

Adjusting Bracket MX

ltem no. 101633

Translation of the Original Instructions



Edition 07 | 2013



Introduction

Overview





- (1) Bracket
- (2) Guide
- (3) Spindle
- (4) Hex. Nut



Content

Introduction	
Overview	1
Intended Use	2
Safety Instructions	3
Application	
Permissible values	4
Application	6
Anchorage	7
MAXIMO	8
TRIO	9
Closing Formwork	10
Appendix	
Components	11



Translation of the Original Instructions

Introduction

Intended Use

1. PERI products have without exception been designed for use in the industrial and commercial sectors by suitably trained personnel.

2. These Instructions for Use contain information to ensure a correct handling and application.

3. The product described here serves as a bracket for erecting individual elements or element units of the PERI MAXIMO and TRIO systems up to h = 4.50 m.

4. For use in ambient temperatures from -20°C to +60°C.

5. Changes and modifications to PERI components are not permitted and represent a misapplication with associated safety risks.

6. Components provided by the contractor must conform with the characteristics required in these Instructions for Use as well as all valid construction guidelines and standards.

7. Only PERI original components may be used. The use of other products, especially spare parts, represent a misapplication with associated safety risks.



Introduction

Safety Instructions

General

1. Deviations from the intended use present a potential safety risk!

2. When using the Adjusting Bracket MX, the Instructions for Use must be followed at all times!

The contractor must ensure that the Instructions for Use provided by PERI are available and easily accessible for site personnel throughout the duration of the project!

3. All country-specific laws, standards and other safety regulations are to be taken into account whenever the Adjusting Bracket MX is used.

4. The contractor can only assign those persons to independently use of the Adjusting Bracket MX who are actually familiar with the task!

5. Adjusting Brackets MX are to be used accordingly so that persons are never put at risk in any way!

6. Do not exceed the permissible load capacity of the Adjusting Brackets MX!

7. Adjusting Brackets MX must be protected against the effects of the weather and aggressive materials if safety is then likely to be affected! 8. Persons using the Adjusting Brackets MX must check before and during use for obvious defects (e.g. deformations, cracks, fractures, incomplete labelling) – visual inspection!

9. The contractor must ensure that the Adjusting Brackets MX are only put back into service if they have been properly checked by a technical expert and if the defect has been repaired!

Product-specific

1. Personnel mounting the Adjusting Bracket MX on the structure must be sufficiently protected against falling!

2. Design table data must be adhered to.

3. Anchoring is to take place only if the anchorage has sufficient concrete strength.

4. After exceptional events or long periods of downtime in which the formwork or shoring was not used, the unit and its components must be checked for stability and function!

5. During transportation and storage, ensure that the Adjusting Bracket MX is securely positioned so that it cannot fall or slide!

Application

Permissible values

Boundary conditions:

- Wind loads for Germany Inland Wind Zone 2.
- Loads for push-pull props and adjusting brackets are based on the same influence of width (one push-pull prop per adjusting bracket).
- Cube strength $_{fck, cube} \ge 15 \text{ N/mm}^2$ at the moment of load application.
- Perm. WB = permissible width of influence.
- L = total length of the formwork in the ground plan.
- All values are characteristic values.

Formwork height h [m]		2.70			3.30				
Top pivot point y [m]		0.60			0.45				
Push-pull prop force [kN]	F _{RS}		±	9.9		± 8.0			
Mary analysis lands [I-N]	V _A		16.4		13.8				
wax. anchor loads [kiv]	Z _A	27.9			25	5.0			
Pressure coefficent $c_p [\div]$		1.80	2.30	2.90	3.40	1.80	2.30	2.90	3.40
Perm. width of influence [m]									
0 m above ground		4.80	3.76	2.98	2.54	3.46	2.71	2.15	1.83
10 m above ground		3.78	2.96	2.34	2.00	2.72	2.13	1.69	1.44
20 m above ground		3.08	2.41	1.91	1.63	2.22	1.74	1.38	1.17
30 m above ground		2.72	2.13	1.69	1.44	1.96	1.54	1.22	1.04

Perm. width of influence, anchor loads and push-pull prop forces

In the end area of the walls, higher cp-values and/or wind loads are to be assumed.

$$\begin{array}{ll} L/h \leq 3 & & c_{p, \text{End}} = 2.3 \\ L/h = 5 & & c_{p, \text{End}} = 2.9 \\ L/h \geq 10 & & c_{p, \text{End}} = 3.4 \end{array}$$

intermediate values to be interpolated.



Application

Perm. width of influence, anchor loads and push-pull prop forces



	3.	90			4.	50	
	0.	60			0.	30	
	± 8	3.4		± 7.0			
	14	.4		12.4			
	25	5.9			23	3.9	
1.80	2.30	2.90	3.40	1.80	2.30	2.90	3.40
3.03	2.37	1.88	1.60	2.36	1.85	1.46	1.25
2.38	1.87	1.48	1.26	1.86	1.45	1.15	0.98
1.94	1.52	1.21	1.03	1.51	1.18	0.94	0.80
1.72	1.35	1.07	0.91	1.34	1.05	0.83	0.71

Measures to be taken at the end of a shift or during the weekend

- without storm warning: secure formwork
- with storm warning: formwork has to be braced from below.

Application

Application



- max. height of formwork h = 4.50 m
- perm. loads, see Design Tables
- max. width of influence, see Design Tables
 Adjusting Bracket MX must not be

mounted on a formwork joint!

- Bracing towards the inside.
- Easy handling possible due to handgrip.



Possible misapplication

Schematic diagram



Application

Formwork unit must be positioned on at least two adjusting brackets.





Application

Anchorage

Required components

5	Anchor Sleeve M24	1x
6	Spacer PP Ø 31/26	1x
7	Bolt ISO 4014 M24	1x
	Plug Ø 26	1x

Installation

Installation is carried out from a safe working position.

1. Mount Anchor Sleeve M24 in the wall or slab according to the width of influence of the Adjusting Bracket MX, see Design Table.

2. Fix Adjusting Bracket MX using Bolt M24.

3. Adjust height accordingly. Height

adjustment ± 5 cm.

View of anchor details

Top view of anchor details



Application

MAXIMO

Brace Connector for MAXIMO

Required components

2	Wingnut MX	1x
3	Base Plate RS	1x
4	Cam Nut	1x
	Tie Rod DW 15	1x

Set formwork

1. Pre-assemble Wingnut MX on the primary formwork, see MAXIMO assembly instructions.

2. Erect pre-assembled formwork unit and place it on the Adjusting Brackets MX.

3. Mount base plate from a safe working position inside by means of cam nuts.

4. Support formwork units on the inside using push-pull props.

5. Align Adjusting Brackets MX so that they lie up against the formwork.



Are the Adjusting Brackets MX positioned up against the formwork?







4.50 m

Application

TRIO

Brace Connector for TRIO

Required components

2	Wingnut Pivot Plate DW 15	1x
3	Base Plate RS	1x
4	Cam Nut	1x
	Tie Rod DW 15	1x

Set formwork

1. Erect pre-assembled formwork unit and place it on the Adjusting Brackets MX.

2. Mount Wingnut Pivot Plate DW 15 from the scaffold.

3. Mount base plate from a safe working position inside by means of cam nuts.

4. Mount base plate from a safe working position inside by means of cam nuts.5. Align Adjusting Brackets MX so that

they lie up against the formwork.



Are the Adjusting Brackets MX positioned up against the formwork?



Application

Position closing formwork



Risk of injury! When setting the closing formwork, the primary formwork must always be secured!

Procedure: example



* Push-Pull Prop

Adjusting Bracket MX





Adjusting Bracket MX



ltem no.	Weight kg
026420	0,123

Anchor Positioning Stud M 24, galv. For fixing the M24 anchor system if the plywood

formlining is not drilled through.

Note

Allen Key SW 14.



027212 0,445 710312 0,005 Accessories Allen Key SW 14, long Nail 3 x 80

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



Wall Formwork



Column Formwork





Climbing Systems



Tunnel Formwork



Bridge Formwork



Shoring Systems



Construction Scaffold



Facade Scaffold



System-Independent Accessories



Industrial Scaffold



Access



Protection Scaffold





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