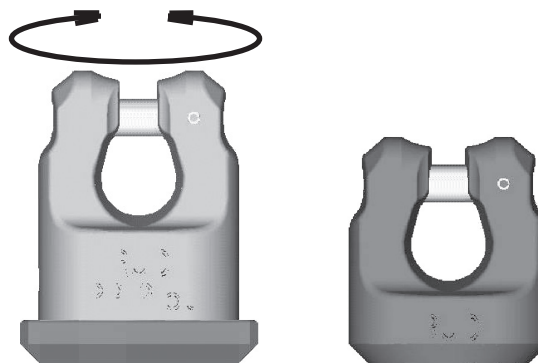


PowerPoint® WPP / WPPH for welding

Safety instructions

This safety instruction/declaration of the manufacturer has to be kept on file for the whole lifetime of the product.

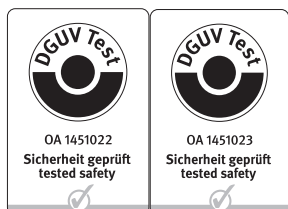
Translation of the Original instructions



Lifting points for welding
able to rotate >**WPP**<
and fixed >**WPPH**<
in the versions **..S** / **..B** / **..VIP**



RUD-Art.-Nr.: 8502207-EN / 03.015



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EG-Konformitätserklärung

entsprechend der EG-Maschinenrichtlinie 2006/42/EG, Anhang II A und ihren Änderungen

Hersteller: **RUD Ketten**
Rieger & Dietz GmbH u. Co. KG
Friedensinsel
73432 Aalen

Hiermit erklären wir, dass die nachfolgend bezeichnete Maschine aufgrund ihrer Konzipierung und Bauart, sowie in der von uns in Verkehr gebrachten Ausführung, den grundlegenden Sicherheits- und Gesundheitsanforderungen der EG-Maschinenrichtlinie 2006/42/EG sowie den unten aufgeführten harmonisierten und nationalen Normen sowie technischen Spezifikationen entspricht.
Bei einer nicht mit uns abgestimmten Änderung der Maschine verliert diese Erklärung ihre Gültigkeit.

Produktbezeichnung: Anschlagpunkt PowerPoint
PP / WPP / WPPH

Folgende harmonisierten Normen wurden angewandt:

EN 12100 : 2011-03 EN 1677-1 : 2009-03
EN 1677-4 : 2009-03

Folgende nationalen Normen und technische Spezifikationen wurden außerdem angewandt:

BGR 500, KAP2.8 : 2008-04

Für die Zusammenstellung der Konformitätsdokumentation bevollmächtigte Person:
Reinhard Smetz, RUD Ketten, 73432 Aalen

Aalen, den 27.06.2014 Dr.-Ing. Arne Kriegsmann (Prokurist/QMB)
Name, Funktion und Unterschrift Verantwortlicher *Arne Kriegsmann*



EC-Declaration of conformity

According to the EC-Machinery Directive 2006/42/EC, annex II A and amendments

Manufacturer: **RUD Ketten**
Rieger & Dietz GmbH u. Co. KG
Friedensinsel
73432 Aalen

We hereby declare that the equipment sold by us because of its design and construction, as mentioned below, corresponds to the appropriate, basic requirements of safety and health of the corresponding EC-Machinery Directive 2006/42/EC as well as to the below mentioned harmonized and national norms as well as technical specifications.
In case of any modification of the equipment, not being agreed upon with us, this declaration becomes invalid.

Product name: Lifting point PowerPoint
PP / WPP / WPPH

The following harmonized norms were applied:

EN 12100 : 2011-03 EN 1677-1 : 2009-03
EN 1677-4 : 2009-03

The following national norms and technical specifications were applied:

BGR 500, KAP2.8 : 2008-04

Authorized person for the configuration of the declaration documents:
Reinhard Smetz, RUD Ketten, 73432 Aalen

Aalen, den 27.06.2014 Dr.-Ing. Arne Kriegsmann (Prokurist/QMB)
Name, function and signature of the responsible person *Arne Kriegsmann*

User Instruction

The weldable RUD PowerPoint® is available in 2 different versions >WPP< turnable and >WPPH< fixed. Both can be assembled with the components:

...S: the Standard version

...B: the lifting ring version for hook assemblies

...VIP: the direct chain connection



WPP-S



WPPH-B



WPPH-VIP

Attention: Other combinations with non RUD components and chains are dangerous! These are not permitted and RUD will not accept any warranty.

1. Reference should be made to German Standards accord. BGR/DGUV 100-500 or other country specific statutory regulations and inspections are to be carried out by competent persons only.

2. Before installing and every use, visually inspect RUD lifting points, paying particular attention to any evidence of weld cracks, corrosion, wear, deformations, etc.

3. The material construction to which the lifting point will be attached should be of adequate strength to withstand forces during lifting without deformation. The contact areas must be free from impurities, oil, colour, ect. The material of the forged welding parts is 1.6541 (23MnNiCrMo52)

4. The lifting points must be positioned to the load in such a way that movements are avoided during lifting.

a.) For single leg lifts, the lifting point should be vertically above the centre of gravity of the load.

b.) For two leg lifts, the lifting points must be equidistant to/or above the centre of gravity of the load.

c.) For three and four leg lifts, the lifting points should be arranged symmetrical around the centre of gravity in the same plane if possible.

5. Load symmetry:

The required WLL of the individual RUD lifting point are calculated using the following formula and are based on symmetrical loading:

$$W_{LL} = \frac{G}{n \times \cos \beta}$$

W_{LL} = working load limit / capacity of each lifting point
 G = load weight (kg)
 n = number of load bearing legs
 β = angle of inclination of the chain to the vertical

The calculation of the load bearing legs is as follows:

	symmetrical	unsymmetrical
Two leg	2	1
Three/four leg	3	1

(also refer to table 1)

6. The type WPPH-VIP (rigid, with VIP-clevis connection) has to be aligned in regard of the vertical slot for the chain link, when used in multiple leg usage with inclination angle, straight into the direction of pull.



7. All fittings connected to the PP-versions should be free moving. Also the assembled components on the PP must be free moveable and should not used over sharp corners.

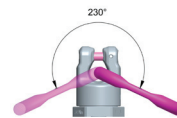
When connecting and disconnecting the lifting means (wire ropes, chain slings, roundslings) pinches and impacts should be avoided. Damage of the lifting means caused by sharp corners should be avoided as well. Before lifting, the hooks must be installed without twists in the direction of pull. Ring/hook/chain of the adjusted PP can be pivot by 230° (Pic. 1).

To guarantee the WLL and the function (compare table 3), the inclination angle of the ring/hook/chain must not exceed 25° when lifting point is attached from the side (compare Pic. 2).

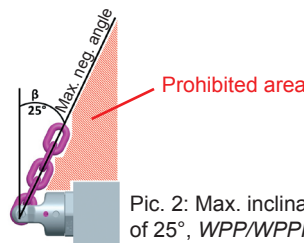


ATTENTION

Ring/hook/chain resp. the attached lifting mean must be free moveable in the WPP/WPPH and must neither have support at the load edge nor at the bottom part of the WPP/WPPH.



Pic. 1: Pivoting area of WPP/WPPH-S/-B/-VIP



Pic. 2: Max. inclination angle of 25°, WPP/WPPH-S/-B/-VIP

8. Effect of temperature:

During use in overheated areas the WLL of the PowerPoint® has to be reduced according as follows:

-40° up to 200°C no reduction
 200° up to 300°C minus 10 % (392°F up to 572°F)
 300° up to 400°C minus 25 % (572°F up to 752°F)
 Temperatures above 400°C (752°F) are not allowed.

9. RUD-Lifting points must not be used under chemical influences such as acids, alkaline solutions and vapours e.g. in pickling baths or hot dip galvanising plants. If this cannot avoided, please contact the manufacturer indicating the concentration, period of penetration and temperature of use.

10. The position where the lifting points should be attached should be clearly marked with colour.

11. If the lifting points are used **exclusively** for lashing the value of the working load limit can be doubled: $LC = 2 \times WLL$

12. After welding, an annual inspection or sooner if conditions dictate should be undertaken by a competent person examining the continued suitability. Also after damage and special occurrences.

Inspection criteria concerning paragraphs 2 and 12:

- The lifting point should be complete
- The WLL, thread size, batch code and manufacturers stamping should be clearly visible on the lifting point.
- Deformations of the components parts such as body, fittings and thread.
- Mechanical damages such as notches, especially in high stress areas.
- Wear should be not more than 10 % of cross sectional diameter.
- Evidence of corrosion.
- Evidence of cracks
- Cracks or other damages to the welding
- The upper fork head part of the PP-version >WPP< must rotate smoothly
- The PP-version >WPP< should only be used within the nom WLL. See RUD chart.
- The PowerPoint® version are not allowed for proof load test. Magnetic crack test only.
- The maximum gap between upper- and lower part of the PowerPoint® >WPP< must not be exceeded:
 PP-...0.63 t up to PP-...2.5 t max. 1.5 mm
 PP-...4 t up to PP-...8 t max. 2.5 mm

A non-adherence to this advice may damages of persons and materials!

Method of lift										
Lifting from the side	Attention, when lifting point is attached to the side the max. inclination angle β can only be 25° / resp. until lifting means touches load (compare point 7)!									
Number of legs	1	1	2	2	2	2	2	3 & 4	3 & 4	3 & 4
Angle of inclination $\angle \beta$	0°	90°	0°	90°	0-45°	45-60°	unsymm.	0-45°	45-60°	unsymm.
Factor	1	1	2	2	1.4	1	1	2.1	1.5	1
Type	Max. weight of load $>G<$ in metric tons for all PowerPoint types with different sling methods									
WPP / WPPH - ... - 0.63t	0.63 t (1385 lbs)	0.63 t (1385 lbs)	1.26 t (2770 lbs)	1.26 t (2770 lbs)	0.88 t (1940 lbs)	0.63 t (1385 lbs)	0.63 t (1385 lbs)	1.32 t (2900 lbs)	0.95 t (2080 lbs)	0.63 t (1385 lbs)
WPP / WPPH - ... - 1.5t	1.5 t (3300 lbs)	1.5 t (3300 lbs)	3.0 t (6600 lbs)	3.0 t (6600 lbs)	2.1 t (4620 lbs)	1.5 t (3300 lbs)	1.5 t (3300 lbs)	3.15 t (6930 lbs)	2.25 t (4950 lbs)	1.5 t (3300 lbs)
WPP / WPPH - ... - 2.5t	2.5 t (5500 lbs)	2.5 t (5500 lbs)	5.0 t (11000 lbs)	5.0 t (11000 lbs)	3.5 t (7700 lbs)	2.5 t (5500 lbs)	2.5 t (5500 lbs)	5.25 t (11550 lbs)	3.75 t (8250 lbs)	2.5 t (5500 lbs)
WPP / WPPH - ... - 4t	4.0 t (8800 lbs)	4.0 t (8800 lbs)	8.0 t (17600 lbs)	8.0 t (17600 lbs)	5.6 t (12320 lbs)	4.0 t (8800 lbs)	4.0 t (8800 lbs)	8.4 t (18480 lbs)	6.0 t (13200 lbs)	4.0 t (8800 lbs)
WPP / WPPH - ... - 5t	6.7 t (15000 lbs)	5.0 t (11000 lbs)	13.4 t (30000 lbs)	10.0 t (22000 lbs)	7.0 t (15400 lbs)	5.0 t (11000 lbs)	5.0 t (11000 lbs)	10.5 t (23100 lbs)	7.5 t (16500 lbs)	5.0 t (11000 lbs)
WPP / WPPH - ... - 8t	10.0 t (22000 lbs)	8.0 t (17600 lbs)	20.0 t (44000 lbs)	16.0 t (35200 lbs)	11.2 t (24640 lbs)	8.0 t (17600 lbs)	8.0 t (17600 lbs)	16.8 t (36960 lbs)	12.0 t (26400 lbs)	8.0 t (17600 lbs)

Table 1

Subject to technical alterations

	weld seam		
	size	length	volume
WPP-...-0,63t		125 mm	approx. 2.3 cm³
WPP-...-1,5t		140 mm	approx. 3.2 cm³
WPP-...-2,5t	(HY) 3 + (a) 5	190 mm	approx. 5.0 cm³
WPP-...-4t	(HY) 3 + (a) 6	250 mm	approx. 8.0 cm³
WPP-...-5t	(HY) 3 + (a) 8	300 mm	approx. 13.0 cm³
WPP-...-8t	(HY) 3 + (a) 10	315 mm	approx. 23.3 cm³
WPPH-...-0,63t		106 mm	approx. 2.0 cm³
WPPH-...-1,5t		125 mm	approx. 2.8 cm³
WPPH-...-2,5t	(HY) 3 + (a) 5	165 mm	approx. 4.5 cm³
WPPH-...-4t	(HY) 3 + (a) 6	215 mm	approx. 6.8 cm³
WPPH-...-5t	(HY) 3 + (a) 8	260 mm	approx. 11.4 cm³
WPPH-...-8t	(HY) 3 + (a) 10	275 mm	approx. 20.6 cm³

Table 2

The welding should only be carried out according to DIN EN ISO 9606-1 or AWS Standards by an authorized certified welder. Welding sequence:

- Tack Weld at the right position
- Before carrying out the top seam, carefully clean the root weld
- The welding process must not be interrupted for such a time that the welding block loses the welding temperature
- The fillet welding process had to be carried out circulated
- Attention: Do not weld on the connecting elements (eyehook, oval link, ...)!

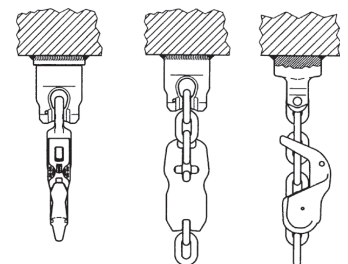


Welding procedure + Welding filler metals:

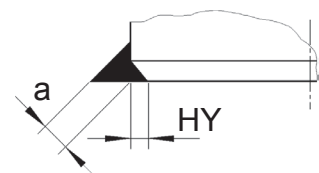
	Europe, USA, Asia, Australia, Africa
	Baustähle, niedrig legierte Stähle EN 10025 Mild steels, low alloyed steel
MIG / MAG (135) Gas shielded wire welding (135)	DIN EN ISO 14341: G4Si1 (G3Si1) Z.B. PEGO G4Si1
E-Hand Gleichstrom (111, =) Stick Electrode direct current	DIN EN ISO 2560-A: E 42 6 B 3 2 H10 DIN EN ISO 2560-A: E 38 2 B 1 2 H10 z.B. PEGO B Spezial*/PEGO BR Spezial*
E-Hand (Wechselstrom 111, ~) Stick Electrode alternating current	DIN EN ISO 2560-A: E 38 2 RB 1 2 DIN EN ISO 2560-A: E 42 0 RC 1 1 z.B. PEGO RC 3 / PEGO RR B 7 Alternativ: DIN EN ISO 3581: E 23 12 2 L R 3 2 z.B. PEGO 309 MoL
WIG (141) TIG Tungsten arc welding	DIN EN ISO 636-A: W 3 Si 1 (W2 Si 1) DIN EN ISO 636-A: W 2 Ni 2 z.B. PEGO WSG 2 / PEGO WSG2Ni2

Table 3

* Follow the drying instructions!



Welding seam definition:



Measurements „a“ have to be acc. weld seam chart. Double-ply weld is prescribed! The specific processing informations of the welding fillers have to be attended.

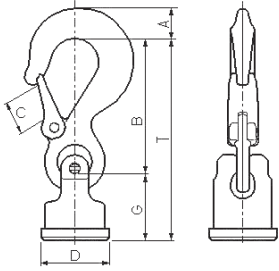
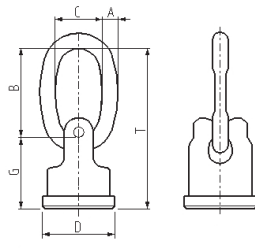
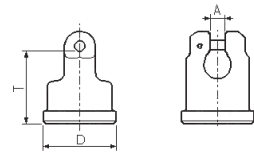
WPP-S  WPP-B  WPP-VIP Only for original VIP chain 											
Type	WLL (t)	A	B	C	D	G	T	weight (kg)	Welding beam HY+filled weld	Ref-no. WPP	Ref-no. WPPH
WPP(WPPH)-S-0.63t	0.63	13	75	18	40 (34)	40 (34)	115 (109)	0.4 (0.35)	4	7990721	7990722
WPP(WPPH)-S-1.5t	1.5	20	97	25	46 (40)	50 (44)	147 (141)	1.0 (0.9)	5	7989944	7989966
WPP(WPPH)-S-2.5t	2.5	28	126	30	61 (53)	61 (53)	187 (179)	1.7 (1.5)	3 + 5	7989945	7989967
WPP(WPPH)-S-4t	4.0	36	150	35	78 (68)	77 (67)	227 (217)	3.7 (3.2)	3 + 6	7989946	7989968
WPP(WPPH)-S-5t	5.0	37	174	40	95 (83)	93 (79)	267 (253)	7.2 (6.3)	3 + 8	7989947	7989969
WPP(WPPH)-S-8t	8.0	49	208	48	100 (88)	102 (88)	310 (296)	9.5 (8.8)	3 + 10	7989948	7989970
WPP(WPPH)-B-0.63t	0.63	9	65	35	40 (34)	40 (34)	105 (99)	0.35 (0.3)	4	7989954	7989976
WPP(WPPH)-B-1.5t	1.5	11	65	35	46 (40)	50 (44)	115 (106)	0.46 (0.36)	5	7989955	7989977
WPP(WPPH)-B-2.5t	2.5	13	74	40	61 (53)	61 (53)	135 (127)	1.05 (0.85)	3 + 5	7989956	7989978
WPP(WPPH)-B-4t	4.0	16	95	45	78 (68)	77 (67)	172 (162)	2.4 (1.9)	3 + 6	7989957	7989979
WPP(WPPH)-B-5t	5.0	21	130	60	95 (83)	93 (79)	223 (209)	5.1 (4.3)	3 + 8	7989958	7989980
WPP(WPPH)-B-8t	8.0	24	140	65	100 (88)	102 (88)	242 (228)	5.9 (5.2)	3 + 10	7989959	7989981
WPP(WPPH)-VIP-0.63t	0.63	4	-	-	40 (34)	-	40 (34)	0.25 (0.2)	4	7989960	7989982
WPP(WPPH)-VIP-1.5t	1.5	6	-	-	46 (40)	-	50 (44)	0.32 (0.22)	5	7989961	7989983
WPP(WPPH)-VIP-2.5t	2.5	8	-	-	61 (53)	-	61 (53)	0.85 (0.65)	3 + 5	7989962	7989984
WPP(WPPH)-VIP-4t	4.0	10	-	-	78 (68)	-	77 (67)	2.1 (1.6)	3 + 6	7989963	7989985
WPP(WPPH)-VIP-5t	5.0	13	-	-	95 (83)	-	93 (79)	4.1 (3.3)	3 + 8	7989964	7989986
WPP(WPPH)-VIP-8t	8.0	16	-	-	100 (88)	-	102 (88)	4.5 (3.8)	3 + 10	7989965	7989987

Table 4

() = dimensions for WPPH

Subject to technical alterations