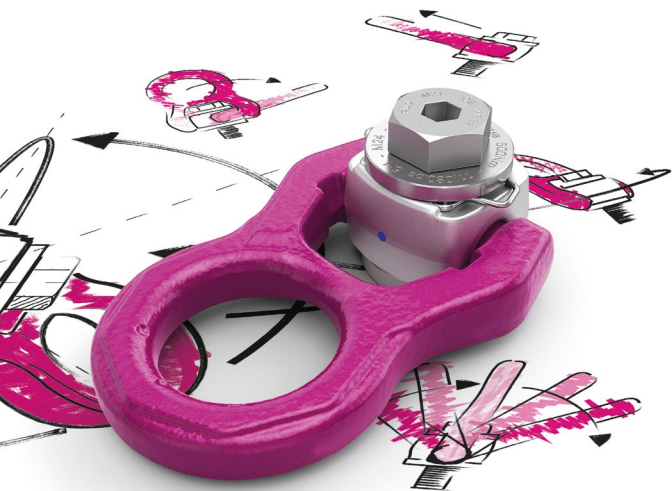


LOAD TABLES

Lifting Points, Lifting Chains.



LIFTING POINTS – FOR BOLTING

max. transport weight in [t]



ACP TURNADO

directions of pull...	...for 1 lifting point		...for 2 lifting points	...for 3/4 lifting points
designation thread size				
ACP M 8	0,7	0,7	0,98	1,47
ACP M 10	1,0	1,0	1,4	2,1
ACP M 12 / 1/2"	1,35	1,35	1,9	2,84
ACP M 16 / 5/8"	2,5	2,5	3,5	5,25
ACP M 20 / 3/4"	4	4	5,6	8,4
ACP M 24 / 1"	6,3	6,3	8,8	13,2
ACP M 30 / 1 1/4"	8	8	11,2	17
ACP M 36	15	12,5	17	26,5
ACP M 42	18	16	22,4	33,6
ACP 1 1/2"	16	14	19,6	29,4
ACP 1 3/4"	18	16	22,4	33,6



- no stopping of the lift bale
- higher working load limits (WLL) than hoist rings of comparable sizes
- no kinking possible

VWBG-V/VWBG/VIP LOAD RING FOR BOLTING - VARIO

directions of pull...	...for 1 lifting point	Higher WLL by optimised attachment or application		
designation thread size				
VWBG-V-0,3 t-M8	0,6	0,3	0,42	0,63
VWBG-V-0,45 t-M10	0,9	0,45	0,63	0,94
VWBG-V-0,6 t-M12	1,2	0,6	0,84	1,26
VWBG-V-1 t-M14	2	1	1,4	2,1
VWBG-V-1,3 t-M16	2,6	1,3	1,82	2,73
VWBG-V-1,8 t-M18	3,6	1,8	2,52	3,75
VWBG-V-2 t-M20/M22	4	2	2,8	4,25
VWBG-V-3,5 t-M24/M27	7	3,5	4,9	7,35
VWBG-V-5 t-M30	10	5	7	10,6
VWBG-6 t-M33	15	6	8,4	12,6
VWBG-8 t-M36-M39	15	8	11,2	17
VWBG-12 t-M42-M45	17	12	16,8	25,2
VWBG-12 t-M45	18	12	16,8	25,2
VWBG-13 t-M48-M52	18	13	18,2	27,3
VWBG-14 t-M52	25	14	19,6	29,4
VWBG-16 t-M56-M62	28	16	22,4	33,6
VWBG-16 t-M64-M76	28	16	22,4	33,6
VWBG-31,5 t-M72-M76	50	31,5	45	67
VWBG-35 t-M80-M85	50	35	49	73,5
VWBG-35 t-M90-M150	50	40	56	84



- pivoting 360°. Suspension ring pivots 230°.
- ball bearing
- patented markings (withdraw of service & load angles)

* = At inclination angles > 45-60° the WLL must be reduced by 30 %.

ADVICE!

Special threads possible!
Variable thread lengths available.
If the load is distributed asymmetrically, a single lashing point must be able to bear the entire load!

LIFTING POINTS – FOR BOLTING

max. transport weight in [t]



RFID chip
as standard

VRS/VARIO EYE BOLT „STARPOINT“

directions of pull...	...for 1 lifting point		...for 2 lifting points	...for 3/4 lifting points
designation thread size				
VRS-0,1 t-M6	0,5	0,1	0,14	0,21
VRS-0,3 t-M8	1	0,3	0,42	0,63
VRS-0,4 t-M10	1	0,4	0,56	0,84
VRS-0,75 t-M12/M14	2	0,75	1	1,57
VRS-1,5 t-M16/M18	4	1,5	2,12	3,15
VRS-2,3 t-M20/M22	6	2,3	3,22	4,83
VRS-3,2 t-M24/M27	8	3,2	4,5	6,7
VRS-4,5 t-M30/M33	12	4,5	6,3	9,5
VRS-7 t-M36	16	7	9,8	14,7
VRS-9 t-M42	24	9	12,6	18,9
VRS-12 t-M48	32	12	16,8	25,2
VRS-16 t-M56	50	16	22,4	33,6
VRS-20 t-M64	60	20	28	42



- pivoting 360°. Easy adjustment in load direction.
- ICE-Bolt made out of patented steel
- Easy-Fit star profile key

VLBG-PLUS/VIP LOAD RING FOR BOLTING PLUS

directions of pull...	...for 1 lifting point		...for 2 lifting points	...for 3/4 lifting points
designation thread size				
VLBG-PLUS-0,63 t-M8	0,63	0,63	0,88	1,32
VLBG-PLUS-0,9 t-M10	0,9	0,9	1,3	1,9
VLBG-PLUS-1,35 t-M12	1,35	1,35	1,9	2,84
VLBG-1,2 t-M14	1,2	1,2	1,68	2,52
VLBG-PLUS-2 t-M16	2	2	2,8	4,25
VLBG-2 t-M18	2	2	2,8	4,25
VLBG-PLUS-3,5 t-M20(M22)	3,5 (2,5)	3,5 (2,5)	4,9 (3,5)	7,35 (5,25)
VLBG-PLUS-4,5 t-M24(M27)	4,5 (4)	4,5 (4)	6,3 (5,6)	9,5 (8,4)
VLBG-PLUS-6,7 t-M30	6,7	6,7	9,5	14,1
VLBG-PLUS-7 t-M36	7	7	9,8	14,7
VLBG-PLUS-8 t-M36	8	8	11,2	17
VLBG-PLUS-10 t-M42	10	10	14	21,2
VLBG-PLUS-15 t-M42	15	15	21,2	31,5
VLBG-PLUS-20 t-M48	20	20	28	42



M8-M30:
45 % higher WLL
at an average

- ICE-Bolt made out of patented steel
- lifting point pivots 360°. Suspension ring pivots 180°
- clamping springs works as a noise reduction

* = At inclination angles > 45-60° the WLL must be reduced by 30 %.

ADVICE! If the load is distributed asymmetrically, a single lashing point must be able to bear the entire load!

LIFTING POINTS – FOR BOLTING

max. transport weight in [t]



PP-S/POWERPOINT®-STAR (UNIVERSAL CONNECTION)
PP-B/POWERPOINT®-B (RING CONNECTION)
PP-VIP/POWERPOINT®-VIP-CHAIN CONNECTION

directions of pull...	...for 1 lifting point		...for 2 lifting points	...for 3/4 lifting points
designation				
thread size	G		G	G
PP-0,63t-M12	0,63	0,63	0,88	1,32
PP-1,5t-M16	1,5	1,5	2,12	3,15
PP-2,5t-M20	2,5	2,5	3,5	5,25
PP-4t-M24	4	4	5,6	8,4
PP-5t-M30	6,7	5	7	10,6
PP-8t-M36	10	8	11,2	17



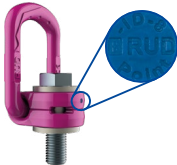
- pivoting 360°. Suspension ring pivots 230°
- double ball bearing
- can be combined with most commercial lifting means

* = At inclination angles > 45-60° the WLL must be reduced by 30 %.

ADVICE! If the load is distributed asymmetrically, a single lashing point must be able to bear the entire load!

RUD BLUE-ID SYSTEM

RFID Transponder



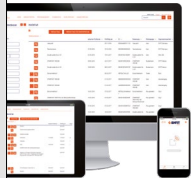
The components are equipped with the **RUD ID-POINT®** (RFID-Chip) and can be clearly identified by the distinctive chip number.

ID-USB-Reader



The robust **RUD-ID-READER** (reading devices) captures the identification number of the **RUD-ID-Point®** and transmits it to the test software **AYE-D.NET** or optionally to your PC applications (e.g. MS Word, Excel, WordPad, SAP), etc.

AYE-D.NET



The expandable test software **AYE-D.NET** assists you with managing and documenting your components.

Inspection and documentation made easy!

LIFTING POINTS – FOR WELDING

max. transport weight in [t]

WPP-S/WPPH-S/POWERPOINT®-STAR

WPP-B/WPPH-B/POWERPOINT®-B (RING CONNECT)

WPP-VIP/WPPH-VIP/PP®-VIP CHAIN CONNECT

directions of pull...	...for 1 lifting point		...for 2 lifting points	...for 3/4 lifting points
designation				
WPP-0,63 t	0,63	0,63	0,88	1,32
WPP-1,5 t	1,5	1,5	2,12	3,15
WPP-2,5	2,5	2,5	3,5	5,25
WPP-4 t	4	4	5,6	8,4
WPP-5 t	6,7	5	7	10,6
WPP-8 t	10	8	11,2	17
WPPH-0,63 t	0,63	0,63	0,88	1,32
WPPH-1,5 t	1,5	1,5	2,12	3,15
WPPH-2,5	2,5	2,5	3,5	5,25
WPPH-4 t	4	4	5,6	8,4
WPPH-5 t	6,7	5	7	10,6
WPPH-8 t	10	8	11,2	17



WPP versions



WPPH versions / fixed

- can be combined with most commercial lifting means
- WPP: Swivels 360° and pivots 230°
- WPP: double ball bearing

VLBS/VLBS-U/VIP LOAD RING F. WELDING/-UNDETACHABLE

directions of pull...	...for 1 lifting point		...for 2 lifting points	...for 3/4 lifting points
designation				
VLBS / VLBS-U-1,5 t	1,5	1,5	2,12	3,15
VLBS / VLBS-U-2,5 t	2,5	2,5	3,5	5,25
VLBS / VLBS-U-4 t	4	4	5,6	8,4
VLBS / VLBS-U-6,7 t	6,7	6,7	9,4	14,1
VLBS / VLBS-U-10 t	10	10	14	21,2
VLBS-16 t	16	16	22,4	33,6



- suspension ring pivots 180°
- 100 % WLL at 90° in the load ring plane possible
- suspension ring can be adjusted

* = At inclination angles > 45-60° the WLL must be reduced by 30 %.

ADVICE! If the load is distributed asymmetrically, a single lashing point must be able to bear the entire load!

LIFTING POINTS – FOR WELDING

max. transport weight in [t]

VRBS-FIX/VIP LOAD RING FIX WELDABLE

directions of pull...	...for 1 lifting point		...for 2 lifting points	...for 3/4 lifting points
designation				
VRBS-FIX-4 t	4	4	5,6	8,4
VRBS-FIX-6,7 t	6,7	6,7	9,4	14,1
VRBS-FIX-10 t	10	10	14	21,2
VRBS-FIX-16 t	16	16	22,4	33,6
VRBS-FIX-31,5 t	31,5	31,5	45	66,2
VRBS-FIX-50 t	50	50	70	105
VRBS-FIX-100 t	100	100	140	210



- pivots up to 180°
- no subsurface corrosion: circumferential HY weld seam
- 100% WLL at 90° in the load ring plane possible

VRBK-FIX/VIP LOAD RING FIX WELDABLE FOR EDGES

directions of pull...	...for 1 lifting point		...for 2 Anschlagpunkte	...for 3/4 lifting points
designation				
VRBK-FIX-4 t	4	4	5,6	8,4
VRBK-FIX-6,7 t	6,7	6,7	9,4	14,1
VRBK-FIX-10 t	10	10	14	21,2
VRBK-FIX-16 t	16	16	22,4	33,6
VRBK-FIX-31,5 t	31,5	31,5	45	67
VRBK-FIX-50 t	50	50	70	105



- pivots up to 270°
- no subsurface corrosion: circumferential HY weld seam
- ideal for use on edges

ABA/WELDABLE LIFTING POINT – FULL WLL IN ALL DIRECTIONS

directions of pull...	...for 1 lifting point		...for 2 lifting points	...for 3/4 lifting points
designation				
ABA-0,8t	0,8 (2)	0,8 (2)	1,12 (2,8)	1,6 (4,25)
ABA-1,6t	1,6 (4)	1,6 (4)	2,2 (5,6)	3,4 (8,4)
ABA-3,2t	3,2 (9)	3,2 (9)	4,5 (12,6)	6,7 (18,9)
ABA-5t	5 (12)	5 (12)	7 (16,8)	10,5 (25,2)
ABA-10 t	10 (20)	10 (20)	14 (28)	21,2 (42)
ABA-20 t	20	20	28	42
ABA-31,5t	31,5	31,5	45	67



- forged lifting point
- clear WLL marking
- circular fillet weld

() = WLL X planar to the ring

* = At inclination angles > 45-60° the WLL must be reduced by 30 %.

ADVICE! If the load is distributed asymmetrically, a single lashing point must be able to bear the entire load!

LIFTING CHAINS – GRADE 80, 100, 120

Working Load Limit in [t] at symmetrical load

Lifting Chains Grade 80

Lifting Chains VIP 100 Grade 100

Lifting Chains ICE 120 Grade 120



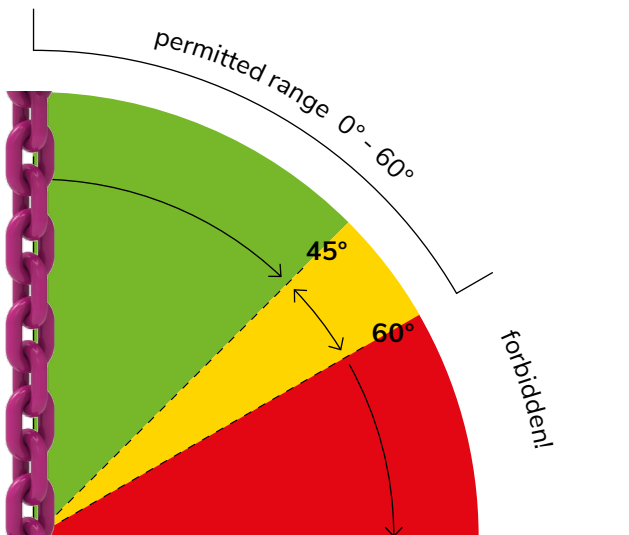
		1-leg	2-leg		3- and 4-leg		2 x 2-leg balancer
							
load angle β		0	0–45°	> 45–60°	0–45°	> 45–60°	0–45°
load factor		1	1,4	1	2,1	1,5	2,8
chain diameter	grade						
4	VIP-10	0,63	0,88	0,63	1,32	0,95	–
4	ICE-12	0,8	1,12	0,8	1,7	1,18	–
6	GK-8	1,12	1,6	1,12	2,36	1,7	–
6	VIP-10	1,5	2,1	1,5	3,15	2,25	4,2
6	ICE-12	1,8	2,52	1,8	3,75	2,7	5,1
8	GK-8	2	2,8	2	4,25	3	–
8	VIP-10	2,5	3,5	2,5	5,25	3,75	7
8	ICE-12	3	4,25	3	6,3	4,5	8,4
10	GK-8	3,15	4,25	3,15	6,7	4,75	–
10	VIP-10	4	5,6	4	8,4	6	11,2
10	ICE-12	5	7,1	5	10,6	7,5	14,1
13	GK-8	5,3	7,5	5,3	11,2	8	–
13	VIP-10	6,7	9,5	6,7	14,1	10	19
13	ICE-12	8	11,2	8	17	11,8	22,6
16	GK-8	8	11,2	8	17	11,8	–
16	VIP-10	10	14	10	21,2	15	28
16	ICE-12	12,5	17	12,5	26,5	19	35,3
18	GK-8	10	14	10	21,2	15	–
20	GK-8	12,5	17	12,5	26,5	19	–
20	VIP-10	16	22,4	16	33,6	24	45
22	GK-8	15	21,2	15	31,5	22,4	–
22	VIP-10	20	28	20	42	30	56
26	GK-8	21,2	30	21,2	45	31,5	–
28	VIP-10	31,5	45	31,5	67 *	47,5 *	89
32	GK-8	31,5	45	31,5	67,5	47,5	–

DGUV-R 109-017: When using multiple leg slings in an unsymmetrical lift the 1-leg WLL becomes valid. When choke hitch is applied the WLL has to be reduced by 20%!

ATTENTION! Before each use of sling chains mind the certification stamp acc. to DIN EN 818, to avoid mixing of sling chains of different quality grades and non-proved chains.

Please observe user instruction! *2 x 2 leg version.

LOAD ANGLE β



Please regard the RUD user instructions!

Service and inspection at regular intervals.

Correct handling.



RUD Ketten
Rieger & Dietz GmbH u. Co. KG

Friedensinsel
73432 Aalen, Germany

Phone: +49 7361 504-1070

Fax: +49 7361 504-1460

sling@rud.com

slingandlashing.rud.com

