available at all times and understood by the site personnel.

These Instructions for Assembly and Use can be used as the basis for creating a risk assessment. The risk assessment is compiled by the contractor. The Instructions for Assembly and Use are not a substitute for a risk assessment!

Observe and comply with the safety instructions and permissible loads.

For the application and inspection of PERI products, observe the current laws and regulations in force in the respective countries.

Materials and working areas are to be inspected before each use and assembly for:

- damage,
- stability and
- functional integrity.

Damaged components must be exchanged immediately on site and no longer used.

Safety components are to be removed only when they are no longer required.

Secure all Pins with Cotter Pins and all Bolts with Nuts

Components provided by the contractor must comply with the characteristics stipulated in these Instructions for Assembly and Use and all applicable laws and standards. Unless otherwise indicated, the following applies in particular:

- Squared timber components:  
Strength class C24 for solid wood according to DIN EN 338:2016-07.
- Scaffolding tubes:  
Galvanised steel tubes with minimum dimension  $\varnothing 48.3 \times 3.2$  mm according to DIN EN 12811-1:2004-03 4.2.1.2.
- Scaffolding tube couplings:  
according to DIN EN 74-1:2022-09 and DIN EN 74-2:2022-09.

Deviations from the standard configuration are only permitted after a further risk assessment has been carried out by the contractor.

Appropriate measures for working and operational safety, as well as stability, are defined on the basis of this risk assessment.

Corresponding proof of stability can be provided by PERI on request if the risk assessment and resulting measures to be implemented are made available.

Before and after extraordinary events that may have damaging effects on the safety of the system, the contractor must immediately

- produce another risk assessment, the results of which must be used to implement suitable measures to ensure the stability of the system,
- arrange for an extraordinary inspection to be carried out by a competent person qualified to do so. The aim of this inspection is to detect and repair damage in good time in order to ensure safe use of the system.

Exceptional events could be:

- accidents, fire, explosions, collisions,
- long periods of non-use,
- natural events, e.g. heavy rainfall, heavy snowfall, significant icing, storms or earthquakes.

Suitable measures could be:

- removing nets/tarpaulin,
- clearing snow and ice,
- reducing live loads,
- securing loose materials.

## Assembly, modification and dismantling work

PERI systems may only be assembled, modified or dismantled under the supervision of a person qualified to do so and by technically suitable employees. The qualified personnel must have received appropriate training for the work to be carried out with regard to specific risks and dangers.

On the basis of the risk assessment and Instructions for Assembly and Use, the contractor must create installation instructions in order to guarantee safe assembly, modification and dismantling of the climbing unit.



The contractor must ensure that the personal protective equipment required for the assembly, modification or dismantling of the scaffolding system, e.g.

- Safety helmet,
- Safety shoes,
- Safety gloves,
- Safety goggles,

is available and used as intended.

For work at a higher level, use an approved ladder or platform system, or an assembly scaffold.



If personal protective equipment against falling from a height (PPE) is required or specified in local regulations, the contractor must determine appropriate attachment points on the basis of the risk assessment.

The PPE to be used to prevent falling is determined by the contractor.

The contractor must

- provide safe working areas for site personnel, which are to be reached through the provision of safe access ways. cordon off and clearly mark danger zones.
- guarantee stability during all stages of construction, in particular during assembly, modification and dismantling operations.
- ensure and demonstrate that all loads that occur are safely transferred.

## Use

Every contractor who uses or allows the PERI systems to be used, is responsible for ensuring that the equipment is in good condition.

If the system is used successively or at the same time by several contractors, the health and safety coordinator must point out any possible mutual hazards and all work must then be coordinated.

When systems are used in publicly accessible areas,

- measures to prevent unauthorised use, e.g. enclosure of access areas, must be taken.
- measures to prevent injuries caused by bumping against protruding components, e.g. assembly of protective components, must be taken.

Always keep the contact surfaces of the system free of dirt, objects, snow and ice.

Close off the system in extreme weather conditions.

## System-specific

Strike components only when the concrete has sufficiently hardened and the person in charge has given the go-ahead for deshuttering to take place.

Always secure all pins with cotter pins.

### **Anchoring**

Anchoring / base plates are only to be used if the anchorage has sufficient concrete strength.

### **Exceptional events**

For unfavourable structure geometries or larger wind speeds, additional securing measures are to be implemented, e.g.:

- ballast,
- bracing,
- dismantling the formwork etc.

# Component overview

Pos. no.	Component name	Art. no.
1	Push-Pull Prop RS 210	117466
2	Push-Pull Prop RS 260	118283
3	Push-Pull Prop RS 300	117467
4	Push-Pull Prop RS 450	117468
5	Push-Pull Prop RS 650	117469
6	Push-Pull Prop RS 1000	028990
7	Push-Pull Prop RS 1400	103800
8	Base Plate-3 f. RS 210-1400	126666
9	Base Plate-2 f. RS 1000/1400	102018
10	Base Plate-2 f. RS 210-1400*	417343
11	Quick Connector Head RS-2	127190
12	Adaptor Quick Connector RS	117726
13	Push-Pull Props RSS I*	328010
14	Push-Pull Props RSS II*	328020
15	Push-Pull Props RSS III*	328030
16	Base Plate-2 for RSS*	406000
17	Kickers AV 82	057087
18	Kickers AV 111	057088
19	Kickers AV 140	028110
20	Kickers AV 210*	408135
21	Kicker AV RSS III cpl*	328120
22	Pin Ø16x42mm ga	027170
23	Pin Ø16x65/86mm ga	018050
24	Pin Ø20x140mm ga	105400
25	Cotter Pin 4/1 ga	018060
26	Anchor Bolt SW24 Ø14/20x130mm	124777

\* Available as a rental article



Unless otherwise indicated, PERI recommends the following guide values for Bolt connections as "hand-tightened" tightening torques  $M_{A,hand-tightened}$ . These guide values are based on DIN EN 15048-1:2016-09 with minimum Safety Factor 3 against breakage.

Quality class	Quality 4.6		Quality 8.8 and 10.9
	Lightly oiled	MoS2	Undefined
Bolt M8	8 Nm	6.6 Nm	8 Nm
Bolt M10	16 Nm	13.0 Nm	16 Nm
Bolt M12	30 Nm	23.0 Nm	30 Nm
Bolt M16	65 Nm	54.0 Nm	65 Nm
Bolt M20	100 Nm		100 Nm
Bolt M24	150 Nm		150 Nm
Bolt M30	260 Nm		260 Nm
Bolt M36	350 Nm		350 Nm

Tightening torques have been determined for the following components:

Scaffolding tube coupling	50 Nm
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## General information

- Store and transport components in such a way that no unintentional change in their position is possible. Detach load-lifting accessories and lifting gear from the lowered components only if they are in a stable position and no unintentional change is possible.
- Do not drop the components.
- Only ever use approved and inspected means of transportation from PERI including lashing, lifting gear and slings.
- Only ever attach the means of transport to the intended attachment points with a positive fit using suitable lifting gear and slings.

## During the relocation procedure

- Ensure that components are picked up and set down in such a way that unintentional falling over, falling apart, sliding, falling down or rolling is avoided.
- Always use ropes to guide components or assemblies that are susceptible to wind when moving them with a crane.
- No one is allowed to remain under the suspended load.
- The access areas on the construction site must be free of obstacles and tripping hazards, and must also be slip-resistant.
- For transportation, the substrate must have sufficient load-bearing capacity.
- Use original PERI storage and transport systems, e.g. crate pallets, pallets or stacking devices.

## Pallets

Pallets are one possibility for storing and transporting push-pull props. (Fig. A1.01)



- Use lifting gear combi or 4-sling lifting gear. On each pallet, attach a hook to one load-bearing point (**1.1**). → Four load-bearing points per pallet. (Fig. A1.01)
- Refer to the user information for pallets and stacking devices.

The pallets are available in two different sizes:

### Pallets

<b>1a</b>	RP-2 80 x 120	103434
<b>1b</b>	RP-2 80 x 150	103429



Pallets (**1a/1b**) can be lifted using the longitudinal as well as the front sides. (Fig. A1.01)

### Perm. load-bearing capacity of the pallets

- RP-2 80 x 120: 1.5 t
- RP-2 80 x 150: 1.5 t

### Crane sling angle $\leq 15^\circ$

4-sling lifting gear length  $L = 3.0$  m.



Push-Pull Props RS of the same type and size can also be placed one above the other between squared timbers and secured by means of steel bands.

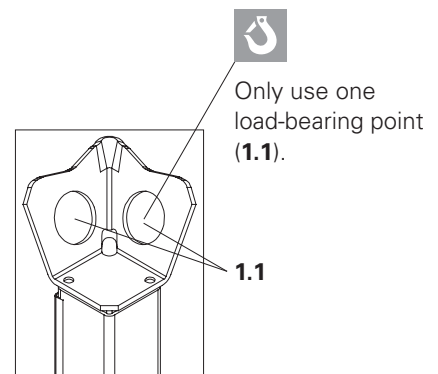


Fig. A1.01a

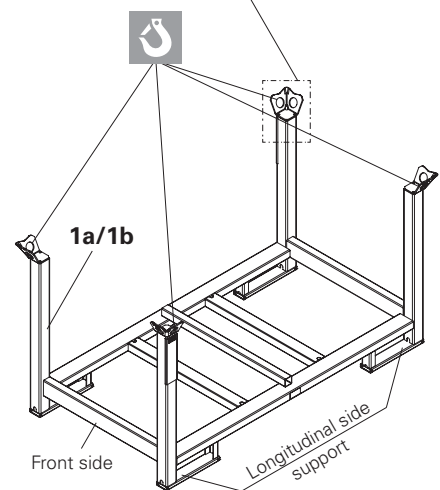


Fig. A1.01

## Push-Pull Props RS

In the following table, Push-Pull Props RS with the respective load carrier and the number of Push-Pull Props RS per load carrier are defined taking into account the permissible load-bearing capacity of the pallets.

Push-pull prop	Article no.	Load carrier	max. pieces / pallet = width x height	Work aids
<b>RS 210</b>	117466	RP-2 80 x 120	55 = 11 x 5	Squared timber, steel band
<b>RS 260</b>	118238	RP-2 80 x 150	55 = 11 x 5	Squared timber, steel band Layers stacked offset
<b>RS 300</b>	117467	RP-2 80 x 150	50 = 10 x 5	Squared timber, steel band
<b>RS 450</b>	117468	RP-2 80 x 150	45 = 9 x 5	Squared timber, steel band Layers stacked offset (Fig. A1.02)
<b>RS 650</b>	117469	RP-2 80 x 150	24 = 6 x 4	Squared timber, steel band
<b>RS 1000</b>	028990	RP-2 80 x 150	12 = 6 x 2	3x squared timber per layer, (fit 1x centre and 2x outside of the pallet), Steel band
<b>RS 1400</b>	103800	RP-2 80 x 150	5 = 5 x 1	3x squared timbers per layer (fit 1x centre and 2x outside of the pallet), Steel band (Fig. A1.03 + Fig. A1.03a)

### RS 450

Stacked Push-Pull Props RS in one pallet. (Fig. A1.02)

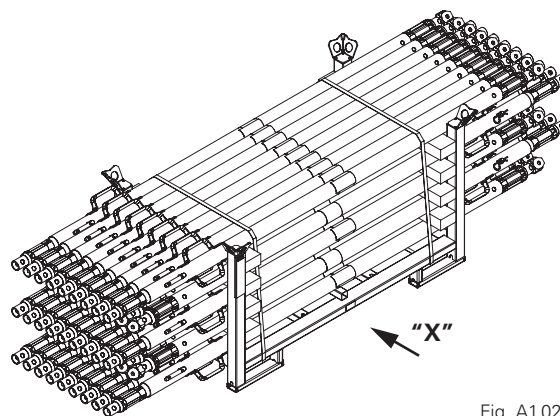


Fig. A1.02



Attention: with the Push-Pull Props RS 450, the projection of the push-pull props is uneven due to the handle. As a result, the centre of gravity of the load is not in the middle. Therefore, ensure that the levels are stacked in an offset arrangement. (Fig. A1.02a)

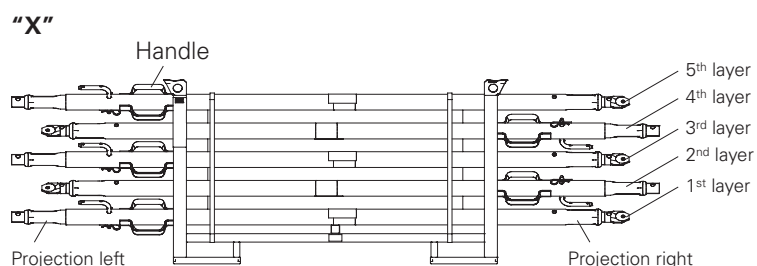


Fig. A1.02a

### RS and RSS Push-Pull Props

Instructions for Assembly and Use – Standard configuration

## RS 1400

Stacked Push-Pull Props RS in one pallet. (Fig. A1.03 + Fig. A1.03a)



For moving a single Push-Pull Prop RS, see Section "A3 Push-Pull Props RS 1400" on page 25.

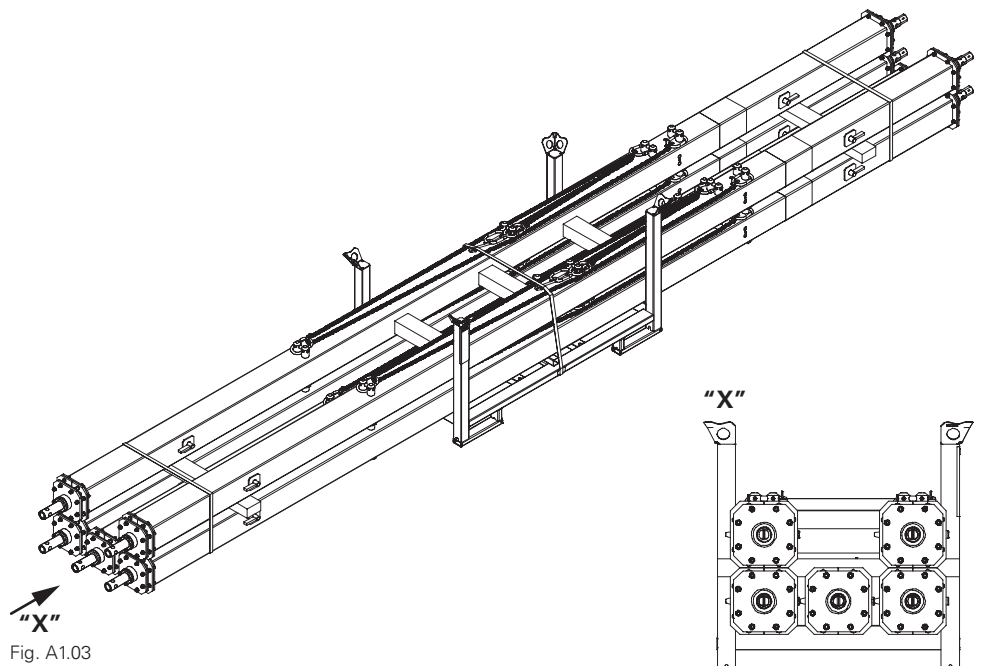


Fig. A1.03

Fig. A1.03a

## Push-Pull Props RSS

Push-pull prop	Article no.	Load carrier	max. no. of items/pallet = width x height	Work aids
<b>RSS I</b>	328010*	RP-2 80 x 150	54 = 9 x 6	Place squared timbers between every layer and secure with steel bands.
<b>RSS II</b>	328020*	RP-2 80 x 150	54 = 9 x 6	
<b>RSS III</b>	328030*	RP-2 80 x 150	38 = 8 x 4 + 6 (Fig. A1.04)	

\* Rental article

### RSS III

Stacked Push-Pull Props RSS in one pallet. (Fig. A1.04)

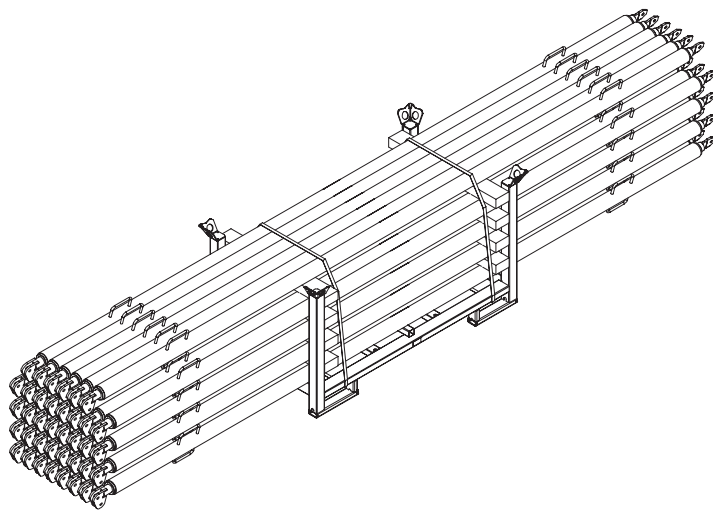


Fig. A1.04

## Kickers AV


Kicker brace	Article number	Load carrier	max. no. of items/pallet = width x height	Work aids
<b>AV 82</b>	057087	Crate Pallet K	200	
<b>AV 111</b>	057088	Crate Pallet K	200	
<b>AV 140</b>	028110	Crate Pallet K	144 – stacked	Cover plate, steel band
<b>AV 210</b>	408135*	RP-2 80 x 120	54 = 9 x 6	Place squared timbers between every layer and secure with steel bands
<b>AV RSS III</b>	328120*	RP-2 80 x 150	54 = 9 x 6	

\* Rental article

## General information



### Danger

- If the anti-rotation device is missing, the Push-Pull Prop RS can be extended too far, thereby losing its propping capability and leading to a system collapse!  
This can lead to serious injury or death.
  - Make sure that the splint/dowel pin in the Inner Tube is fitted all the way into the cantilever (**A**).  
Check this every time before use.
  -  Use a suitable light source for this, e.g. torch (Fig. A2.01 + Fig. A2.02)
- If the anti-rotation device is damaged, the Push-Pull Prop RS can be extended too far, thereby losing its propping capability and leading to a system collapse!  
This can lead to serious injury or death.
  - If you come up against resistance, do not forcefully overtwist the Push-Pull Prop RS.
  - Observe the maximum extension length of the Push-Pull Props RS.

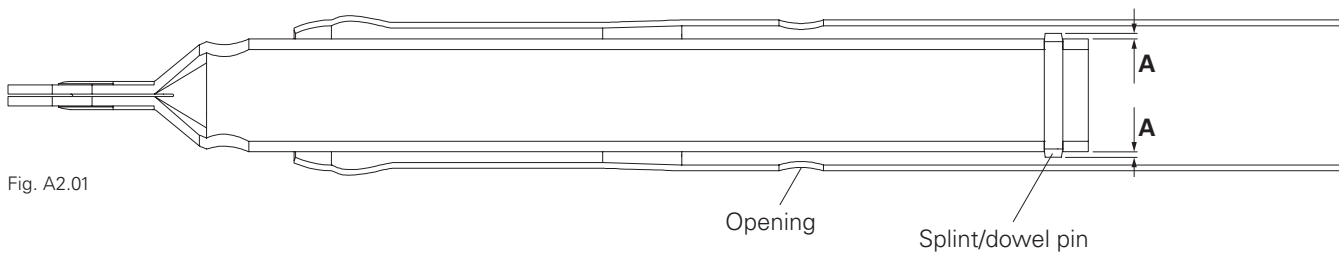


Fig. A2.01

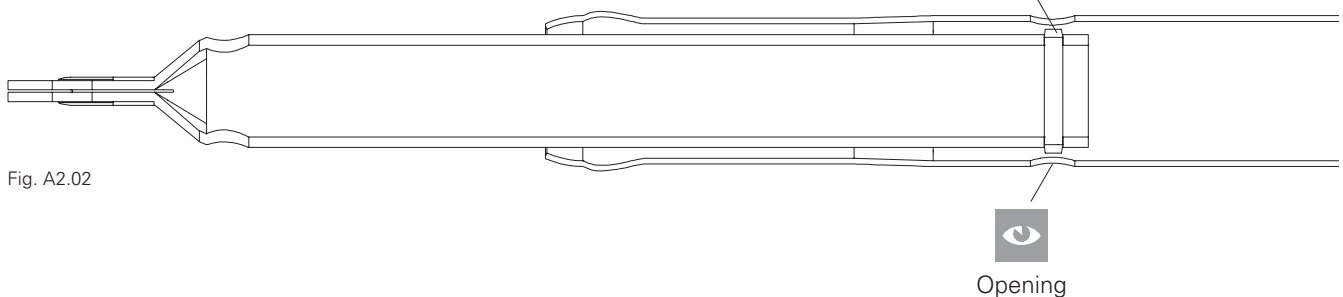


Fig. A2.02



If you sense resistance when unscrewing the Push-Pull Prop RS, do not forcefully unscrew the push-pull prop with a lever or hammer.

(Fig. A2.03 + Fig. A2.04)

Establish the cause of resistance.

The following examples may be the cause of resistance:

- The Push-Pull Prop RS is damaged, replace the Push-Pull Prop RS.
- The Push-Pull Prop RS is at its extension limit, use a longer Push-Pull Prop RS.
- The Base Plate is too far away from the formwork requiring support, move the Base Plate.
- The formwork requiring support is stuck.

Each Push-Pull Prop RS should be extended evenly in length at the top/bottom to prevent unconscious over-tightening. No side may be extended further than the other side. The splint/dowel pin in the Inner Tube acts as an anti-rotation device.

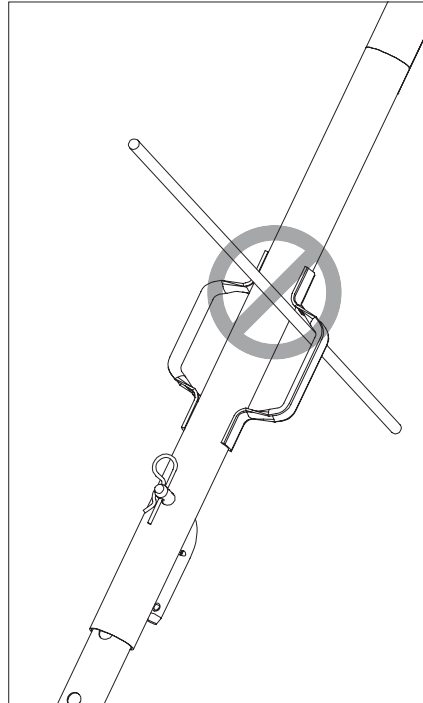


Fig. A2.03

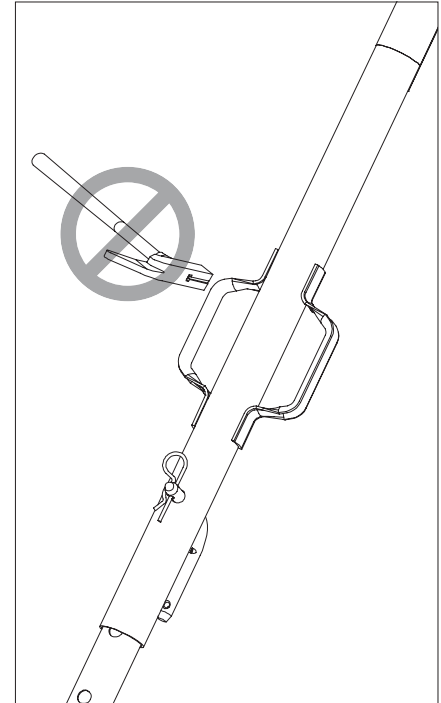


Fig. A2.04



The size and number of Push-Pull Props RS depends on the forces to be transferred, and must be determined in a product-specific manner.

For load-bearing capacities, see Section “B1 Load-bearing capacities” on page 42.

- Rough adjustment of the length
  - Rough adjustments on Push-Pull Props RS 210 and RS 260 are not possible.
  - Rough adjustments on Push-Pull Props RS 300 and RS 450 are possible on one side.
  - Rough adjustments on Push-Pull Props RS 650 and RS 1000 are possible on both sides.
  - Adjustments should be made as symmetrically as possible.
- Fine adjustment of the length
  - All Push-Pull Props RS can be adjusted with the spindle handle on the Outer Tube; in the process, the threaded spindles move simultaneously at the top and bottom.

## Adjusting the length



Hole spacing for the adjustment: 10 cm increments.

1. Rough adjustment at bottom
  - Remove cotter pins **(1)** and pins **(2)**.
  - Pull out the Inner Tube until the required length is reached. Ensure that the holes are congruent.
  - Secure the tubes with pins and cotter pins.
2. Rough adjustment at top, length-wise symmetrical to the bottom.
3. Turn the Push-Pull Prop RS with the spindle handle.
  - Fine adjustment on both sides by means of the thread – top and bottom, simultaneously.



- Screw out the thread of the fine adjustment approx. 50 % which means fine adjustment can take place in both directions.
- The Push-Pull Prop RSS can be used in the same way as the Push-Pull Prop RS.

## RS 210 and RS 260

- No rough adjustment.
- Fine adjustment by means of the thread using the spindle handle – on both sides.

Push-pull prop	Article no.	Rough adjustment		Fine adjustment		
		Adjustment travel [mm]	Length L1 [m]	Adjustment travel [mm]	min. L [m] Fig. A2.05a	max. L [m] Fig. A2.05b
<b>RS 210</b>	117466	–	–	800 = 2x400	<b>1.3</b>	<b>2.1</b>
<b>RS 260</b>	118238	–	–	300 = 2x150	<b>2.3</b>	<b>2.6</b>

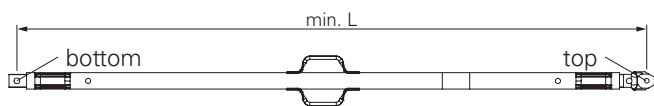


Fig. A2.05a

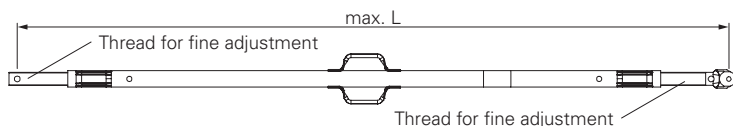


Fig. A2.05b

## RS 300 and RS 450

- Rough adjustment on one side using pin and cotter pin on the Outer and Inner Tubes – at the bottom.
- Fine adjustment by means of the thread using the spindle handle – on both sides.

Push-pull prop	Article no.	Rough adjustment		Fine adjustment		
		Adjustment travel [mm]	Length L1 [m] Fig. A2.06b	Adjustment travel [mm]	min. L [m] Fig. A2.06a	max. L [m] Fig. A2.06c
<b>RS 300</b>	117467	800 = 8x100	2.7	300 = 2x150	<b>1.9</b>	<b>3.0</b>
<b>RS 450</b>	117468	1400 = 14x100	4.2	300 = 2x150	<b>2.8</b>	<b>4.5</b>

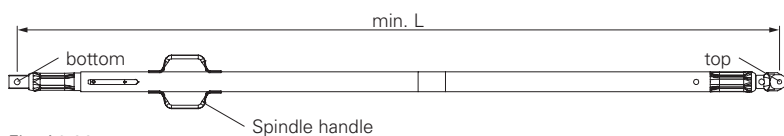


Fig. A2.06a

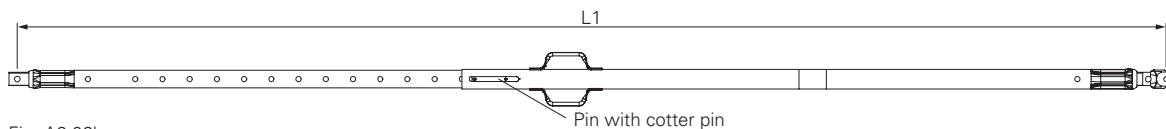


Fig. A2.06b

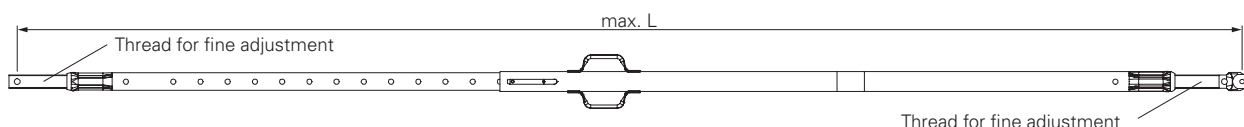


Fig. A2.06c

## RS 650 and RS 1000



### Warning

Heavy moving components!

During assembly, there is a risk of hands being crushed.

- ⇒ Adjust the length of the Push-Pull Prop RS only in a horizontal position.
- ⇒ When extending or retracting the inner tubes, only hold the thread spindles, not the Inner Tubes.
- ⇒ Never put a finger in a hole for holding purposes.
- ⇒ The RS 1000 should only be moved by crane.
- ⇒ Inclined Push-Pull Props RS can be picked up either with asymmetrical 2-sling lifting gear (crane hooks on the spindle handles) or two round slings, tied to the Outer Tube (through the spindle handle pairs). This allows the push-pull prop to be attached and detached from the crane hook from the ground. Avoid collisions with locking pins.

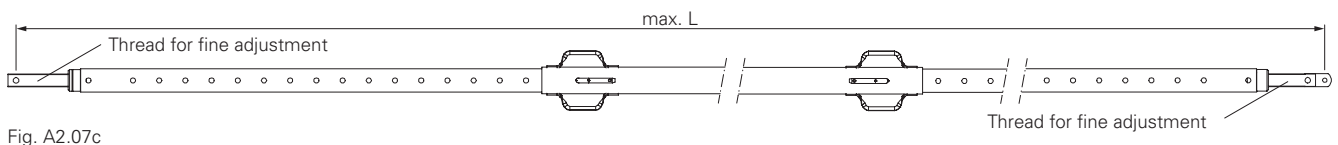
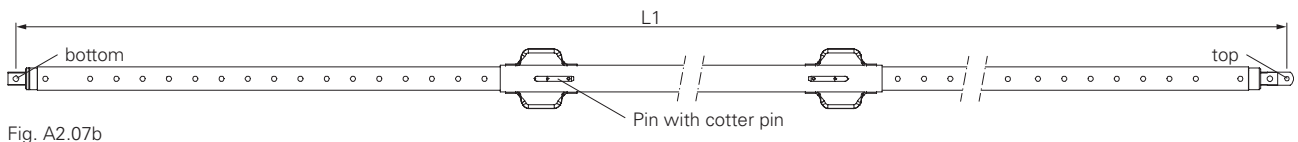
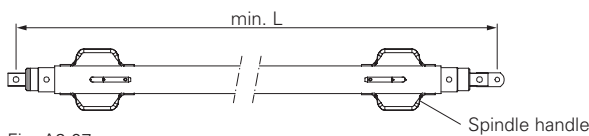


- Rough adjustment on the Outer and Inner Tubes using pins and cotter pins. Possible on both sides – top and bottom.
- Fine adjustment by means of the thread using the spindle handle – on both sides.
- Use round slings pursuant to EN 1492-2.



PERI recommends the use of a round sling if there is no safe access to the upper spindle handle. This allows the crane lifting gear to be unhooked from the round sling from the ground after assembly.

Push-pull prop	Article no.	Rough adjustment		Fine adjustment		
		Adjustment travel [mm]	Length L1 [m] Fig. A2.07b	Adjustment travel [mm]	min. L [m] Fig. A2.07a	max. L [m] Fig. A2.07c
<b>RS 650</b>	117469	2000 = 2x10x100	6.3	200 = 2x100	<b>4.3</b>	<b>6.5</b>
<b>RS 1000</b>	028990	3400 = 2x10x170	9.8	200 = 2x100	<b>6.4</b>	<b>10.0</b>



## General information



### Warning

Loose components may tip over!  
Toppling can result in serious injury or even death.

- ⇒ Use personal protective equipment.
- ⇒ Secure all pins using cotter pins.



- Fix the loose end of the chain with the hook (7.5). As a result, the end of the chain is prevented from getting caught when the Push-Pull Prop RS 1400
  - is unloaded.
  - is moved on the construction site.
  - is attached to the formwork unit.
- Never attach the hook (7.5) to a crane hook.
- To reposition the Push-Pull Prop RS 1400, attach ring 1 (7.1) to the crane hook.
- When transporting in a horizontal position, secure both crane hooks using the red rings only (7.2 + 7.3).

### Push-Pull Prop RS 1400

7	Push-Pull Prop RS 1400	103800
7.1	Ring 1 – black, loose, with hook (10.5)	
7.2	Ring 2 – red, fixed	
7.3	Ring 3 – red, fixed	
7.4	Ring 4 – black, fixed	
7.5	Hook – attached to Ring 1	
7.6	Spigot – 2x	
7.7	Pin Ø 16 x 42	
7.8	Cotter Pin 4/1 ga	
7.9	Chain	

### Top view

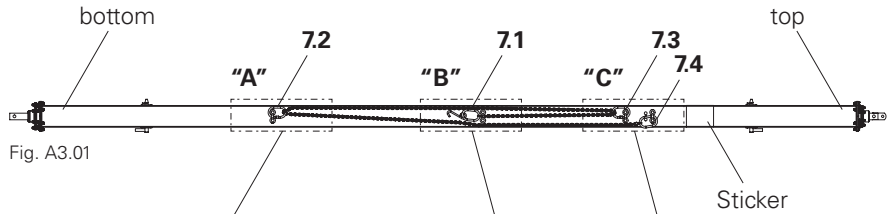


Fig. A3.01

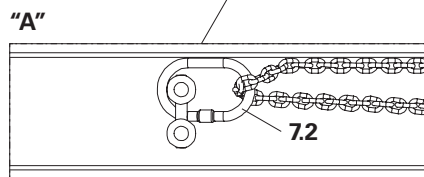


Fig. A3.01a

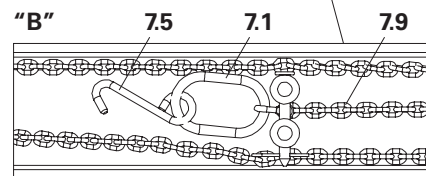


Fig. A3.01b

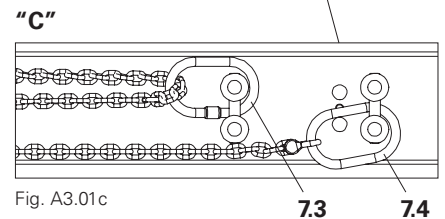


Fig. A3.01c



Is the chain (7.9) attached in the manner shown in the illustrations Fig. A3.01 – Fig. A3.01c?

If the chain is not accurately inserted as shown in the illustrations, release the chain and re-attach to the Push-Pull Prop RS 1400.

## Moving the push-pull prop



### Warning

Heavy load on the crane!  
The Push-Pull Prop RS 1400 can rip off or slip and fall, causing serious injury or even death.

⇒ Crane sling angle on the 2-sling lifting gear  $\leq 30^\circ$ .

⇒ Do not use textile slings, e.g. round slings, for moving operations.



- Ensure that Push-Pull Props RS 1400 are only moved individually and in a horizontal position on the rings **(7.2 + 7.3)**.
- Following the moving operation, the chain is then secured again.

### Preparation

1. Remove cotter pins and pins.  
→ Ring 1 **(7.1)** is released.
2. Loosen the chain.
3. Firmly clamp the hook **(7.5)** in the chain.
4. Re-attach pins and cotter pins.

### Moving

1. Attach one crane hook of 2-sling lifting gear to Ring 2 **(7.2)**.
2. The other crane hook is attached to Ring 3 **(7.3)**.
3. Lift the Push-Pull Prop RS 1400 with a crane.  
(Fig. A3.02)

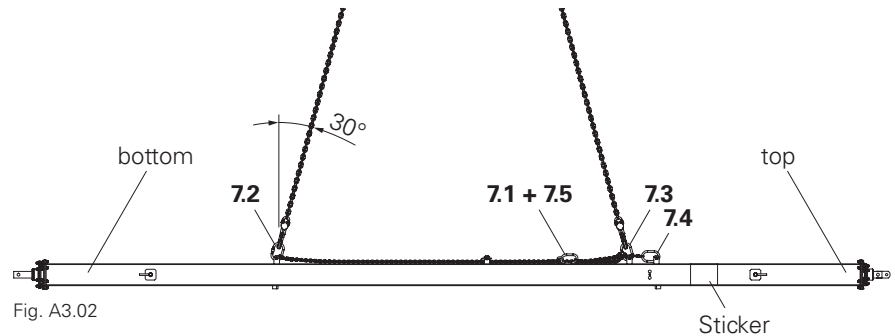


Fig. A3.02

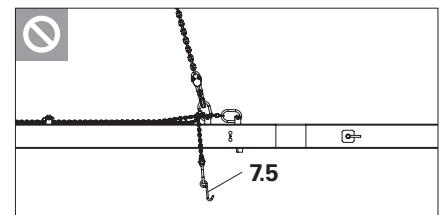


Fig. A3.02a



The hook **(7.5)** must **not** hang down.  
(Fig. A3.02a)

During the moving process, firmly clamp the hook to the chain of the push-pull prop.

## Adjusting the length



### Warning

Heavy moving components!

During assembly, there is a risk of hands being crushed.

- ⇒ Adjust the length of the Push-Pull Prop RS 1400 only in a horizontal position.
- ⇒ When extending or retracting the inner tubes, only hold the thread spindles, not the Inner Tubes.
- ⇒ Never put a finger in a hole for holding purposes.



- The length of the Push-Pull Prop RS 1400 to be adjusted is to be calculated according to project specifications.
- Ensure even distribution when adjusting the length of the inner tubes at the top and bottom (rough adjustment).
- Unscrew the threaded spindle at the bottom (**7.14**) by only a few turns so that the Push-Pull Prop RS 1400 can be attached to the Base Plate.



Screw out the threaded spindles (**7.13** + **7.14**) approx. 50 % which means fine adjustment can take place in both directions.

### Push-Pull Prop RS 1400

<b>7</b>	Push-Pull Prop RS 1400	103800
<b>7.10</b>	Outer Tube	
<b>7.11</b>	Upper Inner Tube	
<b>7.12</b>	Lower Inner Tube	
<b>7.13</b>	Upper threaded spindle	
<b>7.14</b>	Lower threaded spindle	

Push-pull prop	Article no.	Rough adjustment		Fine adjustment		
		Adjustment travel [mm]	Length L1 [m] Fig. A3.03b	Adjustment travel [mm]	min. L [m] Fig. A3.03a	max. L [m] Fig. A3.03c
<b>RS 1400</b>	103800	6800 = 2x17x200	13.2	800 = 2x400	<b>6.4</b>	<b>14.0</b>

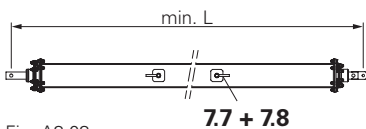


Fig. A3.03a

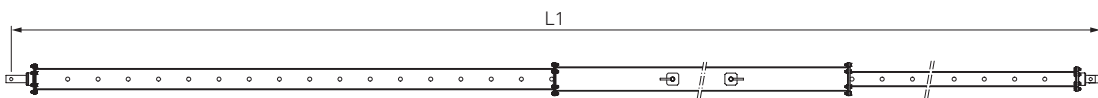


Fig. A3.03b

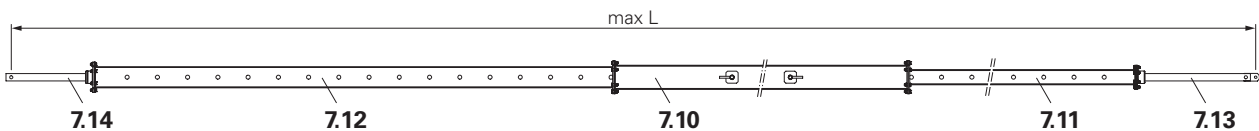


Fig. A3.03c

## Rough adjustment on one side



Hole spacing for the adjustment:  
20 cm increments.

### Rough adjustment

1. Remove cotter pins (**7.8**) and pins (**7.7**).
2. Pull out the Inner Tube (**7.11**) until the required length is achieved.
3. Insert pins (**7.7**) through the congruent holes of the Inner and Outer Tubes (**7.10**).
4. Secure the pin (**7.7**) with a cotter pin (**7.8**).  
→ The length has been adjusted and the Inner and Outer Tubes are secured against moving.

(Fig. A3.03c + Fig. A3.04)

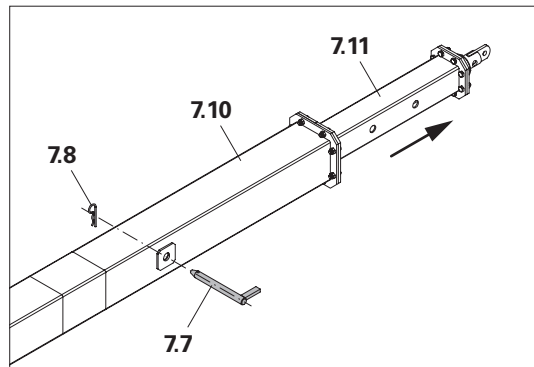


Fig. A3.04

## Fine adjustment



**Do not fine-tune the Push-Pull Prop RS 1400 until it has been attached to the formwork and Base Plate.**

### Fine adjustment

1. Turn the push-pull prop on the Outer Tube.  
→ Fine adjustment on both sides using the threaded spindles – top and bottom simultaneously.

## Releasing the chain

### Releasing

1. Remove cotter pins (7.8) and pins (7.7) from the spigot (7.6). (Fig. A3.05a)
2. Lift out the chain (7.9) with ring 1 (7.1) and hook (7.5).
3. Fix the pins (7.7) and cotter pins (7.8) in place again.
4. Insert ring 1 (7.1) with hook (7.5) through ring 3 (7.3) and pull through. (Fig. A3.05b)
5. Pull chain (7.9) completely tight.
6. Insert ring 1 (7.1) with hook (7.5) through ring 2 (7.2) and pull through.
7. Pull chain (7.9) completely tight.  
→ The chain (7.9) is released and hangs loosely in ring 4 (7.4) on the Push-Pull Prop RS 1400 (7).

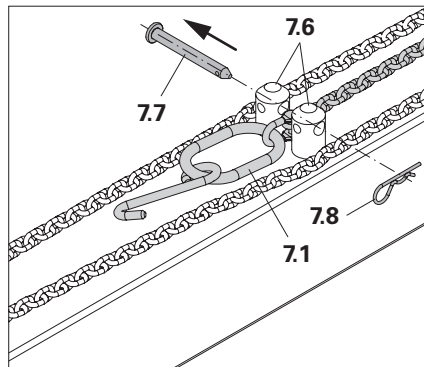


Fig. A3.05a

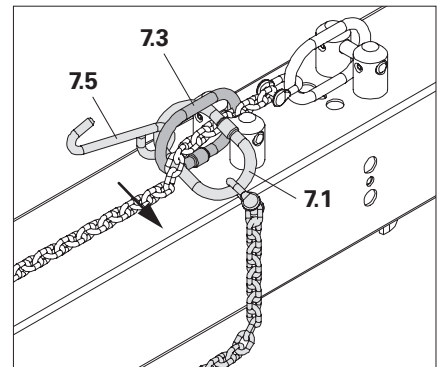


Fig. A3.05b

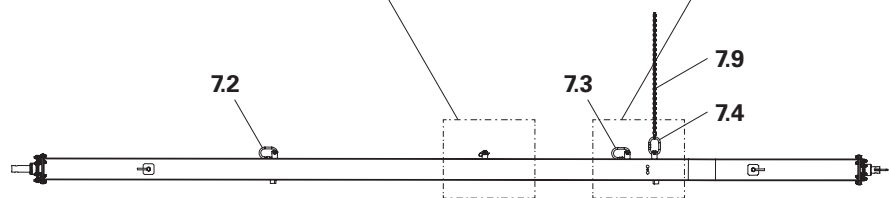


Fig. A3.06

## Erecting the push-pull prop



**Perm. load-bearing capacity of the chain: 10 kN.**

### Erection

1. Release the chain (7.9).
2. Attach ring 1 (7.1) to the crane hook.
3. Attach the Base Plate to the lower end of the Push-Pull Prop RS 1400, see Section "A5 Base Plates" on page 34.
4. Attach Push-Pull Prop RS 1400 to the crane lifting gear and guide to the formwork unit. (Fig. A3.07)  
One person must hold the Push-Pull Prop RS 1400 at the bottom to prevent it from slipping away.
5. Attach the upper part of the Push-Pull Prop RS 1400 to the formwork unit using the brace connector of the respective system, see Section "A6 Brace connectors" on page 36.
6. Fit the base plate to the ground using, for example, an Anchor Bolt PERI 14/20 x 130.
7. Turn the Push-Pull Prop RS 1400 on the Outer Tube until the formwork unit is in the specified position, e.g. perpendicular.  
→ The threaded spindles turn simultaneously.

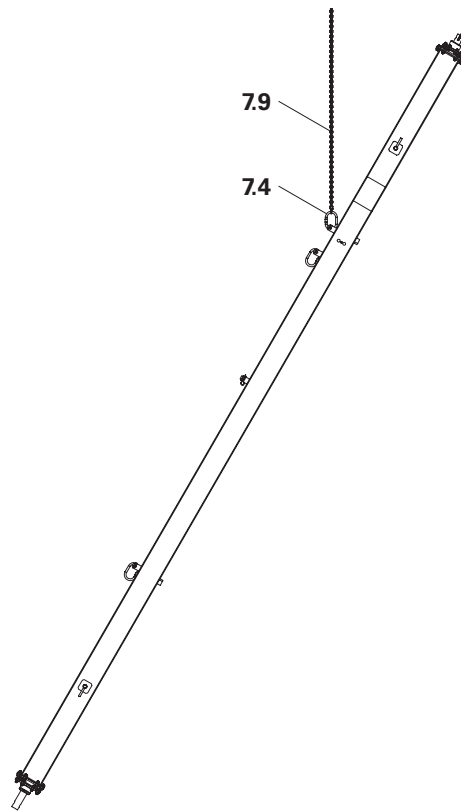


Fig. A3.07



After assembly, wrap the chain around the Push-Pull Prop RS 1400 and hook it in at the bottom. This keeps it out of the way. (Fig. A3.08)

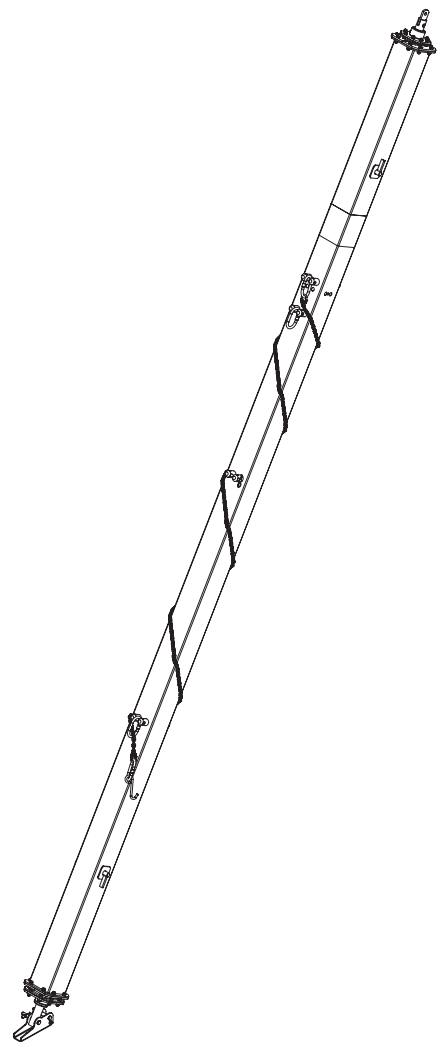


Fig. A3.08

## Transport position

### Fastening the chain

1. Remove pins (7.7) and cotter pins (7.8).
2. Insert hook (7.5) and ring 1 (7.1) through ring 2 (7.2) and pull through. (Fig. A3.01a)
3. Pull chain (7.9) completely tight.
4. Insert hook (7.5) and ring 1 (7.1) through ring 3 (7.3) and pull through. (Fig. A3.09)
5. Pull chain (7.9) completely tight.
6. Place chain (7.9) between the two spigots (7.6).
  - Ring 1 (7.1) is positioned in front of both spigots (7.6). (Fig. A3.10)
7. Insert pins (7.7) through the holes of both spigots (7.6). (Fig. A3.10)
  - The chain (7.9) is positioned beneath the pins.
8. Insert the cotter pin (7.8) through the hole in the pin (7.7). (Fig. A3.10)
  - Chain (7.9) is tensioned.



Is the chain (7.9) positioned between the two spigots (7.6)? (Fig. A3.10)

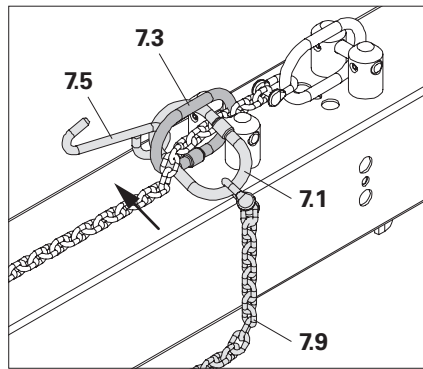


Fig. A3.09

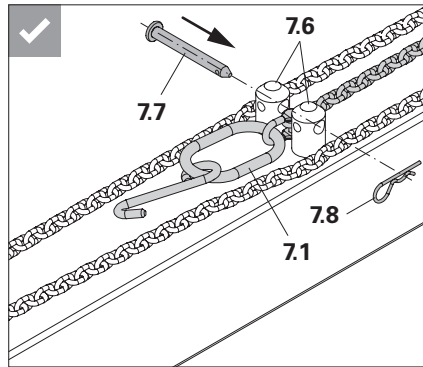


Fig. A3.10

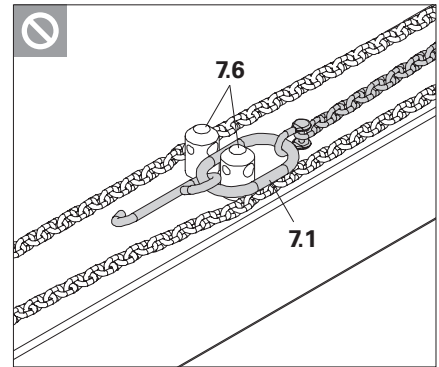


Fig. A3.11

Do **not** position ring 1 (7.1) between the two spigots (7.6). (Fig. A3.11)

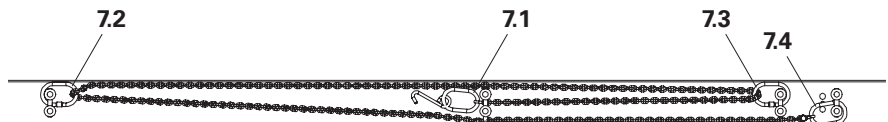


Fig. A3.12

## RSS Push-Pull Props

Push-pull prop	Article no.	Fine adjustment		
		Adjustment travel [mm]	min. L [m] Fig. A4.01a	max. L [m] Fig. A4.01b
<b>RSS I</b>	328010*	890 = 2x445	<b>2.05</b>	<b>2.94</b>
<b>RSS II</b>	328020*	890 = 2x445	<b>2.91</b>	<b>3.80</b>
<b>RSS III</b>	328030*	1400 = 2x700	<b>4.60</b>	<b>6.00</b>

\* Rental article

### Adjusting the length

- Screw out the threaded spindles symmetrically at the top and bottom until the required length is reached.
- Turn the installed push-pull prop with the spindle handle.
  - The threaded spindles turn simultaneously.



The Push-Pull Prop RS can also be used instead of the Push-Pull Prop RSS.

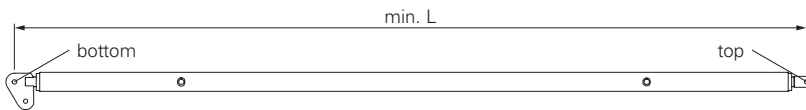


Fig. A4.01a

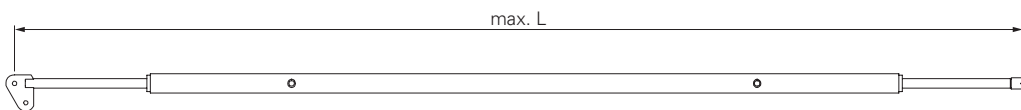


Fig. A4.01b

## Kickers AV

Push-pull prop	Article no.	Fine adjustment		
		Adjustment travel [mm]	min. L [m] Fig. A4.02a	max. L [m] Fig. A4.02b
<b>AV 82</b>	057087	320 = 2x160	<b>0.50</b>	<b>0.82</b>
<b>AV 111</b>	057088	320 = 2x160	<b>0.79</b>	<b>1.11</b>
<b>AV 140</b>	028110	320 = 2x160	<b>1.08</b>	<b>1.40</b>
<b>AV 210</b>	328135*	820 = 2x410	<b>1.28</b>	<b>2.10</b>
<b>AV RSS III</b>	328120*	890 = 2x445	<b>2.03</b>	<b>2.92</b>

\* Rental article

### Adjusting the length

Screw out the threaded spindles symmetrically at the top and bottom until the required length is reached.

→ The threaded spindles turn simultaneously.

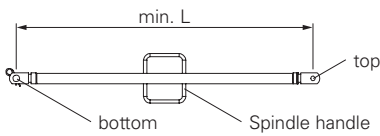


Fig. A4.02a

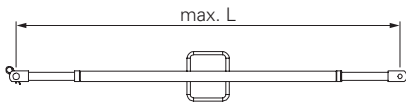


Fig. A4.02b



- Take into consideration data sheet for the tie bolt.
- Secure the formwork against tipping until the base plate is anchored to the ground.



- Base plates are specific to the push-pull props used. There are two variants:
  - Base Plate-3 f. RS 210-1400 (8) for Push-Pull Props RS 210, RS 260, RS 300, RS 450, RS 650, RS 1000 and RS 1400.
  - Base Plate-2 for RSS (16) for Push-Pull Props RSS I, RSS II and RSS III
- Before the Push-Pull Prop RS / RSS or the Kicker AV are attached to the Base Plate, roughly adjust the length and unscrew the threaded spindles (fine adjustment) using only a few turns.



Instead of the Base Plate-3 f. RS 210-1400 (article no. 126666), the following Base Plates can also be used:

- Base Plate-2 f. RS 1000/1400 (article no. 102018)
- Base Plate-2 f. RS 210-1400 (article no. 417343\*)

\* Rental article

## Base Plate RS

### Components

- 8 Base Plate-3 f. RS 210-1400
- 26 Anchor Bolt SW24 Ø14/20x130mm

### Assembly

1. Attach the lower part of the Push-Pull Prop RS – shown here as a kicker brace – to the Base Plate-3 f. RS 210-1400 (8) with bolt (8.1b) and cotter pin (8.2b).
2. Attach the lower part of the second push-pull prop – shown here as a push-pull prop – to the Base Plate-3 f. RS 210-1400 (8) with pin (8.1a) and cotter pin (8.2a).
3. Fix the brace connector to the formwork, see Instructions for Assembly and Use of the system.
4. Attach the push-pull prop to the brace connector, see Section “A6 Brace connectors” on page 36.
5. Mount the Base Plate on a flat and sufficiently load-bearing substrate, e.g. using Anchor Bolt SW24 Ø14/20x130mm (26) (Fig. A5.01)

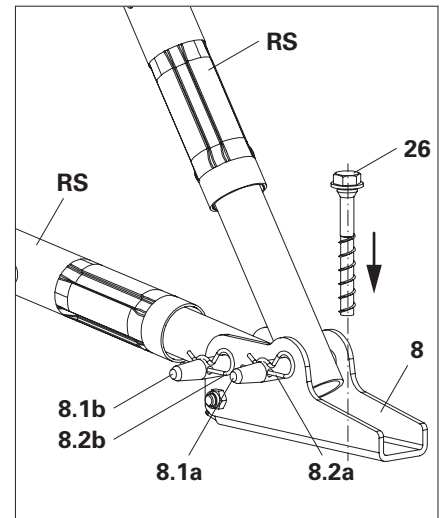


Fig. A5.01

## Base Plate RSS

### Components

- 16** Base Plate-2 for RSS\*
- 22** Pin Ø16x42mm ga
- 25** Cotter Pin 4/1 ga
- 26** Anchor Bolt SW24 Ø14/20x130mm

\* Rental article

### Assembly

1. Fix the connection lugs of the Push-Pull Prop RSS to the Base Plate-2 for RSS (**16**) using pins (**16.1**) and cotter pins (**16.2**).
2. Fix the connection of the kicker brace to the rear hole of the connection lug using the Pin Ø16x42mm ga (**22**) and Cotter Pin 4/1 ga (**25**).
3. Mount the Base Plate-2 for RSS on a flat and sufficiently load-bearing substrate, e.g. using Anchor Bolt SW24 Ø14/20x130mm (**26**).

(Fig. A5.02)

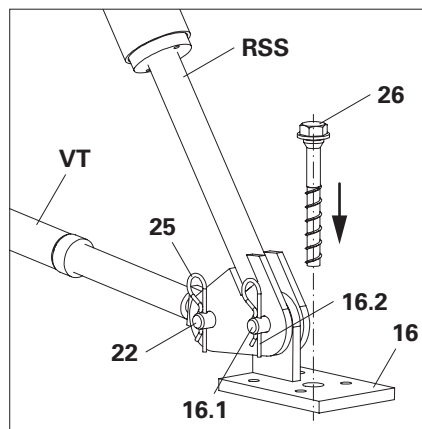


Fig. A5.02



The brace connector shown is simply an example. The components, positions and installation steps used must be taken from the applicable Instructions for Assembly and Use for the system.

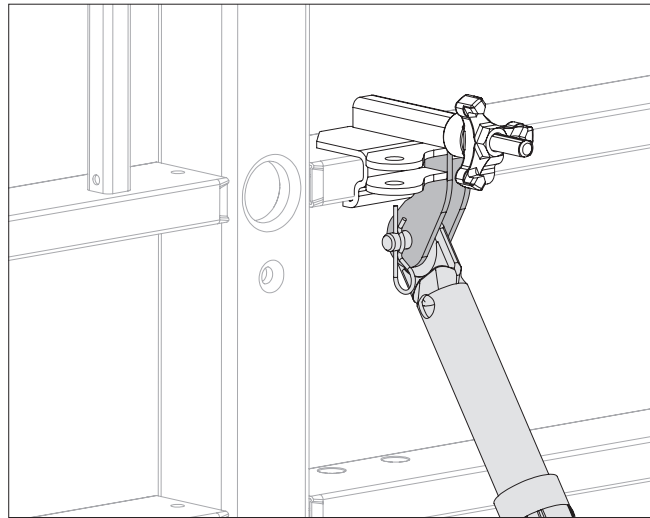


Fig. A6.01

## Quick Connector Head RS-2



### Danger

Risk of heavy unsecured components toppling over!

Heavy components may topple over and cause serious injuries or even death.

- ⇒ Only ever fit the Quick Connector Head RS-2 onto prefabricated concrete elements.
- ⇒ Do not use Quick Connector Head RS-2 for wall or column formwork.
- ⇒ Always fit at least two Quick Connector Heads RS-2 with corresponding Push-Pull Props RS for each prefabricated element.
- ⇒ The finished part must be adequately secured against tipping using, for example, a crane, until it is propped with Push-Pull Props.
- ⇒ Only ever use Quick Connector Head RS-2 with Push-Pull Props RS 210, RS 260, RS 300 and RS 450. In the case of long Push-Pull Props (RS 650, RS 1000 and RS 1400), suspension is not possible due to the dead weight or for handling reasons.
- ⇒ Do not use with Push-Pull Props RSS.
- ⇒ Only use Quick Connector Head RS-2 in an angle range of 20° to 60°, see Section "B3 Prefabricated concrete element loads" on page 50.

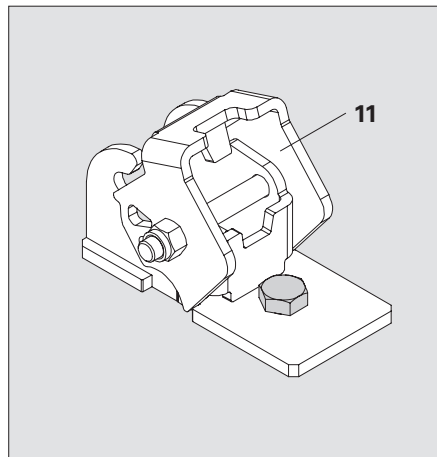


Fig. A7.01a

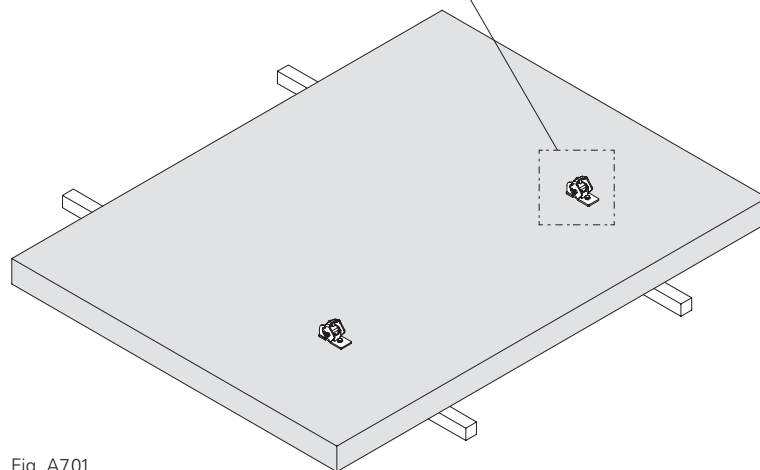


Fig. A7.01



The position and number of fixing material for the quick connector head are determined according to the respective project.

### Components

**11** Quick Connector Head RS-2 127190

Fix Quick Connector Head RS-2 (**11**) with suitable fixing material, e.g. screw-on sleeves and bolts or permissible pigtail anchors, preferably to horizontal prefabricated concrete elements. (Fig. A7.01 + Fig. A7.01a)



Have at least 2 Quick Connector Heads RS-2 (**11**) been fitted?

## Push-Pull Prop Adaptor RS



The adaptor (**12**) tightly connects (friction-locked) the Quick Connector Head RS-2 and push-pull prop.

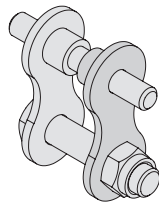


Fig. A702

### Component

<b>12</b>	Adaptor Quick Connector RS	117726
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### Assembly

1. Take the Adaptor Quick Connector RS apart (**12**). (Fig. A702 + Fig. A703a)
2. Insert bolts (**12.1**) and threaded bolts (**12.2**) through the holes on the connection lug of the Push-Pull Prop (**RS**).
3. Push the counterpart (**12.3**) over the pin (**12.1**) and threaded bolt (**12.2**). Fit
4. a nut (**12.4**) onto the threaded bolt (**12.2**). (Fig. A703a)  
→ The Adaptor Quick Connector RS is installed (**12**). (Fig. A703b)

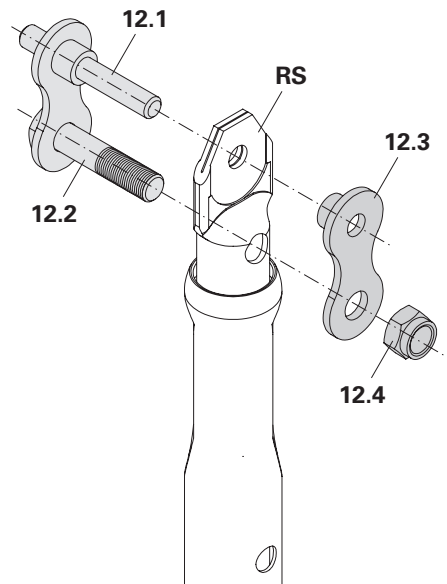


Fig. A703a

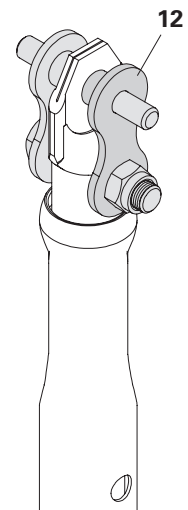


Fig. A703b

## Attaching the Push-Pull Prop RS

1. Press the securing flap (11.1) backwards with the pin (12.1) against the guide edges (11.2).  
→ The quick connector is open.  
(Fig. A7.04a)
2. Move the push-pull prop downwards with the bolt (12.1) on the guide edge (11.2).  
→ The pins (12.1) fall into the notches of the hook plates (11.3) and the securing flap (11.1) swivels downwards.  
(Fig. A7.04a + Fig. A7.04b)  
→ The small tip (11.4) of the securing flap rests on the pin. As a result, the connection is secured.  
(Fig. A7.04c)

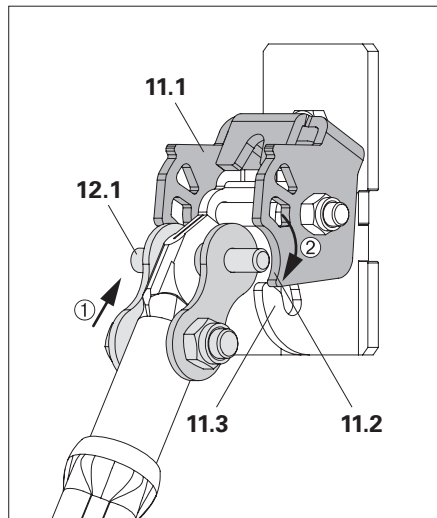


Fig. A7.04a



Is the securing flap closed, i.e. is the small tip (11.4) of the securing flap resting on the pins of the adaptor on both sides? (Fig. A7.04c)



To fix the Base Plate in place, see Section "A5 Base Plates" on page 34.

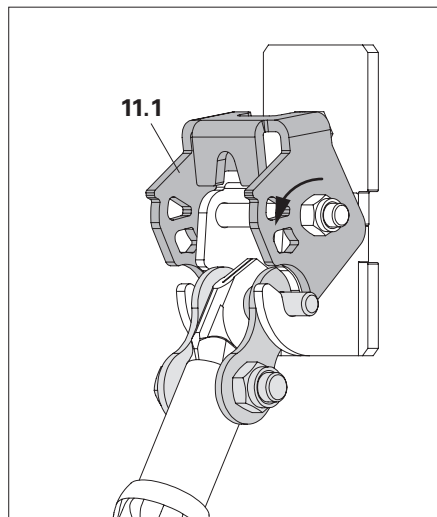


Fig. A7.04b

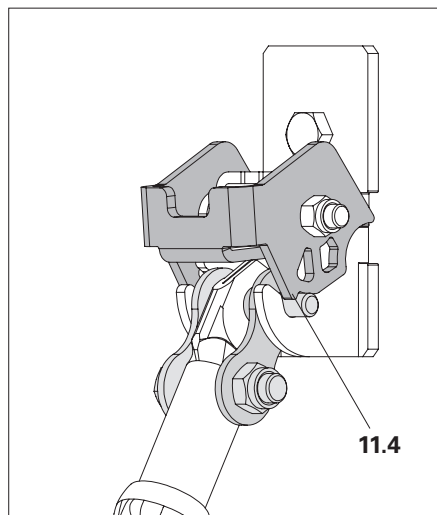


Fig. A7.04c

## Prefabricated concrete walls



The wall shown is simply an example. The number and positions of the Quick Connectors RS-2 with Push-Pull Props RS must be verified on a project-specific basis.

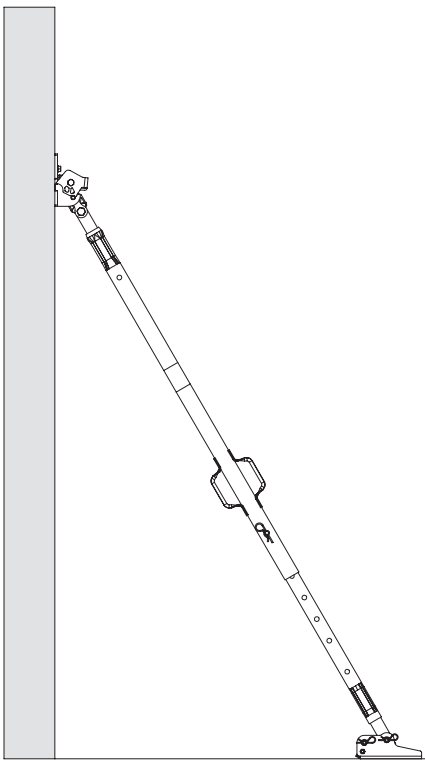


Fig. A705

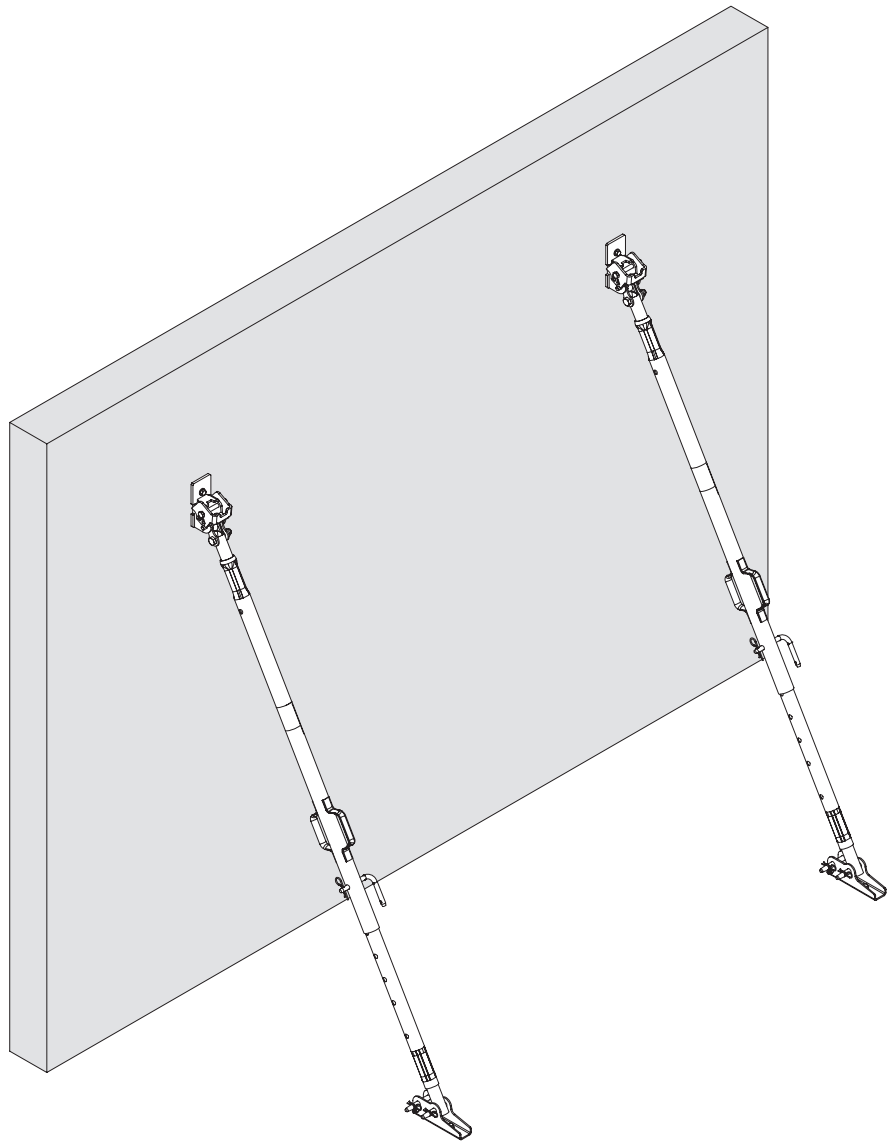


Fig. A705a

## Prefabricated concrete columns



The column shown is simply an example. The number and positions of the Quick Connectors RS-2 with Push-Pull Props RS must be verified on a project-specific basis.

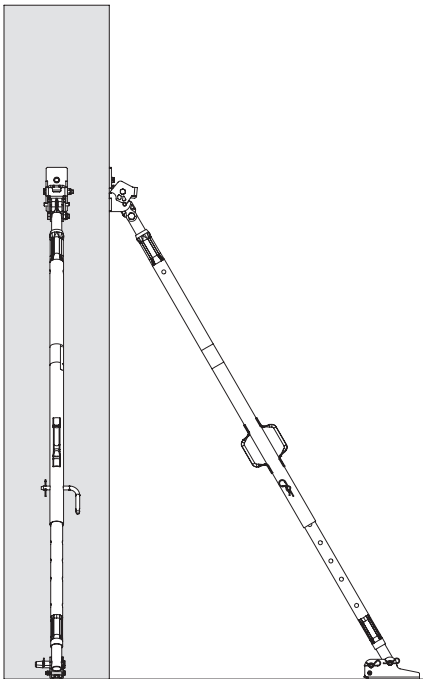


Fig. A7.06

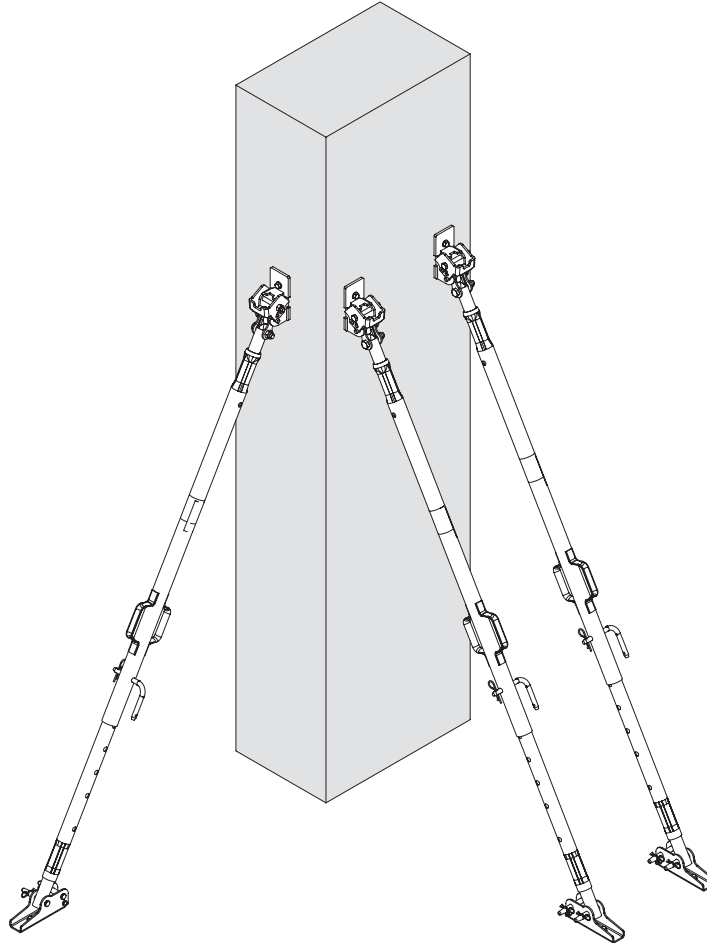


Fig. A7.06a

## Disassembly



- The push-pull prop must be secured and free of any load.
- The dismantling sequence is carried out according to project specifications.

### Dismantling

1. Press the securing flap (11.1) upwards, e.g. with a pole. (Fig. A7.07)
2. Detach the Adaptor Quick Connector RS (12). (Fig. A7.08)

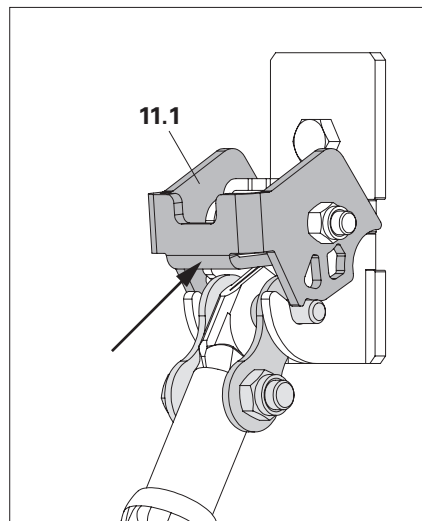


Fig. A7.07

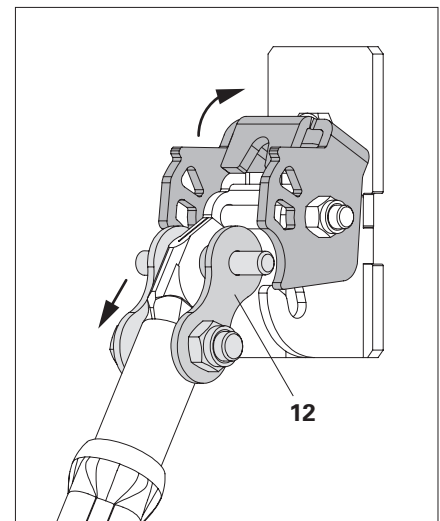


Fig. A7.08

## RS Push-Pull Props



- The load-bearing capacity information refers to use with symmetrical extensions.
- The connection points are to be pin jointed and made structurally adequate by calculations in each individual case.

<b>Push-Pull Prop RS 210</b>	L = 1.30 – 2.10 m	
Extension length L [m]	1.30 – 2.00	2.10
Perm. compressive force F [kN]	25.0	23.6
Perm. tension force F [kN]	25.0	

<b>Push-Pull Prop RS 260</b>	L = 2.30 – 2.60 m	
Extension length L [m]	2.30	2.60
Perm. compressive force F [kN]	25.0	22.1
Perm. tension force F [kN]	25.0	

<b>Push-Pull Prop RS 300</b>	L = 1.90 – 3.00 m		
Extension length L [m]	1.90 – 2.30	2.50	3.00
Perm. compressive force F [kN]	25.0	21.6	14.2
Perm. tension force F [kN]	25.0		

<b>Push-Pull Prop RS 450</b>	L = 2.80 – 4.50 m		
Extension length L [m]	2.80 – 3.60	4.00	4.50
Perm. compressive force F [kN]	25.0	17.2	11.8
Perm. tension force F [kN]	25.0		

<b>Push-Pull Prop RS 650</b>	L = 4.30 – 6.50 m				
Extension length L [m]	4.30 – 4.90	5.00	5.50	6.00	6.50
Perm. compressive force F [kN]	25.0	24.4	18.5	15.9	13.2
Perm. tension force F [kN]	25.0				

<b>Push-Pull Prop RS 1000</b>	L = 6.40 – 10.00 m				
Extension length L [m]	6.40 – 6.64	7.64	8.44	9.24	10.00
Perm. compressive force F [kN]	34.2	25.9	20.3	16.0	12.8
Perm. tension force F [kN]	29.0				

<b>Push-Pull Prop RS 1400</b>	L = 6.40 – 14.00 m			
Extension length L [m]	6.40 – 10.46	12.00	13.00	14.00
Perm. compressive force F [kN]	28.8	26.8	22.2	18.1
Perm. tension force F [kN]	27.7			

**Static system for Push-Pull Props RS**

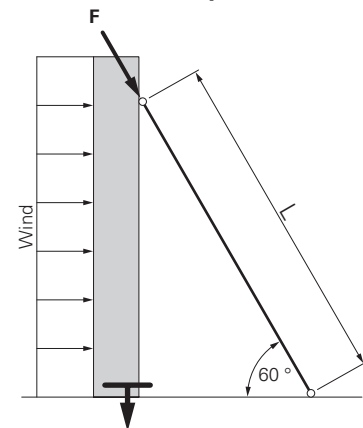


Fig. B1.01

## RSS Push-Pull Props and Kickers AV



- The load-bearing capacity information refers to use with symmetrical extensions.
- The connection points are to be pin jointed and made structurally adequate by calculations in each individual case.

<b>Push-Pull Prop RSS I</b>	L = 2.05 – 2.94 m			
Extension length L [m]	2.03	2.30	2.60	2.94
Perm. compressive force F [kN]	34.2	33.2	22.7	14.2
Perm. tension force F [kN]	26.3			

<b>Push-Pull Prop RSS II</b>	L = 2.91 – 3.80 m			
Extension length L [m]	2.91	3.21	3.50	3.80
Perm. compressive force F [kN]	31.7	26.4	17.1	11.6
Perm. tension force F [kN]	26.3			

<b>Push-Pull Prop RSS III</b>	L = 4.60 – 6.00 m				
Extension length L [m]	4.60	4.95	5.30	5.65	6.00
Perm. compressive force F [kN]	27.8	22.8	18.6	14.7	11.1
Perm. tension force F [kN]	20.0				

**Static system for Push-Pull Props RSS**

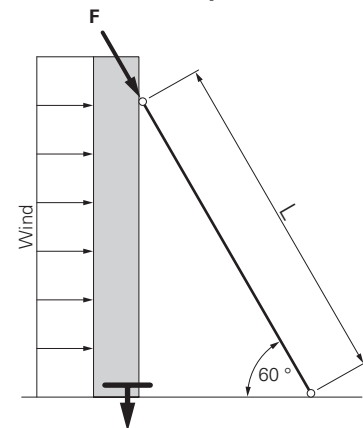


Fig. B1.02

<b>Kickers AV 82 / 111 / 140</b>	L = 0.50 – 0.82 m			L = 0.79 – 1.11 m			L = 1.08 – 1.40 m		
Extension length L [m]	0.50	0.66	0.82	0.79	0.95	1.11	1.08	1.24	1.40
Perm. compressive force F [kN]	34.1	28.9	23.2	30.9	24.9	19.7	25.7	20.0	15.7
Perm. tension force F [kN]	26.3			26.3			26.3		

<b>Kickers AV 210</b>	L = 1.28 – 2.10 m			
Extension length L [m]	1.28	1.69	1.90	2.10
Perm. compressive force F [kN]	34.2	34.2	25.5	19.0
Perm. tension force F [kN]	26.3			

<b>Kickers AV for RSS III</b>	L = 2.03 – 2.92 m			
Extension length L [m]	2.03	2.30	2.60	2.94
Perm. compressive force F [kN]	34.2	33.2	22.7	14.2
Perm. tension force F [kN]	26.3			

**Static system for Kickers AV**

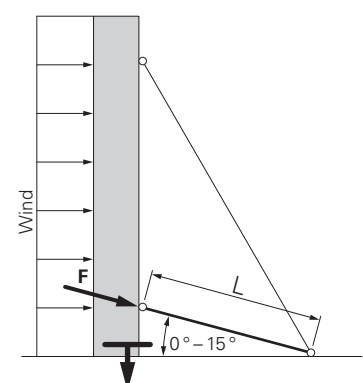


Fig. B1.03

## Push-Pull Props RS on the Base Plate

Use with Push-Pull Props RS.

### Base Plate-3 f. RS 210-1400

Article no. 126666

(Fig. B2.01 + Fig. B2.01a)

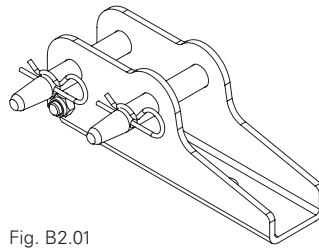


Fig. B2.01

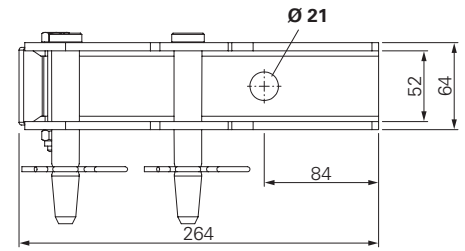


Fig. B2.01a

### Load case 1

$$35^\circ \leq \alpha_1 \leq 75^\circ$$

$$0^\circ \leq \alpha_2 \leq 25^\circ$$

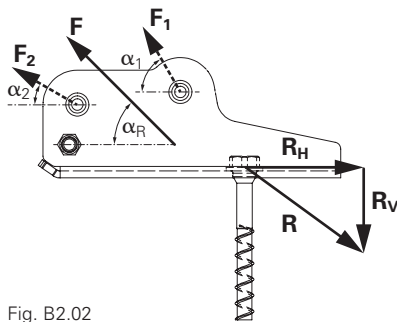


Fig. B2.02

F = Resulting force from F<sub>1</sub> and F<sub>2</sub>

F<sub>1</sub> = push-pull prop load

F<sub>2</sub> = kicker brace load

α = angle between F and concrete surface [°]

α<sub>1</sub> = angle between F<sub>1</sub> and concrete surface [°]

α<sub>2</sub> = angle between F<sub>2</sub> and concrete surface [°]

R = Resulting Anchor Bolt load

R<sub>V</sub> = vertical component of the dowel load

R<sub>H</sub> = horizontal component of the dowel load

$$F = \sqrt{F_1^2 + F_2^2 + 2 \times F_1 \times F_2 \times \cos(\alpha_1 - \alpha_2)}$$

$$\alpha = \frac{F_1 \times \alpha_1 + F_2 \times \alpha_2}{F_1 + F_2}$$

Table only applies if F<sub>1</sub> and F<sub>2</sub> are simultaneously compressive or tension forces.

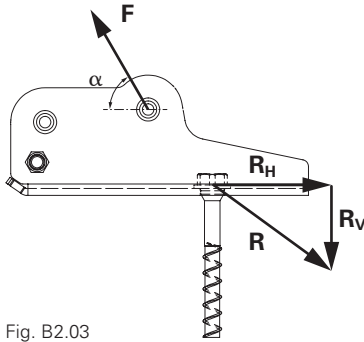
Load case 1*								
α <sub>R</sub> [°]	Tension				Compression			
	perm. tension force F [kN]	R [kN]	R <sub>V</sub> [kN]	R <sub>H</sub> [kN]	perm. compression F [kN]	R [kN]	R <sub>V</sub> [kN]	R <sub>H</sub> [kN]
30	38.1	40.0	22.7	32.9	18.4	16.4	3.9	15.9
35	36.1	39.7	26.4	29.6	23.2	19.0	0.0	19.0
40	34.1	39.4	29.5	26.1	30.3	23.2	0.0	23.2
45	30.5	37.1	30.3	21.5	35.4	25.0	0.0	25.0
50	27.6	35.6	30.9	17.7	38.7	24.9	0.0	24.9
55	25.3	34.5	31.3	14.5	41.1	23.6	0.0	23.6
60	23.4	33.7	31.6	11.7	43.0	21.5	0.0	21.5
65	21.9	33.1	31.8	9.3	44.6	18.9	0.0	18.9
70	20.5	32.6	31.8	7.0	46.2	15.8	0.0	15.8
75	19.5	32.0	31.6	5.0	47.8	12.4	0.0	12.4

Minimum concrete strength f<sub>ck</sub> = 12 N/mm<sup>2</sup> or f<sub>ck,cube</sub> = 15 N/mm<sup>2</sup>

\* Static values relate solely to Base Plate-3. The Anchor Bolt connection must be verified separately.

## Load case 2

$$0^\circ \leq \alpha \leq 90^\circ$$



$F$  = Resulting force from  $F_1$  and  $F_2$   
 $\alpha$  = angle between  $F$  and concrete surface [°]  
 $R$  = Resulting Anchor Bolt load  
 $R_v$  = vertical component of the dowel load  $R_H$   
 $R_h$  = horizontal component of the dowel load

Fig. B2.03

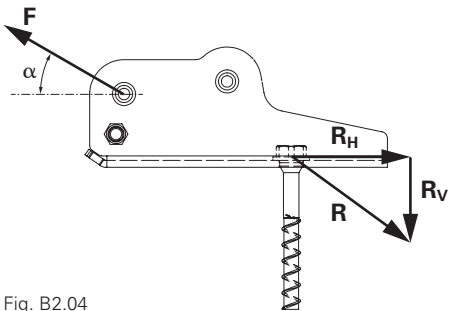
Load case 2*								
$\alpha$ [°]	Tension				Compression			
	perm. tension force $F$ [kN]	$R$ [kN]	$R_v$ [kN]	$R_H$ [kN]	perm. compression $F$ [kN]	$R$ [kN]	$R_v$ [kN]	$R_H$ [kN]
0	31.7	38.8	22.4	31.7	9.1	15.9	13.1	9.1
5	32.1	39.2	22.8	31.9	9.7	15.6	12.2	9.7
10	32.4	39.5	23.3	31.9	10.6	15.3	11.2	10.4
15	32.7	39.6	23.8	31.6	11.7	15.1	10.0	11.3
20	33.1	39.6	24.5	31.1	13.2	15.1	8.5	12.4
25	33.6	39.6	25.3	30.5	15.3	15.4	6.6	13.9
30	34.3	39.6	26.3	29.7	18.4	16.4	3.9	15.9
35	35.1	39.7	27.3	28.8	23.2	19.0	0.0	19.0
40	36.2	39.8	28.5	27.7	30.3	23.2	0.0	23.2
45	37.3	39.7	29.6	26.4	35.4	25.0	0.0	25.0
50	37.6	38.6	30.1	24.2	38.7	24.9	0.0	24.9
55	35.9	37.2	30.4	21.3	41.1	23.6	0.0	23.6
60	31.1	35.3	31.6	15.5	43.0	21.5	0.0	21.5
65	26.9	34.2	32.3	11.4	44.6	18.9	0.0	18.9
70	23.1	33.4	32.5	7.9	46.2	15.8	0.0	15.8
75	19.5	32.1	31.7	5.0	47.8	12.4	0.0	12.4
80	16.1	29.1	28.9	2.8	46.2	8.0	0.0	8.0
85	13.8	26.8	26.8	1.2	43.1	3.8	0.0	3.8
90	12.1	25.2	25.2	0.0	40.4	0.0	0.0	0.0

Minimum concrete strength  $f_{ck} = 12 \text{ N/mm}^2$  or  $f_{ck,cube} = 15 \text{ N/mm}^2$

\* Static values relate solely to Base Plate-3. The Anchor Bolt connection must be verified separately.

## Load case 3

$$0^\circ \leq \alpha \leq 35^\circ$$



$F$  = Resulting force from  $F_1$  and  $F_2$   
 $\alpha$  = angle between  $F$  and concrete surface [°]  
 $R$  = Resulting Anchor Bolt load  
 $R_v$  = vertical component of the dowel load  $R_H$   
 $R_H$  = horizontal component of the dowel load

Fig. B2.04

Load case 3*								
$\alpha$ [°]	Tension				Compression			
	perm. tension force $F$ [kN]	$R$ [kN]	$R_v$ [kN]	$R_H$ [kN]	perm. compression $F$ [kN]	$R$ [kN]	$R_v$ [kN]	$R_H$ [kN]
0	34.7	39.9	19.7	34.7	10.6	16.8	13.1	10.6
5	36.7	40.9	18.3	36.6	13.3	17.8	11.9	13.3
10	38.3	41.5	17.3	37.7	18.0	20.3	9.9	17.7
15	39.7	41.8	16.8	38.3	28.6	28.2	5.6	27.6
20	40.9	41.9	16.7	38.5	54.7	51.4	0.0	51.4
25	40.3	41.1	18.9	36.5	54.7	49.5	0.0	49.5
30	33.5	39.1	26.2	29.1				
35	21.7	31.0	25.5	17.7				
40	15.1	25.6	22.8	11.6				

Minimum concrete strength  $f_{ck} = 12 \text{ N/mm}^2$  or  $f_{ck,cube} = 15 \text{ N/mm}^2$

\* Static values relate solely to Base Plate-3. The Anchor Bolt connection must be verified separately.

## Base Plate-2 f. RS 210-1400

Article no. 417343

(Fig. B2.05)

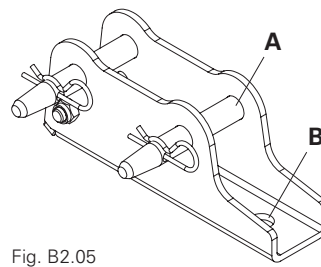


Fig. B2.05

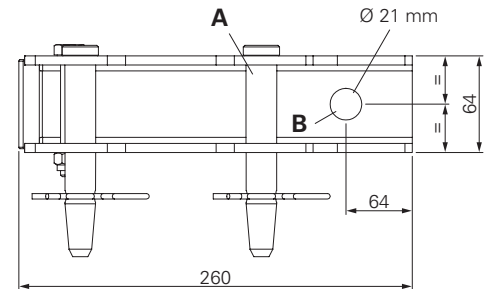


Fig. B2.05a

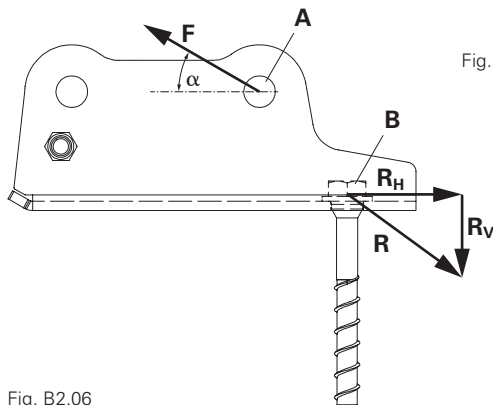


Fig. B2.06

F = prop load

Fit the push-pull prop and the Anchor Bolt in the positions shown **(A)** and **(B)**.

(Fig. B2.05 – Fig. B2.06)

### The following proof must also be provided:

1. The push-pull prop must be capable of bearing the respective prop load with the extension length available.
2. The tie bolt must be capable of bearing the specified dowel force.

If the load at hand F is lower than the value in the table, then the resulting dowel force can be reduced linearly.

$\alpha$ [°]	Tension				Compression			
	perm. tension force F [kN]	R [kN]	$R_v$ [kN]	$R_H$ [kN]	perm. compression F [kN]	R [kN]	$R_v$ [kN]	$R_H$ [kN]
0	36.00	40.48	18.50	36.00	2.30	7.18	6.80	-2.30
10	34.80	40.11	20.80	34.30	2.70	6.85	6.30	-2.70
20	34.60	40.05	23.40	32.50	3.40	6.45	5.60	-3.20
30	35.20	40.13	26.20	30.40	4.70	6.01	4.40	-4.10
40	36.80	40.74	29.40	28.20	8.00	6.26	1.40	-6.10
50	39.60	41.86	33.20	25.50	18.20	11.70	0.00	-11.70
60	16.90	23.74	22.20	8.40	25.10	12.50	0.00	-12.50
70	6.60	13.60	13.40	2.30	29.80	10.20	0.00	-10.20
80	4.20	11.22	11.20	0.70	34.10	5.90	0.00	-5.90
90	3.20	10.20	10.20	0.00	38.80	0.00	0.00	0.00
100	2.60	9.51	9.50	-0.40	44.70	7.80	0.00	7.80
110	2.20	9.04	9.00	-0.80	46.70	16.00	0.00	16.00
120	2.00	8.76	8.70	-1.00	45.30	22.60	0.00	22.60
130	1.90	8.49	8.40	-1.20	42.70	28.07	6.10	27.40
140	1.90	8.22	8.10	-1.40	41.50	34.13	12.40	31.80
150	1.90	7.96	7.80	-1.60	41.70	40.96	18.20	36.70
160	2.00	7.71	7.50	-1.80	40.30	41.06	15.80	37.90
170	2.10	7.50	7.20	-2.10	37.80	40.74	16.60	37.20
180	2.30	7.18	6.80	-2.30	36.00	40.48	18.50	36.00

## Base Plate-2 f.RS 1000/1400

Article no. 102018  
(Fig. B2.07)

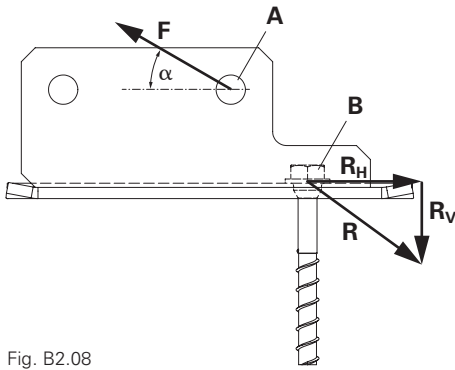


Fig. B2.08

F = prop load

Fit the push-pull prop and the Anchor Bolt in the positions shown (A) and (B). (Fig. B2.07 – Fig. B2.08)

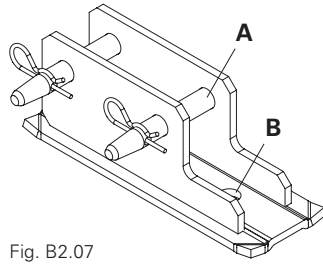


Fig. B2.07

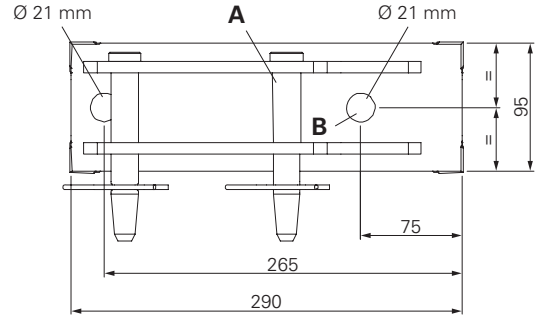


Fig. B2.07a

### The following proof must also be provided:

1. The push-pull prop must be capable of bearing the respective prop load with the extension length available.
2. The tie bolt must be capable of bearing the specified dowel force.

If the load at hand F is lower than the value in the table, then the resulting dowel force can be reduced linearly.

$\alpha$ [°]	Tension				Compression			
	perm. tension force F [kN]	R [kN]	$R_v$ [kN]	$R_H$ [kN]	perm. compression F [kN]	R [kN]	$R_v$ [kN]	$R_H$ [kN]
0	52.8	58.0	22.9	53.3	10.6	18.8	15.5	10.6
10	44.4	49.9	24.1	43.7	12.3	18.1	13.4	12.1
20	38.9	44.3	25.0	36.6	14.1	16.4	9.7	13.3
30	35.2	39.7	25.4	30.5	16.7	15.1	4.2	14.4
40	33.2	36.2	25.8	25.4	33.7	25.8	0.0	25.8
50	32.2	33.3	26.1	20.7	52.8	34.2	0.0	34.2
60	37.5	42.8	38.5	18.7	52.8	26.6	0.0	26.6
70	27.3	39.5	38.4	9.3	52.8	18.2	0.0	18.2
80	19.6	34.3	34.1	3.4	52.8	9.2	0.0	9.2
90	15.1	30.6	30.6	0.0	52.8	0.0	0.0	0.0
100	12.3	27.7	27.6	2.1	52.8	9.2	0.0	9.2
110	10.6	25.7	25.5	3.6	52.8	18.2	0.0	18.2
120	9.6	24.3	23.8	4.8	52.8	26.6	0.0	26.6
130	9.0	23.2	22.4	5.8	52.8	34.2	0.0	34.2
140	8.7	22.2	21.1	6.7	52.8	40.4	0.0	40.4
150	8.7	21.3	19.9	7.6	52.8	45.7	1.2	45.7
160	9.0	20.4	18.6	8.5	52.8	50.8	8.8	50.1
170	9.6	19.6	17.2	9.4	52.8	54.9	16.1	52.5
180	10.6	18.8	15.5	10.6	52.8	58.0	22.9	53.3

## Base Plate-2 for RSS

Article no. 406000

(Fig. B2.09)

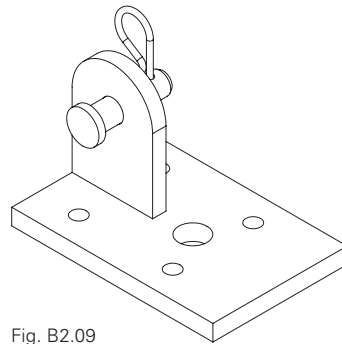


Fig. B2.09

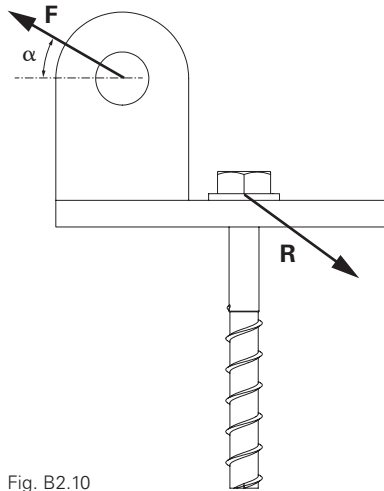


Fig. B2.10

F = Resulting force from push-pull prop and kicker brace load.

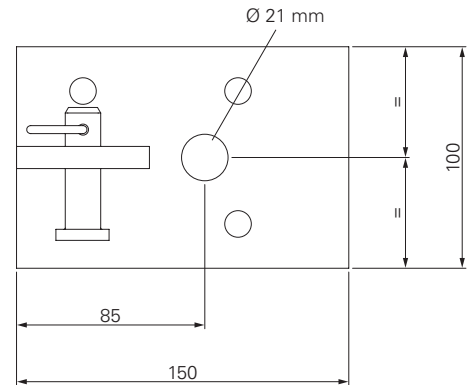


Fig. B2.09a

### The following proof must also be provided:

1. The push-pull prop must be capable of bearing the respective prop load with the extension length available.
2. The tie bolt must be capable of bearing the specified dowel force.

If the load at hand F is lower than the value in the table, then the resulting dowel force can be reduced linearly.

$\alpha$ [°]	Tension		Compression	
	perm. tension force F [kN]	R [kN]	perm. compression F [kN]	R [kN]
0	14.4	18.1	10.0	14.4
10	14.6	18.6	12.1	14.5
20	14.8	18.5	14.8	14.6
30	15.6	18.5	15.5	13.4
40	16.9	18.5	16.8	12.9
50	19.1	19.8	19.1	12.3
60	22.6	28.3	22.7	11.4
70	20.4	30.2	29.2	10.0
80	14.3	24.4	34.4	6.0
90	11.3	21.5	34.4	0.0
100	9.6	19.7	34.4	6.0
110	8.5	18.5	29.2	10.0
120	7.9	17.6	22.7	11.6
130	7.6	16.8	19.1	13.1
140	7.5	16.1	16.9	14.4
150	7.7	15.6	15.5	15.6
160	8.1	15.1	14.8	16.6
170	8.8	14.7	14.6	17.6
180	10.0	14.4	14.4	18.1

## Quick Connector Head RS-2

Article no. 127190 (Fig. B3.03)

Maximum accommodated load $F_{perm}$ [kN]						
Minimum concrete strength 15 N/mm <sup>2</sup> – prefabricated element thickness $\geq$ 5 cm						
$\beta$	20 °	30°	40 °	45 °	50 °	60 °
$F_{perm}$	13.0	14.7	16.9	15.6	11.9	8.2

Loads to be transferred into the prefabricated element												
$\beta$	20 °		30°		40 °		45 °		50 °		60 °	
Actual push-pull prop load [kN]	FSZ [kN]	FSQ [kN]	FSZ [kN]	FSQ [kN]	FSZ [kN]	FSQ [kN]	FSZ [kN]	FSQ [kN]	FSZ [kN]	FSQ [kN]	FSZ [kN]	FSQ [kN]
1.0	0.59	0.94	0.51	0.87	1.19	0.77	1.53	0.70	1.88	0.64	2.51	0.50
2.0	1.18	1.88	1.03	1.73	2.38	1.53	3.07	1.41	3.75	1.29	5.01	1.00
4.0	2.35	3.76	2.06	3.46	4.76	3.06	6.13	2.82	7.50	2.57	10.02	2.00
6.0	3.53	5.64	3.08	5.20	7.13	4.60	9.20	4.23	11.26	3.86	15.04	3.00
8.0	4.70	7.52	4.11	6.93	9.51	6.13	12.26	5.64	15.01	5.14	20.05	4.00
10.0	5.88	9.40	5.14	8.66	11.89	7.66	15.33	7.05	18.76	6.43	25.06	5.00
12.0	7.06	11.28	6.17	10.39	14.27	9.19	18.39	8.45	22.51	7.72	30.07	6.00
14.0	8.23	13.16	7.20	12.12	16.65	10.72	21.46	9.86	26.26	9.00	35.08	7.00
16.0	9.41	15.04	8.22	13.86	19.02	12.26	24.52	11.27	30.02	10.29	40.10	8.00

FSZ = bolt tensile force

FSQ = bolt shear force

Verifying the transfer of these forces into the prefabricated element takes place on the construction site.

## Base Plate-3 f. RS 210-1400

Article no. 126666 (Fig. B3.01 + Fig. B3.03)

Maximum accommodated load from the push-pull prop [kN]						
$\beta$	20 °	30°	40 °	45 °	50 °	60 °
F [kN]	22.5	24.9	28.7	31.4	30.3	18.4

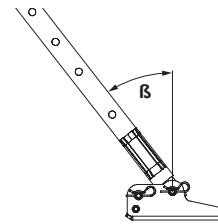


Fig. B3.01

## Base Plate-2 f. RS 210-1400

Article no. 417343 (Fig. B3.02 + Fig. B3.03)

Maximum accommodated load from the push-pull prop [kN]						
$\beta$	20 °	30°	40 °	45 °	50 °	60 °
F [kN]	6.6	16.9	18.2	13.1	8.0	4.7

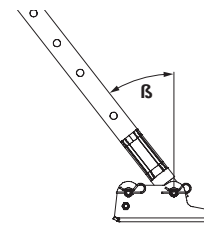


Fig. B3.02

## Push-Pull Props RS

(Fig. B3.03)

Maximum accommodated load – push-pull props – tension/compression				
RS 210	Extension length L [m]	1.30 – 2.00	2.10	–
	perm. FD [kN]	25.0	23.6	–
RS 260	Extension length L [m]	2.30	2.60	–
	perm. FD [kN]	25.0	22.1	–
RS 300	Extension length L [m]	1.90 – 2.30	2.50	3.00
	perm. FD [kN]	25.0	21.6	14.2
RS 450	Extension length L [m]	2.80 – 3.60	4.00	4.50
	perm. FD [kN]	25.0	17.2	–

Permitted area of application  
Quick connector head:  $\beta = 20^\circ - 60^\circ$

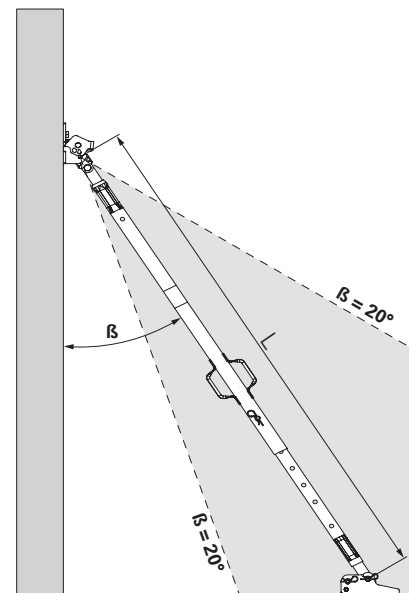


Fig. B3.03

## RS and RSS Push-Pull Props

PERI

Item no. Weight kg

117466 10,600

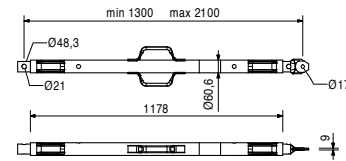
### Push-Pull Prop RS 210, galv.

Extension length  $l = 1.30 - 2.10$  m.  
For aligning PERI formwork systems and precast concrete elements.



### Note

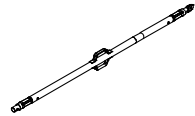
Permissible load see PERI Design Tables.



118238 12,200

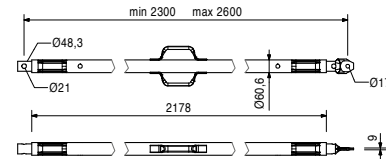
### Push-Pull Prop RS 260, galv.

Extension length  $l = 2.30 - 2.60$  m.  
For aligning PERI formwork systems and precast concrete elements.



### Note

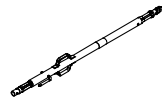
Permissible load see PERI Design Tables.



117467 15,500

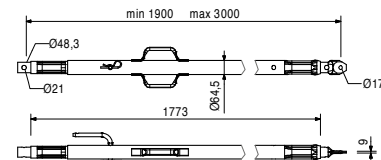
### Push-Pull Prop RS 300, galv.

Extension length  $l = 1.90 - 3.00$  m.  
For aligning PERI formwork systems and precast concrete elements.



### Note

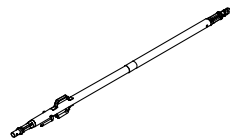
Permissible load see PERI Design Tables.



117468 23,000

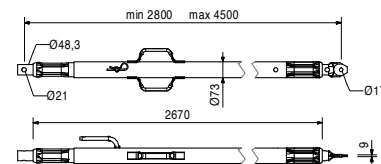
### Push-Pull Prop RS 450, galv.

Extension length  $l = 2.80 - 4.50$  m.  
For aligning PERI formwork systems and precast concrete elements.



### Note

Permissible load see PERI Design Tables.



## RS and RSS Push-Pull Props

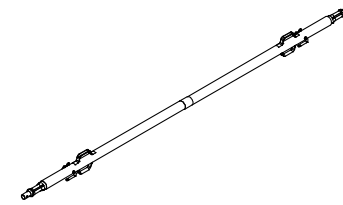
PERI

Item no. Weight kg

117469 40,000

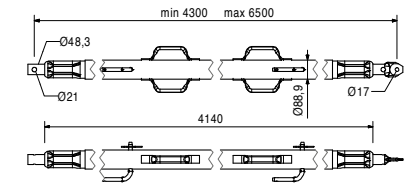
### Push-Pull Prop RS 650, galv.

Extension length  $l = 4.30 - 6.50$  m.  
For aligning PERI formwork systems and precast concrete elements.



### Note

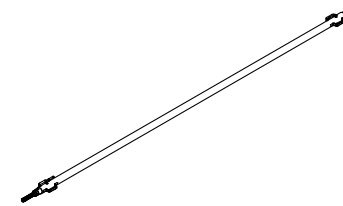
Permissible load see PERI Design Tables.



028990 115,000

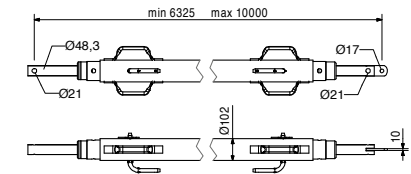
### Push-Pull Prop RS 1000, galv.

Extension length  $l = 6.40 - 10.00$  m.  
For aligning PERI formwork systems.



### Note

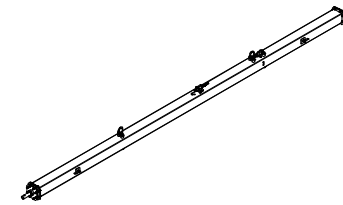
Permissible load see PERI Design Tables.



103800 271,000

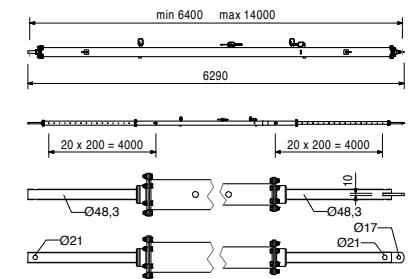
### Push-Pull Prop RS 1400, galv.

Extension length  $l = 6.40 - 14.00$  m.  
For aligning PERI formwork systems.



### Note

Permissible load see PERI Design Tables.  
Chain can be operated from bottom.



## RS and RSS Push-Pull Props

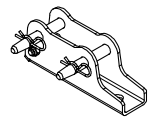
PERI

Item no. Weight kg

126666 3,070

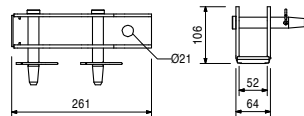
### Base Plate -3 for RS 210 – 1400

For assembling the RS 210, RS 260, RS 300, RS 450, RS 650, RS 1000 and RS 1400 push-pull props.



### Complete with

2 pc. 105400 bolts  $\varnothing 20 \times 140$ , galv.  
2 pc. 018060 cotter pin 4/1, galv.  
1 pc. 113063 bolt ISO 4014 M12  $\times 80-8.8$ , galv.  
1 pc. 113064 hex nut ISO7040-M12-8-G, galv.



Accessories

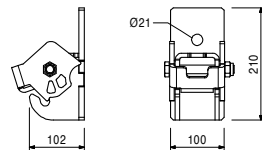
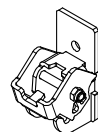
124777 0,210

### Anchor Bolt PERI 14/20 x 130

127190 4,190

### Quick Assembly Head RS-2

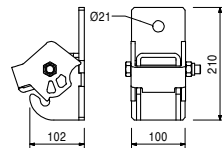
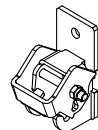
For aligning precast concrete elements.



117470 4,260

### Quick Connector Head RS

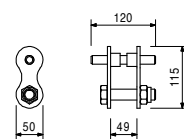
For aligning precast concrete elements.



117726 1,050

### Push-Pull Prop Adaptor RS

For aligning precast concrete elements.



## RS and RSS Push-Pull Props

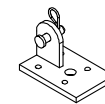
PERI

Item no. Weight kg

106000 1,820

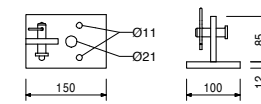
### Base Plate-2 for RSS, galv.

For assembly of RSS Push-Pull Props.



### Complete with

1 pc. 027170 Pin  $\varnothing 16 \times 42$ , galv.  
1 pc. 018060 Cotter Pin 4/1, galv.



Accessories

124777 0,210

### Anchor Bolt PERI 14/20 x 130

057087 3,720  
057088 4,410

### Kickers AV Kicker AV 82 Kicker AV 111

For aligning PERI formwork systems.

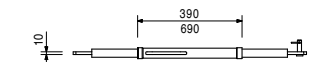
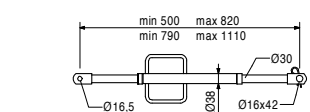
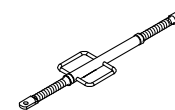
min. L	max. L
500	820
790	1110

### Complete with

1 pc. 027170 Pin  $\varnothing 16 \times 42$ , galv.  
1 pc. 018060 Cotter Pin 4/1, galv.

### Note

Permissible load see PERI Design Tables.



028110 5,180

### Kicker AV 140

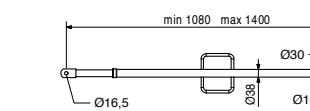
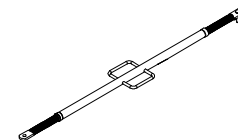
Extension length  $l = 1.08 - 1.40$  m.  
For aligning PERI formwork systems.

### Complete with

1 pc. 027170 Pin  $\varnothing 16 \times 42$ , galv.  
1 pc. 018060 Cotter Pin 4/1, galv.

### Note

Permissible load see PERI Design Tables.



## RS and RSS Push-Pull Props

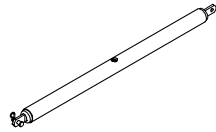
PERI

Item no. Weight kg

108135 12,900

### Kicker AV 210

Extension length  $l = 1.28 - 2.10$  m.  
For aligning PERI formwork systems.

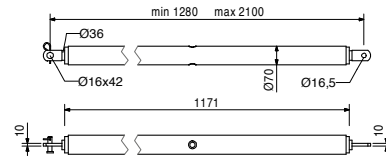


### Complete with

1 pc. 027170 Pin  $\varnothing 16 \times 42$ , galv.  
1 pc. 018060 Cotter Pin 4/1, galv.

### Note

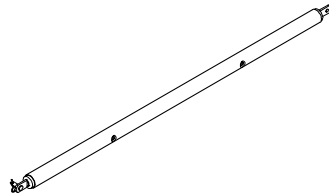
Permissible load see PERI Design Tables.



028120 17,000

### Kicker AV RSS III

Extension length  $l = 2.03 - 2.92$  m.  
For aligning PERI formwork systems.

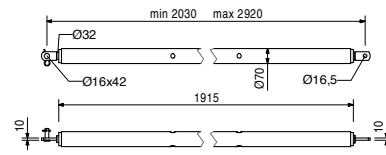


### Complete with

1 pc. 027170 Pin  $\varnothing 16 \times 42$ , galv.  
1 pc. 018060 Cotter Pin 4/1, galv.

### Note

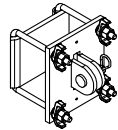
Permissible load see PERI Design Tables.



028050 4,550

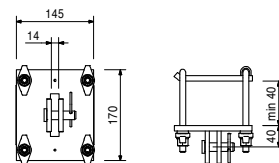
### Girder Headpiece GT 24, galv.

For connecting push-pull props and kicker braces to GT 24 Girders



### Complete with

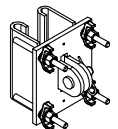
1 pc. 027170 Pin  $\varnothing 16 \times 42$ , galv.  
1 pc. 018060 Cotter Pin 4/1, galv.



028070 4,680

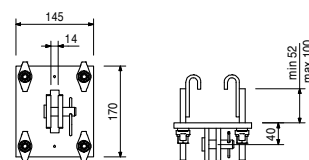
### Girder Headpiece GT 24/A, galv.

For connecting push-pull props and kicker braces to extended GT 24 Girders in the area of the Extension Splice 24-2.



### Complete with

1 pc. 027170 Pin  $\varnothing 16 \times 42$ , galv.  
1 pc. 018060 Cotter Pin 4/1, galv.



## RS and RSS Push-Pull Props

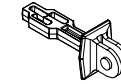
PERI

Item no. Weight kg

028060 1,940

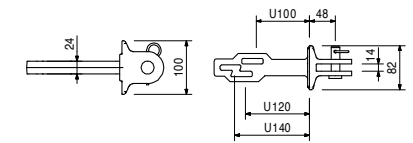
### Wedge Headpiece SRZ/SRU

For connecting push-pull props and kicker braces to Steel Waler SRZ and SRU Profile U100 – U140.



### Complete with

1 pc. 027170 Pin  $\varnothing 16 \times 42$ , galv.  
1 pc. 018060 Cotter Pin 4/1, galv.



024250 0,331

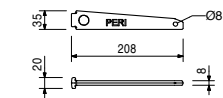
### Accessories

### Wedge K, galv.

024250 0,331

### Wedge K, galv.

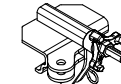
For coupling Compression Plate KDP, Wedge Head Piece SRZ/SRU and Waler Connector SB-A, B, C.



023660 3,300

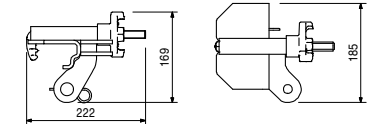
### Brace Connector TRIO, galv.

For connecting push-pull props and kicker braces to MAXIMO and TRIO Panels. Mounted on vertical and horizontal struts.



### Complete with

1 pc. 027170 Pin  $\varnothing 16 \times 42$ , galv.  
1 pc. 018060 Cotter Pin 4/1, galv.



066082 1,040

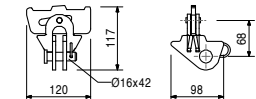
### Brace Connector DRA

For connecting push pull props and kicker braces at DOMINO panels.



### Complete with

1 pc. 027170 Pin  $\varnothing 16 \times 42$ , galv.  
1 pc. 018060 Cotter Pin 4/1, galv.



## RS and RSS Push-Pull Props

**PERI**

**PERI**

Item no. Weight kg

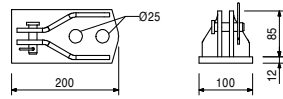
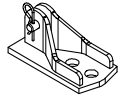
028080 2,970

### Connector Kicker/Push-Pull Prop, galv.

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

### Complete with

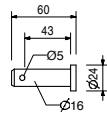
1 pc. 027170 Pin  $\varnothing$  16 x 42, galv.  
1 pc. 018060 Cotter Pin 4/1, galv.



027170 0,102

### Pin $\varnothing$ 16 x 42, galv.

For different connections.



018060 0,030

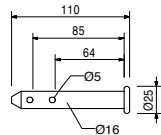
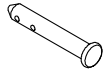
Accessories

### Cotter Pin 4/1, galv.

018050 0,171

### Pin $\varnothing$ 16 x 65/86, galv.

For different connections.



018060 0,030

Accessories

### Cotter Pin 4/1, galv.

018060 0,030

### Cotter Pin 4/1, galv.



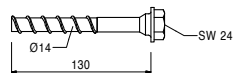
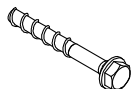
124777 0,210

### Anchor Bolt PERI 14/20 x 130

For temporary fixation to reinforced concrete structures.

### Note

See PERI data sheet!  
Drilling  $\varnothing$  14 mm.



**The optimal System  
for every Project and  
every Requirement**



**Wall Formwork**



**Column Formwork**



**Slab Formwork**



**Climbing Systems**



**Bridge Formwork**



**Tunnel Formwork**



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