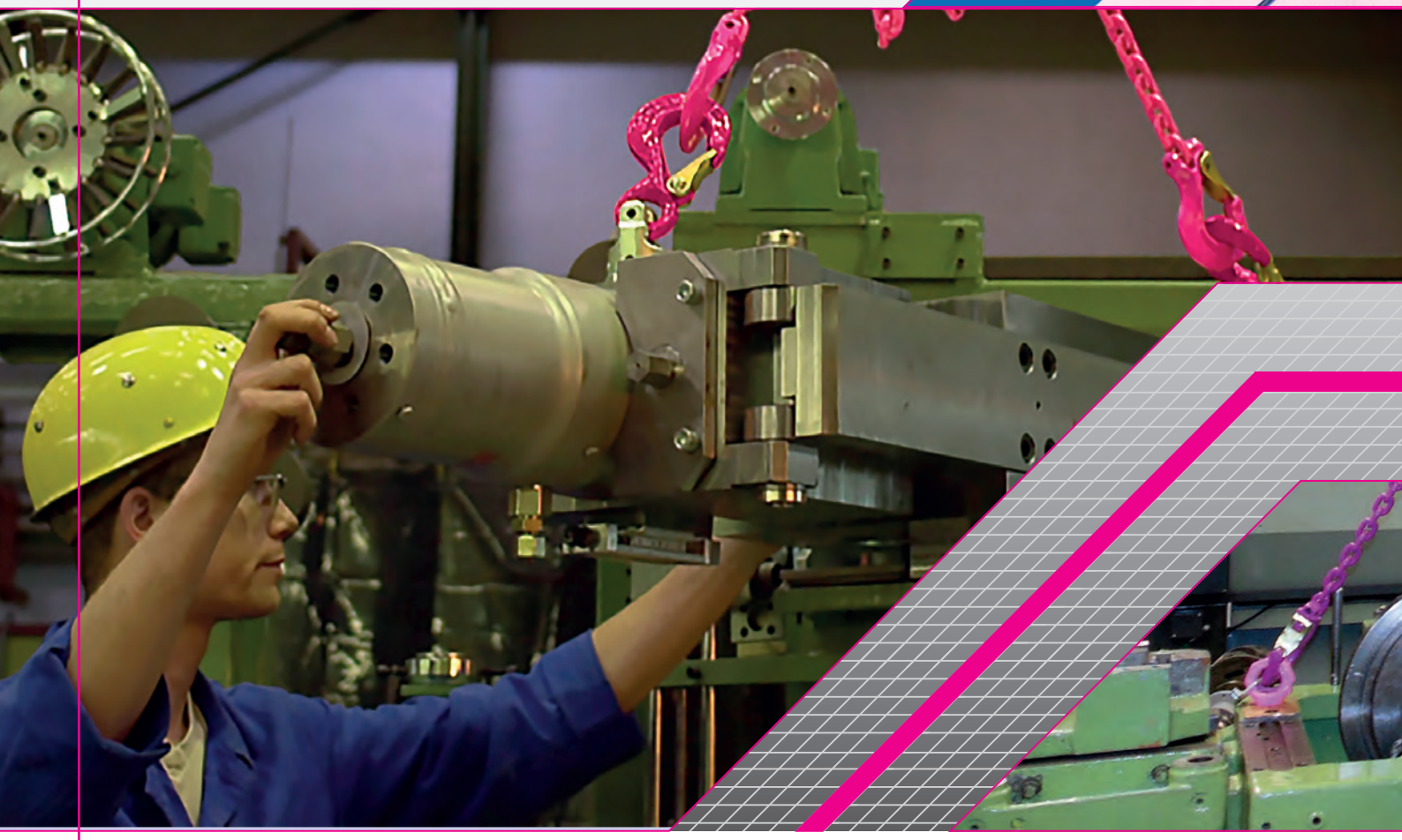
RUD®

Tradition in Dynamic Innovation

Lifting / Lashing Points

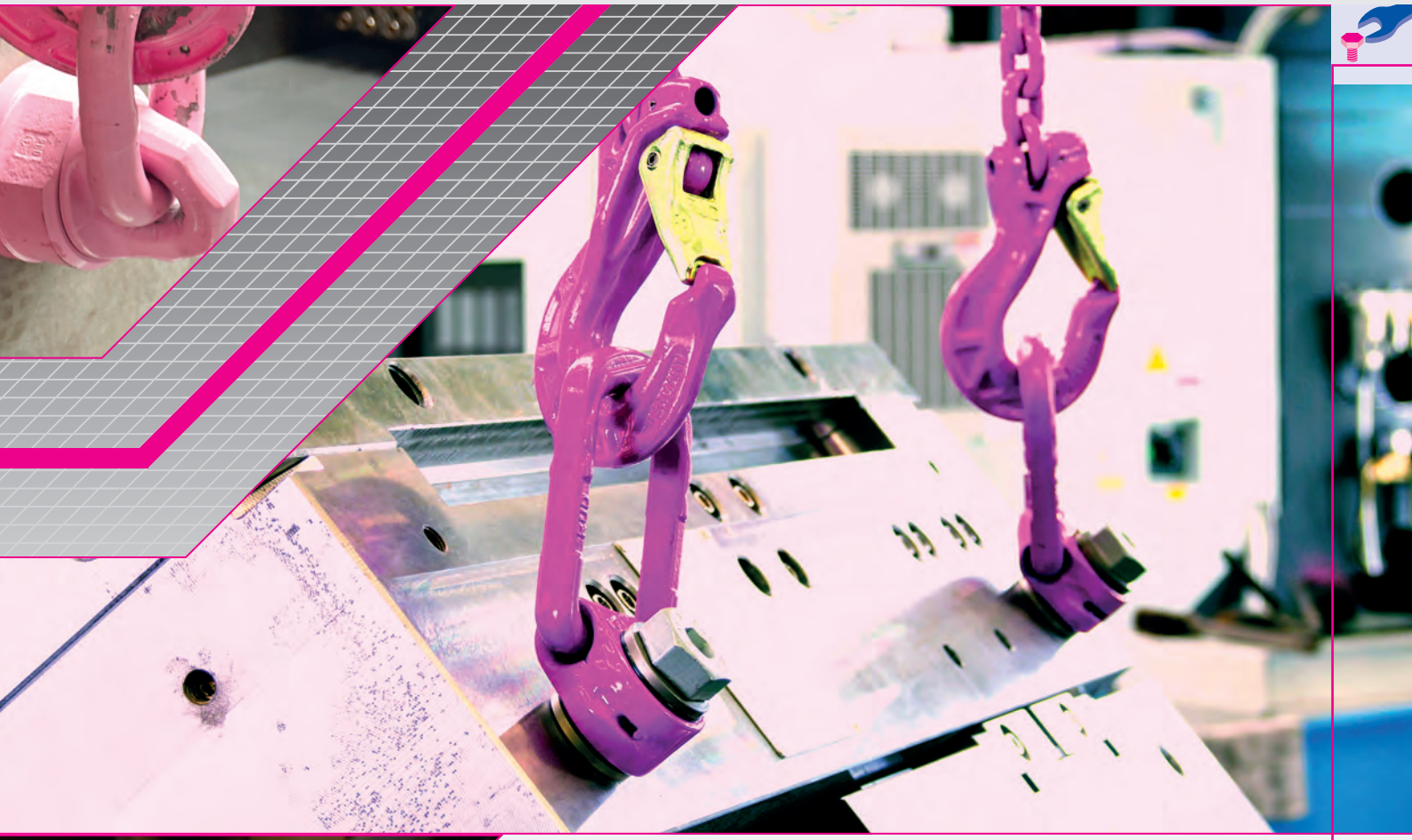
Edition 01 // EN

Professionally designed for every construction

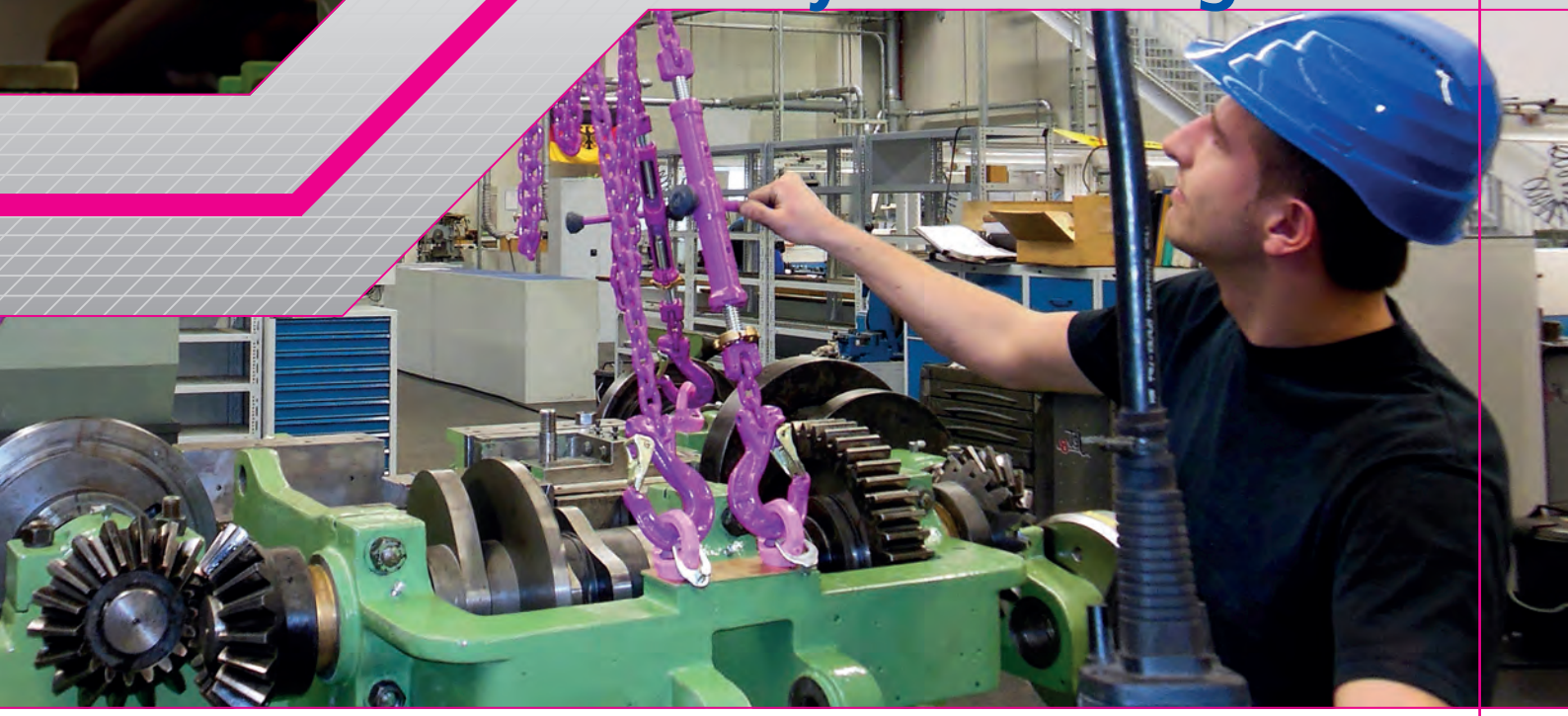


MADE IN GERMANY

RUD®



Lifting points ready for bolting



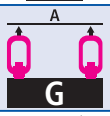
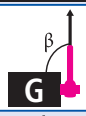
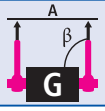
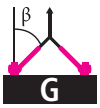
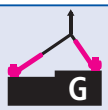
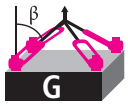
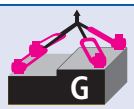
WORKING LOAD LIMIT

Maximum transport weight "G" in [t] with different lifting points

Thread sizes
M8 – M48
further thread types and special lengths on request.

see p.46

ICE-LBG-SR
ICE Load ring for bolting Super Rotation

type			0.3 t	0.63 t	1 t	1.5 t	2.5 t	4 t	5 t	8 t	10 t	15 t	20 t
thread size			M8	M10	M12	M16	M20	M24	M30	M36	M42	M42	M48
number of legs		β											
	1	0°	0.3	0.63	1	1.5	2.5	4	5	8	10	15	20
	2	0°	0.6	1.26	2	3	5	8	10	16	20	30	40
	1	90°	0.3	0.63	1	1.5	2.5	4	5	8	10	15	20
	2	90°	0.6	1.26	2	3	5	8	10	16	20	30	40
	2	0-45°	0.42	0.88	1.4	2.1	3.5	5.6	7	11.2	14	21	28
	2	45-60°	0.3	0.63	1	1.5	2.5	4	5	8	10	15	20
	2	unsym-metrical	0.3	0.63	1	1.5	2.5	4	5	8	10	15	20
	3+4	0-45°	0.63	1.32	2.1	3.15	5.25	8.4	10.5	16.8	21	31.5	42
	3+4	45-60°	0.45	0.95	1.5	2.25	3.75	6	7.5	12	15	22.5	30
	3+4	unsym-metrical	0.3	0.63	1	1.5	2.5	4	5	8	10	15	20

LIFTING

Lifiting points – ready for bolting

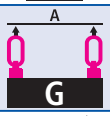
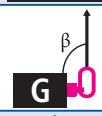
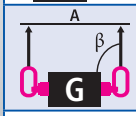
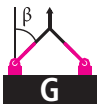
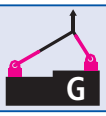
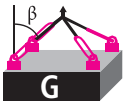
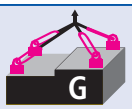
WORKING LOAD LIMIT

Maximum transport weight "G" in [t] with different lifting points

Thread sizes
M8 – M30
5/16" – 1 ¼"
further thread types and special lengths on request.

see p.52

VWBG-V
VIP Load ring for bolting -Vario

type			**0.3 t** (0.4 t)	**0.45 t** (0.6 t)	**0.6 t** (0.75 t)	**1 t** (1.25 t)	**1.3 t** (1.5 t)	**1.8 t** (2 t)	**2 t** (2.5 t)	**3.5 t** (4 t)	**5 t** (6 t)
thread size			M8	M10	M12	M14	M16	M18	M20 M22	M24 M27	M30
number of legs		β	5/16"	3/8"	1/2"	–	5/8"	–	3/4"	1"	1 1/4"
	1	0°	0.6	0.9	1.2	2	2.6	3.6	4	7	10
	2	0°	1.2	1.8	2.4	4	5.2	7.2	8	14	20
	1	90°	0.3 (0.4)	0.45 (0.6)	0.6 (0.75)	1 (1.25)	1.3 (1.5)	1.8 (2)	2 (2.5)	3.5 (4)	5 (6)
	2	90°	0.6 (0.8)	0.9 (1.2)	1.2 (1.5)	2 (2.5)	2.6 (3)	3.6 (4)	4 (5)	7 (8)	10 (12)
	2	0-45°	0.42 (0.56)	0.63 (0.84)	0.84 (1.05)	1.4 (1.75)	1.81 (2.1)	2.52 (2.8)	2.8 (3.5)	4.9 (5.6)	7 (8.4)
	2	45-60°	0.3 (0.4)	0.45 (0.6)	0.6 (0.75)	1 (1.25)	1.3 (1.5)	1.8 (2)	2 (2.5)	3.5 (4)	5 (6)
	2	unsym-metrical	0.3 (0.4)	0.45 (0.6)	0.6 (0.75)	1 (1.25)	1.3 (1.5)	1.8 (2)	2 (2.5)	3.5 (4)	5 (6)
	3+4	0-45°	0.63 (0.84)	0.94 (1.26)	1.26 (1.57)	2.1 (2.62)	2.73 (3.15)	3.78 (4.2)	4.2 (5.25)	7.35 (8.4)	10.5 (12.6)
	3+4	45-60°	0.45 (0.6)	0.67 (0.9)	0.9 (1.12)	1.5 (1.87)	1.95 (2.25)	2.7 (3)	3 (3.75)	5.25 (6)	7.5 (9)
	3+4	unsym-metrical	0.3 (0.4)	0.45 (0.6)	0.6 (0.75)	1 (1.25)	1.3 (1.5)	1.8 (2)	2 (2.5)	3.5 (4)	5 (6)

Higher WLL () due to optimised attachment or usage (see product page).

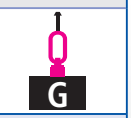
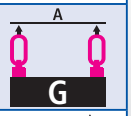
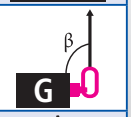
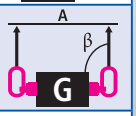
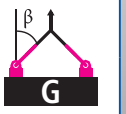
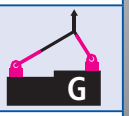
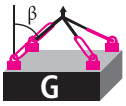
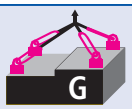
LIFTING

Lifiting points – ready for bolting

VWBG
VIP Load ring for bolting

Thread sizes
M33 – M150
1 ½" – 5"
further thread types and special lengths on request.

see p.52

6 t (7.5 t)	**8 t** (10 t)	**12 t** (13 t)	**12 t** (15 t)	**13 t** (16 t)	**14 t** (20 t)	**16 t** (22 t)	**16 t** (25 t)	**31.5 t** (40 t)	**35 t** (48 t)	**40 t** (50 t)	type		
M33 –	M36–M39 1 1/2"	M42–M45 1 3/4"–1 7/8"	M45 –	M48–M52 2"	M52 –	M56–M62 2 1/4"–2 1/2"	M64–M76 2 3/4"–3"	M72–M76 3"	M80–M85 3 1/2"	M90–M150 4"– 5"	thread size		
											β	number of legs	
15	15	17	18	18	25	28	28	50	50	50	0°	1	
30	30	34	36	36	50	56	56	100	100	100	0°	2	
6 (7.5)	8 (10)	12 (13)	12 (15)	13 (16)	14 (20)	16 (22)	16 (25)	31.5 (40)	35 (48)	40 (50)	90°	1	
12 (15)	16 (20)	24 (26)	24 (30)	26 (32)	28 (40)	32 (44)	32 (50)	63 (80)	70 (96)	80 (100)	90°	2	
8.4 (10.5)	11.2 (14)	16.8 (18.2)	16.8 (21)	18.2 (22.4)	19.6 (28)	22.4 (30.8)	22.4 (35)	44.1 (56)	49 (67.2)	56 (70)	0-45°	2	
6 (7.5)	8 (10)	12 (13)	12 (15)	13 (16)	14 (20)	16 (22)	16 (25)	31.5 (40)	35 (48)	40 (50)	45-60°	2	
6 (7.5)	8 (10)	12 (13)	12 (15)	13 (16)	14 (20)	16 (22)	16 (25)	31.5 (40)	35 (48)	40 (50)	unsym-metrical	2	
12.6 (15.75)	16.8 (21)	25.2 (27.3)	25.2 (31.5)	27.3 (33.6)	29.4 (42)	33.6 (46.2)	33.6 (52.5)	66.15 (84)	73.5 (100.8)	84 (105)	0-45°	3+4	
9 (11.2)	12 (15)	18 (19.5)	18 (22.5)	19.5 (24)	21 (30)	24 (33)	24 (37.5)	47.25 (60)	52.5 (72)	60 (75)	45-60°	3+4	
6 (7.5)	8 (10)	12 (13)	12 (15)	13 (16)	14 (20)	16 (22)	16 (25)	31.5 (40)	35 (48)	40 (50)	unsym-metrical	3+4	

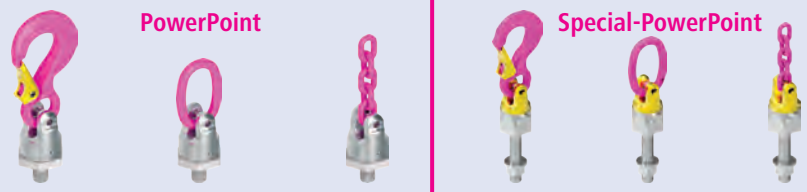
Higher WLL () due to optimised attachment or usage (see product page).

WORKING LOAD LIMIT

Maximum transport weight "G" in [t] with different lifting points

Thread sizes
M12 – M36
½" – ¼"
further thread types and special lengths on request.

see p.62



	PowerPoint			Special-PowerPoint		
	PP-S	**PP-B**	**PP-VIP**	**So-PP-S**	**/ -B**	**/ -VIP**
	S-Star / B-Ring connect. / VIP chain connect.			S-Star / B-Ring connect. / VIP chain connect.		
type	**0,63 t**	**1,5 t**	**2,5 t**	**4 t**	**5 t**	**8 t**	**0,6 t**	**1,3 t**	**2 t**	**3,5 t**	**5 t**	**8 t**
thread size	M12	M16	M20	M24	M30	M36	M12	M16	M20 M22	M24 M27	M30	M36
	1/2"	5/8"	7/8"	1"	1 1/4"	1 1/2"	1/2"	5/8"	3/4"	1"	1/4"	–

number of legs	β	PP-S	PP-B	PP-VIP	So-PP-S	/ -B	/ -VIP
1	0°	0.63	1.5	2.5	4	6.7	10	0.63	1.5	2.5	4	6.7	10
2	0°	1.26	3	5	8	13.4	20	1.26	3	5	8	13.4	20
1	90°	0.63	1.5	2.5	4	5	8	0.6	1.3	2	3.5	5	8
2	90°	1.26	3	5	8	10	16	1.2	2.6	4	7	10	16
2	0-45°	0.88	2.1	3.5	5.6	7	11.2	0.84	1.82	2.8	4.9	7	11.2
2	45-60°	0.63	1.5	2.5	4	5	8	0.6	1.3	2	3.5	5	8
2	unsym-metrical	0.63	1.5	2.5	4	5	8	0.6	1.3	2	3.5	5	8
3+4	0-45°	1.32	3.15	5.25	8.4	10.5	16.8	1.26	2.73	4.2	7.35	10.5	16.8
3+4	45-60°	0.95	2.25	3.75	6	7.5	12	0.9	1.95	3	5.25	7.5	12
3+4	unsym-metrical	0.63	1.5	2.5	4	5	8	0.6	1.3	2	3.5	5	8

LIFTING

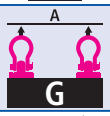
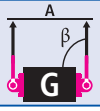
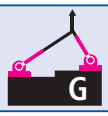
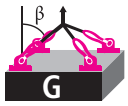
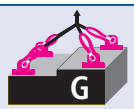
Lifiting points – ready for bolting

WBPG

Hoist ring boltable on plate

Thread sizes
M48

see p.72

85 t	100 t	120 t	150 t	200 t	250 t	type		
6×M48	6×M48	6×M48	10×M42	10×M48	12×M48	thread size		
						β	number of legs	
85	100	120	150	200	250	0°	1	
170	200	240	300	400	500	0°	2	
85	100	120	150	200	250	90°	1	
170	200	240	300	400	500	90°	2	
119	140	168	210	280	350	0-45°	2	
85	100	120	150	200	250	45-60°	2	
85	100	120	150	200	250	unsym-metrical	2	
178	210	252	315	420	525	0-45°	3+4	
127	150	180	225	300	375	45-60°	3+4	
85	100	120	150	200	250	unsym-metrical	3+4	

WORKING LOAD LIMIT

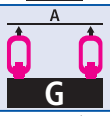
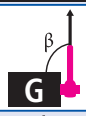
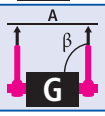
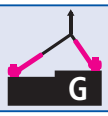
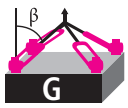
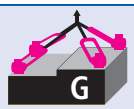
Maximum transport weight "G" in [t] with different lifting points

Thread sizes
M8 – M48
3/8" – 2"
further thread types and special lengths on request.

see p.76

VLBG
VIP Load ring for bolting

LBG-RS
Load ring for bolting
stainless steel

type			0.3 t	0.63t	1 t	1.2 t	1.5 t	2 t	2.5 t	4 t	5 t	7 t	8 t	10 t	15 t	20 t	1 t	2 t
thread size			M8	M10	M12	M14	M16	M18	M20 M22	M24 M27	M30	M36	M36	M42	M42	M48	M16	M20
			–	3/8"	1/2"	–	5/8"	–	3/4"	1"	1 1/4"	–	1-1/2"	–	–	2"	–	–
number of legs		β																
	1	0°	0.3	0.63	1	1.2	1.5	2	2.5	4	5	7	8	10	15	20	1	2
	2	0°	0.6	1.26	2	2.4	3	4	5	8	10	14	16	20	30	40	2	4
	1	90°	0.3	0.63	1	1.2	1.5	2	2.5	4	5	7	8	10	15	20	1	2
	2	90°	0.6	1.26	2	2.4	3	4	5	8	10	14	16	20	30	40	2	4
	2	0-45°	0.42	0.88	1.4	1.68	2.1	2.8	3.5	5.6	7	9.8	11.2	14	21	28	1.4	2.8
	2	45-60°	0.3	0.63	1	1.2	1.5	2	2.5	4	5	7	8	10	15	20	1	2
	2	unsym-metrical	0.3	0.63	1	1.2	1.5	2	2.5	4	5	7	8	10	15	20	1	2
	3+4	0-45°	0.63	1.32	2.1	2.52	3.15	4.2	5.25	8.4	10.5	14.7	16.8	21	31.5	42	2.1	4.2
	3+4	45-60°	0.45	0.95	1.5	1.8	2.25	3	3.75	6	7.5	10.5	12	15	22.5	30	1.5	3
	3+4	unsym-metrical	0.3	0.63	1	1.2	1.5	2	2.5	4	5	7	8	10	15	20	1	2

LIFTING

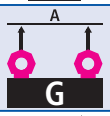
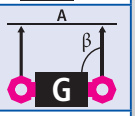
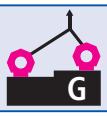
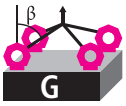
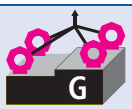
Lifiting points – ready for bolting

VRS "STARPOINT"

Vario eye bolt "STARPOINT"

Thread sizes
M6 – M48
¼" – 2"
further thread types and special lengths on request.

see p.84

0.1 t	0.3 t	0.4 t	0.75 t	1.5 t	2.3 t	3.2 t	4.5 t	7 t	9 t	12 t	type		
M6	M8	M10	M12 M14	M16 M18	M20 M22	M24 M27	M30 M33	M36	M42	M48	thread size		
1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1" – 1 1/8"	1 1/4"	1 1/2"	1 3/4"	2"	β	number of legs	
0.5	1	1	2	4	6	8	12	16	24	32	0°	1	
1	2	2	4	8	12	16	24	32	48	64	0°	2	
0.1	0.3	0.4	0.75	1.5	2.3	3.2	4.5	7	9	12	90°	1	
0.2	0.6	0.8	1.5	3	4.6	6.4	9	14	18	24	90°	2	
0.14	0.42	0.56	1	2.1	3.22	4.48	6.3	9.8	12.6	16.8	0-45°	2	
0.1	0.3	0.4	0.75	1.5	2.3	3.2	4.5	7	9	12	45-60°	2	
0.1	0.3	0.4	0.75	1.5	2.3	3.2	4.5	7	9	12	unsym-metrical	2	
0.21	0.63	0.84	1.6	3.15	4.83	6.7	9.4	14.7	18.9	25.2	0-45°	3+4	
0.15	0.45	0.6	1.12	2.25	3.45	4.8	6.7	10.5	13.5	18	45-60°	3+4	
0.1	0.3	0.4	0.75	1.5	2.3	3.2	4.5	7	9	12	unsym-metrical	3+4	

Higher WLL due to optimized attachment or usage (see product page).

WORKING LOAD LIMIT

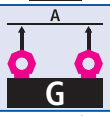
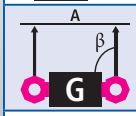
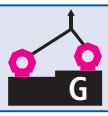
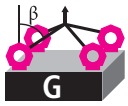
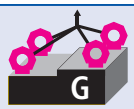
Maximum transport weight "G" in [t] with different lifting points

Thread sizes
M6 – M30
further thread types and special lengths on request.

VRM: see p.96
INOX-STAR: see p.98

VRM "STARPOINT" *
Vario eye nut "STARPOINT"

INOX-STAR
Stainless steel eye bolt

type			0.1 t	0.3 t	0.4 t	0.75 t	1.5 t	2.3 t	3.2 t	4.5 t	0.5 t	1 t	2 t	2.5 t
thread size			M6	M8	M10	M12	M16	M20	M24	M30	M12	M16	M20	M24
number of legs		β												
	1	0°	0.5	1	1	2	4	6	8	12	1.2	2.4	3.6	5.2
	2	0°	1	2	2	4	8	12	16	24	2.4	4.8	7.2	10.4
	1	90°	0.1	0.3	0.4	0.75	1.5	2.3	3.2	4.5	0.5	1	2	2.5
	2	90°	0.2	0.6	0.8	1.5	3	4.6	6.4	9	1	2	4	5
	2	0-45°	0.14	0.42	0.56	1	2.1	3.22	4.48	6.3	0.7	1.42	2.83	3.53
	2	45-60°	0.1	0.3	0.4	0.75	1.5	2.3	3.2	4.5	0.5	1	2	2.5
	2	unsym-metrical	0.1	0.3	0.4	0.75	1.5	2.3	3.2	4.5	0.5	1	2	2.5
	3+4	0-45°	0.21	0.63	0.84	1.6	3.15	4.83	6.7	9.4	1.06	2.12	4.24	5.3
	3+4	45-60°	0.15	0.45	0.6	1.12	2.25	3.45	4.8	6.7	0.75	1.5	3	3.75
	3+4	unsym-metrical	0.1	0.3	0.4	0.75	1.5	2.3	3.2	4.5	0.5	1	2	2.5

* WLL of the VRM are only in effect when using a quality grade 10.9 threaded bolt.

LIFTING

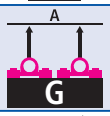
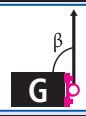
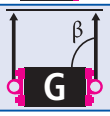
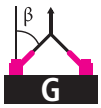
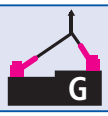
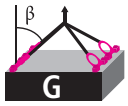
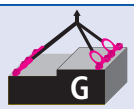
Lifiting points – ready for bolting

RBG
Load ring eye plate (3 t)
-threaded

VRBG
VIP Load ring eye plate (10 t/16 t)
-threaded

VRBG
(31,5 t/50 t)

Thread sizes
M16 – M36
WLL
3 t – 50 t
see p.100

3 t	10 t	16 t	31.5 t	50 t	type		
2 × M16	4 × M20	4 × M30	6 × M30	8 × M36	thread size		
					β	number of legs	
3	10	16	31.5	50	0°	1	
6	20	32	63	100	0°	2	
3	10	16	31.5	50	90°	1	
6	20	32	63	100	90°	2	
4.2	14	22.4	44.1	70	0-45°	2	
3	10	16	31.5	50	45-60°	2	
3	10	16	31.5	50	unsym-metrical	2	
6.3	21	33.6	66.2	105	0-45°	3+4	
4.5	15	24	47.5	75	45-60°	3+4	
3	10	16	31.5	50	unsym-metrical	3+4	

WORKING LOAD LIMIT

Maximum transport weight "G" in [t] with different lifting points

Thread sizes

M20 – M64

further thread types and special lengths on request.

see p.106

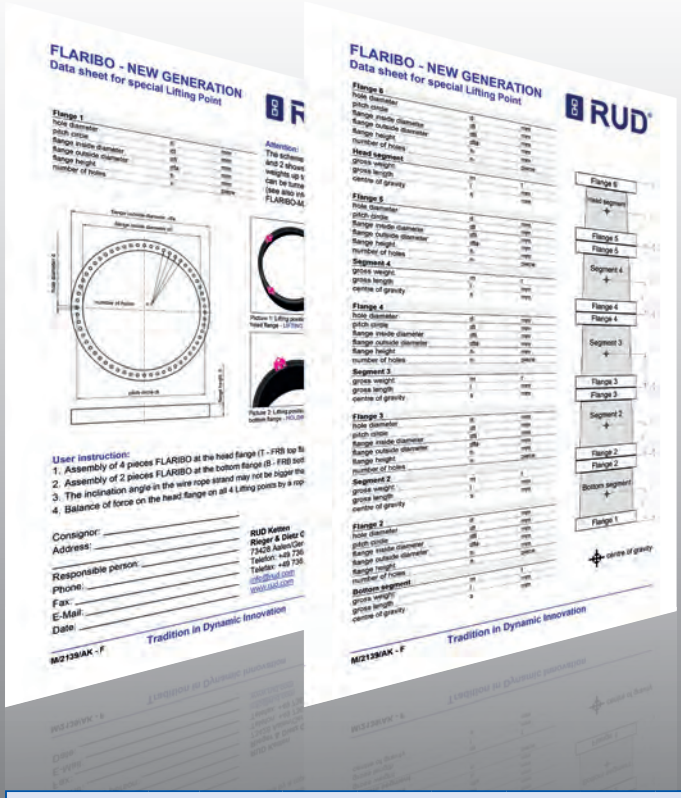
T-FRB
Flange Load ring top flange

B-FRB
Flange Load ring bottom flange

Ideal for lifting and rotating pipes and components with flanges.

WLL of up to 31.5 t, load weight of up to 118 t.

Actual lifting capacity depends on component dimensions. If you would like further technical information or have any questions, simply contact your specialist distributor or go to www.rud.com.



Extract from the FLARIBO questionnaire

Flange measurements: Bore diameter, segmental diameter, inner flange diameter, outer flange diameter, flange height, …

T-FRB / B-FRB
Questionnaire
PDF-download

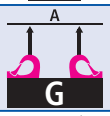
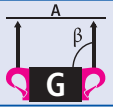
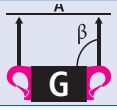
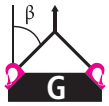
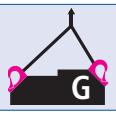
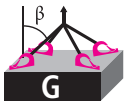
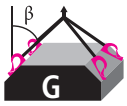
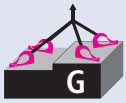
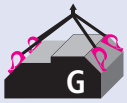
LIFTING

Lifiting points – ready for bolting

Thread sizes
M6 – M24
WLL
1.5 t – 20 t
see p.110

VABH-B
VIP Excavator hook
for bolting

VCGH-G
VIP Excavator hook
for bolting

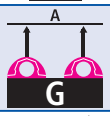
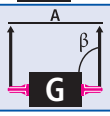
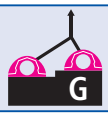
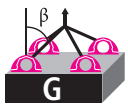
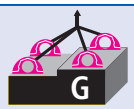
type			1.5 t	2.5 t	4 t	6.7 t		10 t	16 t	20 t
thread size			4×M10	4×M12	4×M16	6×M20		4×M24	6×M24	6×M24
number of legs		β								
	1	0°	1.5	2.5	4	6.7	assembly VCGH-G	–	–	–
	2	0°	3	5	8	13.4	↓	–	–	–
	1	90°	1.5	2.5	4	6.7		10	16	20
	2	90°	3	5	8	13.4		20	32	40
	2	0-45°	2.1	3.5	5.6	9.4		14	22.4	28
	2	45-60°	1.5	2.5	4	6.7		10	16	20
	2	unsym-metrical	1.5	2.5	4	6.7		10	16	20
	3+4	0-45°	3.15	5.25	8.4	14.1		21	33.6	42
	3+4	45-60°	2.25	3.75	6	10		15	24	30
	3+4	unsym-metrical	1.5	2.5	4	6.7		10	16	20

WORKING LOAD LIMIT

Maximum transport weight "G" in [t] with different lifting points

Thread sizes
M12 – M36
WLL
1.6 t – 31.5 t
see p.114

B-ABA
Boltable lifting point
full load in all directions

type			1.6 t	3.2 t	5 t	10 t	20 t	31.5 t
thread size			4×M12	4×M16	4×M20	4×M24	6×M30	6×M36
number of legs		β						
	1	0°	1.6	3.2	5	10	20	31.5
	2	0°	3.2	6.4	10	20	40	63
	1	90°	1.6	3.2	5	10	20	31.5
	2	90°	3.2	6.4	10	20	40	63
	2	0-45°	2.2	4.5	7.1	14.1	28	45
	2	45-60°	1.6	3.2	5	10	20	31.5
	2	unsym-metrical	1.6	3.2	5	10	20	31.5
	3+4	0-45°	3.4	6.8	10.6	21.2	42	67
	3+4	45-60°	2.4	4.8	7.5	15	30	47.5
	3+4	unsym-metrical	1.6	3.2	5	10	20	31.5

LIFTING

Lifiting points – ready for bolting

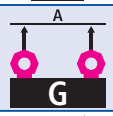
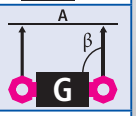
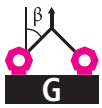
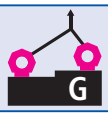
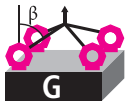
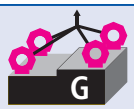
RS
Eye bolt

RM
Eye nut

Thread sizes
M6 – M48
further thread types and special lengths on request.

see p.116

0.1 t	0.2 t	0.25 t	0.4 t	0.75 t	1 t (0,8 t)	1.5 t	2 t	3 t	4 t	6 t	8 t	type
M6	M8	M10	M12	M14	M16	M20	M24	M30	M36	M42	M48	thread size
1/4"	5/16"	3/8"	7/16"	9/16"	5/8"	7/8"	1"	1 1/4" 1 3/8"	1 1/2"	1 3/4"	2"	
0.4	0.8	1	1.6	3	4 (3,2)	6	8	12	16	24	32	
0.8	1.6	2	3.2	6	8 (6,4)	12	16	24	32	48	64	
0,1	0,2	0,25	0,4	0,75	1 (0,8)	1,5	2	3	4	6	8	

β	number of legs	
0°	1	
0°	2	
90°	1	
90°	2	
0-45°	2	
45-60°	2	
unsym-metrical	2	
0-45°	3+4	
45-60°	3+4	
unsym-metrical	3+4	

We recommend to use either "VRS-Starpoint" or "VRM-Starpoint eye nut" which can be adjusted to the direction of pull!

() = deviating WLL of the RM

SUPER ROTATION®

ICE-LBG-SR

ICE Load ring for bolting Super Rotation

MADE IN GERMANY

RUD®

ICE-bolt with revolutionary mechanical characteristics

No loosening thanks to Super Rotation®

Double SR-ball bearing, rotating 360° under load

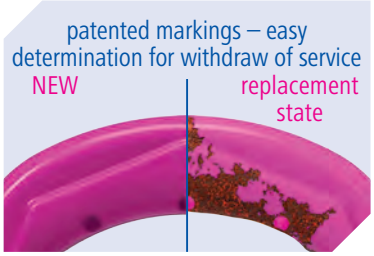
The revolution in rotating under loads

© wortundform

SUPER ROTATION®

ICE-LBG-SR

First lifting point with unsymmetrical force introduction rotating under load.

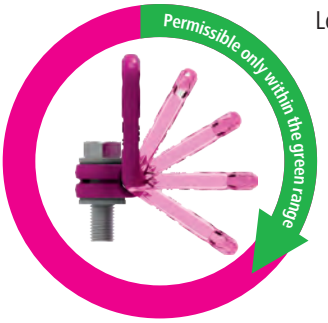


Product features ICE-LBG-SR

- **SR-ball bearing** is the optimal solution for permanent turning and flipping actions at WLL and without loosening the mounting bolt.
- **Captive but exchangeable ICE-Bolt** made out of patented steel with special corrosion protection Corrud-DT. Non-hazardous low temperature usage; higher toughness and therefore higher bending strength as well as less wear occurance. Original ICE-Bolt is available as a spare part. Clear marking at the bolt head: RUD, ICE, thread size, batch-no., class of strength.
- **Lifting point pivots 360°. Suspension ring pivots 180°.**
- **Clear marking of the minimum WLL for all loading directions.** Marking with requested torque moment and nominal WLL with a safety factor of 4:1 (MD 2006/42/EC) and 5:1 (ASME B 30.26).
- **Patented markings** for easy determination for withdraw of service.
- **Clamping spring** works as a noise reduction and holds the suspension ring in the requested position; therefore simple hinge of lifting mean possible respectivley flat design if turned down.
- Available as:
  – Standard Metric Thread (DIN EN 13)
  – Variable bolt lengths available for tapped or through holes (see p.50).
- Significant product characteristics of the ICE-LBG-SR are subject to property right claims
- ICE-LBG-SR: Tested and certified by DGUV
  Testing specifications:
  GS-OA-15-04:2012-05
  Certificate No.: OA 1551026

ICE-LBG-SR

ICE Load ring for bolting SUPER ROTATION



Load direction

Application-specific features ICE-LBG-SR

- Quick and easy installation with just one bolt connection.
- Assembly with flat / ring wrench or allen key possible.
- Hand tightening with appropriate wrench is sufficient for a singular lift.
- Please observe torque instructions when lifting point is permanently installed resp. at constant swivelling operations and tilting/ turning actions.

Other important RUD specific information and specialities to our RUD lifting points can be found on page 20 and in the specific user instruction (www.rud.com).

Accessories ICE-LBG-SR

For permanent installation of the lifting point for through hole fixtures we recommend the securing nut acc. to DIN 980-V (standard distribution, washer included), for variable installations with just one lifting action please use collar nut acc. to DIN 6331 (available upon request).

For special thread lengths in metric sizes, lock nuts (DIN 980-V crack tested) with washer are available. Collar nuts (DIN 6331, crack inspected) optionally on request.

ICE-LBG-SR // metric thread

SUPER ROTATION®

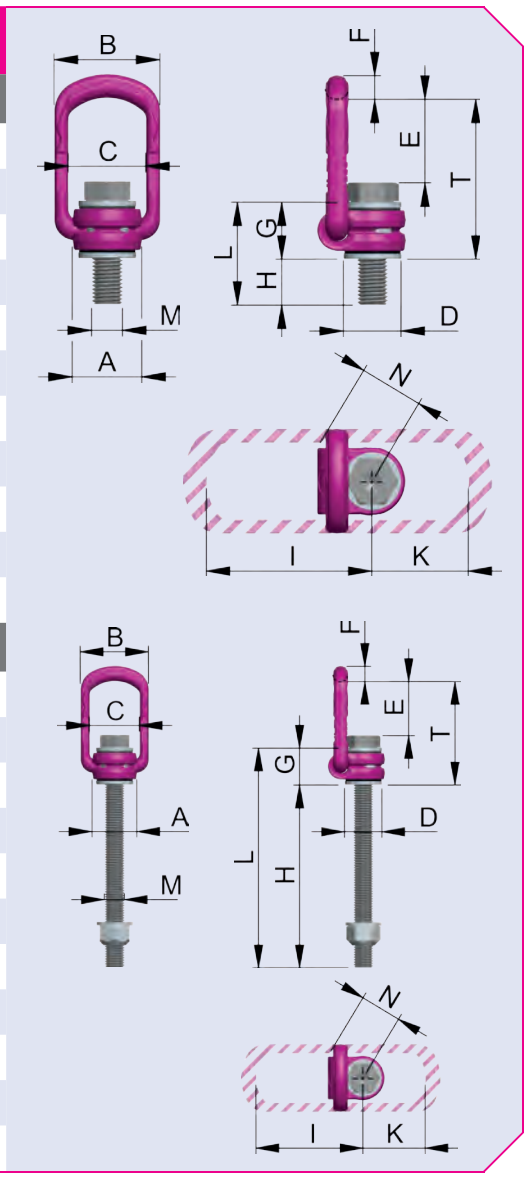
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
ICE-LBG-SR ICE Load ring for bolting Super Rotation® – metric										
ICE-LBG-SR 0.3 t M8	0.3	0.3	75	32	50	34	24	40	10	29
ICE-LBG-SR 0.63 t M10	0.63	0.31	74	32	50	34	24	39	10	29
ICE-LBG-SR 1 t M12	1	0.34	74	32	50	34	26	38	10	29
ICE-LBG-SR 1.5 t M16	1.5	0.52	84	36	54	40	30	39	13.5	34
ICE-LBG-SR 2.5 t M20	2.5	1.3	110	54	82	60	45	53	17	45
ICE-LBG-SR 4 t M24	4	1.4	125	54	82	60	45	66	18	45
ICE-LBG-SR 5 t M30	5	3.2	145	63	102	69	55	66	22.5	60
ICE-LBG-SR 8 t M36**	8	6.0	197	84	122	90	70	95	26.5	79
ICE-LBG-SR 10 t M42**	10	6.7	197	84	122	90	70	92	26.5	79
ICE-LBG-SR 15 t M42**	15	11.2	222	105	156	110	90	107	36	89
ICE-LBG-SR 20 t M48**	20	11.6	222	105	156	110	90	103	36	89

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
ICE-LBG-SR ICE Load ring for bolting Super Rotation® – metric, longer vario bolt										
ICE-LBG-SR 0.3 t M8	0.3	*	75	32	50	34	24	40	10	29
ICE-LBG-SR 0.63 t M10	0.63	*	74	32	50	34	24	39	10	29
ICE-LBG-SR 1 t M12	1	*	74	32	50	34	26	38	10	29
ICE-LBG-SR 1.5 t M16	1.5	*	84	36	54	40	30	39	13.5	34
ICE-LBG-SR 2.5 t M20	2.5	*	110	54	82	60	45	53	17	45
ICE-LBG-SR 4 t M24	4	*	125	54	82	60	45	66	18	45
ICE-LBG-SR 5 t M30	5	*	145	63	102	69	55	66	22.5	60
ICE-LBG-SR 8 t M36**	8	*	197	84	122	90	70	95	26.5	79
ICE-LBG-SR 10 t M42**	10	*	197	84	122	90	70	92	26.5	79
ICE-LBG-SR 15 t M42**	15	*	222	105	156	110	90	107	36	89
ICE-LBG-SR 20 t M48**	20	*	222	105	156	110	90	103	36	89

* = weight depends on design specifics
** = bolt with quality grade 10.9
*** = in preparation

SUPER ROTATION®

H [mm]	I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
12	75	43	41	M8	32	30	8504284
15	75	43	44	M10	32	60	8504285
18	75	43	47	M12	32	100	8504286
24	86	46	58	M16	38	150	8504287
30	113	61	75	M20	48	250	8504288
36	130	76	80	M24	48	400	8504289
45	151	79	105	M30	66	500	8504290
54	205	110	133	M36	87	800	in prep
73	205	110	152	M42	87	1000	in prep
63	230	130	152	M42	100	1500	in prep
72	230	130	161	M48	100	2000	in prep
8-76	75	43	37-105	M8	32	30	8600500
10-96	75	43	39-125	M10	32	60	8600501
12-116	75	43	41-145	M12	32	100	8600502
16-149	86	46	50-185	M16	38	150	8600504
20-187	113	61	65-230	M20	48	250	8600506
24-222	130	76	69-265	M24	48	400	8600508
30-279	151	79	90-340	M30	66	500	8600510
36-221	205	110	105-300	M36	87	800	***
42-271	205	110	111-350	M42	87	1000	***
42-261	230	130	121-350	M42	100	1500	***
48-301	230	130	137-390	M48	100	2000	***



subject to technical modifications

VWBG-V

VIP Load ring for bolting - Vario

VWBG

VIP Load ring for bolting

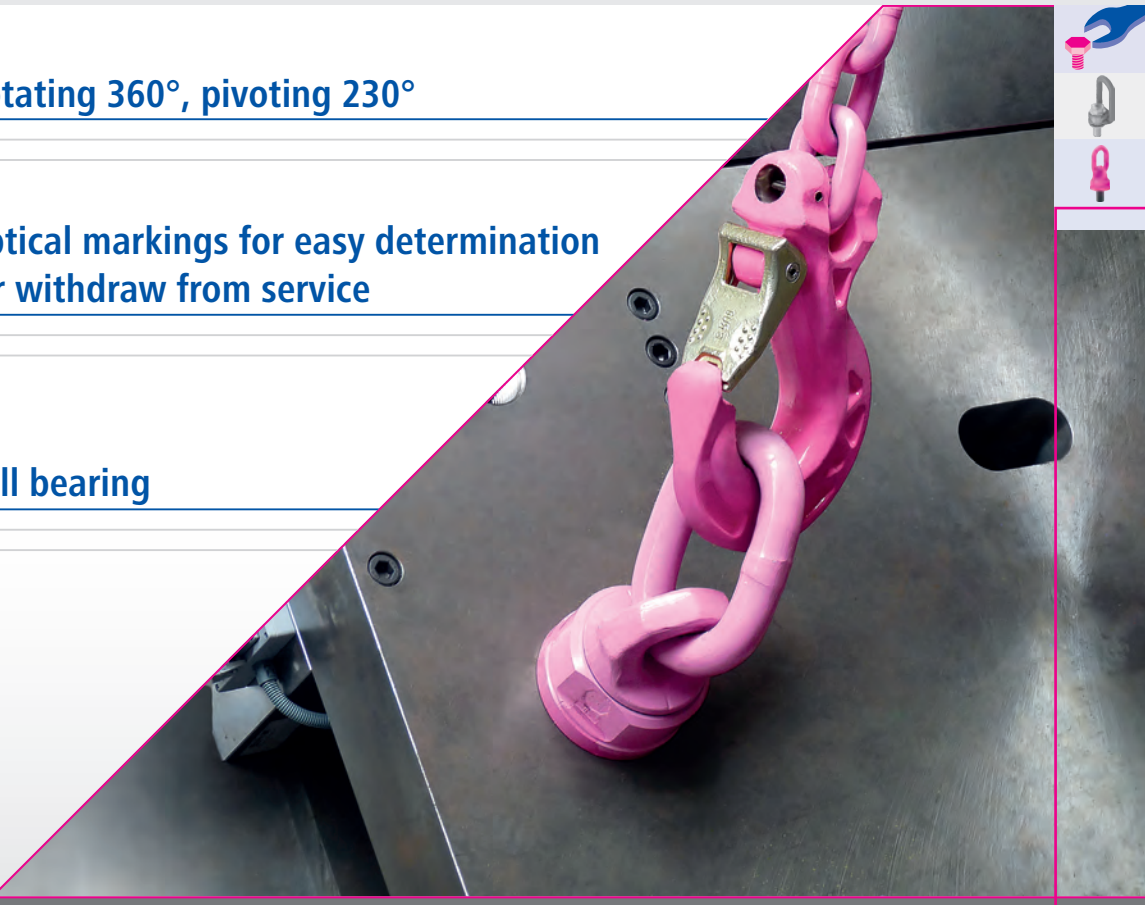
MADE IN GERMANY

RUD®

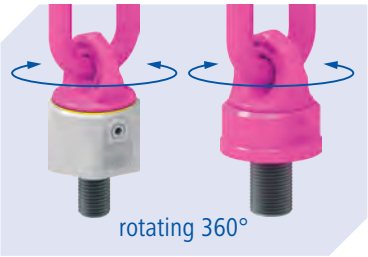
Rotating 360°, pivoting 230°

Optical markings for easy determination for withdraw from service

Ball bearing



Diversity, no matter how you turn it

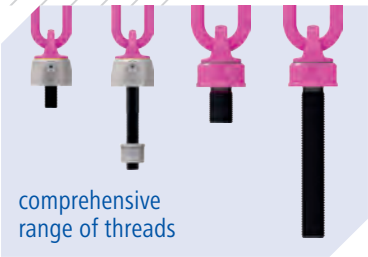


For rotating lifting situations. Rotating upright under WLL.

VWBG-V

VWBG

For heavy loads which need to be twisted and turned. Rotating 360° under WLL.



Product features VWBG-V // VWBG

VWBG: 8UN, UNF, BSW, G, -40°–200°C, 400°C max.

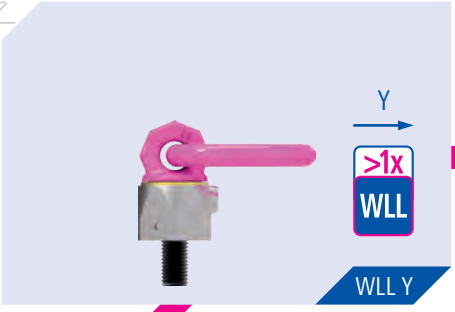
VWBG-V: -40°–100°C, 350°C max.

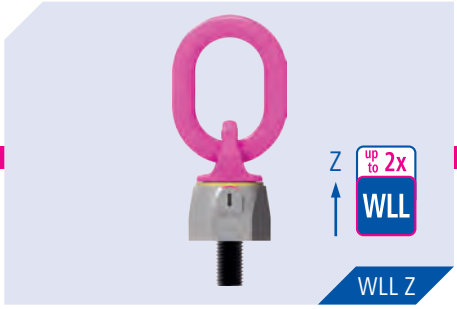
360°, 230°, M, MF, UNC, VARIO

- **Ball bearing for a shock-free rotating and turning with less friction.**
- **Lifting points pivots 360°.**
- **Suspension ring with enlarged pivoting area.**
- **Comprehensive range of threads and WLL** (M8 – M150 bzw. 0,3 t – 40 t).
  Available as:
  – Standard Metric Thread (DIN EN 13)
  – Metric Fine Thread (DIN EN 13)
  – Coarse Pitch Thread UNC (ANSI B1.1)
  – VWBG: Coarse thread BSW (BS84)
- **Clear marking of the minimum WLL for all loading directions.** Higher WLL possible when location and installation is optimised(compare WLL chart / product information).
- **Patented markings for easy determination for withdraw of service as well as the determination of the load angle.**
- Rotatable at nominal WLL, 90° to the bolt-on direction.
- Variable bolt lengths available for tapped or through holes (available nuts etc. see p.56).

VWBG-V / VWBG

VIP Load ring for bolting -Vario / VIP Load ring for bolting





VWBG-V and VWBG are used in several loading directions. In doing so, all positions of the suspension ring can occur.

Refer to the Working Load Limit chart on p.34.

Product features / Application-specific features VWBG-V / VWBG

- VWBG-V: RUD bolts with special corrosion protection Corrud-DT.
- Large distance between bolt-on surface and load to avoid damage.
- VWBG-V: Non removable special bolt (this reduces the risk of improper standard bolts).
- Component according to the test criterias of BG/DGUV "GS-OA-15-04"
- Quick and easy installation with just one bolt connection.
- Hand tightening with appropriate wrench is sufficient for a singular lift.
- Please observe torque instructions when lifting point is permanently installed resp. at constant swivelling operations and tilting/ turning actions.

Other important RUD specific information and specialities to our RUD lifting points can be found on page 20 and in the specific user instruction (www.rud.com).

Accessories VWBG-V / VWBG

For permanent installation of the lifting point for through hole fixtures we recommend the securing nut acc. to DIN 980-V (standard distribution, washer included), for variable installations with just one lifting action please use collar nut acc. to DIN 6331 (available upon request).

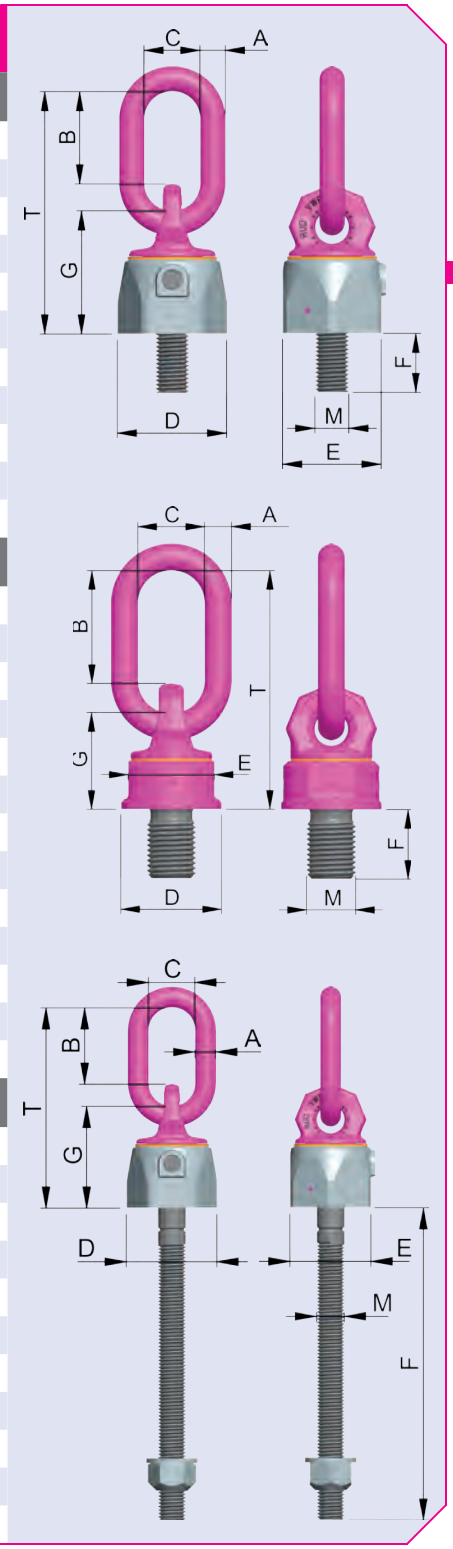
For special thread lengths in metric sizes, lock nuts (DIN 980-V crack tested) with washer are available. Collar nuts (DIN 6331, crack inspected) optionally on request.

VWBG-V / VWBG // metric thread / metric thread with longer Vario bolt

Type	WLL-X [t]	WLL-Y [t]	WLL-Z [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]
VWBG-V Load ring – metric							
VWBG-V 0.3-M8	0.3	0.4	0.6	0.18	76	8	31
VWBG-V 0.45-M10	0.45	0.6	0.9	0.29	78	8	31
VWBG-V 0.6-M12	0.6	0.75	1.2	0.41	107	10	49
VWBG-V 1.0-M14 (F=21)	1	1.25	2	0.63	114	13	46
VWBG-V 1.3-M16	1.3	1.5	2.6	0.59	114	13	46
VWBG-V 1.8-M18 (F=27)	1.8	2	3.6	1.18	137	13	54
VWBG-V 2.0-M20	2	2.5	4	1.42	137	13	54
VWBG-V 2.0-M22 (F=33)	2	2.5	4	1.45	137	13	54
VWBG-V 3.5-M24	3.5	4	7	2.63	173	18	66
VWBG-V 3.5-M27 (F=41)	3.5	4	7	2.65	173	18	66
VWBG-V 5.0-M30	5	6	10	5.09	221	22	90
VWBG Load ring – metric							
VWBG 6(7.5)t-M33 (F=50)	6	7.5	15	5.6	208	22	86
VWBG 8(10)t-M36	8	10	15	4.7	208	22	86
VWBG 12(13)t-M42	12	13	17	6.1	234	26	111
VWBG 12(15)t-M45	12	15	18	6.24	234	26	111
VWBG 13(16)t-M48	13	16	18	6.37	234	26	111
VWBG 14(20)t-M52	14	20	25	10.55	271	32	119
VWBG 16(22)t-M56	16	22	28	10.68	271	32	119
VWBG 16(22)t-M60 (F=90)	16	22	28	11.37	271	32	119
VWBG 16(25)t-M64	16	25	28	11.4	271	32	119
VWBG 31.5(40)t-M72	31.5	40	50	29.96	338	46	130
VWBG 35(48)t-M80	35	48	50	31.19	338	46	130
VWBG 40(50)t-M90	40	50	50	34.5	378	46	168
VWBG 40(50)t M100 (F= 150mm)	40	50	50	36.5	378	46	168
VWBG-V Load ring – metric with longer Vario bolt							
VWBG-V 0.3-M8	0.3	0.4	0.6	*	76	8	31
VWBG-V 0.45-M10	0.45	0.6	0.9	*	78	8	31
VWBG-V 0.6-M12	0.6	0.75	1.2	*	107	10	49
VWBG-V 1.0-M14	1	1.25	2	*	114	13	46
VWBG-V 1.3-M16	1.3	1.5	2.6	*	114	13	46
VWBG-V 1.8-M18	1.8	2	3.6	*	137	13	54
VWBG-V 2.0-M20	2	2.5	4	*	137	13	54
VWBG-V 2.0-M22	2	2.5	4	*	137	12	54
VWBG-V 3.5-M24	3.5	4	7	*	173	18	66
VWBG-V 3.5-M27	3.5	4	7	*	173	18	66
VWBG-V 5.0-M30	5	6	10	*	221	22	90

* = weight depends on design specifics

C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	M	torque [Nm]	Ref. No.
29	30	28	13	36	M8	10	7103720
29	33,5	30	17	38	M10	10	7103715
35	42	36	21	47	M12	10	7100180
38	48	41	21	56	M14	25	8600337
38	48	41	25	56	M16	30	7100430
35	62	55	27	67	M18	50	8600338
35	62	55	33	67	M20	70	7100800
35	62	55	33	67	M22	100	8600334
40	81	70	40	88	M24	150	7100640
40	81	70	41	88	M27	200	8600335
50	99	85	50	106	M30	225	7100650
50	90	80	50	96	M33	350	8600150
50	90	80	54	94	M36	410	7999059
65	98	85	63	95	M42	550	7999044
65	98	85	67	95	M45	550	7900455
65	98	85	68	95	M48	550	7999045
70	120	95	78	120	M52	750	7901081
70	120	95	84	120	M56	800	7999004
70	120	95	90	120	M60	800	8600454
70	120	95	94	120	M64	800	7999043
90	170	145	108	159	M72	1200	7900097
90	170	145	120	159	M80	1500	7900100
110	170	145	135	159	M90	2000	7903408
110	170	145	150	159	M100	2000	8600458
29	30	28	8-102	36	M8	10	8600330
29	33,5	30	10-122	38	M10	10	8600331
35	42	36	12-140	47	M12	10	8600332
38	48	41	14-160	56	M14	25	8600337
38	48	41	16-180	56	M16	30	8600333
35	62	55	18-83	67	M18	50	8600338
35	62	55	20-223	67	M20	70	8600334
35	62	55	22-94	67	M22	100	8600334
40	81	70	24-255	88	M24	150	8600335
40	81	70	27-92	88	M27	200	8600335
50	99	85	30-330	106	M30	225	8600336



subject to technical modifications

VWBG // metric with longer Vario bolt

Type	WLL-X [t]	WLL-Y [t]	WLL-Z [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]
VWBG Load ring – metric with longer Vario bolt							
VWBG 6(7.5)t	6	7.5	15	*	208	23	86
VWBG 8(10)t	8	10	15	*	208	23	86
VWBG 12(13)t	12	13	17	*	234	26	111
VWBG 13(16)t	13	16	18	*	234	26	111
VWBG 14(20)t	14	20	25	*	271	32	119
VWBG 16(22)t	16	22	28	*	271	32	119
VWBG 16(25)t	16	25	28	*	271	32	119
VWBG 31.5(40)t	31.5	40	50	*	338	46	130
VWBG 35(48)t	35	48	50	*	338	46	130
VWBG 40(50)t	40	50	50	*	378	46	168

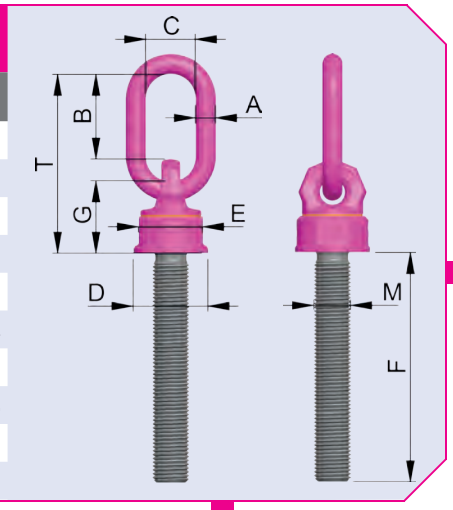
* = weight depends on design specifics

VWBG-V / VWBG // metric fine thread

Type	WLL-X [t]	WLL-Y [t]	WLL-Z [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]
VWBG-V Load ring – metric fine thread with longer Vario bolt							
VWBG-V 0.6-M12×1.5	0.6	0.75	1.2	*	107	10	49
VWBG-V 1.0-M14×1.5	1	1.25	2	*	114	13	46
VWBG-V 1.3-M16×1.5	1.3	1.5	2.6	*	114	13	46
VWBG-V 1.8-M18×1.5	1.8	2	3.6	*	137	13	54
VWBG-V 2.0-M20×1.5	2	2.5	4	*	137	13	54
VWBG-V 3.5-M24×1.5	3.5	4	7	*	173	18	66
VWBG-V 5.0-M30×2	5	6	10	*	221	22	90
VWBG Load ring – metric fine thread with longer Vario bolt							
VWBG 6(7.5)t-M33×2	6	7.5	15	*	208	23	86
VWBG 8(10)t-M36×3	8	10	15	*	208	23	86
VWBG 12(13)t-M42×3	12	13	17	*	234	26	111
VWBG 13(16)t-M48×3	13	16	18	*	234	26	111
VWBG 16(22)t-M56×4	16	22	28	*	271	32	119
VWBG 16(25)t-M64×4	16	25	28	*	271	32	119
VWBG 31.5(40)t-M72×4	31.5	40	50	*	338	46	130
VWBG 35(48)t-M80×4	35	48	50	*	338	46	130
VWBG 40(50)t-M90×4	40	50	50	*	378	46	168

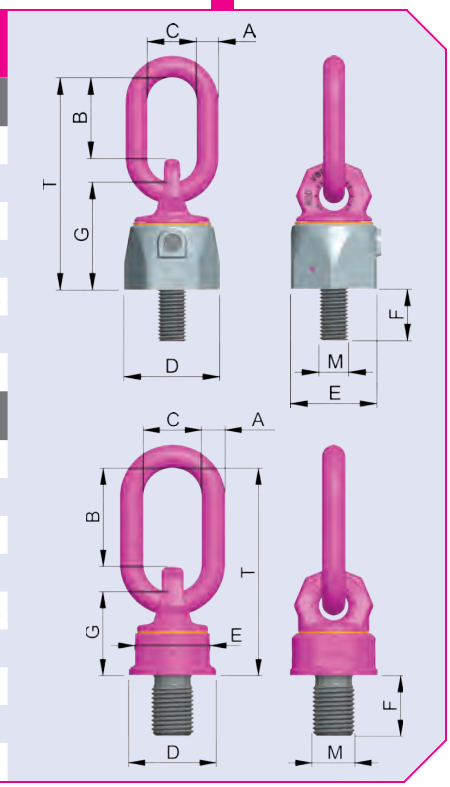
* = weight depends on design specifics

C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	M	torque [Nm]	Ref. No.
50	90	80	33-300	94	M33	350	8600150
50	90	80	36-300	94	M36-M39	410	8600451
65	98	85	42-300	95	M42-M45	550	8600452
65	98	85	48-300	95	M48-M52	550	8600453
70	120	95	52-300	120	M52	750	8600158
70	120	95	56-300	120	M56-M60	800	8600454
70	120	95	64-300	120	M64-M76	800	8600455
90	170	145	72-300	159	M72-M76	1200	8600456
90	170	145	80-300	159	M80-M85	1500	8600457
110	170	145	90-300	159	M90-M150	2000	8600458



subject to technical modifications

C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	M	torque [Nm]	Ref. No.
35	42	36	12-55	47	M12×1.5	10	8600332
38	48	41	14-65	56	M14×1.5	25	8600337
38	48	41	16-70	56	M16×1.5	30	8600333
35	62	55	18-83	67	M18×1.5	50	8600338
35	62	55	20-88	67	M20×1.5	70	8600334
40	81	70	24-95	88	M24×1.5	150	8600335
50	99	85	30-125	106	M30×2	225	8600336
50	90	80	33-300	94	M33×2	350	8600150
50	90	80	36-300	94	M36×3	410	8600451
65	98	85	42-300	95	M42×3	550	8600452
65	98	85	48-300	95	M48×3	550	8600453
70	120	95	56-300	120	M56×4	800	8600454
70	120	95	64-300	120	M64×4	800	8600455
90	170	145	72-300	159	M72×4	1200	8600456
90	170	145	80-300	159	M80×4	1500	8600457
110	170	145	90-300	159	M90×4	2000	8600458



subject to technical modifications

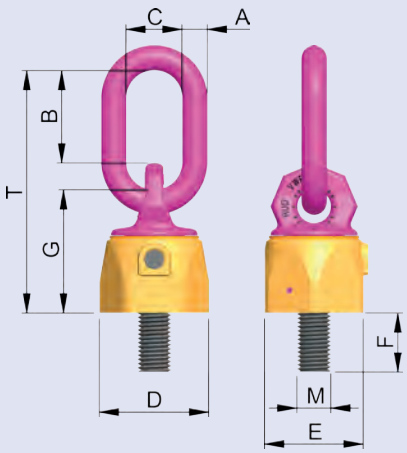
VWBG-V / VWBG // UNC inch thread / BSW-Whitworth inch thread

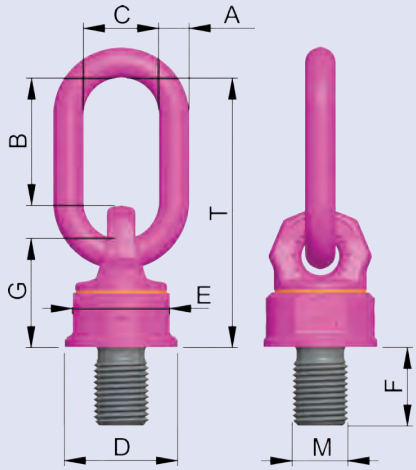
Type	WLL-X [t]	WLL-Y [t]	WLL-Z [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]
VWBG-V Load ring – UNC inch thread							
VWBG-V 0.3-5/16"-18UNC	0.3	0.4	0.6	0.18	76	8	31
VWBG-V 0.45-3/8"-16UNC	0.45	0.6	0.9	0.29	78	8	31
VWBG-V 0.6-1/2"-13UNC	0.6	0.75	1.2	0.41	107	10	49
VWBG-V 1.3-5/8"-11UNC	1.3	1.5	2.6	0.52	114	13	46
VWBG-V 2.0-3/4"-10UNC	2	2.5	4	1.42	137	13	54
VWBG-V 3.5-1"-8UNC	3.5	4	7	2.63	173	18	66
VWBG-V 5.0-1 1/4"-7UNC	5	6	10	5.09	221	22	90
VWBG-V Load ring – UNC inch thread with longer Vario bolt							
VWBG-V 0.6-1/2"-13UNC	0.6	0.75	1.2	*	107	10	49
VWBG-V 1.3-5/8"-11UNC	1.3	1.5	2.6	*	114	13	46
VWBG-V 2.0-3/4"-10UNC	2	2.5	4	*	137	13	54
VWBG-V 3.5-1"-8UNC	3.5	4	7	*	173	18	66
VWBG-V 5.0-1 1/4"-7UNC	5	6	10	*	221	22	90
VWBG Load ring – UNC inch thread							
VWBG 8(10)t - 1 1/2"-6UNC (F=57)	8	10	15	4.79	208	22	86
VWBG 12(13)t - 1 3/4"-5UNC (F=66)	12	13	17	6.14	234	26	111
VWBG 13(16)t - 2"-4.5UNC (F=76)	13	16	18	6.2	234	26	111
VWBG 16(22)t - 2 1/4"-4.5UNC (F=85)	16	22	28	11	271	32	119
VWBG 16(22)t - 2 1/2"-4UNC (F=95)	16	22	28	11.5	271	32	119
VWBG 16(25)t - 2 3/4"-4UNC (F=104)	16	25	28	12	271	32	119
VWBG 31.5(40)t - 3"-4UNC (F=114)	31.5	40	50	26.3	338	46	130
VWBG 35(48)t - 3 1/2"-4UNC (F=133)	35	48	50	28	338	46	130
VWBG 40(50)t - 4"-4UNC (F=150)	40	50	50	36.7	378	46	168
VWBG 40(50)t - 4 1/2"-4UNC (F=170)	40	50	50	40.6	378	46	168
VWBG 40(50)t - 5"-4UNC (F=190)	40	50	50	45.5	378	46	168
VWBG Load ring – BSW-Whitworth inch thread							
VWBG 8(10)t - 1 1/2"-BSW (F=57)	8	10	15	4.79	208	22	86
VWBG 12(13)t - 1 3/4"-BSW (F=66)	12	13	17	6.14	234	26	111
VWBG 13(16)t - 2"-BSW (F=76)	13	16	18	6.2	234	26	111
VWBG 16(22)t - 2 1/4"-BSW (F=85)	16	22	28	11	271	32	119
VWBG 16(22)t - 2 1/2"-BSW(F=95)	16	22	28	11	271	32	119
VWBG 16(25)t - 2 3/4"-BSW (F=104)	16	25	28	12	271	32	119
VWBG 31.5(40)t - 3"-BSW (F=114)	31.5	40	50	26.3	338	46	130
VWBG 35(48)t - 3 1/2"-BSW (F=133)	35	48	50	28	338	46	130
VWBG 40(50)t - 4"-BSW (F=150)	40	50	50	36.2	378	46	168
VWBG 40(50)t - 4 1/2"-BSW (F=170)	40	50	50	38.1	378	46	168
VWBG 40(50)t - 5"-BSW (F=190)	40	50	50	45.1	378	46	168

Type VWBG with inch thread and special lengths is available up to F_{max} = 300.

* = weight depends on design specifics

C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	M	torque [Nm]	Ref. No.
29	30	28	13	36	5/16"-18UNC	10	7991090
29	33,5	30	17	38	3/8"-16UNC	10	7991091
35	42	36	21	47	1/2"-13UNC	10	7991092
38	48	41	29	56	5/8"-11UNC	30	7991093
35	62	55	28	67	3/4"-10UNC	70	7991094
40	81	70	38	88	1"-8UNC	150	7991095
50	99	85	47	106	1 1/4"-7UNC	225	7991096
35	42	36	40-149	47	1/2"-13UNC	10	8600332
38	48	41	51-180	56	5/8"-11UNC	30	8600333
35	62	55	56-222	67	3/4"-10UNC	70	8600334
40	81	70	64-246	88	1"-8UNC	150	8600335
50	99	85	77-331	106	1 1/4"-7UNC	225	8600336
50	90	80	57	94	1 1/2"-6UNC	410	8600451
65	98	85	66	95	1 3/4"-5UNC	550	8600452
65	98	85	76	95	2"-4.5UNC	550	8600453
70	120	95	85	120	2 1/4"-4.5UNC	800	8600454
70	120	95	95	120	2 1/2"-4UNC	800	8600454
70	120	95	104	120	2 3/4"-4UNC	800	8600455
90	170	145	114	159	3"-4UNC	1200	8600456
90	170	145	133	159	3 1/2"-4UNC	1500	8600457
110	170	145	150	159	4"-4UNC	2000	8600458
110	170	145	170	159	4 1/2"-4UNC	2000	8600458
110	170	145	190	159	5"-4UNC	2000	8600458
50	90	80	57	94	1 1/2"-BSW	410	8600451
65	98	85	66	95	1 3/4"-BSW	550	8600452
65	98	85	76	95	2"-BSW	550	8600453
70	120	95	85	120	2 1/4"-BSW	800	8600454
70	120	95	95	120	2 1/2"-BSW	800	8600454
70	120	95	104	120	2 3/4"-BSW	800	8600455
90	170	145	114	159	3"-BSW	1200	8600456
90	170	145	133	159	3 1/2"-BSW	1500	8600457
110	170	145	150	159	4"-BSW	2000	8600458
110	170	145	170	159	4 1/2"-BSW	2000	8600458
110	170	145	190	159	5"-BSW	2000	8600458





subject to technical modifications

PP-S PP-B PP-VIP

PowerPoint®-Star Ring connection VIP chain connection

MADE IN GERMANY

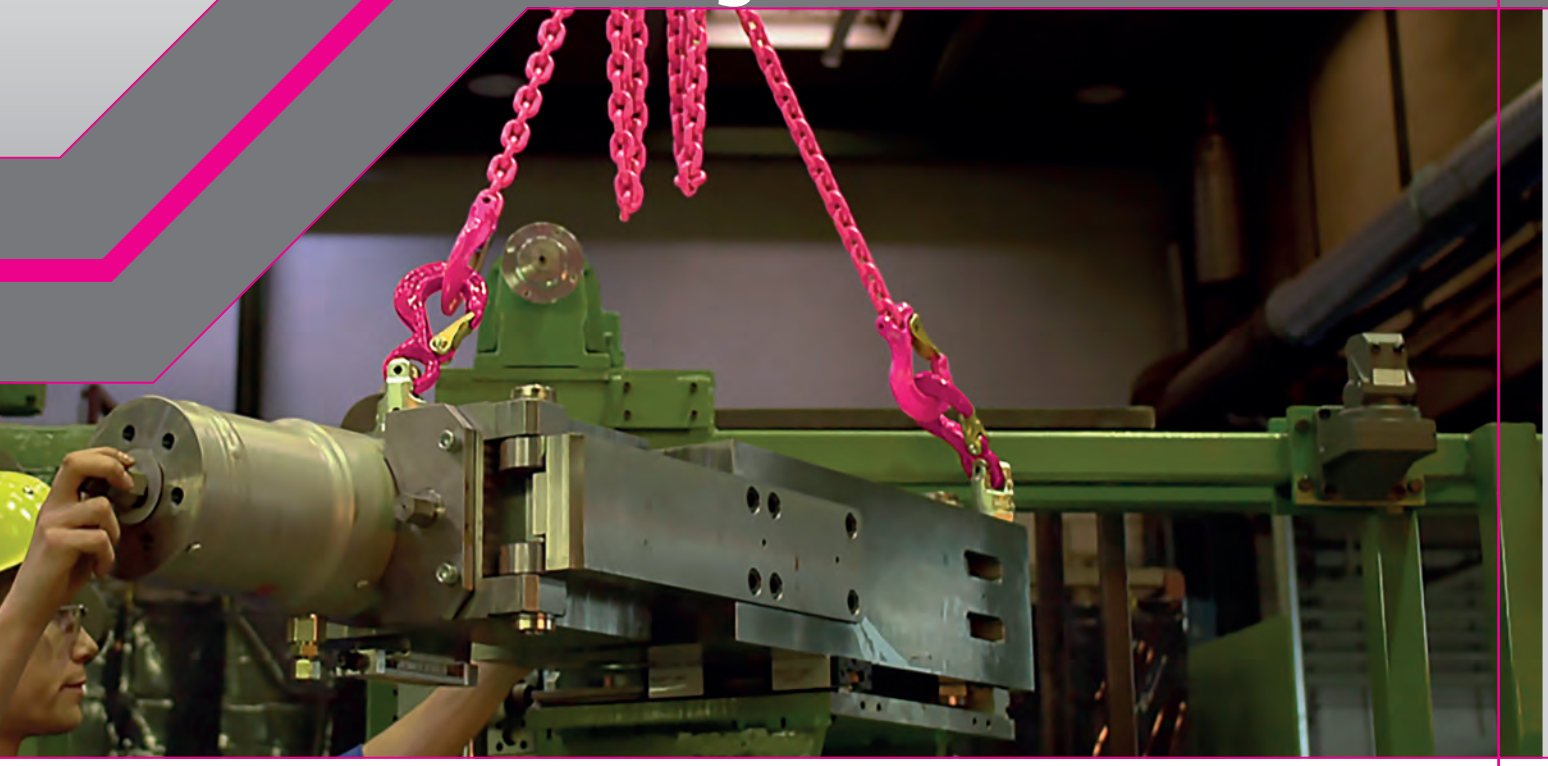
RUD®

Rotating 360°, pivoting 230°

Universal, unmistakable VIP connection for chain, hook and eye

Double ball bearing for turning/rotating operations

Easy to rotate and always the right connection

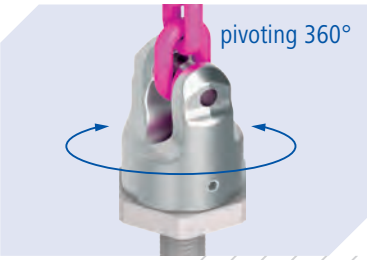


Universal hook connection
for ring assemblies, round slings,
wire ropes, hook assemblies

PP-S

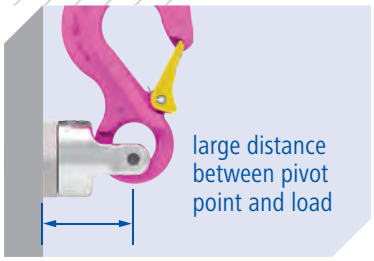
PP-B

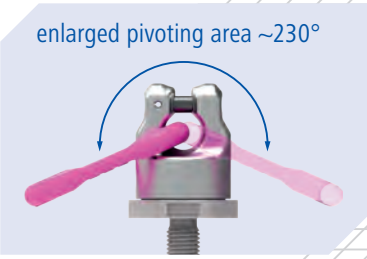
Ring connection
for hook assemblies



PP-VIP

direct VIP chain connection





Product features PP // So-PP

- **Can be combined with most commerical lifting means without additional connecting element.**
- **PP-S, PP-B, PP-VIP: Double ball bearing** is the optimal solution for turning and flipping operations under full load (not suitable for permanent turning under load).
- **Lifting points pivots 360°.**
- **Large distance between bolt-on surface and load to avoid damage.**
- **Rotatable at nominal WLL, 90° to the bolt-on direction.** Lowest kinking possibility due to cardan joint.
- **Suspension ring with enlarged pivoting area.**
- Clear marking of the minimum WLL for all loading directions.
- So-PP-S, So-PP-B, So-PP-VIP: variable thread lengths
- Available as:
  – Standard Metric Thread (DIN EN 13)
  – Coarse Pitch Thread UNC (ANSI B1.1)
- PP-S, PP-B, PP-VIP: Marking with requested torque moment and nominal WLL with a safety factor of 4:1(MRL 2006/42/EG) and 5:1 (ASME B 30.26).
- So-PP-S, So-PP-B, So-PP-VIP: Non removable special bolt (this reduces the risk of non standard bolts).

PP-S // PP-B // PP-VIP

PowerPoint®-Star // Ring connection for hook assemblies // VIP chain connection

For further information refer to the specific user instruction.

Product features / Application-specific features PP / So-PP

- So-PP-S, So-PP-B, So-PP-VIP: Variable thread lengths are available for use of threaded holes and through hole fixtures.
- So-PP-S, So-PP-B, So-PP-VIP: For permanent installation of the lifting point for through hole fixtures we recommend the securing nut acc. to DIN 980-V (standard distribution, washer included), for variable installations with just one lifting action please use collar nut acc. to DIN 6331 (available upon request). For special thread lengths in metric sizes, lock nuts (DIN 980-V crack tested) with washer are available. Collar nuts (DIN 6331, crack inspected) optionally on request.
- PP-S, PP-B, PP-VIP: Tested and certified by DGUV

  Testing specifications:
  GS-OA-15-04:2012-05
  Certificate-No.: OA 1451017

  DGUV Test
  OA 1451017
  Sicherheit geprüft
  tested safety
- So-PP-S, So-PP-B, So-PP-VIP: Component according to the test criterias of BG/DGUV "GS-OA-15-04"
- Significant product characteristics of the PP-S, PP-B and PP-VIP are subject to property right claims.
- PP-VIP, So-PP-VIP: Universal and non-mix-up clevis connection for chains, hooks and eye.
  PP-S, So-PP-S: The shape of the hook tip avoids unintentional attachment into small holes and tip loading. Robust, forged safety latch.
- Quick and easy installation with just one bolt connection.
- Hand tightening with appropriate wrench is sufficient for a singular lift.
- Please observe torque instructions when lifting point is permanently installed resp. at constant swivelling operations and tilting/ turning actions.

Other important RUD specific information and specialities to our RUD lifting points can be found on page 20 and in the specific user instruction (www.rud.com).

PP-S / PP-B / PP-VIP // metric thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]
PP-S PowerPoint®-Star universal connection – metric							
PP-S-0.63t-M12	0.63	0.4	116	13	75	18	40
PP-S-1.5t-M16	1.5	0.9	147	20	97	25	46
PP-S-2.5t-M20	2.5	1.7	187	28	126	30	61
PP-S-4t-M24	4	3.5	227	36	150	35	78
PP-S-5t-M30	5 (6.7)	7.5	267	37	174	40	95
PP-S-8t-M36	8 (10)	9.2	310	49	208	48	100
PP-B PowerPoint® Ring connection – metric							
PP-B-0.63t-M12	0.63	0.35	106	9	65	35	40
PP-B-1.5t-M16	1.5	0.6	115	11	65	35	46
PP-B-2.5t-M20	2.5	1.1	135	13	74	40	61
PP-B-4t-M24	4	2.4	172	16	95	45	78
PP-B-5t-M30	5 (6.7)	5.2	223	19	130	60	95
PP-B-8t-M36	8 (10)	6.3	242	24	140	65	100
PP-VIP PowerPoint® with VIP chain connection – metric							
PP-VIP4-0.63t-M12	0.63	0.25	41	4			40
PP-VIP6-1.5t-M16	1.5	0.45	50	6			46
PP-VIP8-2.5t-M20	2.5	0.95	61	8			61
PP-VIP10-4t-M24	4	2.2	77	10			78
PP-VIP13-5t-M30	5 (6.7)	3.5	93	13			95
PP-VIP16-8t-M36	8 (10)	5.2	102	16			100

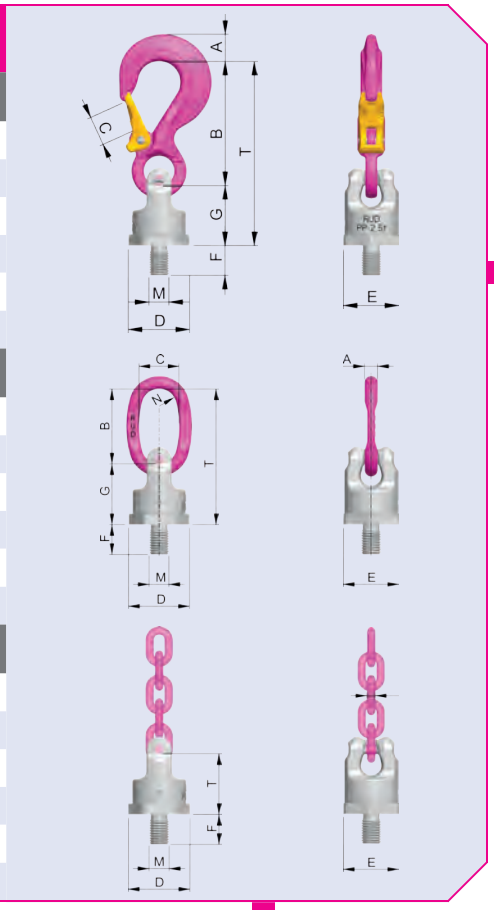
( ) = higher WLL due to axial loading

VWBG-KA // technical data

Type	WLL [t]	weight [kg/pc.]	T [mm]	D [mm]
VWBG-KA for VIP chain connection				
VWBG-KA-28**	31.5	26.4	146	170
So-VWBG-KA-28**	31.5	*	146	170
So-VWBG-KA-28**	31.5	*	146	170

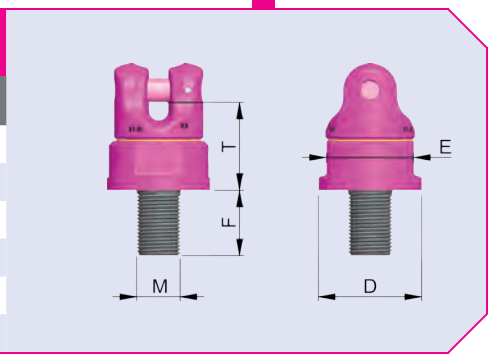
* = weight depends on design specifics
** = pivoting range: 180°

E [mm]	F [mm]	G [mm]	M	N [mm]	torque [Nm]	Ref. No.
36	18	41	M12		10	7990719
41	25	50	M16		30	7989719
55	30	61	M20		70	7989075
70	36	77	M24		150	7989076
85	45	93	M30		225	7989720
90	54	102	M36		410	7989077
36	18	41	M12	15	10	7989522
41	25	50	M16	15	30	7989523
55	30	61	M20	18	70	7989081
70	36	77	M24	20	150	7989082
85	45	93	M30	25	225	7989524
90	54	102	M36	28	410	7989083
36	18		M12		10	7989525
41	25		M16		30	7989526
55	30		M20		70	7989527
70	36		M24		150	7989528
85	45		M30		225	7989529
90	54		M36		410	7989530



subject to technical modifications

E [mm]	F [mm]	M	torque [Nm]	Ref. No.
145	108	M72	1200	7903437
145	72–300	M72–M76	1200	8600239
145	72–300	3"-4UNC	1200	8600239



subject to technical modifications

So-PP-VIP // metric thread / metric fine thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	D [mm]
So-PP-VIP ** Special-PP, VIP chain connection – metric, longer vario bolt					
So-PP-VIP4-0.6t-M12	0.6 (0.63)	*	47	4	42
So-PP-VIP6-1.0t-M14	1 (1.5)	*	58	6	48
So-PP-VIP6-1.3t-M16	1.3 (1.5)	*	58	6	48
So-PP-VIP8-2.0t-M20	2 (2.5)	*	73	8	61
So-PP-VIP8-2.0t-M22	2 (2.5)	*	73	8	61
So-PP-VIP10-3.5t-M24	3.5 (4.0)	*	94	10	81
So-PP-VIP10-3.5t-M27	3.5 (4.0)	*	94	10	81
So-PP-VIP13-5t-M30	5 (6.7)	*	108	13	99
So-PP-VIP16-8t-M36	8 (10)	*	100	16	100
So-PP-VIP16-8t-M39	8 (10)	*	100	16	100
So-PP-VIP16-8t-M42	8 (10)	*	100	16	100
So-PP-VIP ** Special-PP, VIP chain con. – metric fine thread, longer vario bolt					
So-PP-VIP4-0.6t-M12×1.5	0.6 (0.63)	*	47	4	42
So-PP-VIP6-1.0t-M14×1.5	1 (1.5)	*	58	6	48
So-PP-VIP6-1.3t-M16×1.5	1.3 (1.5)	*	58	6	48
So-PP-VIP8-2.0t-M20×1.5	2 (2.5)	*	73	8	61
So-PP-VIP10-3.5t-M24×1.5	3.5 (4.0)	*	94	10	81
So-PP-VIP13-5t-M30×2	5 (6.7)	*	108	13	99

( ) = higher WLL due to axial loading * = weight depends on design specifics

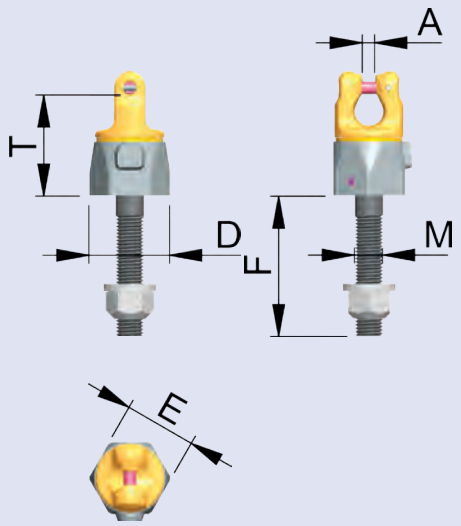
** = So-PP is also available with the VIP Cobra hook (So-PP-S) or with the VIP Load ring (So-PP-B)

PP-S / PP-B // UNC inch thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]
PP-S PowerPoint-Star Universal connection – UNC inch thread							
PP-S-0.63t-1/2"-13UNC	0.63	0.4	116	13	75	18	40
PP-S-1.5t-5/8"-11UNC	1.5	0.9	147	20	97	25	46
PP-S-2.5t-3/4"-10UNC	2.5	1.7	187	28	126	30	61
PP-S-2.5t-7/8"-9UNC	2.5	1.7	187	28	126	30	61
PP-S-4t-1"-8UNC	4	3.5	227	36	150	35	78
PP-S-5t-1 1/4"-7UNC	5 (6.7)	7.5	267	37	174	40	95
PP-S-8t-1 1/2"-6UNC	8 (10)	9.2	310	49	208	48	100
PP-B PowerPoint Ring connection – UNC inch thread							
PP-B-0.63t-1/2"-13UNC	0.63	0.35	105	9	65	35	40
PP-B-1.5t-5/8"-11UNC	1.5	0.6	115	11	65	35	46
PP-B-2.5t-3/4"-10UNC	2.5	1.1	135	13	74	40	61
PP-B-2.5t-7/8"-9UNC	2.5	1.1	135	13	74	40	61
PP-B-4t-1"-8UNC	4	2.4	172	16	95	45	78
PP-B-5t-1 1/4"-7UNC	5 (6.7)	5.2	223	19	130	60	95
PP-B-8t-1 1/2"-6UNC	8 (10)	6.3	242	24	140	65	100

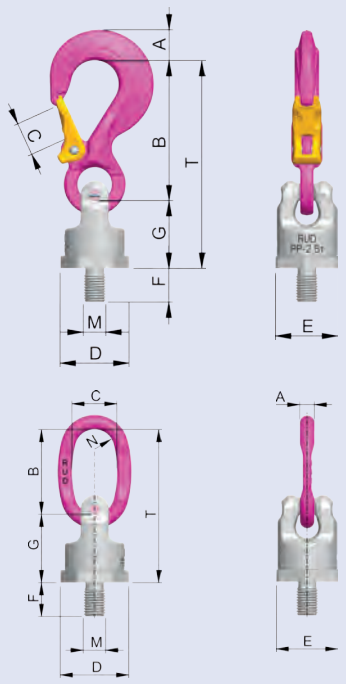
( ) = higher WLL due to axial loading

E [mm]	F [mm]	M	torque [Nm]	Ref. No.
36	12-140	M12	10	8600320
41	14-65	M14	25	8600326
41	16-180	M16	30	8600321
55	20-224	M20	70	8600322
55	22-94	M22	70	8600322
70	24-255	M24	150	8600323
70	27-92	M27	200	8600323
85	30-330	M30	225	8600324
90	36-300	M36	410	8600305
90	39-300	M39	410	8600305
90	42-300	M42	410	8600305
36	12-55	M12×1.5	10	8600320
41	14-65	M14×1.5	25	8600326
41	16-70	M16×1.5	30	8600321
55	20-89	M20×1.5	70	8600322
70	24-95	M24×1.5	150	8600323
85	30-125	M30×2	225	8600324



subject to technical modifications

E [mm]	F [mm]	G [mm]	M	N [mm]	torque [Nm]	Ref. No.
36	18	41	1/2"-13UNC		10	7990720
41	25	50	5/8"-11UNC		30	7989908
55	30	61	3/4"-10UNC		70	7989909
55	30	61	7/8"-9UNC		70	7989910
70	36	77	1"-8UNC		150	7989911
85	45	93	1 1/4"-7UNC		225	7989912
90	54	102	1 1/2"-6UNC		410	7989913
36	18	41	1/2"-13UNC	15	10	7989901
41	25	50	5/8"-11UNC	15	30	7989902
55	30	61	3/4"-10UNC	18	70	7989903
55	30	61	7/8"-9UNC	18	70	7989904
70	36	77	1"-8UNC	20	150	7989905
85	45	93	1 1/4"-7UNC	25	225	7989906
90	54	102	1 1/2"-6UNC	28	410	7989907



subject to technical modifications

PP-VIP / SoPP-VIP // UNC inch thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	D [mm]
PP-VIP PowerPoint® with VIP chain connection – UNC inch thread					
PP-VIP4-0.63t-1/2"-13UNC	0.63	0.25	41	4	40
PP-VIP6-1.5t-5/8"-11UNC	1.5	0.45	50	6	46
PP-VIP8-2.5t-3/4"-10UNC	2.5	0.95	61	8	61
PP-VIP8-2.5t-7/8"-9UNC	2.5	1	61	8	61
PP-VIP10-4t-1"-8UNC	4	2.2	77	10	78
PP-VIP13-5t-1 1/4"-7UNC	5 (6.7)	3.5	93	13	95
PP-VIP16-8t-1 1/2"-6UNC	8 (10)	5.2	102	16	100
So-PP-VIP ** Special-PP, VIP chain connection – UNC, with longer vario bolt					
So-PP-VIP4-0.6t-1/2"-13UNC	0.6 (0.63)	*	47	4	42
So-PP-VIP6-1.0t-5/8"-11UNC	1 (1.5)	*	58	6	48
So-PP-VIP8-2.0t-3/4"-10UNC	2 (2.5)	*	73	8	61
So-PP-VIP10-3.5t-1"-8UNC	3.5 (4.0)	*	94	10	81
So-PP-VIP13-5t-1 1/4"-7UNC	5 (6.7)	*	108	13	99

( ) = higher WLL due to axial loading * = weight depends on design specifics
** = So-PP is also available with the VIP Cobra hook (So-PP-S) or with the VIP Load ring (So-PP-B)

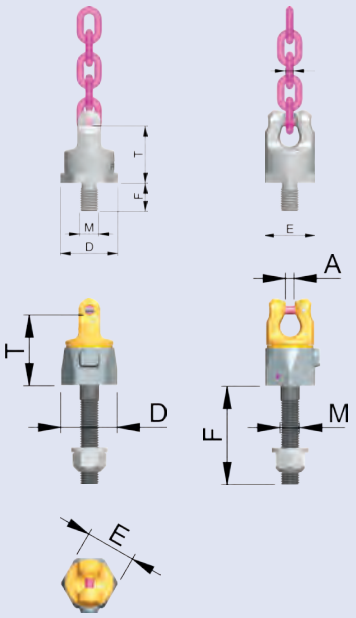
VIP Cobra hook for PowerPoint® // technical data

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]
VIP Cobra hook for PowerPoint®							
VCÖH 4	0.63	0.14	75	18	18	12	13
VCÖH 6	1.5	0.5	98	24	22	16	22
VCÖH 8	2.5	0.8	126	32	28	20	28
VCÖH 10	4	1.58	150	38	36	26	36
VCÖH 13	6.7	2.9	170	48	45	30	37
VCÖH 16	10	4.2	208	63	56	36	49

VIP Load ring for PowerPoint // technical data

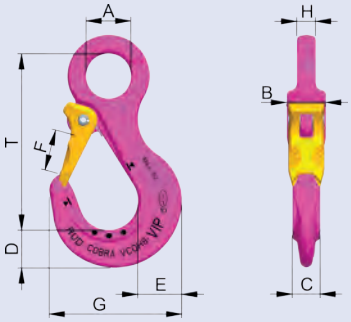
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	C [mm]	D [mm]
VIP Load ring for PowerPoint®						
PP 0.63t-B	0.63	0.1	65	9	35	4
PP 1.5t-B	1.5	0.13	65	11	35	6
PP 2.5t-B	2.5	0.22	75	13	40	8
PP 4t-B	4	0.42	95	16	45	10
PP-VIP13-B	6.7	1	130	21	60	13
PP-VIP16-B	10	1.4	140	24	65	16

E [mm]	F [mm]	M	torque [Nm]	Ref. No.
36	18	1/2"-13UNC	10	7989920
41	25	5/8"-11UNC	30	7989921
55	30	3/4"-10UNC	70	7989922
55	30	7/8"-9UNC	70	7989923
70	36	1"-8UNC	150	7989924
85	45	1 1/4"-7UNC	225	7989925
90	54	1 1/2"-6UNC	410	7989926
36	12-45	1/2"-13UNC	10	8600320
41	16-55	5/8"-11UNC	25	8600321
55	20-65	3/4"-10UNC	70	8600322
70	25-74	1"-8UNC	150	8600323
85	31-91	1 1/4"-7UNC	225	8600324



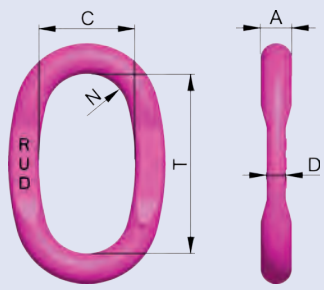
subject to technical modifications

E [mm]	F [mm]	for M	G [mm]	H [mm]	Ref. No.
14	18	M12 / 1/2"-13UNC	52	8	8502323
24	25	M16 / 5/8"-11UNC	73	11	8502203
31	30	M20 / 3/4"-10UNC / 7/8"-9UNC	95	13	8502142
39	35	M24 / 1"-8UNC	118	17	8502145
48	40	M30 / 1/4"-7UNC	135	21	8502204
58	50	M36 / 1 1/2"-6UNC	161	27	8502146



subject to technical modifications

N [mm]	für M	G [mm]	H [mm]	Ref. No.
15	M12 / 1/2"-13UNC	52	8	7989531
15	M16 / 5/8"-11UNC	73	11	8502173
18	M20 / 3/4"-10UNC / 7/8"-9UNC	95	13	8502174
20	M24 / 1"-8UNC	118	17	8502175
25	M30 / 1/4"-7UNC	135	21	8502176
28	M36 / 1 1/2"-6UNC	161	27	8502177



subject to technical modifications

WBPG

Hoist ring boltable on plate

MADE IN GERMANY

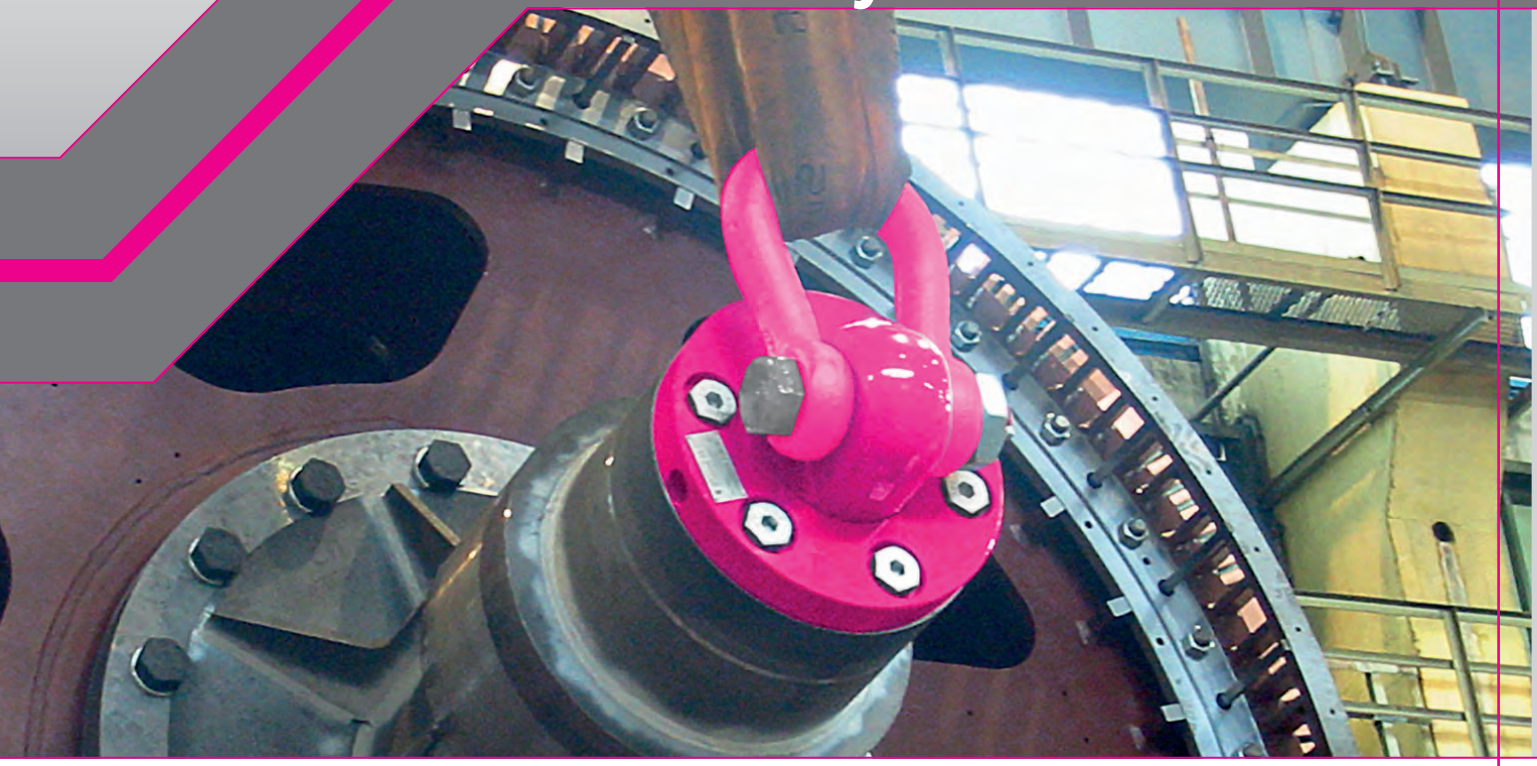
RUD®

Heavy duty design

WLL up to 250 t

Rotating 360°

Ball bearing mounted for heavy loads



WBPG

A versatile RUD solution for heavy-duty loads.

Product features

4:1 | RUD ID | 360° | 180° | M | -10°–100°C | 100°C max.

- **Heavy Duty Generation:** WBPG up to 250 t WLL.
- **Lifting points pivots 360°. Suspension ring pivots 180°.**
- **Detachable suspension ring in the shape of a shackle, for the attachment of common lifting means.**
- RUD bolts with special corrosion protection Corrud-DT are included in delivery and are also available as a spare part. Clear marking at the bolt head: RUD, thread size, batch-no., class of strength.
- Component according to the test criterias of BG/DGUV "GS-OA-15-04".

Application-specific features WBPG

- Assembly with flat/ring wrench or allen key possible.

Other important RUD specific information and specialities to our RUD lifting points can be found on page 20 and in the specific user instruction (www.rud.com).

WBPG // metric thread

Type	WLL [t]	weight [kg/St.]	T [mm]	A [mm]	B [mm]	D [mm]	E [mm]	F [mm]	G [mm]
WBPG Hoist ring boltable on plate – metric									
WBPG 85t/400mm 6×M48	85	170	577	400	75	190	89	304	273
WBPG 100t/400mm 6×M48	100	198	577	400	83	190	89	304	273
WBPG 120t/570mm 6×M48	120	360	651	571	95	238	110	344	307
WBPG 200t/650mm 10×M48	200	678	880	650	120	290	100	460	426
WBPG 250t/730mm 12×M48	250	992	1110	730	130	305	138	496	424

WBPG

Hoist ring boltable on plate

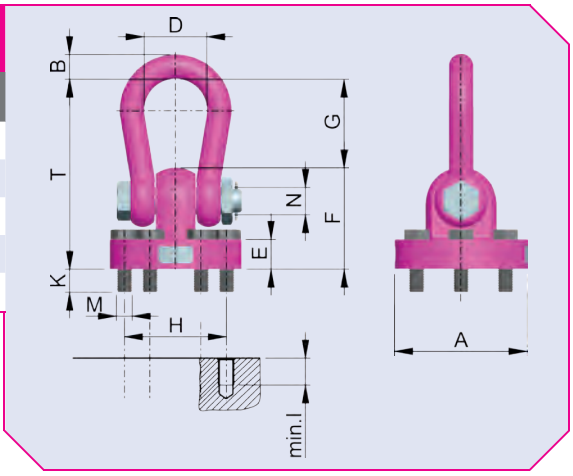
WBPG on flange

WBPG on cone

WBPG on flat surface

	H [mm]	I [mm]	K [mm]	M	N [mm]	torque [Nm]	Ref. No.
	310	73	71	6×M48	83	6000	7993712
	310	73	71	6×M48	83	6000	7993245
	445	77	75	6×M48	95	6000	7900917
	500	73	71	10×M48	130	6000	7900383
	580	74	72	12×M48	140	6000	7905690

subject to technical modifications



VLBG

VIP Load ring for bolting

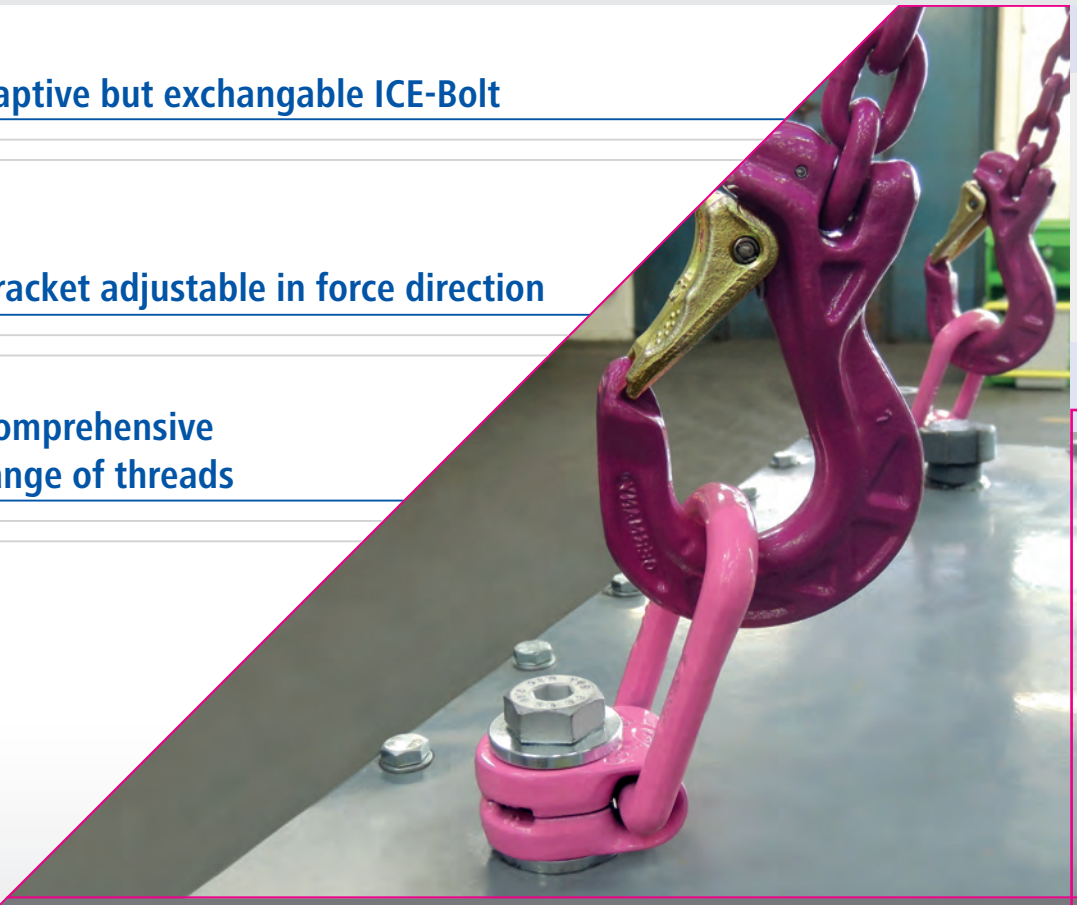
MADE IN GERMANY

RUD®

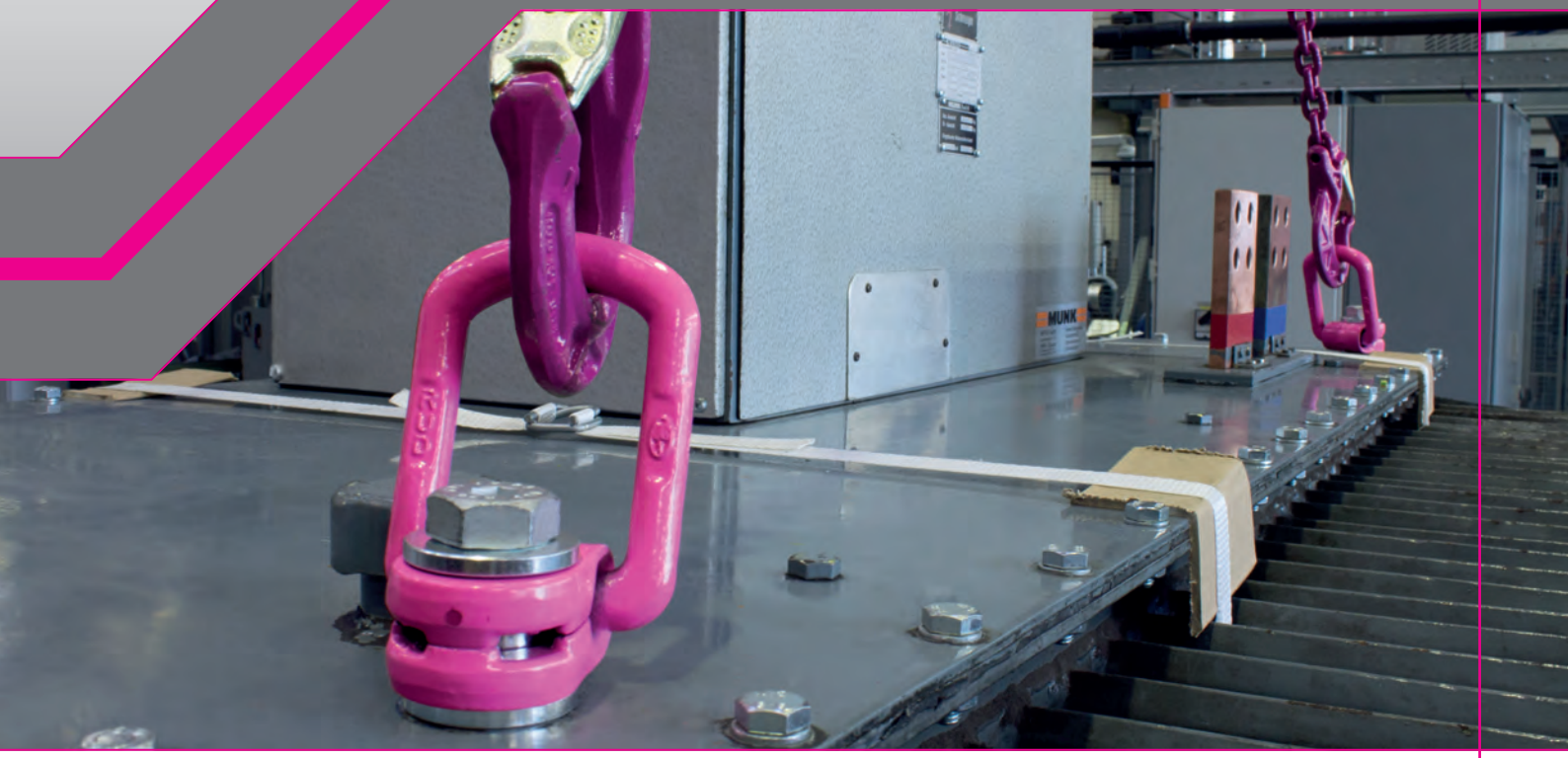
Captive but exchangable ICE-Bolt

Bracket adjustable in force direction

Comprehensive range of threads

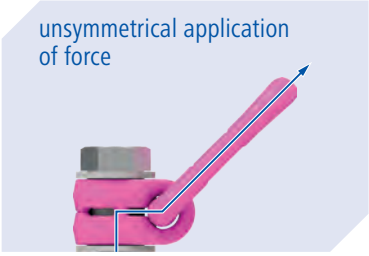


Tried and tested – full WLL in all directions



VLBG

More than 30 years of experience as lifting point with unsymmetrical force application.



Product features VLBG

4:1 · RUD ID · 360° · 180°

VLBG [DGUV Test · M · MF · UNC · 8UN · VARIO · -40°–100°C · 350°C max.

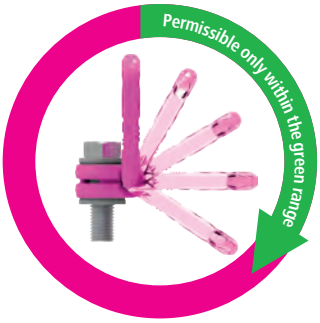
LBG-RS [M · -60°–100°C · 400°C max. · EDELSTAHL Rost frei INOX STAINLESS STEEL

- **Lifting points pivots 360°. Suspension ring pivots 180°.**
- **VLBG: Captive but exchangeable ICE-Bolt** made out of patented steel with special corrosion protection Corrud-DT. Non-hazardous deep temperature usage; higher toughness and therefore higher bending strength as well as less wear occurance. Original ICE-Bolt is available as a spare part. Clear marking at the bolt head: RUD, ICE, thread size, batch-no., class of strength.
- **Clamping spring** works as a noise reduction and holds the suspension ring in the requested position; therefore simple hinge of lifting mean possible respectivley flat design if turned down.
- **Clear marking of the minimum WLL** for all loading directions.
- Available as:
  VLBG: Standard Metric Thread (DIN EN 13)
  VLBG: Metric Fine Thread (DIN EN 13)
  VLBG: Coarse Pitch Thread UNC (ANSI B1.1)
  VLBG: Fine Thread UNF (ANSI B1.1)
- VLBG: Variable bolt lengths available for tapped or through holes (see p.80).
- VLBG: Tested and certified by DGUV
  Testing specifications:
  GS-OA-15-04:2012-05
  Certificate No.: OA 1451016

DGUV Test
OA 1451016
Sicherheit geprüft
tested safety

VLBG

VIP Load ring for bolting



Product features / Application-specific features VLBG / LBG-RS

- LBG-RS: Component made out of 1.4571: therefore higher resistancy against intergranular corrosion.
- Quick and easy installation with just one bolt connection.
- Assembly with flat / ring wrench or allen key possible.
- Hand tightening with appropriate wrench is sufficient for a singular lift.
- Please observe torque instructions when lifting point is permanently installed resp. at constant swivelling operations and tilting/ turning actions.

Other important RUD specific information and specialities to our RUD lifting points can be found on page 20 and in the specific user instruction (www.rud.com).

Accessories VLBG

For permanent installation of the lifting point for through hole fixtures we recommend the securing nut acc. to DIN 980-V (standard distribution, washer included), for variable installations with just one lifting action please use collar nut acc. to DIN 6331 (available upon request).

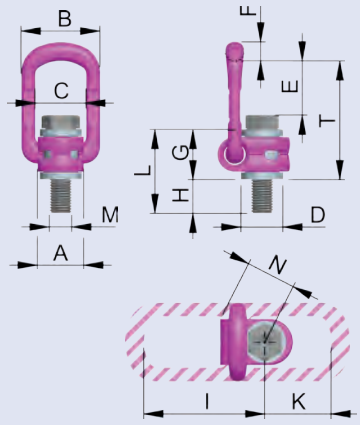
For special thread lengths in metric sizes, lock nuts (DIN 980-V crack tested) with washer are available. Collar nuts (DIN 6331, crack inspected) optionally on request.

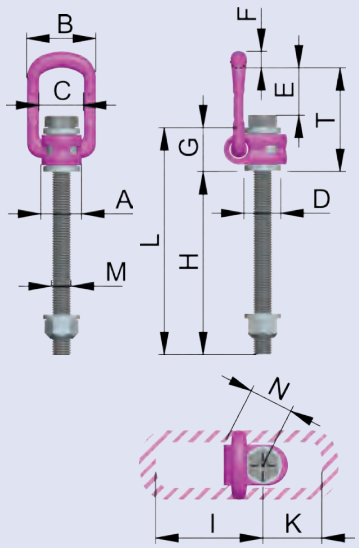
VLBG // metric thread / metric fine thread with longer vario bolt

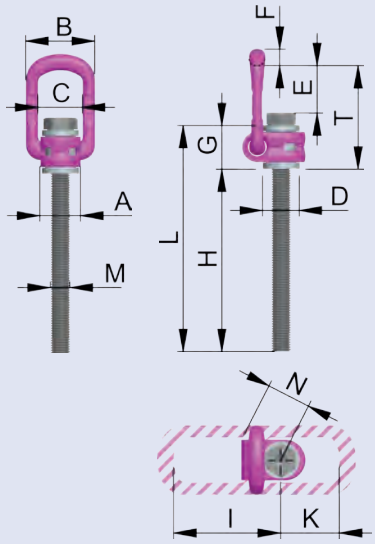
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
VLBG VIP Load ring for bolting – metric										
VLBG 0.3t M8	0.3	0.3	75	30	54	34	24	40	10	29
VLBG 0.63t M10	0.63	0.32	75	30	54	34	24	39	10	29
VLBG 1t M12	1	0.33	75	32	54	34	26	38	10	29
VLBG 1.2t M14 (H=21)	1.2	0.52	85	33	56	36	30	39	13.5	36
VLBG 1.5t M16	1.5	0.55	85	33	56	36	30	39	13.5	36
VLBG 2t M18 (H=27)	2	1.3	110	50	82	54	45	55	16.5	43
VLBG 2.5t M20	2.5	1.3	110	50	82	54	45	55	16.5	43
VLBG 2.5t M22 (H=33)	2.5	1.31	110	50	82	54	45	54	16.5	43
VLBG 4t M24	4	1.5	125	50	82	54	45	67	18	43
VLBG 4t M27	4	3.1	147	60	103	65	60	69	22.5	61
VLBG 5t M30	5	3.3	147	60	103	65	60	67	22.5	61
VLBG 7t M36 (So-Schr.)	7	3.4	146	60	103	65	60	74	22.5	55
VLBG 8t M36	8	6.2	197	77	122	82	70	97	26.5	77
VLBG 10t M42	10	6.7	197	77	122	82	70	94	26.5	77
VLBG 15t M42	15	10.9	222	95	156	100	85	109	36	87
VLBG 20t M48	20	11.6	222	95	156	100	95	105	36	87
VLBG VIP Load ring for bolting – metric with longer vario bolt										
VLBG 0.3t M8	0.3	*	75	30	54	34	24	40	10	29
VLBG 0.63t M10	0.63	*	75	30	54	34	24	39	10	29
VLBG 1t M12	1	*	75	32	54	34	26	38	10	29
VLBG 1.2t M14	1.2	*	85	33	56	36	30	39	13.5	36
VLBG 1.5t M16	1.5	*	85	33	56	36	30	39	13.5	36
VLBG 2t M18	2	*	110	50	82	54	45	55	16.5	43
VLBG 2.5t M20	2.5	*	110	50	82	54	45	55	16.5	43
VLBG 2.5t M22	2.5	*	110	50	82	54	45	54	16.5	43
VLBG 4t M24	4	*	125	50	82	54	45	67	18	43
VLBG 4t M27	4	*	147	60	103	65	60	69	22.5	61
VLBG 5t M30	5	*	147	60	103	65	60	67	22.5	61
VLBG 8t M36	8	*	197	77	122	82	70	97	26.5	77
VLBG 10t M42	10	*	197	77	122	82	70	94	26.5	77
VLBG 15t M42	15	*	222	95	156	100	85	109	36	87
VLBG 20t M48	20	*	222	95	156	100	95	105	36	87
VLBG VIP Load ring for bolting – metric fin thread with longer vario bolt										
VLBG 1t M12x1.5	1	*	75	32	54	34	26	38	10	29
VLBG 1.2t M14x1.5	1.2	*	85	33	56	36	30	39	13.5	36
VLBG 1.5t M16x1.5	1.5	*	85	33	56	36	30	39	13.5	36
VLBG 2t M18x1.5	2	*	110	50	82	54	45	55	16.5	43
VLBG 2.5t M20x1.5	2.5	*	110	50	82	54	45	55	16.5	43
VLBG 4t M24x1.5	4	*	125	50	82	54	45	67	18	43

* = weight depends on design specifics

H [mm]	I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
11	75	45	40	M8	32	30	8500821
15	75	45	44	M10	32	60	8500822
18	75	45	47	M12	32	100	8500823
21	86	47	57	M14	38	120	8600399
22	86	47	58	M16	38	150	8500824
27	113	64	70	M18	48	200	8600384
32	113	64	75	M20	48	250	8500826
33	113	64	75	M22	48	250	8600385
37	130	78	80	M24	48	400	8500827
39	151	80	100	M27	67	400	7983658
49	151	80	110	M30	67	500	8500828
52	151	80	107	M36	67	700	8500829
63	205	110	140	M36	87	800	7983553
73	205	110	150	M42	70	1000	7983554
63	230	130	150	M42	100	1500	7982966
73	230	130	160	M48	100	2000	7982967
8-76	75	45	37-105	M8	32	30	8600280
10-96	75	45	39-125	M10	32	60	8600281
12-116	75	45	41-145	M12	32	100	8600382
14-34	86	47	50-70	M14	38	120	8600399
16-149	86	47	52-185	M16	38	150	8600383
18-47	113	64	61-90	M18	48	200	8600384
20-187	113	64	63-230	M20	48	250	8600385
22-57	113	64	65-100	M22	48	250	8600385
24-222	130	78	67-265	M24	48	400	8600386
27-239	151	80	88-300	M27	67	400	8600387
30-279	151	80	91-340	M30	67	500	8600388
36-223	205	110	113-300	M36	87	800	8600289
42-273	205	110	119-350	M42	70	1000	8600290
42-263	230	130	129-350	M42	100	1500	8600291
48-303	230	130	135-350	M48	100	2000	8600292
12-31	75	45	41-60	M12 x 1.5	32	100	8600382
14-34	86	47	50-70	M14 x 1.5	38	120	8600399
16-39	86	47	52-75	M16 x 1.5	38	150	8600383
18-47	113	64	61-90	M18 x 1.5	48	200	8600384
20-52	113	64	63-95	M20 x 1.5	48	250	8600385
24-62	130	78	67-105	M24 x 1.5	48	400	8600386







subject to technical modifications

VLBG // metric fine thread / UNC inch thread

VLBG-Z VIP Load ring for bolting – UNC inch thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
VLBG-Z 0.63t 3/8"-16UNC	0.63	0.29	75	30	54	34	24	39	10	29
VLBG-Z 1t 1/2"-13UNC	1	0.36	75	32	54	34	26	38	10	29
VLBG-Z 1.5t 5/8"-11UNC	1.5	0.50	85	33	56	36	30	39	13.5	36
VLBG-Z 2.5t 3/4"-10UNC	2.5	1.3	110	50	82	54	45	55	16.5	43
VLBG-Z 2.5t 7/8"-9UNC	2.5	1.25	110	50	82	54	45	55	16.5	43
VLBG-Z 4t 1"-8UNC	4	1.50	125	50	82	54	45	67	18	43
VLBG-Z 5t 1-1/4"-7UNC	5	3.33	147	60	103	65	60	64	22.5	61
VLBG-Z 5t 1-1/4"-8UN	5	3.33	147	60	103	65	60	64	22.5	61
VLBG-Z 8t 1-1/2"-6UNC	8	6.2	197	77	122	82	70	97	26.5	77
VLBG-Z 20t 2"-4.5UNC	20	11.7	222	95	156	100	95	105	36	87

VLBG-Z VIP Load ring for bolting – UNC inch thread with longer vario bolt

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
VLBG-Z 0.63t 3/8"-16UNC	0.63	*	75	30	54	34	24	39	10	29
VLBG-Z 1t 1/2"-13UNC	1	*	75	32	54	34	26	38	10	29
VLBG-Z 1.5t 5/8"-11UNC	1.5	*	85	33	56	36	30	39	13.5	36
VLBG-Z 2.5t 3/4"-10UNC	2.5	*	110	50	82	54	45	55	16.5	43
VLBG-Z 2.5t 7/8"-9UNC	2.5	*	110	50	82	54	45	55	16.5	43
VLBG-Z 4t 1"-8UNC	4	*	125	50	82	54	45	67	18	43
VLBG-Z 5t 1-1/4"-7UNC	5	*	147	60	103	65	60	64	22.5	61
VLBG-Z 8t 1-1/2"-6UNC	8	*	197	77	122	82	70	97	26.5	77
VLBG-Z 20t 2"-4.5UNC	20	*	222	95	156	100	95	105	36	87

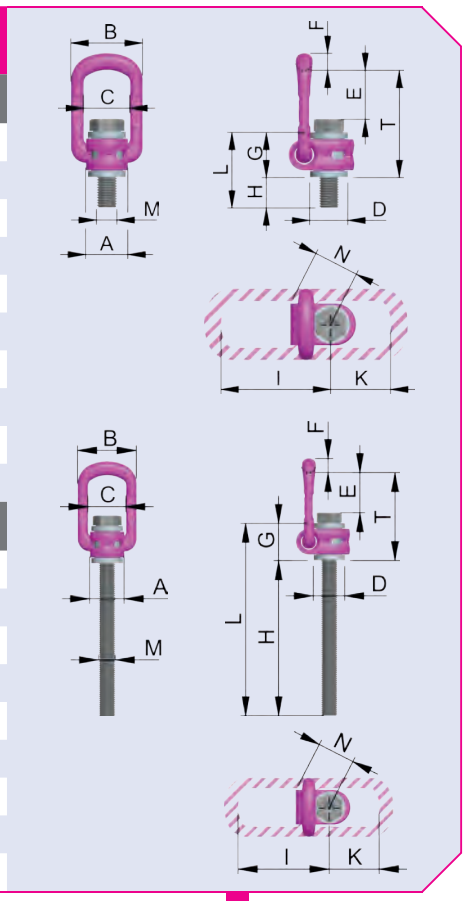
* = weight depends on design specifics

LBG-RS // metric thread stainless steel

LBG-RS Load ring for bolting stainless steel – metric

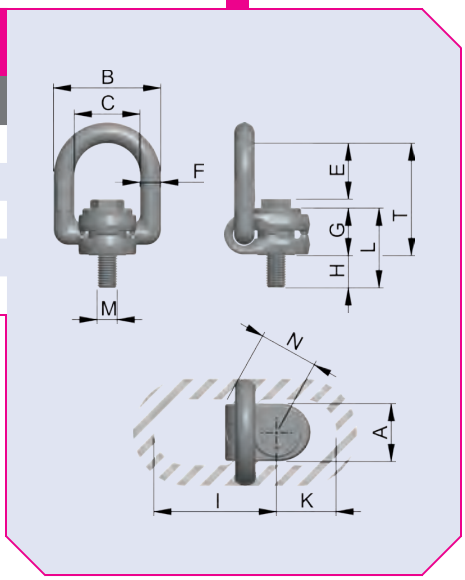
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
LBG 1t M16 RS	1	1.1	88	50	85	50		43	16.5	38
LBG 2t M20 RS	2	1.2	88	50	85	50		42	16.5	38

H [mm]	I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
16	75	45	45	3/8"-16UNC	32	60	8504256
22	75	45	50	1/2"-13UNC	32	100	8502349
24	86	47	60	5/8"-11UNC	38	150	8502350
28	113	64	71	3/4"-10UNC	48	250	8502351
27	113	64	70	7/8"-9UNC	48	250	8502352
41	130	78	84	1"-8UNC	48	400	8502353
41	151	80	102	1-1/4"-7UNC	67	500	8503187
41	151	80	102	1-1/4"-8UN	67	500	8502354
62	205	110	140	1-1/2"-6UNC	87	800	8504257
69	230	130	156	2"-4.5UNC	100	2000	8504258
10-98	75	45	39-127	3/8"-16UNC	32	60	8600440
13-123	75	45	42-152	1/2"-13UNC	32	100	8600441
16-148	86	47	52-184	5/8"-11UNC	38	150	8600442
19-185	113	64	62-228	3/4"-10UNC	48	250	8600443
22-211	113	64	65-254	7/8"-9UNC	48	250	8600444
25-211	130	78	68-254	1"-8UNC	48	400	8600445
32-278	151	80	93-339	1-1/4"-7UNC	67	500	8600446
38-270	205	110	115-347	1-1/2"-6UNC	87	800	8600447
51-302	230	130	138-389	2"-4.5UNC	100	2000	8600448



subject to technical modifications

H [mm]	I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
25	95	45	63	M16	45	100	62086
27	95	45	65	M20	45	200	62813



subject to technical modifications

VRS "STARPOINT"

Vario eye bolt

MADE IN GERMANY

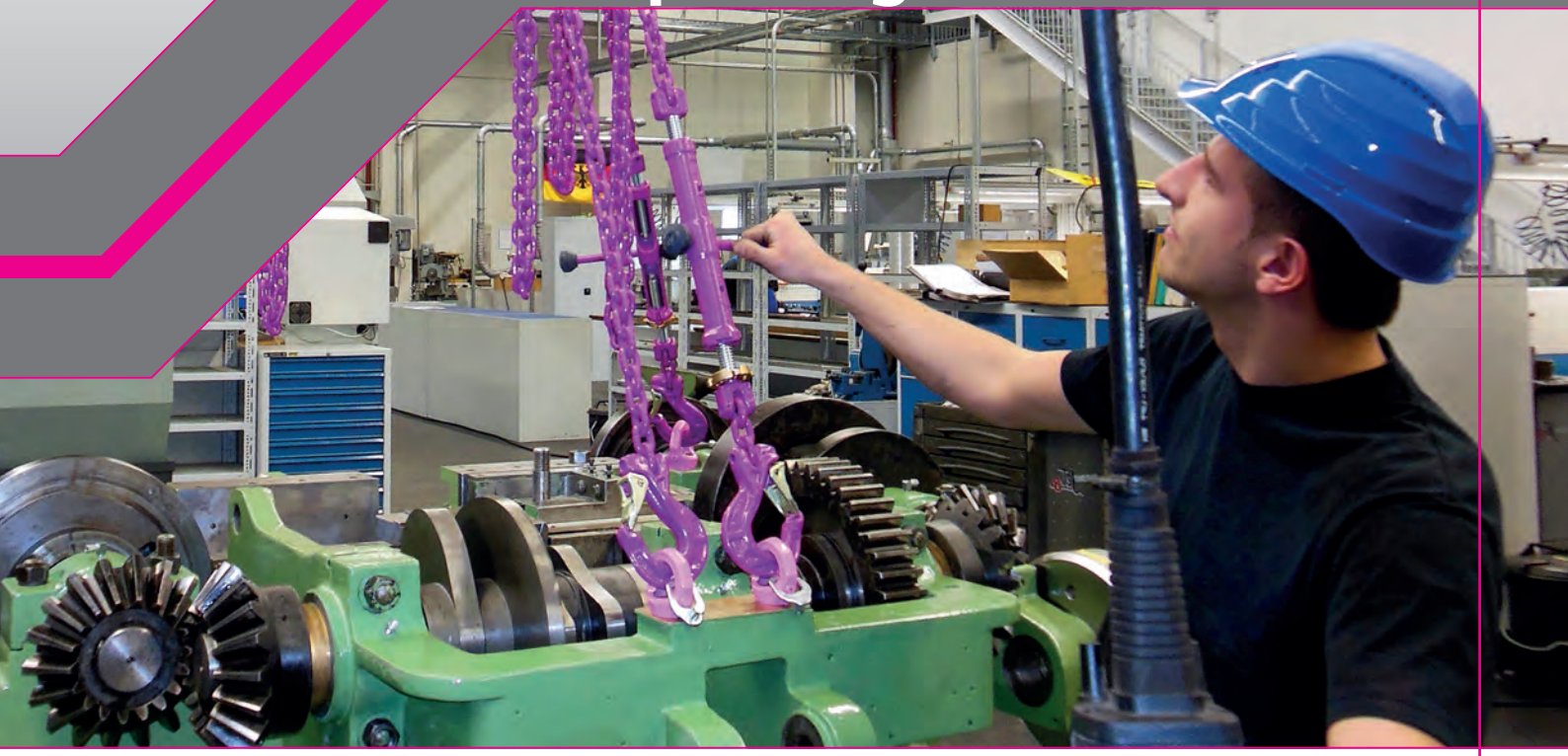
RUD®

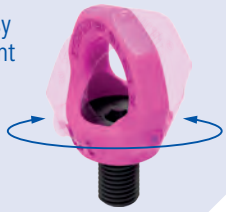
360° adjustable in force direction

several times higher WLL than the DIN 580 eye bolt

Easy-Fit-Key for easy assembly and disassembly

Clever installation – simple alignment





Pivoting 360°. Easy adjustment in load direction.

ICE-Bolt made out of patented steel.

Easy-Fit-Key (Star Key)

VRS

The STARPOINT amongst the eye bolts.

Clear marking of the minimum WLL.

Clear marking at the bolt head

Variable bolt lengths available

Product features VRS

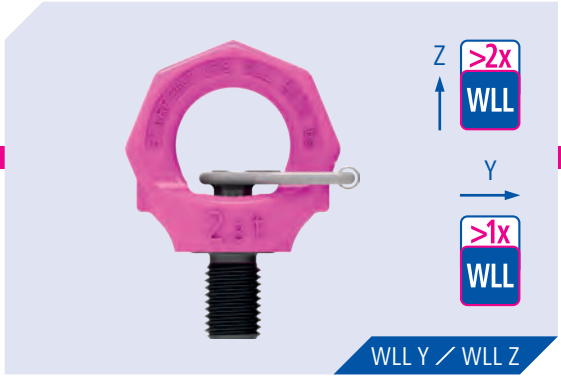
4:1 | RUD ID | DGUV Test | 360° | M | MF | UNC | UNF | G | VARIO | -40°–100°C | 350°C max.

- **Lifting points pivots 360°.** Easy adjustment in load direction.
- **ICE-Bolt** made out of patented steel. Non-hazardous deep temperature usage down to -60°; higher toughness and therefore higher bending strength as well as less wear occurance.
- Not exchangeable ICE-Bolt (this reduces the usage of improper standard bolts).
- **Clear marking of the minimum WLL for all loading directions.** Higher WLL possible when location and installation is optimised(compare WLL chart / product information).
- **Clear marking at the bolt head:** RUD, thread size, batch-no, ICE.
- **Variable bolt lengths available** for tapped or through holes (see p.90).
- Available as:
  – Standard Metric Thread (DIN EN 13)
  – Metric Fine Thread (DIN EN 13)
  – Coarse Pitch Thread UNC (ANSI B1.1)
  – Fine Thread 8UN (ANSI B1.1)
  – Inch Pipe Thread (DIN 228)
- Significant product characteristics of the VRS are subject to property right claims.
- Tested and certified by DGUV

Testing specifications:
GS-OA-15-04:2012-05
Certificate No.: OA OA 1451015

VRS

Vario eye bolt
"STARPOINT"



Please refer to the Working Load Limit chart on p.39.

Product features / Application-specific features VRS

- Complying with the US-Standard (ASME B30.26).
- Quick and easy installation with just one bolt connection.
- Installation and disassembly without any further tools than the exchangeable Easy-Fit star profile key for singular lifts.
- For permanent installation and recurrend lifts we can offer a special socket wrench to apply the requested torque (fits to a common Inch torque wrench, see p.94).

Other important RUD specific information and specialities to our RUD lifting points can be found on page 20 and in the specific user instruction (www.rud.com).

Accessories VRS

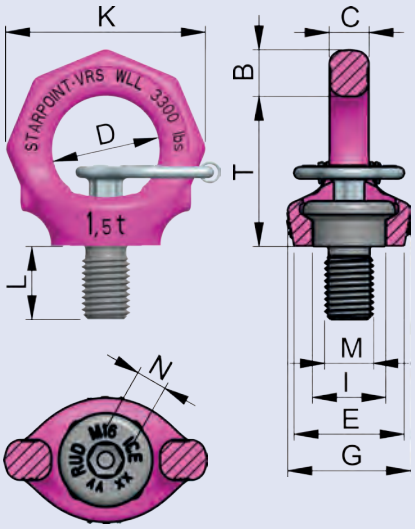
For permanent installation of the lifting point for through hole fixtures we recommend the securing nut acc. to DIN 980-V (standard distribution, washer included), for variable installations with just one lifting action please use collar nut acc. to DIN 6331 (available upon request).

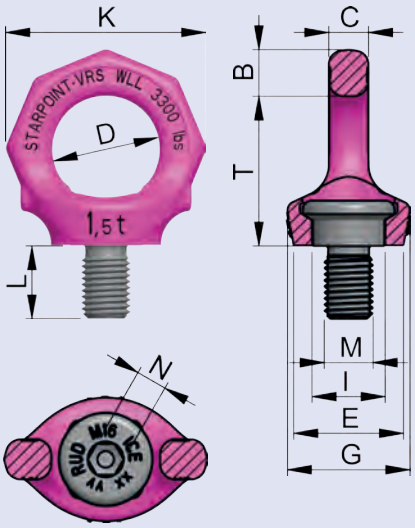
For special thread lengths in metric sizes, lock nuts (DIN 980-V crack tested) with washer are available. Collar nuts (DIN 6331, crack inspected) optionally on request.

VRS-F / VRS // metric thread with and without STAR KEY

Type	WLL [t]	weight [kg/pc.]	T [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]
VRS-F STARPOINT – metric								
VRS-F-M6	0.1	0,07	27	9	7	20	23	28
VRS-F-M8	0.3	0.12	34	11	9	25	25	31
VRS-F-M10	0.4	0.12	34	11	9	25	25	31
VRS-F-M12	0.75	0.2	42	13	10	30	30	38
VRS-F-M14	0.75	0.21	42	13	10	30	30	38
VRS-F-M16	1.5	0.3	49	15	14	35	35	41
VRS-F-M16	1.5	0.3	49	15	14	35	35	41
VRS-F-M18	1.5	0.35	49	15	14	35	35	41
VRS-F-M20	2.3	0.5	57	17	16	40	40	50
VRS-F-M22	2.3	0.5	57	17	16	40	40	50
VRS-F-M24	3.2	0.8	69	21	19	49	50	60
VRS-F-M27	3.2	1.0	69	21	19	49	50	60
VRS-F-M30	4.5	1.6	86	26	24	60	66	75
VRS-F-M33	4.5	1.8	86	26	24	60	66	75
VRS-F-M36	7	3.5	103	32	29	72	75	90
VRS-F-M42	9	4.9	120	38	34	82	85	105
VRS-F-M48	12	7.0	137	43	38	94	100	120
VRS STARPOINT without STAR KEY – metric								
VRS-M6	0.1	0.07	27	9	7	20	23	28
VRS-M8	0.3	0.1	34	11	9	25	25	31
VRS-M10	0.4	0.1	34	11	9	25	25	31
VRS-M12	0.75	0.2	42	13	10	30	30	38
VRS-M14	0.75	0.2	42	13	10	30	30	38
VRS-M16	1.5	0.33	49	15	14	35	35	41
VRS-M18	1.5	0.3	49	15	14	35	35	41
VRS-M20	2.3	0.5	57	17	16	40	40	50
VRS-M22	2.3	0.61	57	17	16	40	40	50
VRS-M24	3.2	0.86	69	21	19	49	50	60
VRS-M24	3.2	1	69	21	19	49	50	60
VRS-M27	3.2	0.94	69	21	19	49	50	60
VRS-M30	4.5	1.5	86	26	24	60	66	75
VRS-M30	4.5	1.6	86	26	24	60	66	75
VRS-M33	4.5	1.66	86	26	24	60	66	75
VRS-M36	7	3.3	103	32	29	72	75	90
VRS-M36	7	3.5	103	32	29	72	75	90
VRS-M42	9	4.6	120	38	34	82	85	105
VRS-M48	12	7.44	137	43	38	94	100	120

I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
13	37	9	M 6	6	5	7900906
16.3	47	12	M8	6	10	8500911
16.3	47	15	M10	6	10	7104029
19.8	56	18	M12	8	25	7101313
19.8	56	18	M14	8	30	7999330
23.9	65	24	M16	10	60	7101314
23.9	65	35	M16	10	60	7983306
23.9	65	24	M18	10	60	7903387
29.6	75	30	M20	12	115	7101315
29.6	75	30	M22	12	125	7992197
35.5	90	36	M24	14	190	7101316
35.5	90	36	M27	14	250	7994138
44.5	112	45	M30	17	330	7101317
44.5	112	45	M33	17	350	7993439
52.8	135	54	M36	22	590	7984201
61.5	158	63	M42	24	925	7984202
70.4	180	72	M48	27	1400	7984203
13	37	9	M6	6	5	7900909
16.3	47	12	M8	6	10	7100554
16.3	47	15	M10	6	10	7100555
19.8	56	18	M12	8	25	7100556
19.8	56	18	M14	8	30	7100557
23.9	65	24	M16	10	60	7100558
23.9	65	24	M18	10	60	7992219
29.6	75	30	M20	12	115	7100559
29.6	75	30	M22	12	125	7904625
35.5	90	36	M24	14	190	7100560
35.5	90	48	M24	14	190	7990615
35.5	90	36	M27	14	250	7904626
44.5	112	45	M30	17	330	7100561
44.5	112	60	M30	17	330	7991307
44.5	112	45	M33	17	350	7904627
52.8	135	54	M36	22	590	7984198
52.8	135	72	M36	22	590	7991247
61.5	158	63	M42	24	925	7984199
70.4	180	72	M48	27	1400	7984200





subject to technical modifications

VRS-F // metric fine thread / metric with longer vario bolt

Type	WLL [t]	weight [kg/pc.]	T [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]
VRS-F STARPOINT – metric fine thread								
VRS-F-M8×1	0.3	0.12	34	11	9	25	25	28
VRS-F-M12×1.5	0.75	0.2	42	13	10	30	30	38
VRS-F-M16×1.5	1.5	0.3	49	15	14	35	35	41
VRS-F-M20×2	2.3	0.5	57	17	16	40	40	50
VRS-F-M24×2	3.2	0.8	69	21	19	49	50	60
VRS-F-M30×2	4.5	1.6	86	26	24	60	66	75
VRS-M36×3	7	3.5	103	32	29	72	75	90
VRS-F STARPOINT – metric fine thread with longer vario bolt								
VRS-F-M10	0.4	*	34	11	9	25	25	31
VRS-F-M12	0.75	*	42	13	10	30	30	38
VRS-F-M16	1.5	*	49	15	14	35	35	41
VRS-F-M20	2.3	*	57	17	16	40	40	50
VRS-F-M24	3.2	*	69	21	19	49	50	60
VRS-F-M30	4.5	*	86	26	24	60	66	75

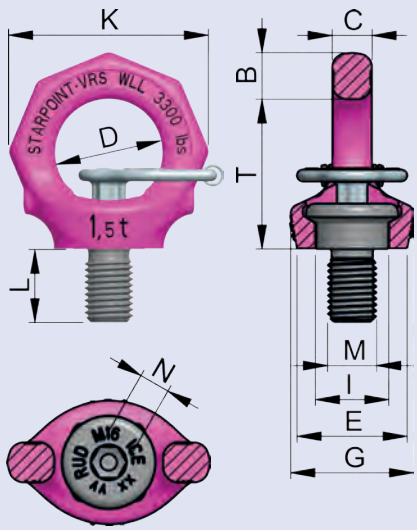
* = weight depends on design specifics

VRS // pipe thread EN 228-1 without STAR KEY

Type	WLL [t]	weight [kg/pc.]	T [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]
VRS STARPOINT without STAR KEY – pipe thread EN 228-1								
VRS-G 1/4" *	0.75	0.2	42	13	10	30	30	–
VRS-G 1/2"	0.75	0.3	52	13	10	30	35	30
VRS-G 3/4"	1.5	0.53	61	15	14	35	42	36
VRS-G 1"	1.5	0.5	61	15	14	35	47	36
VRS-G 1-1/4"	1.5	1.0	64	15	14	35	58	41
VRS-G 2"	1.5	1.5	64	15	17	35	81	50
VRS-G 2"	2.3	1.9	72	17	16	40	81	70
VRS-G 3"	1.5	3.3	64	15	15	35	115	100

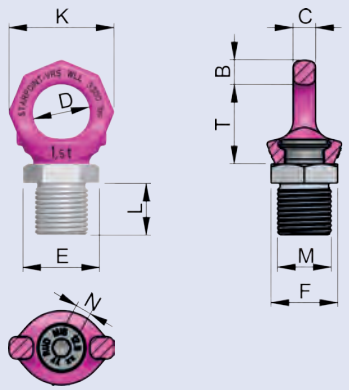
* = identically constructed as VRS metric thread

I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
16.3	47	12	M8×1	6	10	7904332
19.8	56	18	M12×1.5	8	25	7902929
23.9	65	24	M16×1.5	10	60	7902676
29.6	75	30	M20×2	12	115	7992634
35.5	90	36	M24×2	14	190	7992566
44.5	112	45	M30×2	17	330	7991856
52.8	135	54	M36×3	22	590	7992728
16.3	47	16-70	M10	6	10	8600270
19.8	56	18-150	M12	8	25	8600271
23.9	65	16-120	M16	10	60	8600272
29.6	75	30-160	M20	12	115	8600273
35.5	90	36-140	M24	14	190	8600274
44.5	112	45-190	M30	17	330	8600275



subject to technical modifications

G [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
38	56	18	G 1/4"	8	25	7999269
–	56	20	G 1/2"	8	25	7998682
–	65	23	G 3/4"	10	60	7998880
–	65	32	G 1"	10	60	7999163
–	65	40	G 1-1/4"	10	60	7903732
–	65	45	G 2"	10	100	7999164
–	75	45	G 2"	12	115	7900433
–	65	45	G 3"	10	100	7905324

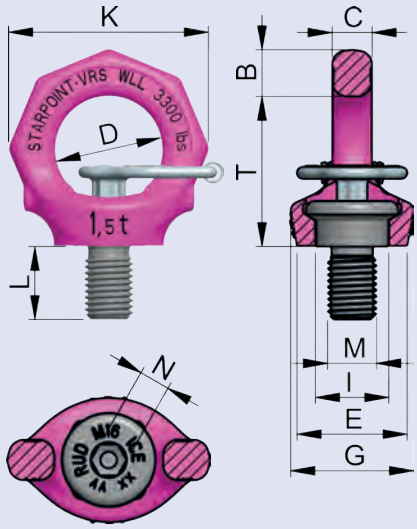


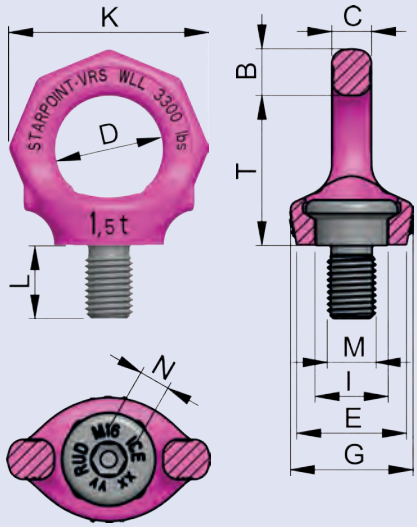
subject to technical modifications

VRS-F // UNC inch thread with and without STAR KEY

Type	WLL [t]	weight [kg/pc.]	T [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]
VRS-F STARPOINT – UNC inch thread								
VRS-F 5/16"-18UNC	0.3	0.13	34	11	9	25	25	31
VRS-F 3/8"-16UNC	0.4	0.12	34	11	9	25	25	31
VRS-F 7/16"-14UNC	0.4	0.12	34	11	9	25	25	31
VRS-F-1/2"-13UNC	0.75	0.22	42	13	10	30	30	38
VRS-F-5/8"-11UNC	1.5	0.33	49	15	14	35	35	41
VRS-F-3/4"-10UNC	1,5	0,33	49	15	14	35	35	41
VRS-F-7/8"-9UNC	2.3	0.64	57	17	16	40	40	50
VRS-F-1"-8UNC	3.2	0.98	69	21	19	49	50	60
VRS-F-1 1/8"-8UN	3.2	0.98	69	21	19	49	50	60
VRS-F-1 1/8"-7UNC	3.2	0.98	69	21	19	49	50	60
VRS-F-1 1/4"-7UNC	4.5	1.82	86	26	24	60	66	75
VRS-F-1 1/2"-6UNC	7	3.6	103	32	29	72	75	90
VRS-F-1 3/4"-5UNC	9	4.95	120	38	34	82	85	105
VRS-F-2"-4.5UNC	12	7.6	137	43	38	94	100	120
VRS STARPOINT without STAR KEY – UNC inch thread								
VRS-1/4"-20UNC	0.1	0.24	27	9	7	20	23	31
VRS-7/16"-14UNC	0.4	0.09	34	11	9	25	25	31
VRS-3/8"-16UNC	0.4	0.1	34	11	9	25	25	31
VRS-1/2"-13UNC	0.75	0.2	42	13	10	30	30	38
VRS-5/8"-11UNC	1.5	0.3	49	15	14	35	35	41
VRS-3/4"-10UNC	2.3	0.5	57	17	16	40	40	50
VRS-7/8"-9UNC	2.3	0.6	57	17	16	40	40	50
VRS-1"-8UNC	3.2	0.9	69	21	19	49	50	60
VRS-1 1/8"-8UN	3.2	0.9	69	21	19	49	50	60
VRS-1 1/8"-7UNC	3.2	0.9	69	21	19	49	50	60
VRS-1 1/4"-7UNC	4.5	1.7	86	26	24	60	66	75
VRS-1 1/2"-6UNC	7	2.9	103	32	29	72	75	90
VRS-1 3/4"-5UNC	9	4.6	120	38	34	82	85	105
VRS-2"-4.5UNC	12	7.0	137	43	38	94	100	120

	I [mm]	K [mm]	L [mm]	M	N	torque [Nm]	Ref. No.
	13	47	12	5/16"-18UNC	1/4"	10	7999106
	16.3	47	19	3/8"-16UNC	1/4"	10	7104480
	16.3	47	15	7/16"-14UNC	1/4"	10	7904195
	19.8	56	19	1/2"-13UNC	5/16"	25	7104481
	23.9	65	24	5/8"-11UNC	3/8"	60	7104482
	23,9	65	24	3/4"-10UNC	1/2"	115	
	29.6	75	33	7/8"-9UNC	1/2"	115	7104484
	35.5	90	38	1"-8UNC	9/16"	190	7104485
	35.5	90	36	1 1/8"-8UN	9/16"	250	7903386
	35.5	90	36	1 1/8"-7UNC	9/16"	250	7903383
	44	112	48	1 1/4"-7UNC	3/4"	330	7104486
	52.8	135	54	1 1/2"-6UNC	7/8"	590	7104487
	61.5	158	63	1 3/4"-5UNC	1"	925	7104488
	70.4	180	72	2"-4.5UNC	1 1/8"	1400	7104489
	13	37	9	1/4"-20UNC	1/4"	5	7999105
	16.3	47	15	7/16"-14UNC	1/4"	15	7903118
	16.3	47	19	3/8"-16UNC	1/4"	10	7103959
	19.8	56	19	1/2"-13UNC	5/16"	25	7103960
	23.9	65	24	5/8"-11UNC	3/8"	60	7103961
	29.6	75	29	3/4"-10UNC	1/2"	115	7103962
	29.6	75	33	7/8"-9UNC	1/2"	125	7103963
	35.5	90	38	1"-8UNC	9/16"	190	7103964
	35.5	90	36	1 1/8"-8UN	9/16"	250	7999385
	35.5	90	36	1 1/8"-7UNC	9/16"	250	7999384
	44	112	48	1 1/4"-7UNC	3/4"	330	7103965
	52.8	135	54	1 1/2"-6UNC	7/8"	590	7103966
	61.5	158	63	1 3/4"-5UNC	1"	925	7103967
	70.4	180	72	2"-4.5UNC	1 1/8"	1400	7103968



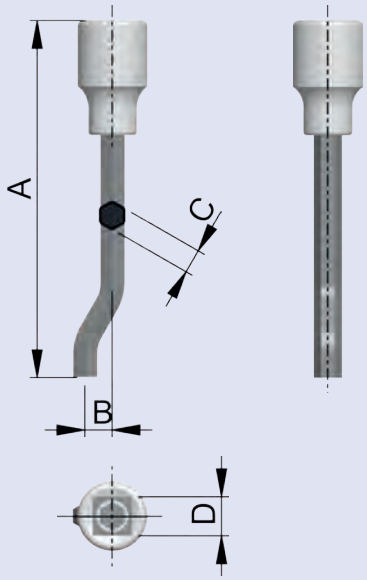


subject to technical modifications

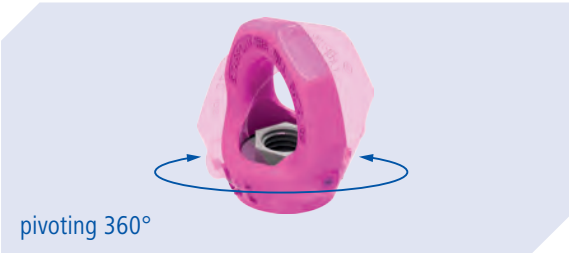
VRS // socket wrench / STAR KEY

Type	weight [kg/pc.]	A [mm]	B [mm]	C [mm]	D [mm]
VRS socket wrench					
socket wrench VRS	0.09	118	7.5	6	1/2"
socket wrench VRS	0.11	118	9	8	1/2"
socket wrench VRS	0.15	138	12	10	1/2"
socket wrench VRS	0.2	137	14	12	1/2"
socket wrench VRS	0.24	140	16.5	14	1/2"
socket wrench VRS	0.47	152	22	17	1/2"
socket wrench VRS	1.0	192	26	22	1"
socket wrench VRS	1.2	276	29	24	1"
socket wrench VRS	2.0	304	33	27	1"
VRS STAR KEY – metric					
STAR KEY	0.02				
STAR KEY	0.02				
STAR KEY	0.03				
STAR KEY	0.04				
STAR KEY	0.08				
STAR KEY	0.12				
STAR KEY	0.15				
STAR KEY	0.3				
STAR KEY	0.4				
VRS STAR KEY – UNC inch thread					
STAR KEY	0.02				
STAR KEY	0.02				
STAR KEY	0.03				
STAR KEY	0.04				
STAR KEY	0.08				
STAR KEY	0.12				
STAR KEY	0.15				
STAR KEY	0.3				
STAR KEY	0.4				

M / UNC	Ref. No.
M6+M8+M10	7997749
M12+M14	7997750
M16+M18	7997751
M20+M22	7997752
M24+M27	7997753
M30+M33	7902078
M36	7902079
M42	7902080
M48	7902081
M6+M8+M10	7983986
M12+M14	7905453
M16+M18	7903254
M20+M22	7904282
M24+M27	7904283
M30+M33	7904284
M36	7904285
M42	7904286
M48	7904287
5/16"-18UNC + 3/8"-16UNC + 7/16"-14UNC	7983995
1/2"-13UNC	7984001
5/8"-11UNC	7983997
3/4"-10UNC + 7/8"-9UNC	7983998
1"-8UNC + 1 1/8"-8UN + 1 1/8"-7UNC	7983999
1 1/4"-7UNC	7984000
1 1/2"-6UNC	7984001
1 3/4"-5UNC	7984002
2"-4,5UNC	7984003



subject to technical modifications


pivoting 360°

Clear marking of the minimum WLL.

VRM

The Starpoint among the eye nuts.

Product features

4:1 | RUD ID | 360° | M | -40°–100°C | 100°C max.

- **Lifting points pivots 360°** for an easy adjustment in load direction.
- **Clear marking of the minimum WLL for all loading directions.**
- The WLL statement corresponds to the minimum WLL in all loading directions. Higher WLL possible when location and installation is optimised (compare WLL chart/product information).
- Available as:
  – Standard Metric Thread M6-M30 (DIN EN 13)

Application-specific features VRM

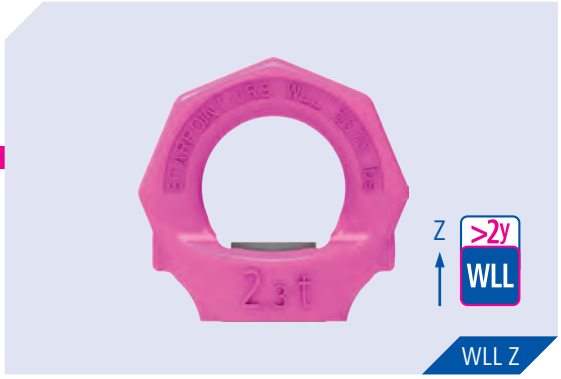
- Special coating on request.
- Component according to the test criterias of BG/DGUV "GS-OA-15-04".
- Quick and easy installation with just one bolt connection.
- Hand tightening with appropriate wrench is sufficient for a singular lift.

VRM // metric thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]	H [mm]
VRM eye nut STARPOINT – metric									
VRM-M6	0.1	0.05	27	9	7	20	23	28	16
VRM-M8	0.3	0.1	34	11	8.5	25	25	28	20
VRM-M10	0.4	0.1	34	11	8.5	25	25	28	20
VRM-M12	0.75	0.2	42	13	10	30	30	34	25
VRM-M16	1.5	0.3	52	15	14	35	36	40	30
VRM-M20	2.3	0.5	57	17	16	40	40	50	34
VRM-M24	3.2	0.9	69	21	19	48	50	60	40
VRM-M30	4.5	1.5	86	26	24	60	60	75	52

VRM

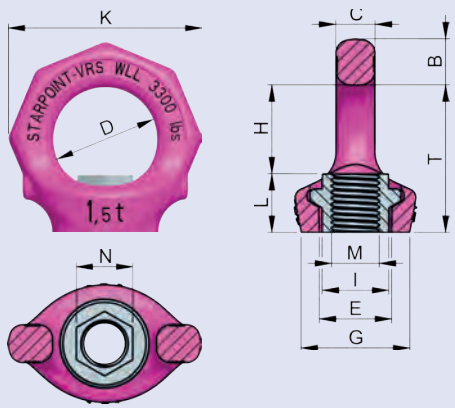
Vario eye nut
"STARPOINT"



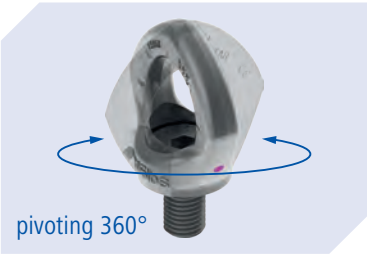
Please refer to the Working Load Limit chart on p.40.

Other important RUD specific information and specialities to our RUD lifting points can be found on page 20 and in the specific user instruction (www.rud.com).

I [mm]	K [mm]	L [mm]	M	N [mm]	Ref. No.
13	37	11	M6	9	7900786
16	47	14	M8	12	7992989
16	47	14	M10	12	7990311
20	56	17	M12	14	7990312
22	65	21	M16	19	7990314
29	75	23	M20	24	7990315
35	90	29	M24	30	7990316
44	112	34	M30	36	7993008



subject to technical modifications



INOX-STAR

Approved concept also
as INOX Stainless Steel®.

Product features

4:1 · RUD ID · 360° · M · -40°–280°C · 280°C max. · Rost frei

- Body and bolt made out of Duplex Steel 1.4462 (high resistancy in sea water and in environment with a high concentration of chlorine ions.
- **Pentagonal shape for a clear determination to common lifting points (i.e. eye bolts).**
- **Lifting points pivots 360°** for an easy adjustment in load direction.
- **Clear marking of the minimum WLL** for all loading directions. Higher WLL possible when location and installation is optimised (compare WLL chart / product information).

- Non removable special bolt (this reduces the risk of non standard bolts). Clear marking at the bolt head: RUD, thread size, batch-no., class of strength.
- Available as: Standard Metric Thread (DIN EN 13)
- Variable thread lengths are available for usage at thread holes and at through hole fixtures.
- Component according to the test criterias of BG/DGUV "GS-OA-15-04"
- Quick and easy installation with just one bolt connection.

INOX-STAR // metric thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]
INOX-STAR Stianless steel eyebolt – metric								
INOX-STAR M12	0.5	0.19	43	14	12	30	30	32
INOX-STAR M16	1	0.31	50	16	14	35	36	38
INOX-STAR M20	2	0.53	57	19	16	40	42	47
INOX-STAR M24	2.5	0.92	69	24	19	48	50	56
INOX-STAR M12 L=50	0.5	0.22	43	14	12	30	30	32
INOX-STAR M20 L=60	2	0.6	57	19	16	40	42	47

INOX-STAR

Stainless steel eyebolt with Full working load in all directions.

Please refer to the Working Load Limit chart on p.40.

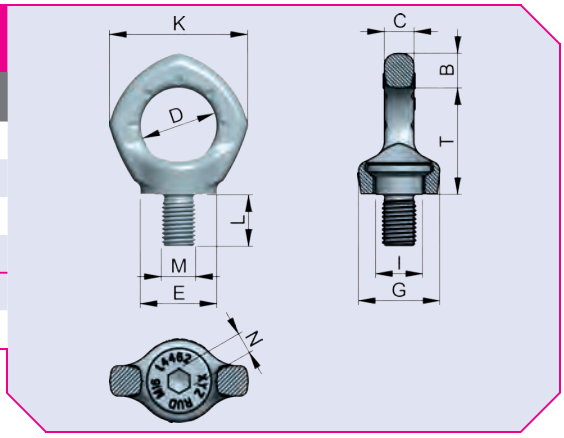
Application-specific features INOX-STAR

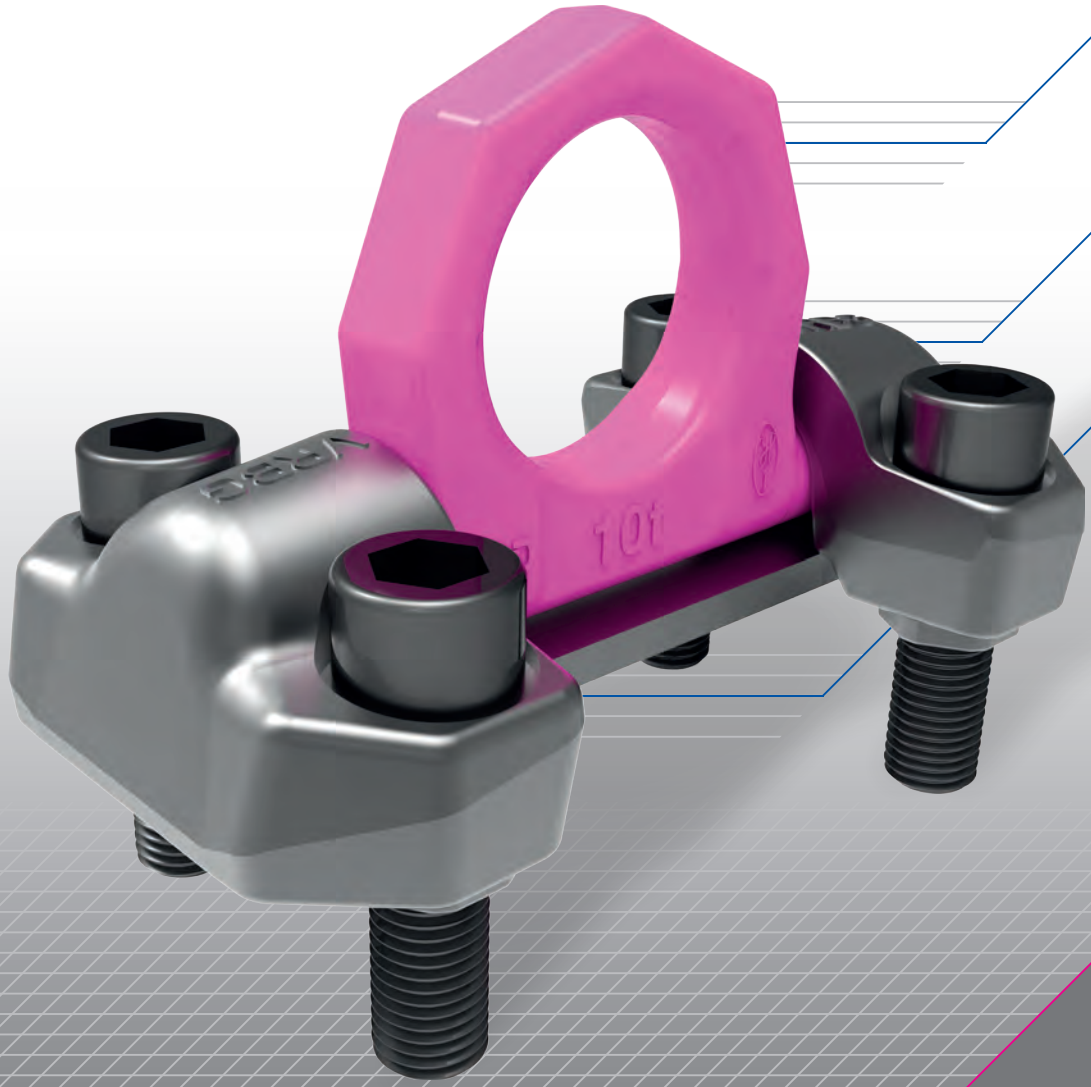
- Hand tightening with appropriate wrench is sufficient for a singular lift.
- For permanent installation and recurrend lifts we can offer a special socket wrench to apply the requested torque (fits to a common Inch torque wrench).

Other important RUD specific information and specialities to our RUD lifting points can be found on page 20 and in the specific user instruction (www.rud.com).

I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
20	56	18	M12	8	25	7993835
23.5	65	24	M16	10	60	7993836
29	74	30	M20	12	115	7993837
35	92	36	M24	14	190	7993838
20	56	50	M12	8	25	7997822
29	74	60	M20	12	115	7998714

subject to technical modifications





RBG
Load ring thread

VRBG
VIP Load ring thread

MADE IN GERMANY

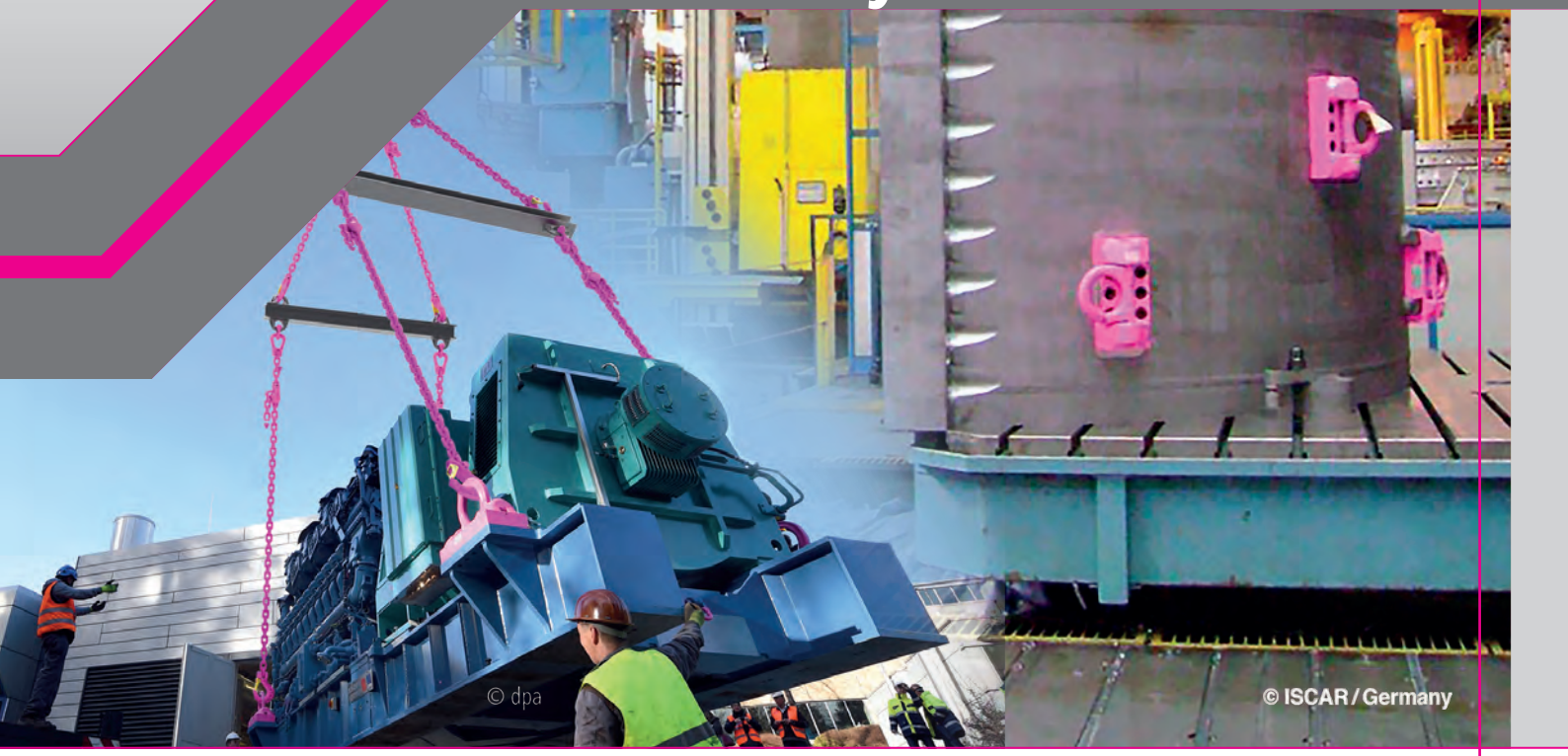
RUD®

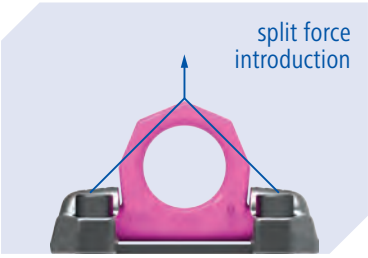
Full load in 90° according to ring plane

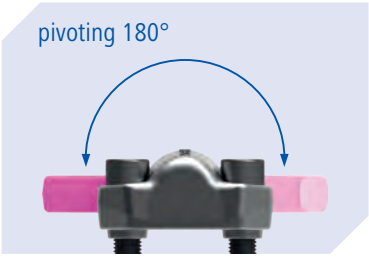
Part-protecting application of force through several fixtures

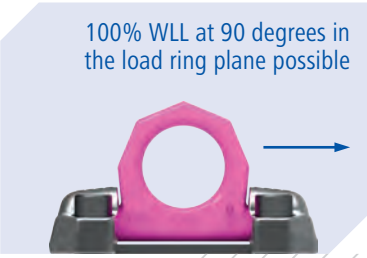
Working Load Limit up to 50 t

Force application made easy



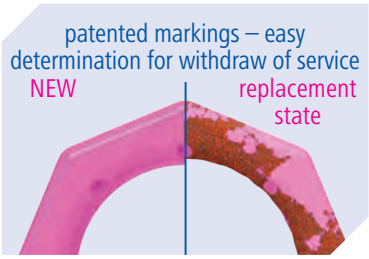






RBG / VRBG

Load ring threaded with full working load in all directions and split force introdcution.



Product features RBG // VRBG

4:1 · RUD ID · 180° · M · -40°–100°C · 350°C max.

- **Split force introduction** due to multiple point fixing.
- **Suspension ring pivots 180°.**
- **100% WLL at 90 degrees in the load ring plane possible.**
- **Clear marking of the minimum WLL for all loading directions.**
- **Patented markings for easy determination for withdraw of service.**
- **Original RUD bolt available as spare part.**
- Component according to the test criterias of BG/DGUV "GS-OA-15-04".

RBG / VRBG

Load ring thread / VIP Load ring thread

VRBG 10 t/16 t / 4 bolts

VRBG 31.5 t/50 t / 6/8 bolts

RBG 3 t / 2 bolts

For further details please refer to the WLL chart on p.41.

Product features / Application-specific features RBG / VRBG

- Assembly with flat / ring wrench or allen key possible.
- Hand tightening with appropriate wrench is sufficient for a singular lift.
- Please observe torque instructions when lifting point is permanently installed resp. at constant swivelling operations and tilting/ turning actions.

Other important RUD specific information and specialities to our RUD lifting points can be found on page 18 and in the specific user instruction (www.rud.com).

RBG // Metric thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]
RBG 3 – Load ring eye plate-threaded												
RBG-3	3	1.07	67	34	16	5	48	22	92	6	18	30

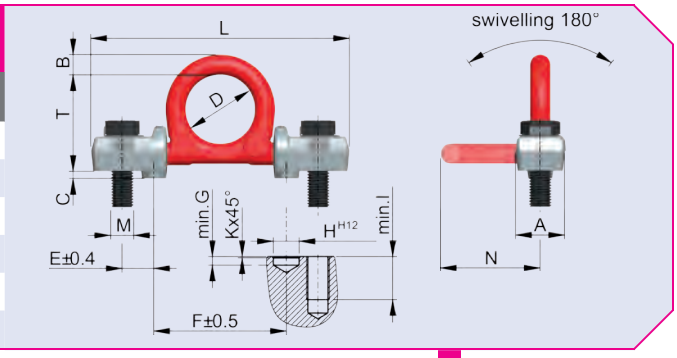
VRBG 10 t/16 t // Metric thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]
VRBG 10 and 16 – VIP Load ring eye plate-threaded												
VRBG 10	10	6.7	103	125	22	6	65	143	78	8	30	50
VRBG 16	16	11.3	131	170	30	8	90	198	104	10	46	70

VRBG 31.5 t/50 t // Metric thread

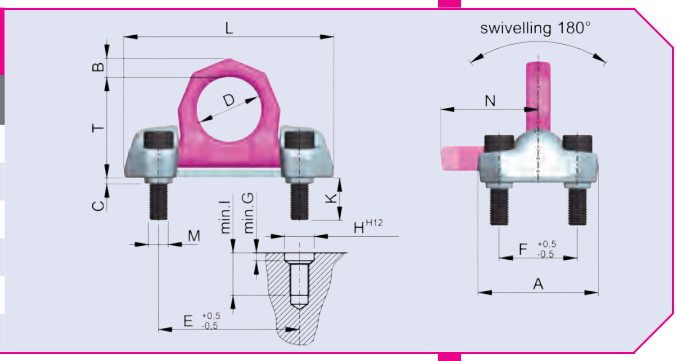
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]
VRBG 31.5 and 50 – VIP Load ring welded on boltable plate									
VRBG 31.5	31.5	67.5	265	180	42	42	130	75	120
VRBG 50	50	198	412	270	70	55	230	100	200

K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
1	178	2×M16	71	120	51817



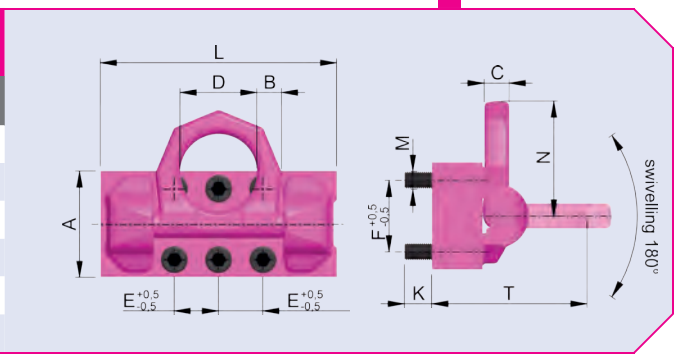
subject to technical modifications

K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
43	213	4×M20	100	300	7994537
63	270	4×M30	134	600	7993255



subject to technical modifications

K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
46	400	6×M30	195	900	7985866
58	650	8×M36	340	1000	7985867



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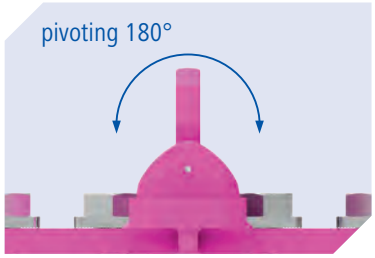
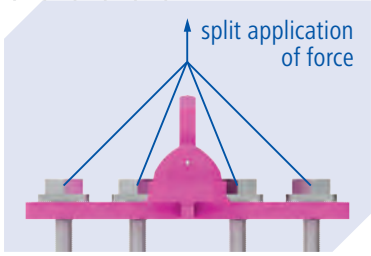
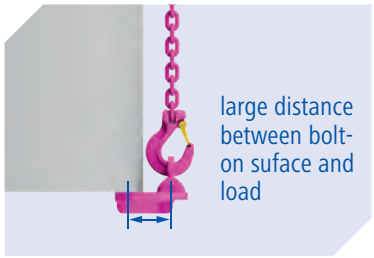
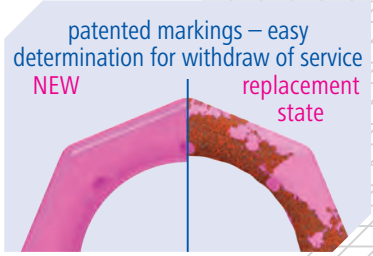


T-FRB / B-FRB

Flange Load ring with a high flexibility.
Available as Top and Bottom Flange.







Product features T-FRB // B-FRB

4:1 | RUD ID | M | -40°–100°C | 350°C max.

- **High flexibility!** Optimal use in different drill patterns and pitch circle diameters of the flange.
- **Lifting point pivots 180°.**
- **The component is equipped with an axial bushing disc for optimised 90° loading.**
- **Split force introduction** due to multiple point fixing.
- **Large distance between bolt-on surface and load to avoid damage.**
- **Patented markings for easy determination for withdraw of service.**
- Clear marking at the bolt head: RUD, thread size, batch-no., class of strength.
- Original RUD bolt available as spare part.
- Variable thread lengths are available for usage at thread holes and at through hole fixtures.

Other important RUD specific information and specialities to our RUD lifting points can be found on page 20 and in the specific user instruction (www.rud.com).

T-FRB / B-FRB

Flange Load ring
FLARIBO Top Flange

Flange Load ring
FLARIBO Botton Flange

FLARIBO on pipe segment

T-FRB / VIP 4 leg suspension

B-FRB / VIP 2 leg suspension

Application-specific features T-FRB / B-FRB

- Assembly with flat/ring wrench or allen key possible.
- Hand tightening with appropriate wrench is sufficient for a singular lift.

T-FRB // technical data

	Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	D [mm]
T-FRB – Flange Load ring, FLARIBO Top Flange						
	T-FRB-F	max.18 t	*	214	150-400	90
	T-FRB-G	max. 18 t	*	228	160-320	90
	T-FRB-H	max. 31.5 t	*	307	180-390	130

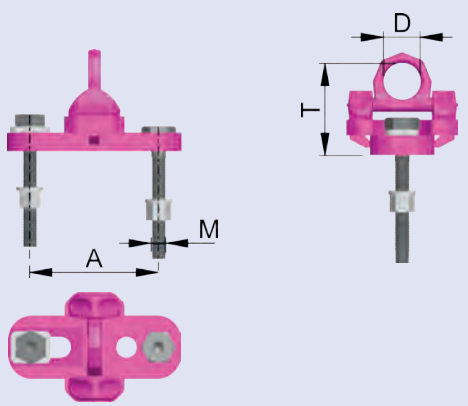
* = weight depends on customised product

B-FRB // technical data

	Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	D [mm]
B-FRB – Flange Load ring, FLARIBO Botton Flange						
	B-FRB-G	max. 18 t	*	141	160-320	90
	B-FRB-H	max. 31.5 t	*	197	180-390	130
	Technical characteristics will be acquired and evaluated through the FLARIBO-questionnaire – according to the specifications of the order. The production is customized.					

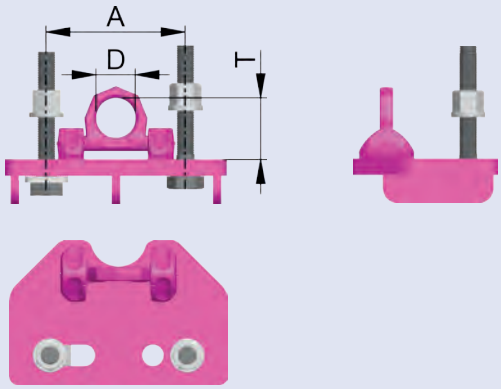
* = weight depends on customised product

possible threads	Ref. No.
M20, M24, M27, M30	8600170
M30, M36, M39, M42, M45, M48	8600180
M42, M45, M48, M56, M64	8600190



sucject to technical modifications

possible threads	Ref. No.
M30, M36, M39, M42, M45, M48	8600181
M42, M45, M48, M56, M64	8600191



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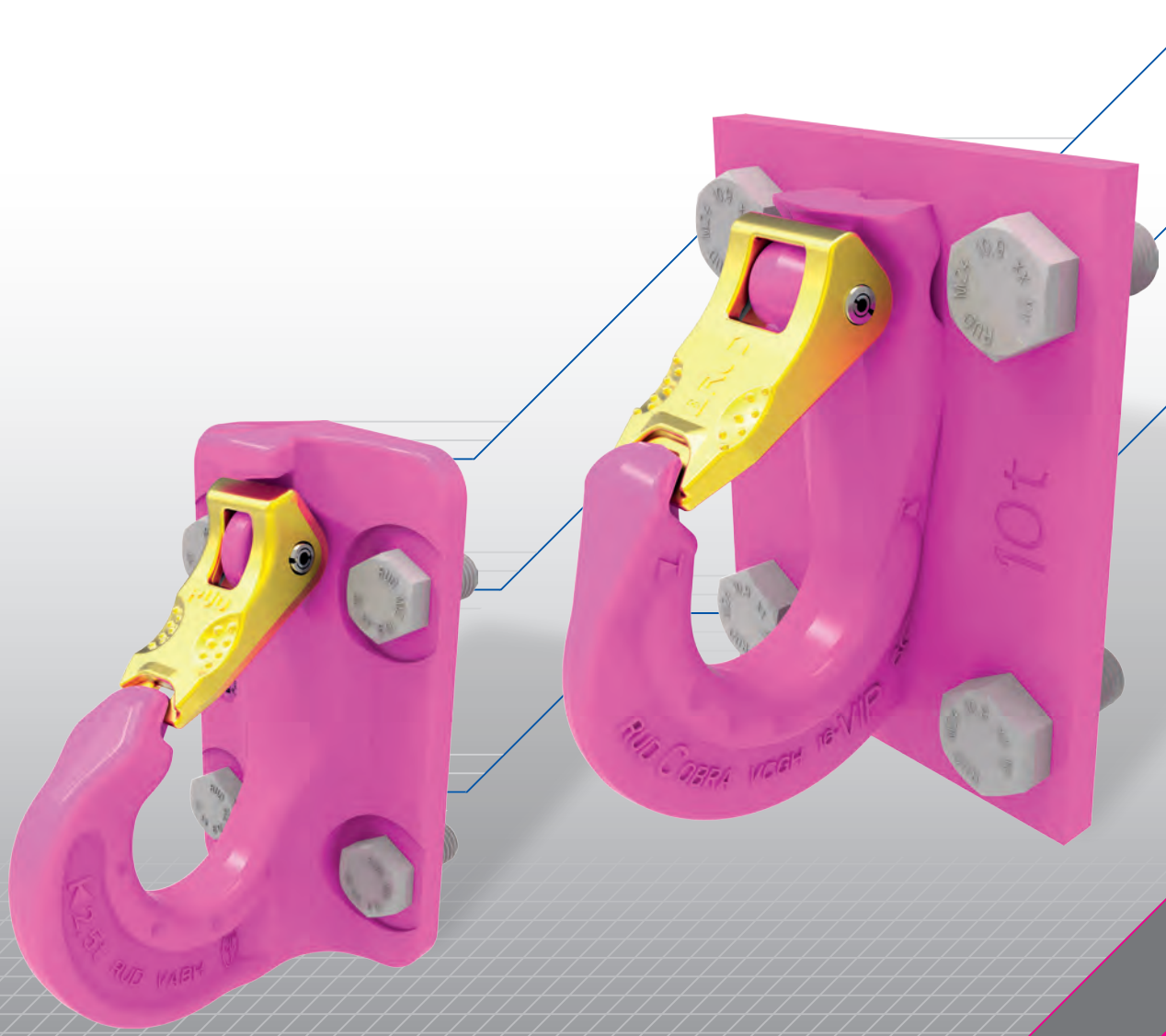


VABH-B

VIP Excavator hook for bolting

VCGH-G

VIP Excavator hook for bolting

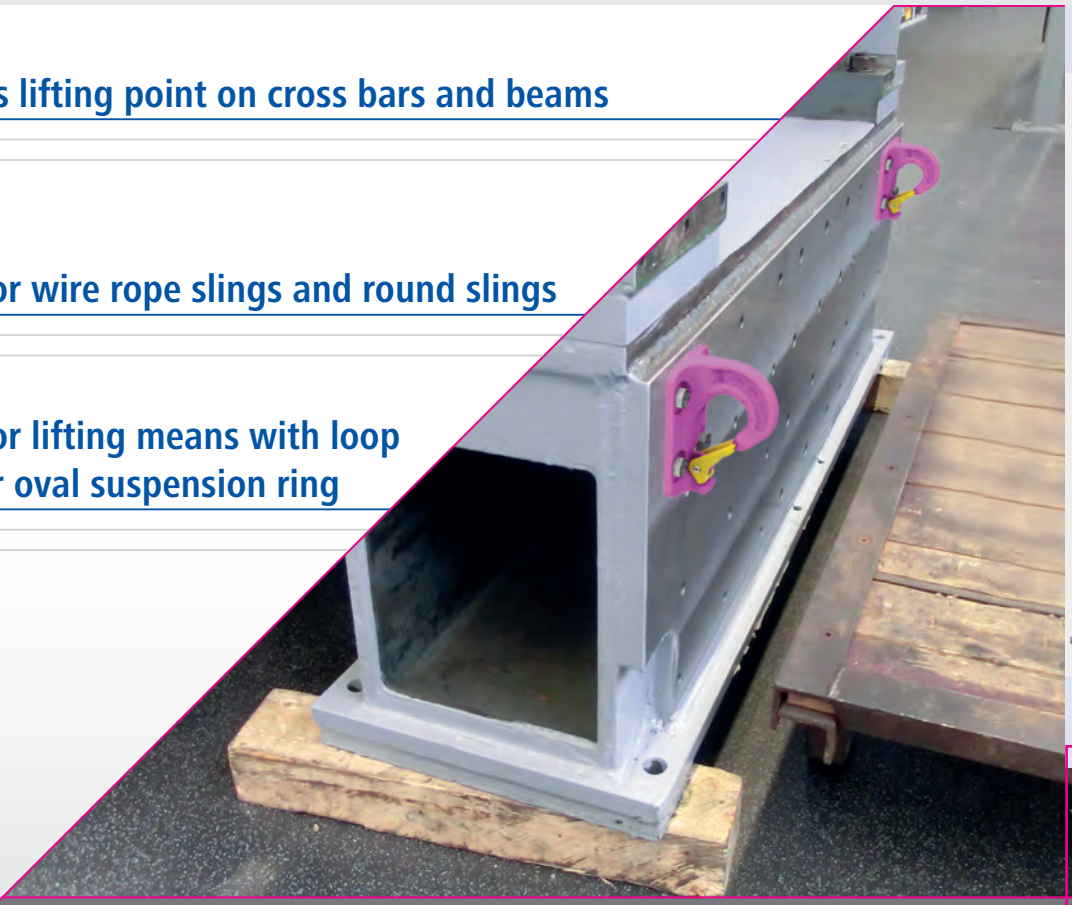
MADE IN GERMANY

RUD®

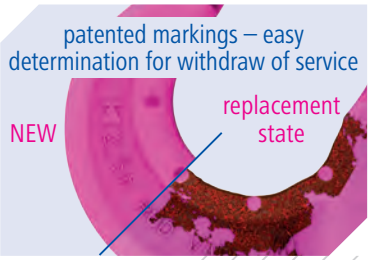
As lifting point on cross bars and beams

For wire rope slings and round slings

For lifting means with loop or oval suspension ring



The threaded hook for all lifting means



Product features

VABH-B / VCGH-G

Threaded Excavator hook
for all lifting means.

4:1 | RUD ID | M | 350 °C max. | VABH-B [-40 °– 100 °C | VCGH-G [-20°– 100°C

- **Can be combined with most commerical lifting means without additional connecting element.**
- **ICE-Bolt** made out of patented steel. Non-hazardous deep temperature usage; higher toughness and therefore higher bending strength as well as less wear occurance.
- **Patented markings for easy determination for withdraw of service.**
- Robust, forged safety latch.

Application-specific features VABH-B / VCGH-G

- Assembly with flat / ring wrench or allen key possible.

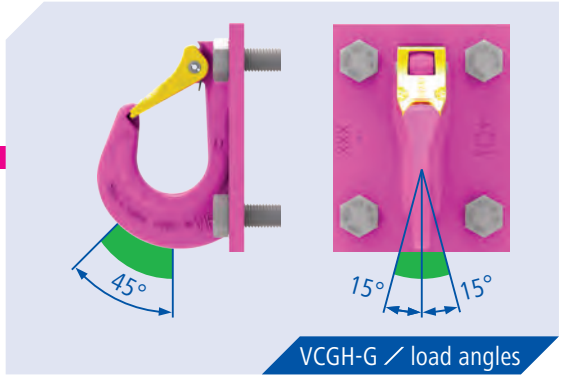
Other important RUD specific information and specialities to our RUD lifting points can be found on page 20 and in the specific user instruction (www.rud.com).

VABH-B / VCGH-G // technical data

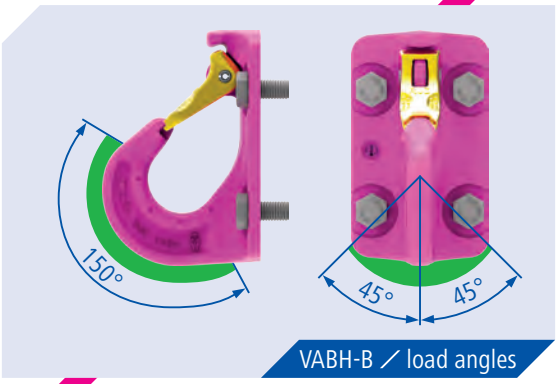
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]
VABH-B – VIP Excavator hook for bolting – metric									
VABH-B 1.5t	1.5	0.78	26	6.5	76	115	111	70	26
VABH-B 2.5t	2.5	1.73	39	7.5	98	148	143	85	31.5
VABH-B 4t	4	3.0	40	11	119	168	164	104	35
VABH-B 6.7t	6.7	5.58	51	13	147	205	200	120	40
VCGH-G – VIP Excavator hook for bolting – metric									
VCGH-G 16	10	8.49	49	15	141	200	220	170	48
VCGH-G 20	16	18.0	69	20	187	272	288	210	63
VCGH-G 22	20	18.9	74	20	196	276	292	240	63

VABH-B / VCGH-G

VIP Excavator hook for bolting / VIP Excavator hook for bolting



VCGH-G / load angles

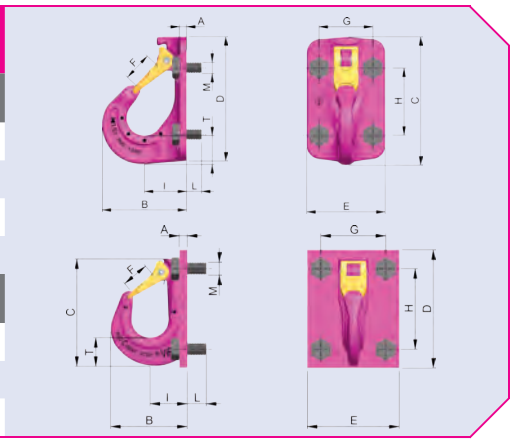


VABH-B / load angles

VABH-B
Area of application in ring plane: 150°
Area of application at lateral load: +45°, –45°

VCGH-G
Area of application in ring plane: 45°
Area of application at lateral load: +15°, –15°

	G [mm]	H [mm]	I [mm]	L [mm]	M	torque [Nm]	Ref. No.
	48	60	38	13.5	4×M10	55	7991205
	60	75	49	18	4×M12	100	7991206
	70	90	59	25	4×M16	240	7991207
	85	110	70	28	4×M20	450	8502238
	120	150	69	35	4×M24	800	7984048
	150	2×110	87	30	6×M24	800	7984311
	150	2×110	92	30	6×M24	950	7984313



subject to technical modifications

B-ABA

Sturdy and resilient. Now also available as bolt-on type.

Product features

4:1 | RUD ID | M | -40 °– 100 °C | 350 °C max.

- **No rattling noise or shaking** even at strong vibrations or shock loads, simple hinge of lifting means possible.
- **ICE-Bolt** made out of patented steel. Non-hazardous deep temperature usage; higher toughness and therefore higher bending strength as well as less wear occurance.
- **Clear marking of the minimum WLL** for all loading directions.
- Clear marking at the bolt head: RUD, thread size, batch-no., ICE.
- Available as: Standard Metric Thread (DIN EN 13)

- Patented markings for easy determination for withdraw of service.
- Pink powder coated surface.

Other important RUD specific information and specialities to our RUD lifting points can be found on page 20 and in the specific user instruction (www.rud.com).

B-ABA // technical data

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
B-ABA – Boltable lifting point, full working load in all directions								
B-ABA 1.6 t	1.6	0.88	46.5	75	16	100	35	16
B-ABA 3.2 t	3.2	2	65	92	23	137	50	21
B-ABA 5 t	5	4.1	80	113	27	172	60	28
B-ABA 10 t	10	9.3	105	146	38	228	80	36
B-ABA 20 t	20	21	148	220	52	272	115	40
B-ABA 31.5 t	31.5	36	170	255	64	320	130	50

* = in preparation

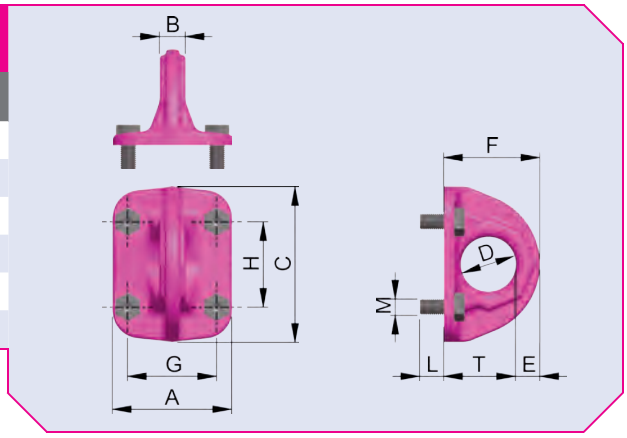
B-ABA

Boltable lifting point, full working load in all directions

Please refer to the Working Load Limit chart on p.44.

	F [mm]	G [mm]	H [mm]	L [mm]	M	Ref. No.
	62.5	55	55	13	4×M10	*
	86	70	75	16	4×M12	*
	108	84	95	24	4×M16	*
	141	110	125	25	4×M20	*
	188	165	150	40	6×M30	*
	220	185	175	54	6×M36	*

subject to technical modifications



RS / RM

High-strength octagon shaped Eye bolt/Eye nut.

Product features

4:1 | RUD ID | M | MF | UNC | BSW | G | -40°– 200°C | 400°C max. | only RS [UNF | 8UN

- **Considerably higher WLL** (in comparison to DIN 580/582) at vertical load.
- **Large thread and WLL range** (M6-M48, 0.1 t – 8 t).
  – Standard Metric Thread (DIN EN 13)
  – Metric Fine Thread (DIN EN 13)
  – Coarse Pitch Thread UNC (ANSI B1.1)
  – only RS: Fine Thread UNF (ANSI B1.1)
  – Fine Thread 8UN (ANSI B1.1)
  – Coarse thread BSW (BS 84)
  – Inch Pipe Thread (DIN 228)
- **Clear marking of the minimum WLL for all loading directions.**

Application-specific features RS / RM

- Quick and easy installation with just one bolt connection.

Other important RUD specific information and specialities to our RUD lifting points can be found on page 20 and in the specific user instruction (www.rud.com).

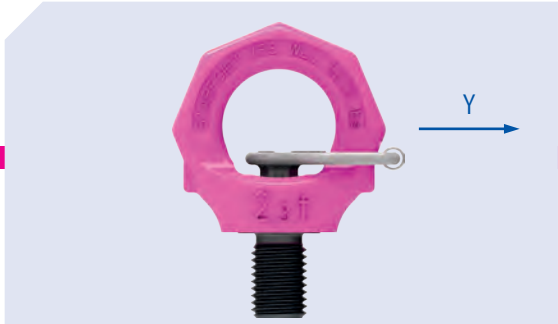
Indication for the RS

In accordance with the test principles of DGUV GS-OA-15-04, eyebolts with rigid eyes serve as mounting aids, e.g. on motors and gear units.

There is a trade association clearance certificate available for using the high-strength RUD RS eyebolts.

RS / RM

Eye bolt / Eye nut



For sideway loading use VRS respectively VRM

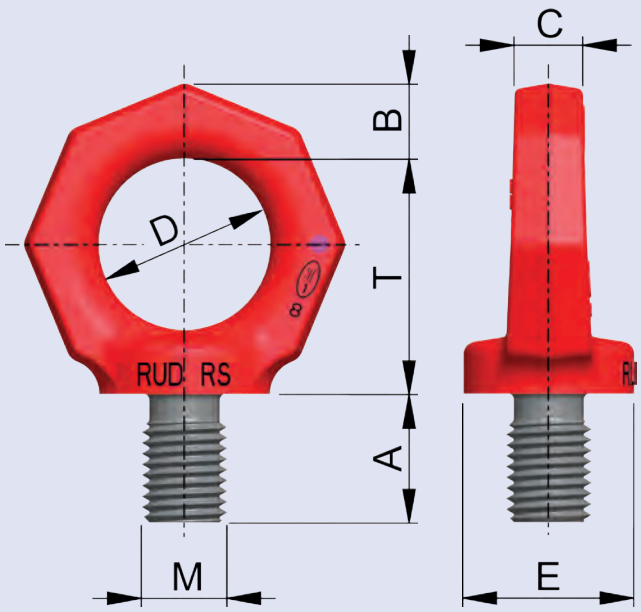
For the actual WLL data of the RS please refer to the Working Load Limit chart on p.45.

WLL Z / RS and RM: only vertical load allowed

RS // metric thread / metric fine thread / pipe thread ISO 228-1

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]
RS Eye bolt – metric						
RS M6	0.1	0.1	34	12	11	10
RS M8	0.2	0.1	34	12	11	10
RS M10	0.25	0.1	34	15	11	10
RS M12	0.4	0.18	41	18	13	12
RS M14	0.75	0.3	48	21	15	14
RS M16	1	0.3	48	24	15	14
RS M18	1.2	0.47	55	30	17	16
RS M20	1.5	0.47	55	30	17	16
RS M22	1.5	0.88	70	36	21	20
RS M24	2	0.88	70	36	21	20
RS M27	2	1.6	85	45	26	24
RS M30	3	1.62	85	45	26	24
RS M33	3	6.1	130	50	43	38
RS M36	4	6.5	130	54	43	38
RS M39	5	6.5	130	59	43	38
RS M42	6	6.5	130	63	43	38
RS M45	7	6.5	130	67	43	38
RS M48	8	6.5	130	67	43	38
RS Eye bolt – metric fine thread						
RS M10×1	0.25	0.1	34	15	11	10
RS M10×1.25	0.25	0.1	34	15	11	10
RS M12×1	0.4	0.18	41	18	13	12
RS M12×1.25	0.4	0.18	41	18	13	12
RS M12×1.5	0.4	0.18	41	18	13	12
RS M14×1.5	0.75	0.3	48	21	15	14
RS M16×1.5	1	0.3	48	24	15	14
RS M18×1.5	1.2	0.45	55	30	17	16
RS M20×1.5	1.5	0.47	55	30	17	16
RS M20×2	1.5	0.47	55	30	17	16
RS M22×1.5	1.5	0.78	70	34	21	20
RS M24×1.5	2	0.88	70	30	21	20
RS M24×2	2	0.88	70	36	21	20
RS M27×2	2	1.6	85	45	26	24
RS M30×2	3	1.6	85	45	26	24
RS M36×3	4	6.5	130	54	43	38
RS M42×3	6	6.5	130	63	43	38
RS M48×3	8	6.5	130	67	43	38
RS Eye bolt – pipe thread ISO 228-1						
RS G 1/4"	0.4	0.18	41	18	13	12
RS G 3/8"	1	0.45	55	24	17	16
RS G 3/4"	2	1.6	85	40	26	24

D [mm]	E [mm]	M	Ref. No.
25	25	M6	61401
25	25	M8	61402
25	25	M10	56397
30	30	M12	56398
35	35	M14	56403
35	35	M16	56404
40	40	M18	53850
40	40	M20	56407
50	50	M22	53346
50	50	M24	56408
60	60	M27	53347
60	60	M30	56409
90	100	M33	57770
90	100	M36	56954
90	100	M39	57771
90	100	M42	56955
90	100	M45	58044
90	100	M48	56956
25	25	M10×1	7985047
25	25	M10×1.25	56877
30	30	M12×1	56868
30	30	M12×1.25	56869
30	30	M12×1.5	59830
35	35	M14×1.5	53844
35	35	M16×1.5	59832
40	40	M18×1.5	50986
40	40	M20×1.5	57203
40	40	M20×2	59833
50	50	M22×1.5	7901656
50	50	M24×1.5	57210
50	50	M24×2	59834
60	60	M27×2	57259
60	60	M30×2	59835
90	100	M36×3	53853
90	100	M42×3	53872
90	100	M48×3	53885
30	30	G 1/4"	7986067
40	40	G 3/8"	7986853
60	60	G 3/4"	7989219

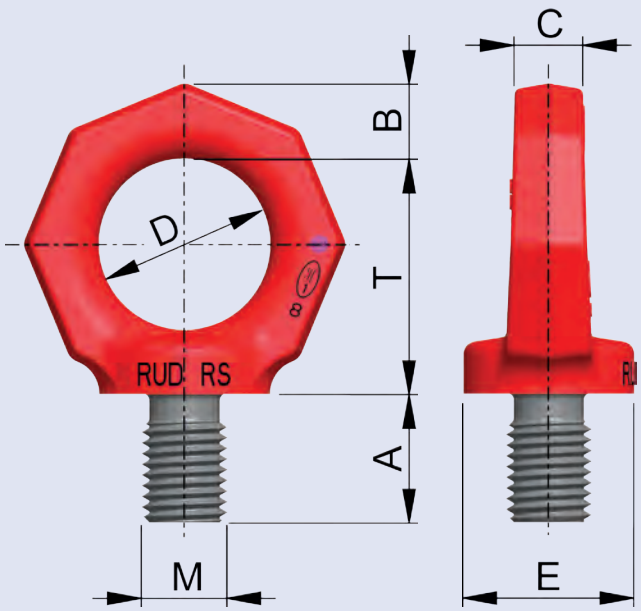


subject to technical modifications

RS // UNC inch thread / UNF inch fine thread / BSW-Whitworth inch thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]
RS Eye bolt – UNC inch thread						
RS 1/4"-20UNC	0.1	0.1	34	12	11	10
RS 5/16"-18UNC	0.2	0.1	34	12	11	10
RS 3/8"-16UNC	0.25	0.1	34	15	11	10
RS 7/16"-14UNC	0.4	0.18	41	18	13	12
RS 1/2"-13UNC	0.4	0.18	41	18	13	12
RS 9/16"-12UNC	0.75	0.3	48	22	15	14
RS 5/8"-11UNC	1	0.3	48	24	15	14
RS 3/4"-10UNC	1.2	0.47	55	30	17	16
RS 7/8"-9UNC	1.5	0.8	70	34	21	20
RS 1"-8UNC	2	0.85	70	36	21	20
RS 1 1/8"-7UNC	2.5	1.6	85	45	26	24
RS 1 1/8"-8UN	2.5	1.6	85	45	26	24
RS 1 1/4"-7UNC	3	1.6	85	46	26	24
RS 1 1/4"-8UN	3	1.6	85	46	26	24
RS 1 3/8"-6UNC	3	6.1	130	55	43	38
RS 1 1/2"-6UNC	4	6.2	130	58	43	38
RS 1 3/4"-5UNC	6	6.3	130	67	43	38
RS 2"-4.5UNC	8	6.5	130	67	43	38
RS Eye bolt – UNF inch fine thread						
RS 3/8"-24UNF	0.25	0.1	34	15	11	10
RS 7/16"-20UNF	0.4	0.18	41	18	13	12
RS 1/2"-20UNF	0.4	0.18	41	18	13	12
RS 3/4"-16UNF	1.2	0.47	55	30	17	16
RS 1"-12UNF	2	0.85	70	36	21	20
RS Eye bolt – BSW-Whitworth inch thread						
RS 1/4"-BSW	0.1	0.1	34	12	11	10
RS 5/16"-BSW	0.2	0.1	34	12	11	10
RS 3/8"-BSW	0.25	0.1	34	15	11	10
RS 1/2"-BSW	0.4	0.18	41	18	13	12
RS 5/8"-BSW	1	0.3	48	24	15	14
RS 3/4"-BSW	1.2	0.45	55	30	17	16
RS 7/8"-BSW	1.5	0.8	70	34	21	20
RS 1"-BSW	2	0.85	70	36	21	20
RS 1 1/8"-BSW	3	1.6	85	45	26	24
RS 1 1/4"-BSW	3	1.6	85	45	26	24
RS 1 1/2"-BSW	4	6.2	130	58	43	38
RS 1 3/4"-BSW	6	6.3	130	67	43	38
RS 2"-BSW	8	6.8	130	67	43	38

D [mm]	E [mm]	M	Ref. No.
25	25	1/4"-20UNC	56887
25	25	5/16"-18UNC	56885
25	25	3/8"-16UNC	56879
30	30	7/16"-14UNC	56870
30	30	1/2"-13UNC	56871
35	35	9/16"-12UNC	57120
35	35	5/8"-11UNC	57198
40	40	3/4"-10UNC	57205
50	50	7/8"-9UNC	57212
50	50	1"-8UNC	57213
60	60	1 1/8"-7UNC	57471
60	60	1 1/8"-8UN	7985010
60	60	1 1/4"-7UNC	57685
60	60	1 1/4"-8UN	57686
90	100	1 3/8"-6UNC	58599
90	100	1 1/2"-6UNC	58615
90	100	1 3/4"-5UNC	58616
90	100	2"-4.5UNC	58658
25	25	3/8"-24UNF	56881
30	30	7/16"-20UNF	56872
30	30	1/2"-20UNF	56873
40	40	3/4"-16UNF	57204
50	50	1"-12UNF	57215
25	25	1/4"-BSW	51806
25	25	5/16"-BSW	51807
25	25	3/8"-BSW	51808
30	30	1/2"-BSW	51810
35	35	5/8"-BSW	51811
40	40	3/4"-BSW	51813
50	50	7/8"-BSW	51816
50	50	1"-BSW	51774
60	60	1 1/8"-BSW	51775
60	60	1 1/4"-BSW	51776
90	100	1 1/2"-BSW	51779
90	100	1 3/4"-BSW	51803
90	100	2"-BSW	51805

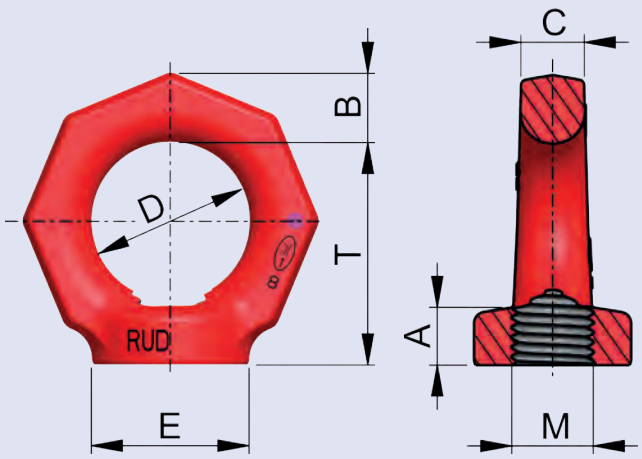


subject to technical modifications

RM // metric thread / metric fine thread / pipe thread ISO 288-1

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]
RM Eye nut – metric thread						
RM M6	0.1	0.1	34	11	11	10
RM M8	0.2	0.1	34	11	11	10
RM M10	0.25	0.1	34	11	11	10
RM M12	0.4	0.16	41	12	13	12
RM M14	0.75	0.26	48	13	15	14
RM M16	0.8	0.26	48	13	15	14
RM M18	1.2	0.4	55	16	17	16
RM M20	1.5	0.4	55	16	17	16
RM M22	1.5	0.7	70	20	21	20
RM M24	2	0.7	70	20	21	20
RM M27	2	1.35	85	25	26	24
RM M30	3	1.32	85	25	26	24
RM M33	3	5.8	130	37	43	38
RM M36	4	5.8	130	37	43	38
RM M39	5	5.6	130	37	43	38
RM M42	6	5.5	130	37	43	38
RM M48	8	5.3	130	37	43	38
RM Eye nut – metric fine thread						
RM M14×1.5	0.75	0.26	48	13	15	14
RM M18×1.5	1.2	0.4	55	16	17	16
RM M27×2	2	1.35	85	25	26	24
RM M48×3	8	5.3	130	37	43	38
RM Eye nut – pipe thread ISO 228-1						
RM G 1/4"	0.4	0.16	41	14	13	12
RM G 1/2"	1.5	0.39	55	18	17	16
RM G 3/4"	2	0.74	70	22	21	20

D [mm]	E [mm]	M	Ref. No.
25	25	M6	55254
25	25	M8	55255
25	25	M10	55258
30	30	M12	55271
35	35	M14	55281
35	35	M16	55460
40	40	M18	55342
40	40	M20	55343
50	50	M22	55387
50	50	M24	55394
60	60	M27	55399
60	60	M30	55438
90	100	M33	7994437
90	100	M36	53093
90	100	M39	7904790
90	100	M42	53095
90	100	M48	53098
35	35	M14×1.5	7902750
40	40	M18×1.5	7902751
60	60	M27×2	7901995
90	100	M48×3	7995961
30	30	G 1/4"	7998753
40	40	G 1/2"	7998754
50	50	G 3/4"	7998755

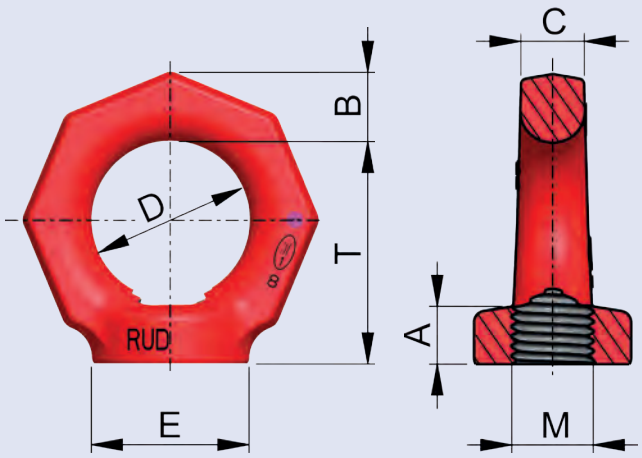


subject to technical modifications

RM // UNC inch thread / BSW-Whitworth inch thread

	Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]
RM Eye nut – UNC inch thread							
	RM 3/8"-16UNC	0.2	0.1	34	12	11	10
	RM 1/2"-13UNC	0.35	0.17	41	14	13	12
	RM 5/8"-11UNC	0.75	0.29	48	16	15	14
	RM 3/4"-10UNC	1.2	0.39	55	18	17	16
	RM 7/8"-9UNC	1.5	0.7	70	22	21	20
	RM 1"-8UNC	2	1.4	85	28	26	24
	RM 1 1/4"-7UNC	3	1.35	85	28	26	24
RM Eye nut – BSW-Whitworth inch thread							
	RM 1/2"-BSW	0.35	0.17	41	14	13	12
	RM 5/8"-BSW	0.75	0.3	48	16	15	14
	RM 3/4"-BSW	1.2	0.42	55	18	17	16
	RM 7/8"-BSW	1.5	0.7	70	22	21	20
	RM 1"-BSW	2	0.7	70	22	21	20
	RM 1 1/8"-BSW	2.5	1.3	85	28	26	24

D [mm]	E [mm]	M	Ref. No.
25	25	3/8"-16UNC	7101103
30	30	1/2"-13UNC	7101104
35	35	5/8"-11UNC	7101105
40	40	3/4"-10UNC	7101106
50	50	7/8"-9UNC	7101107
60	60	1"-8UNC	7101108
60	60	1 1/4"-7UNC	7982594
30	30	1/2"-BSW	7993984
35	35	5/8"-BSW	7993985
40	40	3/4"-BSW	7993986
50	50	7/8"-BSW	7993988
50	50	1"-BSW	7993989
60	60	1 1/8"-BSW	7994198



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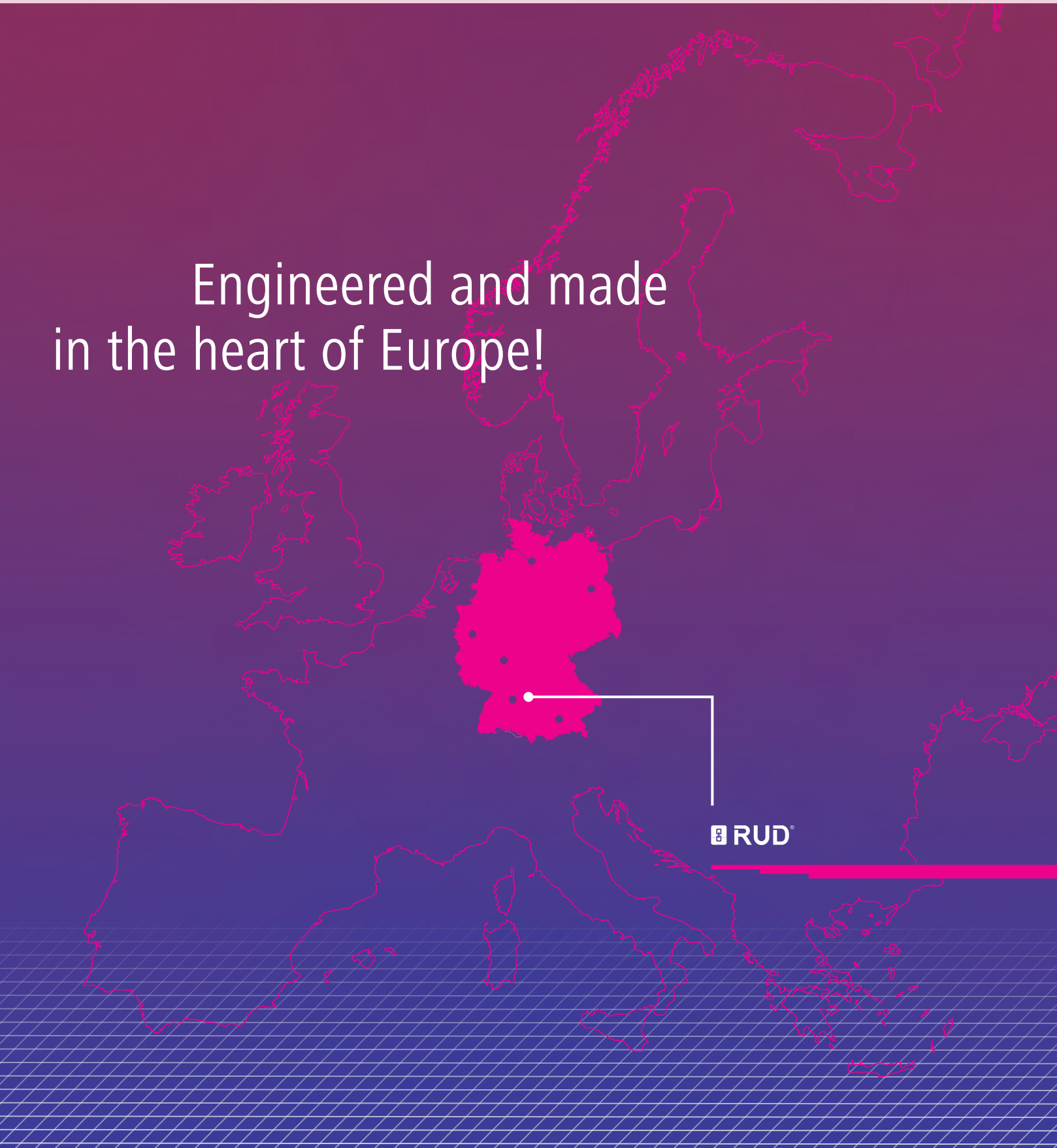
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