

Lifting Points

Edition 01 // EN

Professionally designed
for every construction





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LIFTING POINTS – READY FOR BOLTING



ICE-LBG-SR	ICE Load ring for bolting SUPER ROTATION®	30
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PP-S / PP-B / PP-VIP	PowerPoint®-Star / -Ring connection / -VIP chain connection	42
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VLBG-PLUS / LBG-RS	VIP Load ring for bolting PLUS / Load ring for bolt. stainless steel	50
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LIFTING POINTS – READY FOR WELDING



WPP-S / WPP-B / WPP-VIP	PowerPoint®-Star / -Ring connection / -VIP chain connection	90
ABA	Weldable lifting point with full full load in all directions	94
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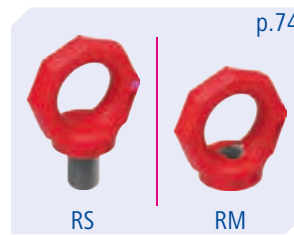
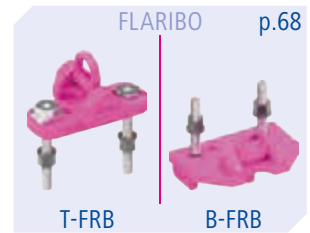
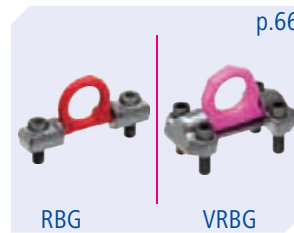
OVERVIEW

Lifting – ready for bolting / Lifting – ready for welding



READY FOR BOLTING

RUD lifting points / M6 – M150 / WLL 0.1 t – 250 t



READY FOR WELDING

RUD lifting points / WLL 0.63 t – 100 t





TRADITION IN ...

Our guiding principle and what drives us

As a family-owned company, operating internationally, we provide future-oriented solutions with chain systems and components for a wide range of applications.

In lifting technology and load securing, our mountable lifting points attest to our top quality, ergonomics and safety.

More than 700 different, tested, threaded and weldable lashing point models in load ranges up to 250 tonnes together with the unique application variety of our ICE and VIP chain systems meet the highest requirements in all areas of application.



Our constant pursuit of innovative product designs, coupled with the highest standards in production technology and quality management, are benchmarks recognised worldwide.

Our highly skilled employees are always curious about the tasks of our present and future customers - as the desire to create added value is what drives all their actions.



DYNAMIC INNOVATION



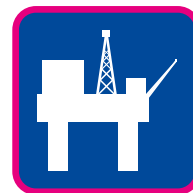
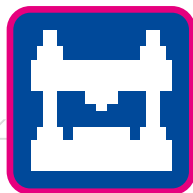
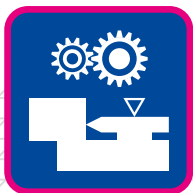
● Production Units
(with sales activity)

● Sales Units
(with manufacturing activity)

It is extremely important for us to be close to our customers. That's why our sales team works on expanding our global sales and service network

on a daily basis. Global consulting and product availability is ensured by a large number of RUD subsidiaries, associated companies and RUD

specialist distributors.



There are highly satisfied users of RUD's top-quality products for lifting and lashing in almost all industrial sectors. Numerous market leaders and global corporations have been working with our products for decades and have, in many cases,

also made them part of their internal works standards.

This new and unique catalogue is intended to help you, as a current or future user of our products, find the ideal solution for your lifting

and transportation tasks more easily. And if there are tasks that you feel cannot be solved with the products in this catalogue, then please get in touch with us. We are curious, after all...!



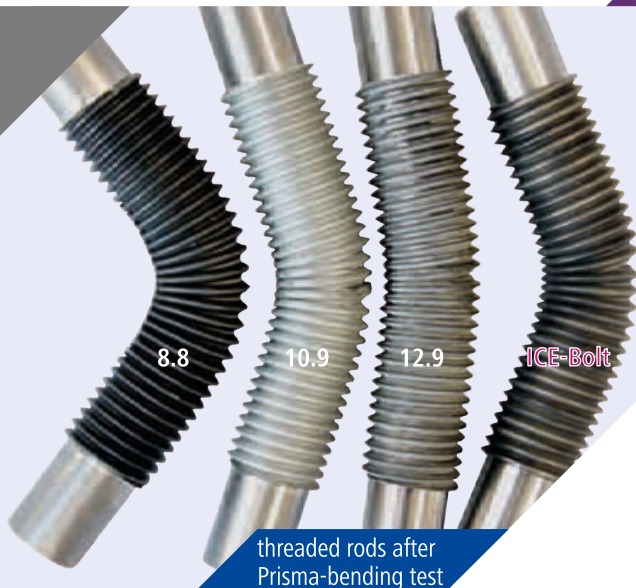
ICE-BOLT

The new grade for bolts in lifting points

The fastening bolts of modern boltable lifting points have to withstand extreme daily loads – in any direction.

These extreme forces on bending loads has safely to be accepted in terms of statics and dynamics – even under lowest temperatures and maximum heat. The patented material of the ICE chains has been predestinated for this safety-relevant challenge.

The ICE-Bolt was developed and will in future replace all common bolts.

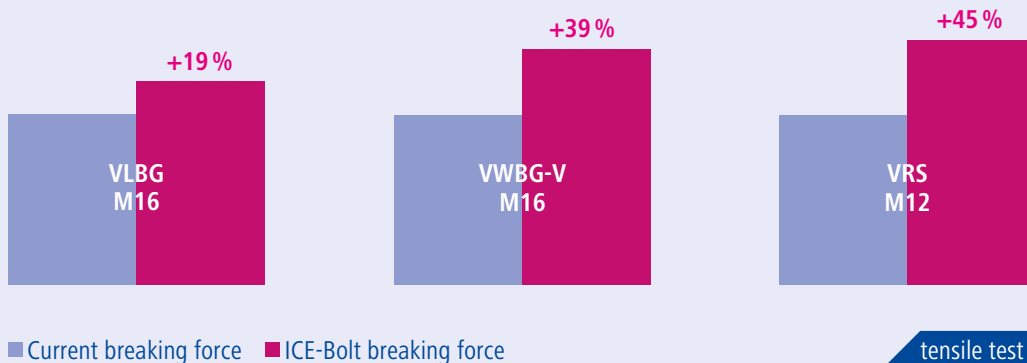


threaded rods after Prisma-bending test

That means for the user: increased WLL or thinner bolt diameters, uncritical use with low temperatures up to -60 °C, increased toughness and thus increased bending strength as well as less wear.

Briefly summarized: **maximum safety with Grade 120!**

Breaking force increase due to ICE-Bolt



tensile test with bolts



RUD ID System®



THE THREE PILLARS

RUD-ID-Point®



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

RUD-ID-READER



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

RUD-ID-NET®



The expandable **RUD-ID-NET®** online application supports you with the administration & documentation of your components.

Advantages of the RUD-ID-Systems® ...

general.

- ✓ fullfills legal requirements
- ✓ unique and long-lasting identification
- ✓ Process safety (avoiding errors)
- ✓ Reduction of inspection costs / time
- ✓ Maintenance and administration of product data / documents
- ✓ Overview and planning of your inspections
- ✓ Expandable for various working means subject to inspections

for inspectors.

- ✓ Avoiding possible errors
- ✓ Easy search function
- ✓ Clearly defined inspection planning
- ✓ Automatic generation of test reports and filing
- ✓ reminder function
- ✓ Various filter possibilities
- ✓ Immediate call-off possibility of inspection history
- ✓ Intuitive, self-explanatory user guidance

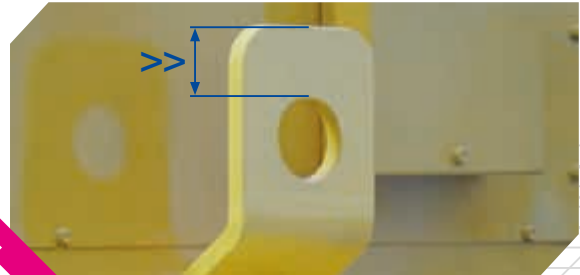
for IT.

- ✓ No software implementation / installation
- ✓ Data privacy
- ✓ No separate data saving required
- ✓ No Hosting
- ✓ No software support
- ✓ No costly user administration
- ✓ Interface (SOA – Service Oriented Architecture)



BAD POINTS!

Examples for insufficient lifting points



DON'T



Lifting points with the design principle as shown above do not always automatically adjust in pulling direction.
Actual pictures taken of incorrect usage: load shall be used with four lifting points and two cranes.

A Hooking in the lifting points below.

B Turning process at about 45°. Lifting points have not adjusted in the permissible force direction

C Turning process at 90°. Lifting points have not adjusted. With full load and exterior use of hook, the bolt might break.

State-of-the-art and approved lifting points increase the working safety!

GOOD POINTS

RUD advantages



Machinery Directive 2006/42/EC



4:1 min. safety factor for lifting



All load-bearing components are 100 % crack tested resp. proof loaded.



design programs



standard feature: RFID

ICE-Pink overhear indicator



































































































VIP-Pink overhear indicator










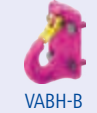



















































































SELECTION CHART

product features

	 ICE-LBG-SR	 VWBG-V	 VWBG	 PP-S /-B /-VIP	 WBPG	 VLBG-PLUS	 LBG-RS
WLL	0.6t – 6.7t	0.63t – 5t	6t – 40t	0.63t – 8t	85t – 250t	0.63t – 20t	1t / 2t
Ideal for rotating and turning						–	–
Ball bearing type						–	–
Safety factor							
RUD-ID-System®							
Full working load in all directions					–		
DGVU-approval			–		–		–
Range of rotation							
Pivoting range suspension link		–					
possible threads Metric	 M8 – M30	 M8 – M30	 M33 – M150	 M12 – M42	 M42 – M48	 M8 – M48	 M16 / M20
Metric fine thread	–	 M12x1.5 – M30x1.5	 M33x2 – M160x4	 M12x1.5 – M42x3	–	 M12x1.5 – M30x2	–
UNC inch thread	–	 5/16" – 18UNC – 1 1/4" – 7UNC	 1 1/2" – 6UNC – 5"	 1/2" – 13UNC – 1 1/2" – 6UNC	–	 3/8" – 16UNC – 2" – 4.5UNC	–
8-UN-inch thread	–	–		–	–		–
UNF inch thread	–	–		–	–	–	–
BSW – British Standard Whitworth	–	–	 1 1/2" – 5"	–	–	–	–
G – pipe thread (nach ISO 228) further thread types on request	–	–		–	–	–	–
Variable thread length					–		–
Spring		–	–	–	–		
Maximum operation temperature range WITHOUT reduction of WLL	 -40°C – 100°C	 -40°C – 100°C	 -40°C – 200°C	 -40°C – 200°C	 -10°C – 100°C	 -40°C – 100°C	 -60°C – 100°C
Maximum operation temperature WITH reduction of WLL	 300°C max.	 350°C max.	 400°C max.	 400°C max.	 100°C max.	 350°C max.	 400°C max.

LIFTING

Lifting points – ready for bolting

 VRS	 VRM	 INOX-STAR	 RBG / VRBG	 FLARIBO	 VABH-B	 VCGH-G	 B-ABA	 RS	 RM
0.1t – 12t	0.1t – 4.5t	0.5t – 2.5t	3t – 50t	18t – 31.5t	1.5t – 6.7t	10t – 20t	1.6t – 31.5t	0.1t – 8t	0.1t – 8t
-	-	-	-		-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
									
									
					-	-		-	-
	-	-	-	-	-	-		-	-
			-	-	-	-	-	-	-
-	-	-		-	-	-	-	-	-
 M6 – M48	 M6 – M30	 M16 – M24	 M16 – M36	 M20 – M64	 M10 – M20	 M24	 M10 – M30	 M6 – M48	 M6 – M48
 M8x1 – M36x3	-	-	-	-	-	-	-	 M10x1 – M48x3	 M14x1.5 – M48x3
 1/4" – 20UNC – 2" – 4.5UNC	-	-	-	-	-	-	-	 1/4" – 20UNC – 2" – 4.5UNC	 3/8" – 16UNC – 1 1/4" – 7UNC
-	-	-	-	-	-	-	-	 1 1/4" – 8-UN – 1 3/4" – 8-UN	 1 3/4" – 8-UN
	-	-	-	-	-	-	-	 3/8" – 24UNF – 1" – 12UNF	-
-	-	-	-	-	-	-	-	 1/4" – 2"	 1/2" – 1 1/8"
 1/4" – 3"	-	-	-	-	-	-	-	 1/4" – 3/4"	 1/4" – 3/4"
	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
 -40°C – 100°C	 -40°C – 100°C	 -40°C – 280°C	 -20°C – 100°C	 -40°C – 100°C	 -40°C – 100°C	 -20°C – 200°C	 -40°C – 100°C	 -40°C – 200°C	 -40°C – 200°C
 350°C max.	 100°C max.	 280°C max.	 350°C max.	 350°C max.	 350°C max.	 350°C max.	 350°C max.	 400°C max.	 400°C max.












































SELECTION CHART

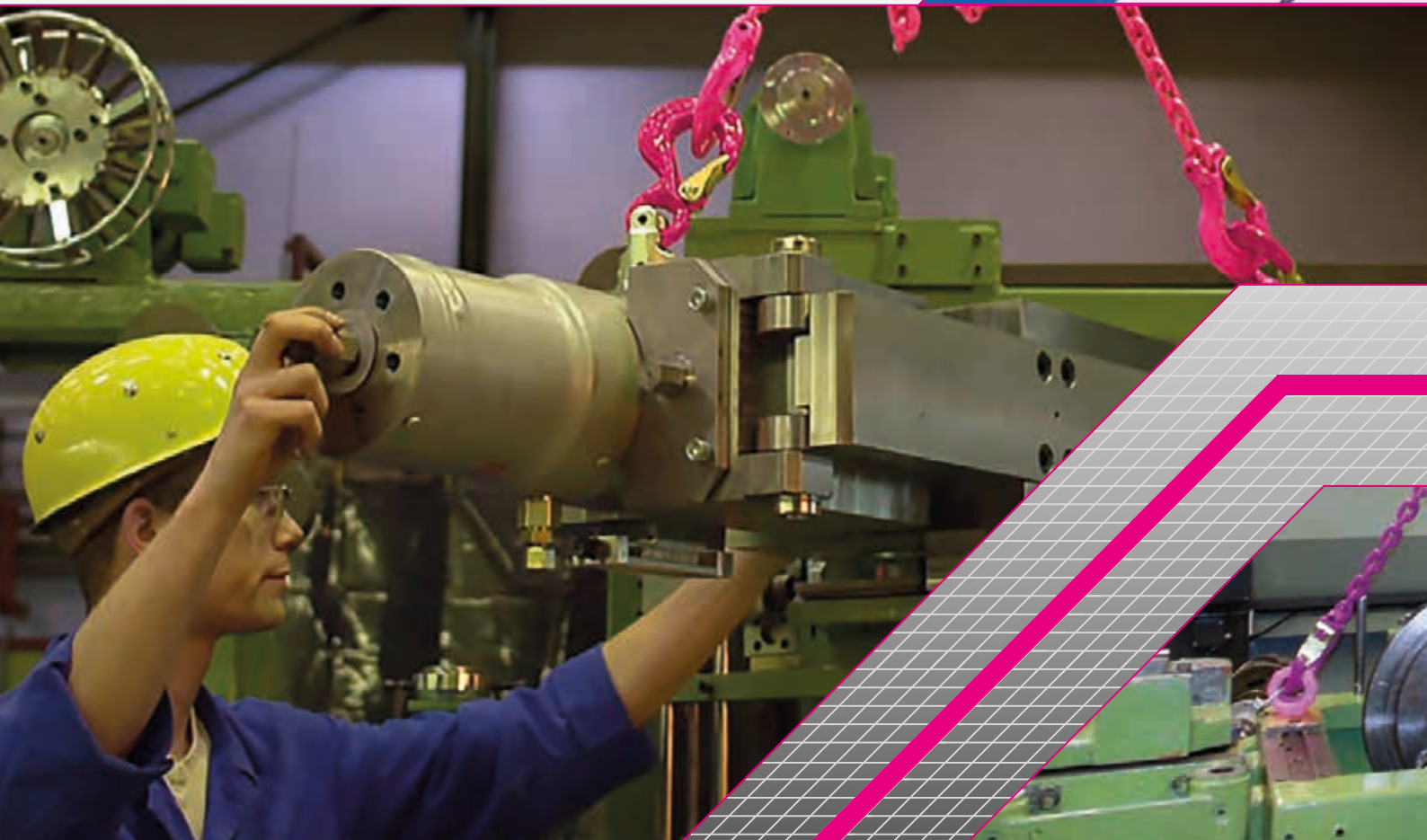
product features

									
	WPP-S/-B/-VIP	WPPH/-B/-VIP	ABA	VRBS-FIX	VRBK-FIX	VRBS	VLBS	LBS-RS	VABH-W
WLL / LC [daN]	0.63t – 8t	0.63t – 8t	0.8t – 31.5t	4t – 100t	4t – 50t	4t – 50t	1.5t – 16t	1.5t – 6.7t	1.5t – 10t
Ideal for rotating and turning		–	–	–	–	–	–	–	–
Ball bearing type		–	–	–	–	–	–	–	–
Safety factor	4:1	4:1	4:1	4:1	4:1	4:1	4:1	4:1	4:1
RUD-ID-System®	–	–	–	–	–	–	–	–	–
Full working load in all directions		–							–
DGUV-approval	DGUV Test	DGUV Test	DGUV Test	DGUV Test	DGUV Test	–	DGUV Test	–	–
Range of rotation	360°	–	–	–	–	–	–	–	–
Pivoting range suspension link	230°	230°	–	180°	270°	180°	180°	180°	–
Metric	–	–	–	–	–	–	–	–	–
UNC inch thread	–	–	–	–	–	–	–	–	–
Spring	–	–	–			–		–	–
Maximum operation temperature range WITHOUT reduction of WLL	-40° – 200°C	-40° – 200°C	-40° – 200°C	-40° – 200°C	-40° – 200°C	-40° – 200°C	-20° – 200°C	-40° – 200°C	-40° – 200°C
Maximum operation temperature WITH reduction of WLL	400°C max.	400°C max.	400°C max.	400°C max.	400°C max.	400°C max.	400°C max.	400°C max.	350°C max.

LIFTING / LASHING / PSA

Lifting points – ready for bolting / Lashing Points / Fall Protection Anchorage

										
VCGH-S	SLP	LPW	LRBS-FIX	LRBK-FIX	L-VL BG	L-ABA	SMILEY Bi	SMILEY	PSA-VRS	PSA-INOX-STAR
10t – 20t	10,000 daN	3,000 daN – 32,000 daN	8,000 daN – 32,000 daN	8,000 daN – 20,000 daN	16,000 daN	3,200 daN – 20,000 daN	3 t / 3,000 daN	6,000 daN	1 – 2 persons	1 – 2 persons
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
4:1	2:1	2:1	2:1	2:1	2:1	2:1	4:1	-	-	-
-	-	-	-	-		-	-	-	-	-
-							-	-		
-	-	-	-	-	-	-	-	-		
-	-	-	-	-		-	-	-		
-						-	-	-	-	-
-	-	-	-	-		-				
-	-	-	-	-	-	-	-	-		-
-						-	You can find the products marked in grey under www.rud.com		-	-
-40° – 200°C	-	-	-	-	-	-	-	-	-	-
350°C max.	-	-	-	-	-	-	-	-	-	-





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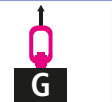
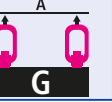
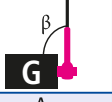
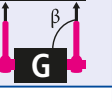
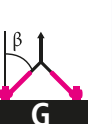
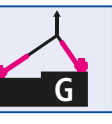
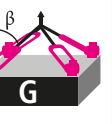
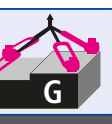
Lifting Points ready for bolting





WORKING LOAD LIMIT

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

Thread sizes M8 – M30 further thread types and special lengths on request. see p.30		  						
type		0.6t	0.9t	1.35t	2.5t	3.5t	4.5t	6.7t
thread size		M8	M10	M12	M16	M20	M24	M30
number of legs	β							
	1 0°	0.6	0.9	1.35	2.5	3.5	4.5	6.7
	2 0°	1.2	1.8	2.7	5	7	9	13.4
	1 90°	0.6	0.9	1.35	2.5	3.5	4.5	6.7
	2 90°	1.2	1.8	2.7	5	7	9	13.4
	2 0-45°	0.8	1.2	1.9	3.5	4.9	6.3	9.4
	2 45-60°	0.6	0.9	1.35	2.5	3.5	4.5	6.7
	2 unsym- metrical	0.6	0.9	1.35	2.5	3.5	4.5	6.7
	3+4 0-45°	1.2	1.9	2.8	5.3	7.4	9.5	14.2
	3+4 45-60°	0.9	1.3	2	3.7	5.2	6.7	10
	3+4 unsym- metrical	0.6	0.9	1.35	2.5	3.5	4.5	6.7

LIFTING

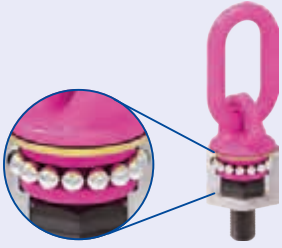

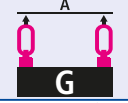
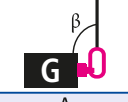
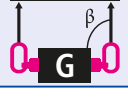
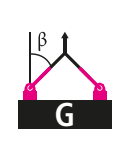
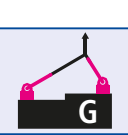
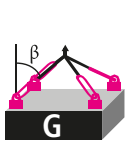
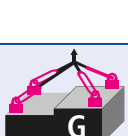
Lifting points – ready for bolting





WORKING LOAD LIMIT

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

Thread sizes M8 – M30 5/16" – 1 1/4" further thread types and special lengths on request. see p.36		 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

Lifting points – ready for bolting



VWBG



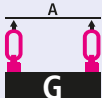
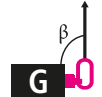
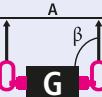
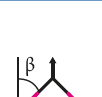

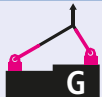
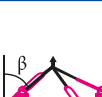

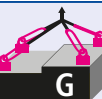
VIP Load ring for bolting

Thread sizes
M33 – M150

1 1/2" – 5"

further thread types
and special lengths
on request.

see p.36










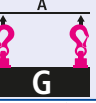
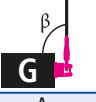
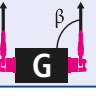



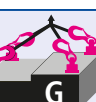
 VWBG VIP Load ring for bolting											Thread sizes M33 – M150 1 1/2" – 5" further thread types and special lengths on request. see p.36		
6t (7.5t)	8t (10t)	12t (13t)	12t (15t)	13t (16t)	14t (20t)	16t (22t)	16t (25t)	31.5t (40t)	35t (48t)	40t (50t)	type		
M33	M36– M39	M42– M45	M45	M48– M52	M52	M56– M62	M64– M76	M72– M76	M80– M85	M90– M150	thread size		
–	1 1/2"	1 3/4"– 1 7/8"	–	2"	–	2 1/4"– 2 1/2"	2 3/4"– 3"	3"	3 1/2"	4"– 5"	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 (11.25)	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 1/2" – 1 1/4" further thread types and special lengths on request. see p.42		  PP-S S-Star  PP-B B-Ring connect.  PP-VIP VIP-chain connect.						  So-PP-S S-Star  So-PP-B B-Ring connect.  So-PP-VIP VIP-chain connect.						
type		0.63t	1.5t	2.5t	4t	5t	8t	0.6t	1.3t	2t	3.5t	5t	8t	
thread size		M12	M16	M20	M24	M30	M36	M12	M16	M20 M22	M24 M27	M30	M36	
number of legs	β	1/2"	5/8"	7/8"	1"	1 1/4"	1 1/2"	1/2"	5/8"	3/4"	1"	1/4"	–	
			1	0°	0.63	1.5	2.5	4	6.7	10	0.63	1.5	2.5	4
	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

Lifting points – ready for bolting



WBPB
Hoist ring boltable on plate

Thread sizes

M48















see p.48

 WBPB Hoist ring boltable on plate						Thread sizes M48 see p.48	
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	unsymmetrical	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	unsymmetrical	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.50		  <p>VLBG-PLUS VIP Load ring for bolting PLUS</p>										  <p>LBG-RS Load ring for bolting stainless</p>						
type		0.63 t	0.9 t (0.63 t)	1.35 t (1 t)	1.2 t	2 t (1.5 t)	2 t	3.5 t (2.5 t)	4.5 t (4 t)	6.7 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 (1 1/4")	M36	M36	M42	M42	M48	M16	M20	
number of legs																		
β																		
	1	0°	0.63	0.9 (0.63)	1.35 (1)	1.2	2 (1.5)	2	3.5 (2.5)	4.5 (4)	6.7 (5)	7	8	10	15	20	1	2
	2	0°	1.26	1.8 (1.26)	2.7 (2)	2.4	4 (3)	4	7 (5)	9 (8)	13.4 (10)	14	16	20	30	40	2	4
	1	90°	0.63	0.9 (0.63)	1.35 (1)	1.2	2 (1.5)	2	3.5 (2.5)	4.5 (4)	6.7 (5)	7	8	10	15	20	1	2
	2	90°	1.26	1.8 (1.26)	2.7 (2)	2.4	4 (3)	4	7 (5)	9 (8)	13.4 (10)	14	16	20	30	40	2	4
	2	0-45°	0.88	1.3 (0.88)	1.9 (1.4)	1.68	2.8 (2.1)	2.8	4.9 (3.5)	6.3 (5.6)	9.4 (7)	9.8	11.2	14	21	28	1.4	2.8
	2	45-60°	0.63	0.9 (0.63)	1.35 (1)	1.2	2 (1.5)	2	3.5 (2.5)	4.5 (4)	6.7 (5)	7	8	10	15	20	1	2
	2	unsymmetrical	0.63	0.9 (0.63)	1.35 (1)	1.2	2 (1.5)	2	3.5 (2.5)	4.5 (4)	6.7 (5)	7	8	10	15	20	1	2
	3+4	0-45°	1.32	1.9 (1.32)	2.8 (2.1)	2.52	4.2 (3.15)	4.2	7.4 (5.25)	9.5 (8.4)	14.2 (10.5)	14.7	16.8	21	31.5	42	2.1	4.2
	3+4	45-60°	0.95	1.35 (0.95)	2 (1.5)	1.8	3 (2.25)	3	5.25 (3.75)	6.75 (6)	10 (7.5)	10.5	12	15	22.5	30	1.5	3
	3+4	unsymmetrical	0.63	0.9 (0.63)	1.35 (1)	1.2	2 (1.5)	2	3.5 (2.5)	4.5 (4)	6.7 (5)	7	8	10	15	20	1	2

() = special sizes and inch thread

LIFTING

Lifting points – ready for bolting



VRS "STARPOINT"
Vario eye bolt "STARPOINT"



Thread sizes
M6 – M48

1/4" – 2"
further thread types
and special lengths
on request.

see p.56




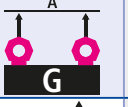
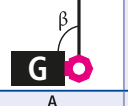
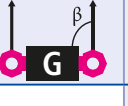
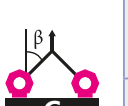
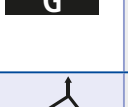

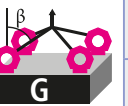
0.1t											type		
0.3t											thread size		
0.4t											β	number of legs	
0.75t													
1.5t											0°	1	
2.3t													
3.2t											0°	2	
4.5t													
7t											90°	1	
9t													
12t											90°	2	
12t													
12t											0-45°	2	
12t													
12t											45-60°	2	
12t													
12t											unsymmetrical	2	
12t													
12t											0-45°	3+4	
12t													
12t											45-60°	3+4	
12t													
12t											unsymmetrical	3+4	
12t													
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	unsymmetrical	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	unsymmetrical	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.62 INOX-STAR: see p.64		 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 unsymmetrical	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 unsymmetrical	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

Lifting points – ready for bolting



RBG

Load ring eye plate (3 t)
-threaded



VRBG

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.66

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	unsymmetrical	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	unsymmetrical	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.68



T-FRB

Flange Load ring top flange



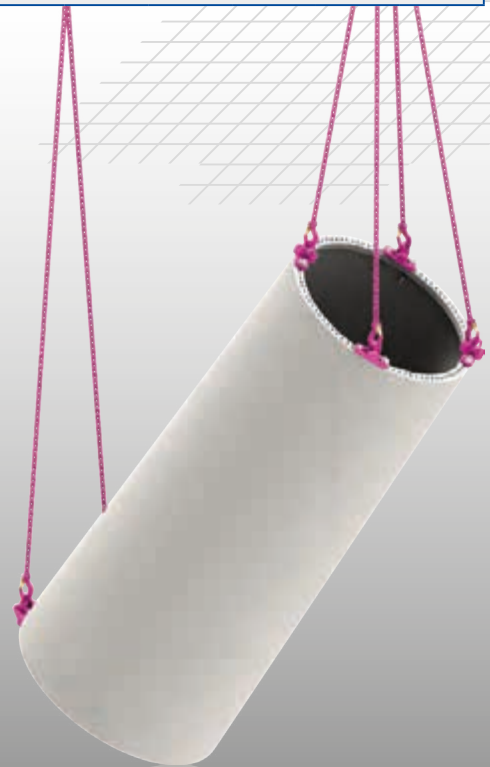
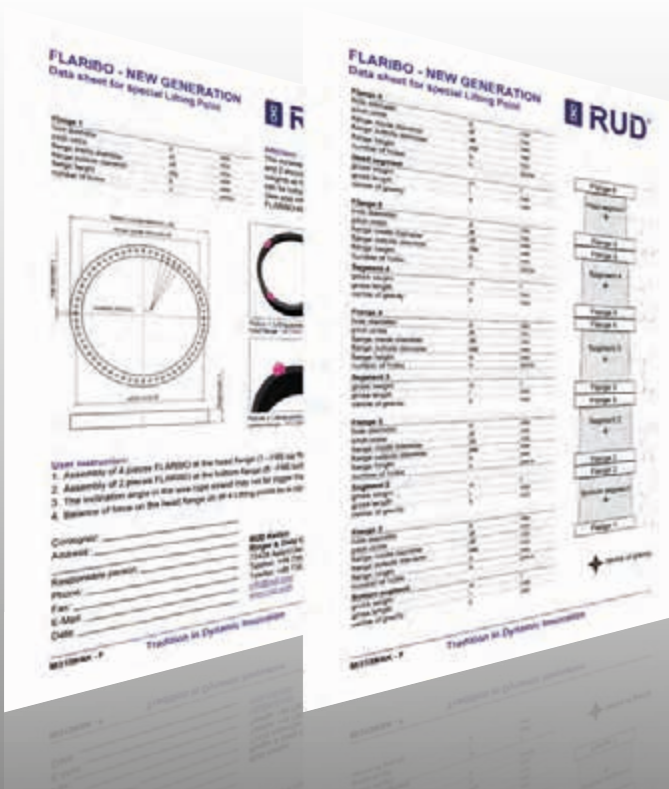
B-FRB

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




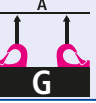


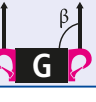
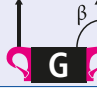

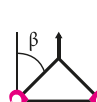




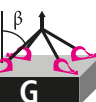
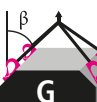
Flange measurements: Bore diameter, segmental diameter, inner flange diameter, outer flange diameter, flange height, ...



T-FRB / B-FRB
Questionnaire
PDF-Download

LITFING

Lifting points – ready for bolting

Thread sizes M6 – M24 WLL 1.5t – 20t see p.70		 VABH-B VIP Excavator hook for bolting				 VCGH-G VIP Excavator hook for bolting				
type		1.5t	2.5t	4t	6.7t		10t	16t	20t	
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 M10 – M30 WLL 1.6t – 31.5t see p.72		 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×M10	4×M12	4×M16	4×M20	6×M24	6×M30
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 unsymmetrisch	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 unsymmetrisch	1.6	3.2	5	10	20	31.5

LIFTING

Lifting points – ready for bolting



RS
Eye bolt



RM
Eye nut

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

see p.74

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"	β number of legs
0.4	0.8	1	1.6	3	4 (3.2)	6	8	12	16	24	32	0° 1
0.8	1.6	2	3.2	6	8 (6.4)	12	16	24	32	48	64	0° 2
0.1	0.2	0.25	0.4	0.75	1 (0.8)	1.5	2	3	4	6	8	90° 1
<p>We recommend to use either "VRS-Starpoint" or "VRM-Starpoint eye nut" which can be adjusted to the direction of pull!</p>												90° 2
												0-45° 2
												45-60° 2
												unsymmetrisch 2
												0-45° 3+4
45-60° 3+4												
unsymmetrisch 3+4												

) = deviating WLL of the RM



The revolution in rotating under loads



ICE-LBG-SR

ICE Load ring for bolting Super Rotation

ICE-bolt with revolutionary mechanical characteristics

No loosening thanks to **Super Rotation®**

Double SR-ball bearing, rotating 360° under load



© wortundform

© wortundform



Product features ICE-LBG-SR



SR ball bearing



rotating 360°, pivoting 180°



ICE-Bolt made out of patented steel.

- ✓ **SR-ball bearing** is the optimal solution for permanent turning and flipping actions at WLL and without loosening the mounting bolt.
- ✓ **Lifting point rotates 360°. Suspension ring pivots 180°.**



ICE-LBG-SR

First lifting point with unsymmetrical force introduction rotating under load.

ICE-LBG-SR

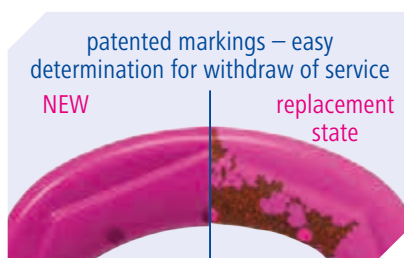
ICE Load ring for bolting Super Rotation



- ✓ **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 occurrence. Original ICE-Bolt is available as a spare part. Clear marking at the bolt head: RUD, ICE, thread size, batch-no., class of strength.
- ✓ **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 respectively flat design if turned down.
- ✓ Available as:
 - Standard Metric Thread (DIN EN 13)
 - Variable bolt lengths for tapped or through holes (see p.34).



marking



patented markings – easy determination for withdraw of service
NEW replacement state



clamping spring

Product features

ICE Load ring for bolting **SUPER ROTATION**

Product features / Application-specific features ICE-LBG-SR

✓ 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 1651054



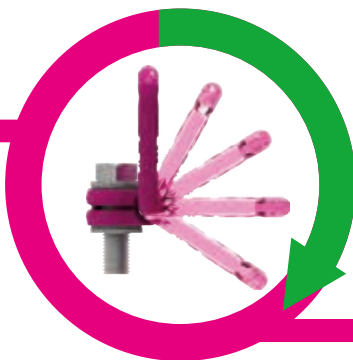
✓ Quick and easy installation with just one bolt connection.

✓ 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 9 and in the specific user instruction (www.rud.com).



Permissible only within the green range

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).

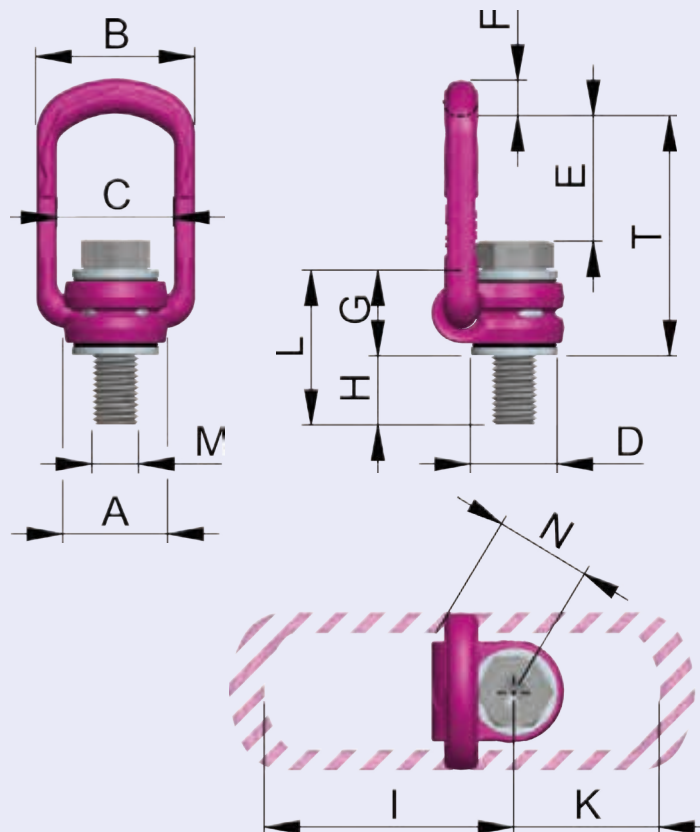
✓ For special thread lengths in metric sizes, lock nuts (DIN 980-V crack tested) with washer are available. Collar nuts (DIN 6331, crack inspected) optionally on request.

**ICE-LBG-SR // metric thread**

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]
ICE-LBG-SR ICE Load ring for bolting Super Rotation® – metric								
ICE-LBG-SR 0.6 t M8	0.6	0.3	75	32	50	34	24	40
ICE-LBG-SR 0.9 t M10	0.9	0.31	74	32	50	34	24	39
ICE-LBG-SR 1.35 t M12	1.35	0.34	74	32	50	34	26	38
ICE-LBG-SR 2.5 t M16	2.5	0.52	84	36	54	40	30	39
ICE-LBG-SR 3.5 t M20	3.5	1.3	110	54	82	60	45	53
ICE-LBG-SR 4.5t M24	4.5	1.4	125	54	82	60	45	66
ICE-LBG-SR 6.7 t M30 **	6.7	3.2	145	63	102	69	55	66
ICE-LBG-SR IICE Load ring for bolting Super Rotation® – metric with longer vario bolt								
ICE-LBG-SR 0.6 t M8	0.6	*	75	32	50	34	24	40
ICE-LBG-SR 0.9 t M10	0.9	*	74	32	50	34	24	39
ICE-LBG-SR 1.3 t M12	1.3	*	74	32	50	34	26	38
ICE-LBG-SR 2.5 t M16	2.5	*	84	36	54	40	30	39
ICE-LBG-SR 3.5 t M20	3.5	*	110	54	82	60	45	53
ICE-LBG-SR 4.5t M24	4.5	*	125	54	82	60	45	66
ICE-LBG-SR 6.7 t M30 **	6.7	*	145	63	102	69	55	66

* = weight depends on design specifics

** = bolt with quality grade 10.9

ICE-LBG-SR – metric

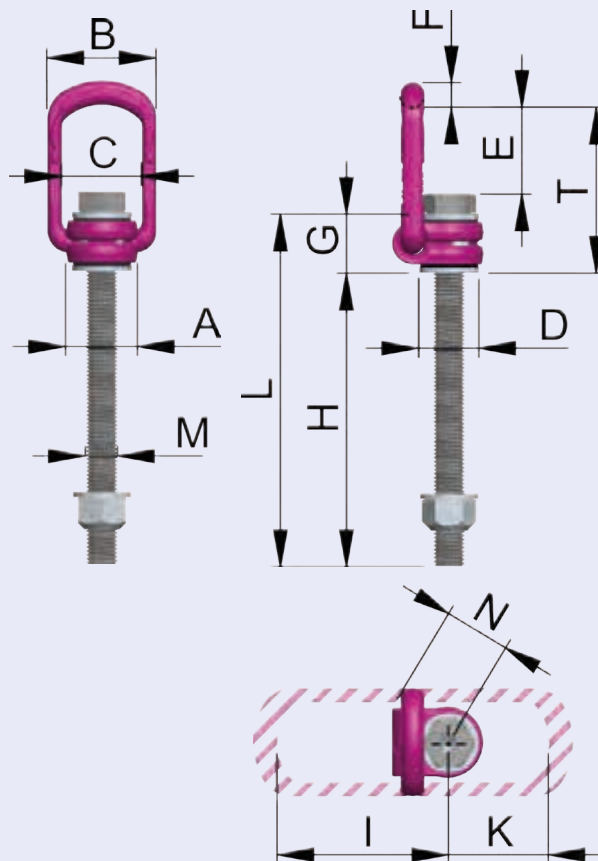
ICE-LBG-SR // Metrisches Gewinde



F [mm]	G [mm]	H [mm]	I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
10	29	12	75	43	41	M8	32	30	8504284
10	29	15	75	43	44	M10	32	60	8504285
10	29	18	75	43	47	M12	32	150	8504286
13.5	34	24	86	46	58	M16	38	150	8504287
17	45	30	113	61	75	M20	48	400	8504288
18	45	36	130	76	80	M24	48	760	8504289
22.5	60	50	151	79	110	M30	66	1000	8504290
10	29	8-76	75	43	37-105	M8	32	30	8600500
10	29	10-96	75	43	39-125	M10	32	60	8600501
10	29	12-116	75	43	41-145	M12	32	150	8600502
13.5	34	16-149	86	46	50-185	M16	38	150	8600504
17	45	20-187	113	61	65-230	M20	48	400	8600506
18	45	24-222	130	76	69-265	M24	48	760	8600508
22.5	60	30-279	151	79	90-340	M30	66	1000	8600510

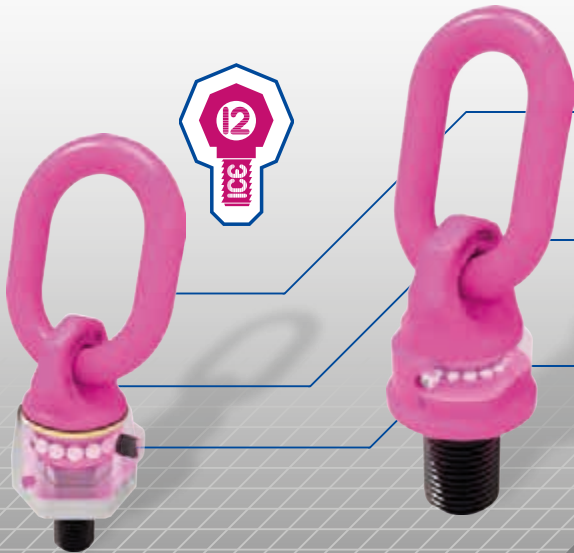
subject to technical modifications

ICE-LBG-SR – metric with longer vario bolt





Diversity, no matter how you turn it



rotating 360°, pivoting 230°

Optical markings for easy determination for withdraw from service

Ball bearing



VWBG-V // VWBG

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



VWBG-V



VWBG

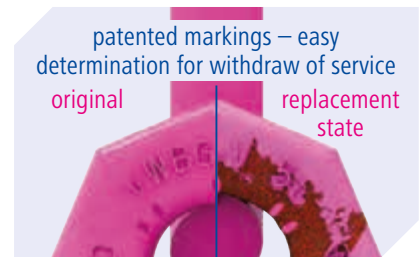


ball bearing



rotating 360°

enlarged pivoting area ~230°



patented markings – easy determination for withdraw of service

original

replacement state

- ✓ **Ball bearing** for a shock-free rotating and turning with less friction.
- ✓ **Lifting points rotate 360°.**
- ✓ **Suspension ring with enlarged pivoting area.**
- ✓ **Patented markings for easy determination for withdraw of service** as well as the determination of the load angle.



VWBG-V

For rotating lifting situations. Rotating upright under WLL.

VWBG

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

Product features

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

- ✓ 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).
- ✓ Rotatable at nominal WLL, 90° to the bolt-on direction.
- ✓ Variable bolt lengths available for tapped or through holes (available nuts etc. see p.39).
- ✓ VWBG-V: RUD bolts with special corrosion protection Corrud-DT.
- ✓ Large distance between bolt-on surface and load to avoid damage.



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

- ✓ VWBG-V: Non removable special bolt (this reduces the risk of improper standard bolts).
- ✓ VWBG-V: Tested and certified by DGUV
- Testing specifications: GS-OA-15-04:2015-12
- ✓ Certificate No.: OA 1651056
- ✓ VWBG: 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 9 and in the specific user instruction (www.rud.com).

Accessories VWBG-V / VWBG

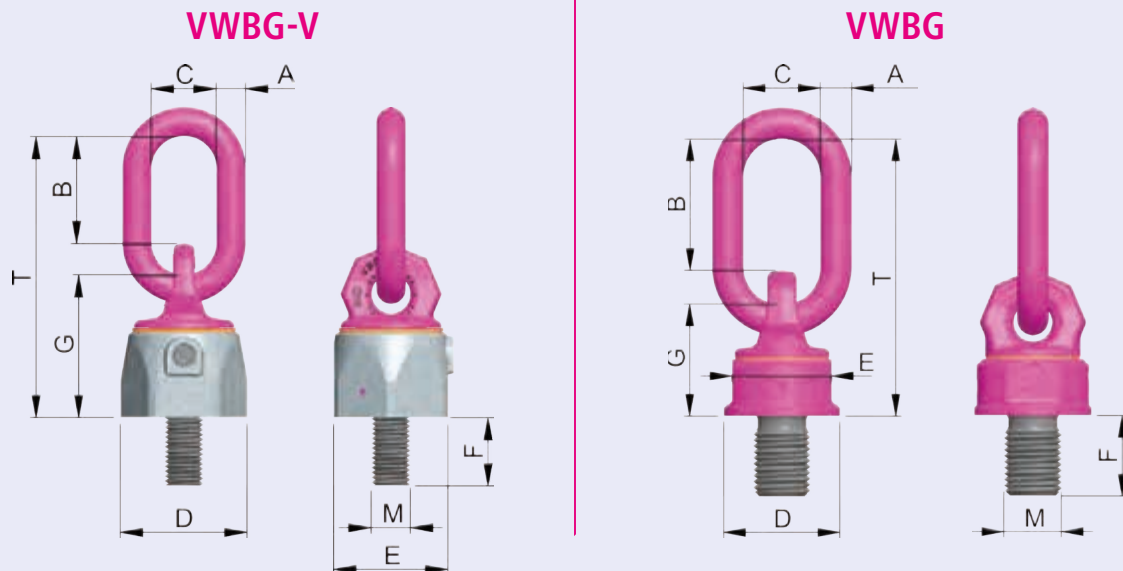
- ✓ For permanent installation of the lifting point for through hole fixtures we recommend the securing nut acc. to DIN 980-V (standard distribution, washer included), for variable installations with just one lifting action please use collar nut acc. to DIN 6331 (available upon request).
- ✓ For special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

Type	WLL-X [t]	WLL-Y [t]	WLL-Z [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	M	torque [Nm]	Ref. No.
VWBG-V Load ring – metric															
VWBG-V 0.3-M8	0.3	0.4	0.6	0.18	76	8	31	29	30	28	13	36	M8	10	7103720
VWBG-V 0.45-M10	0.45	0.6	0.9	0.29	78	8	31	29	33.5	30	17	38	M10	10	7103715
VWBG-V 0.6-M12	0.6	0.75	1.2	0.41	107	10	49	35	42	36	21	47	M12	10	7100180
VWBG-V 1.0-M14 (F=21)	1	1.25	2	0.63	114	13	46	38	48	41	21	56	M14	25	8600337
VWBG-V 1.3-M16	1.3	1.5	2.6	0.59	114	13	46	38	48	41	25	56	M16	30	7100430
VWBG-V 1.8-M18 (F=27)	1.8	2	3.6	1.18	137	13	54	35	62	55	27	67	M18	50	8600338
VWBG-V 2.0-M20	2	2.5	4	1.42	137	13	54	35	62	55	33	67	M20	70	7100800
VWBG-V 2.0-M22 (F=33)	2	2.5	4	1.45	137	13	54	35	62	55	33	67	M22	100	8600334
VWBG-V 3.5-M24	3.5	4	7	2.63	173	18	66	40	81	70	40	88	M24	150	7100640
VWBG-V 3.5-M27 (F=41)	3.5	4	7	2.65	173	18	66	40	81	70	41	88	M27	200	8600335
VWBG-V 5.0-M30	5	6	10	5.09	221	22	90	50	99	85	50	106	M30	225	7100650
VWBG Load ring – metric															
VWBG 6(7.5)t-M33 (F=50)	6	7.5	15	5.6	208	22	86	50	90	80	50	96	M33	350	8600150
VWBG 8(10)t-M36	8	10	15	4.7	208	22	86	50	90	80	54	94	M36	410	7999059
VWBG 12(13)t-M42	12	13	17	6.1	234	26	111	65	98	85	63	95	M42	550	7999044
VWBG 12(15)t-M45	12	15	18	6.24	234	26	111	65	98	85	67	95	M45	550	7900455
VWBG 13(16)t-M48	13	16	18	6.37	234	26	111	65	98	85	68	95	M48	550	7999045
VWBG 14(20)t-M52	14	20	25	10.55	271	32	119	70	120	95	78	120	M52	750	7901081
VWBG 16(22)t-M56	16	22	28	10.68	271	32	119	70	120	95	84	120	M56	800	7999004
VWBG 16(22)t-M60 (F=90)	16	22	28	11.37	271	32	119	70	120	95	90	120	M60	800	8600454
VWBG 16(25)t-M64	16	25	28	11.4	271	32	119	70	120	95	94	120	M64	800	7999043
VWBG 31.5(40)t-M72	31.5	40	50	29.96	338	46	130	90	170	145	108	159	M72	1200	7900097
VWBG 35(48)t-M80	35	48	50	31.19	338	46	130	90	170	145	120	159	M80	1500	7900100
VWBG 40(50)t-M90	40	50	50	34.5	378	46	168	110	170	145	135	159	M90	2000	7903408
VWBG 40(50)t M100 (F= 150)	40	50	50	36.5	378	46	168	110	170	145	150	159	M100	2000	8600458

subject to technical modifications



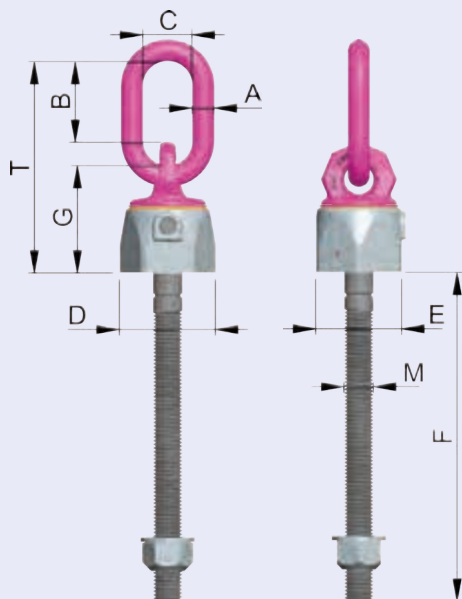
VWBG-V / VWBG // metric with longer Vario bolt

Type	WLL-X [t]	WLL-Y [t]	WLL-Z [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	M	torque [Nm]	Ref. No
VWBG-V Load ring – metric with longer Vario bolt															
VWBG-V 0.3-M8	0.3	0.4	0.6	*	76	8	31	29	30	28	8-102	36	M8	10	8600330
VWBG-V 0.45-M10	0.45	0.6	0.9	*	78	8	31	29	33.5	30	10-122	38	M10	10	8600331
VWBG-V 0.6-M12	0.6	0.75	1.2	*	107	10	49	35	42	36	12-140	47	M12	10	8600332
VWBG-V 1.0-M14	1	1.25	2	*	114	13	46	38	48	41	14-160	56	M14	25	8600337
VWBG-V 1.3-M16	1.3	1.5	2.6	*	114	13	46	38	48	41	16-180	56	M16	30	8600333
VWBG-V 1.8-M18	1.8	2	3.6	*	137	13	54	35	62	55	18-83	67	M18	50	8600338
VWBG-V 2.0-M20	2	2.5	4	*	137	13	54	35	62	55	20-223	67	M20	70	8600334
VWBG-V 2.0-M22	2	2.5	4	*	137	12	54	35	62	55	22-94	67	M22	100	8600334
VWBG-V 3.5-M24	3.5	4	7	*	173	18	66	40	81	70	24-255	88	M24	150	8600335
VWBG-V 3.5-M27	3.5	4	7	*	173	18	66	40	81	70	27-92	88	M27	200	8600335
VWBG-V 5.0-M30	5	6	10	*	221	22	90	50	99	85	30-330	106	M30	225	8600336
VWBG Load ring – metric with longer Vario bolt															
VWBG 6(7.5)t	6	7.5	15	*	208	23	86	50	90	80	33-300	94	M33	350	8600150
VWBG 8(10)t	8	10	15	*	208	23	86	50	90	80	36-300	94	M36-M39	410	8600451
VWBG 12(13)t	12	13	17	*	234	26	111	65	98	85	42-300	95	M42-M45	550	8600452
VWBG 13(16)t	13	16	18	*	234	26	111	65	98	85	48-300	95	M48-M52	550	8600453
VWBG 14(20)t	14	20	25	*	271	32	119	70	120	95	52-300	120	M52	750	8600158
VWBG 16(22)t	16	22	28	*	271	32	119	70	120	95	56-300	120	M56-M60	800	8600454
VWBG 16(25)t	16	25	28	*	271	32	119	70	120	95	64-300	120	M64-M76	800	8600455
VWBG 31.5(40)t	31.5	40	50	*	338	46	130	90	170	145	72-300	159	M72-M76	1200	8600456
VWBG 35(48)t	35	48	50	*	338	46	130	90	170	145	80-300	159	M80-M85	1500	8600457
VWBG 40(50)t	40	50	50	*	378	46	168	110	170	145	90-300	159	M90-M150	2000	8600458

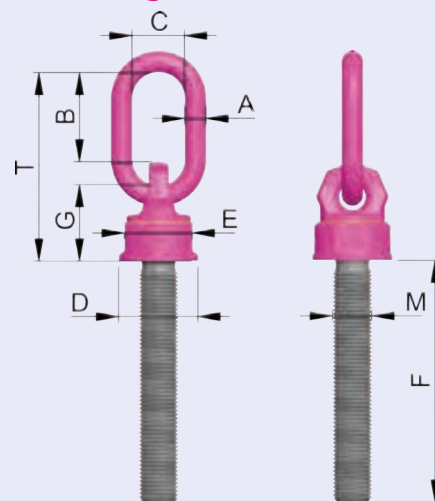
* = weight depends on design specifics

subject to technical modifications

**VWBG-V – metric,
longer Vario bolt**



**VWBG – metric,
longer Vario bolt**



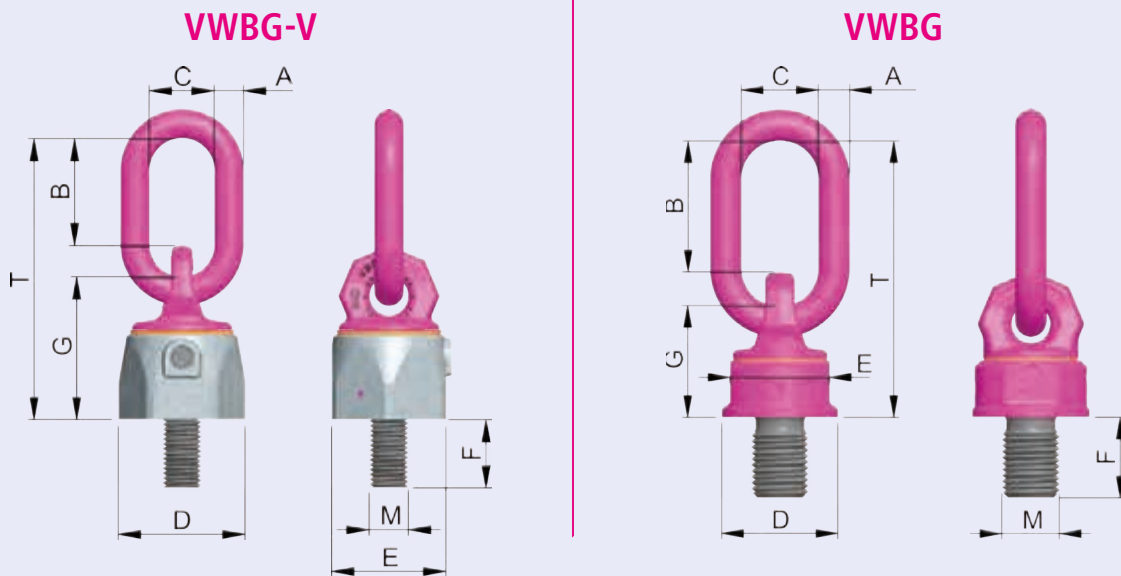


VWBG-V / VWBG // metric fine thread with longer Vario bolt

Type	WLL-X [t]	WLL-Y [t]	WLL-Z [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	M	torque [Nm]	Ref. No
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	35	42	36	12-55	47	M12×1.5	10	8600332
VWBG-V 1.0-M14×1.5	1	1.25	2	*	114	13	46	38	48	41	14-65	56	M14×1.5	25	8600337
VWBG-V 1.3-M16×1.5	1.3	1.5	2.6	*	114	13	46	38	48	41	16-70	56	M16×1.5	30	8600333
VWBG-V 1.8-M18×1.5	1.8	2	3.6	*	137	13	54	35	62	55	18-83	67	M18×1.5	50	8600338
VWBG-V 2.0-M20×1.5	2	2.5	4	*	137	13	54	35	62	55	20-88	67	M20×1.5	70	8600334
VWBG-V 3.5-M24×1.5	3.5	4	7	*	173	18	66	40	81	70	24-95	88	M24×1.5	150	8600335
VWBG-V 5.0-M30×2	5	6	10	*	221	22	90	50	99	85	30-125	106	M30×2	225	8600336
VWBG Load ring – metric fine thread with longer Vario bolt															
VWBG 6(7.5)t-M33×2	6	7.5	15	*	208	23	86	50	90	80	33-300	94	M33×2	350	8600150
VWBG 8(10)t-M36×3	8	10	15	*	208	23	86	50	90	80	36-300	94	M36×3	410	8600451
VWBG 12(13)t-M42×3	12	13	17	*	234	26	111	65	98	85	42-300	95	M42×3	550	8600452
VWBG 13(16)t-M48×3	13	16	18	*	234	26	111	65	98	85	48-300	95	M48×3	550	8600453
VWBG 16(22)t-M56×4	16	22	28	*	271	32	119	70	120	95	56-300	120	M56×4	800	8600454
VWBG 16(25)t-M64×4	16	25	28	*	271	32	119	70	120	95	64-300	120	M64×4	800	8600455
VWBG 31.5(40)t-M72×4	31.5	40	50	*	338	46	130	90	170	145	72-300	159	M72×4	1200	8600456
VWBG 35(48)t-M80×4	35	48	50	*	338	46	130	90	170	145	80-300	159	M80×4	1500	8600457
VWBG 40(50)t-M90×4	40	50	50	*	378	46	168	110	170	145	90-300	159	M90×4	2000	8600458

* = weight depends on design specifics

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]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	M	torque [Nm]	Ref. No.
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	29	30	28	13	36	5/16"-18UNC	10	7991090
VWBG-V 0.45-3/8"-16UNC	0.45	0.6	0.9	0.29	78	8	31	29	33.5	30	17	38	3/8"-16UNC	10	7991091
VWBG-V 0.6-1/2"-13UNC	0.6	0.75	1.2	0.41	107	10	49	35	42	36	21	47	1/2"-13UNC	10	7991092
VWBG-V 1.3-5/8"-11UNC	1.3	1.5	2.6	0.52	114	13	46	38	48	41	29	56	5/8"-11UNC	30	7991093
VWBG-V 2.0-3/4"-10UNC	2	2.5	4	1.42	137	13	54	35	62	55	28	67	3/4"-10UNC	70	7991094
VWBG-V 3.5-1"-8UNC	3.5	4	7	2.63	173	18	66	40	81	70	38	88	1"-8UNC	150	7991095
VWBG-V 5.0-1 1/4"-7UNC	5	6	10	5.09	221	22	90	50	99	85	47	106	1 1/4"-7UNC	225	7991096
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	35	42	36	40-149	47	1/2"-13UNC	10	8600332
VWBG-V 1.3-5/8"-11UNC	1.3	1.5	2.6	*	114	13	46	38	48	41	51-180	56	5/8"-11UNC	30	8600333
VWBG-V 2.0-3/4"-10UNC	2	2.5	4	*	137	13	54	35	62	55	56-222	67	3/4"-10UNC	70	8600334
VWBG-V 3.5-1"-8UNC	3.5	4	7	*	173	18	66	40	81	70	64-246	88	1"-8UNC	150	8600335
VWBG-V 5.0-1 1/4"-7UNC	5	6	10	*	221	22	90	50	99	85	77-331	106	1 1/4"-7UNC	225	8600336
VWBG Load ring – UNC inch thread															
VWBG 8(10)t - 1 1/2"-6UNC (F=57)	8	10	15	4.79	208	22	86	50	90	80	57	94	1 1/2"-6UNC	410	8600451
VWBG 12(13)t - 1 3/4"-5UNC (F=66)	12	13	17	6.14	234	26	111	65	98	85	66	95	1 3/4"-5UNC	550	8600452
VWBG 13(16)t - 2"-4.5UNC (F=76)	13	16	18	6.2	234	26	111	65	98	85	76	95	2"-4.5UNC	550	8600453
VWBG 16(22)t - 2 1/4"-4.5UNC (F=85)	16	22	28	11	271	32	119	70	120	95	85	120	2 1/4"-4.5UNC	800	8600454
VWBG 16(22)t - 2 1/2"-4UNC (F=95)	16	22	28	11.5	271	32	119	70	120	95	95	120	2 1/2"-4UNC	800	8600454
VWBG 16(25)t - 2 3/4"-4UNC (F=104)	16	25	28	12	271	32	119	70	120	95	104	120	2 3/4"-4UNC	800	8600455
VWBG 31.5(40)t - 3"-4UNC (F=114)	31.5	40	50	26.3	338	46	130	90	170	145	114	159	3"-4UNC	1200	8600456
VWBG 35(48)t - 3 1/2"-4UNC (F=133)	35	48	50	28	338	46	130	90	170	145	133	159	3 1/2"-4UNC	1500	8600457
VWBG 40(50)t - 4"-4UNC (F=150)	40	50	50	36.7	378	46	168	110	170	145	150	159	4"-4UNC	2000	8600458
VWBG 40(50)t - 4 1/2"-4UNC (F=170)	40	50	50	40.6	378	46	168	110	170	145	170	159	4 1/2"-4UNC	2000	8600458
VWBG 40(50)t - 5"-4UNC (F=190)	40	50	50	45.5	378	46	168	110	170	145	190	159	5"-4UNC	2000	8600458
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	50	90	80	57	94	1 1/2"-BSW	410	8600451
VWBG 12(13)t - 1 3/4"-BSW (F=66)	12	13	17	6.14	234	26	111	65	98	85	66	95	1 3/4"-BSW	550	8600452
VWBG 13(16)t - 2"-BSW (F=76)	13	16	18	6.2	234	26	111	65	98	85	76	95	2"-BSW	550	8600453
VWBG 16(22)t - 2 1/4"-BSW (F=85)	16	22	28	11	271	32	119	70	120	95	85	120	2 1/4"-BSW	800	8600454
VWBG 16(22)t - 2 1/2"-BSW (F=95)	16	22	28	11	271	32	119	70	120	95	95	120	2 1/2"-BSW	800	8600454
VWBG 16(25)t - 2 3/4"-BSW (F=104)	16	25	28	12	271	32	119	70	120	95	104	120	2 3/4"-BSW	800	8600455
VWBG 31.5(40)t - 3"-BSW (F=114)	31.5	40	50	26.3	338	46	130	90	170	145	114	159	3"-BSW	1200	8600456
VWBG 35(48)t - 3 1/2"-BSW (F=133)	35	48	50	28	338	46	130	90	170	145	133	159	3 1/2"-BSW	1500	8600457
VWBG 40(50)t - 4"-BSW (F=150)	40	50	50	36.2	378	46	168	110	170	145	150	159	4"-BSW	2000	8600458
VWBG 40(50)t - 4 1/2"-BSW (F=170)	40	50	50	38.1	378	46	168	110	170	145	170	159	4 1/2"-BSW	2000	8600458
VWBG 40(50)t - 5"-BSW (F=190)	40	50	50	45.1	378	46	168	110	170	145	190	159	5"-BSW	2000	8600458

* = weight depends on design specifics

subject to technical modifications

Type VWBG – UNC inch thread available with special lengths up to Fmax = 300 mm

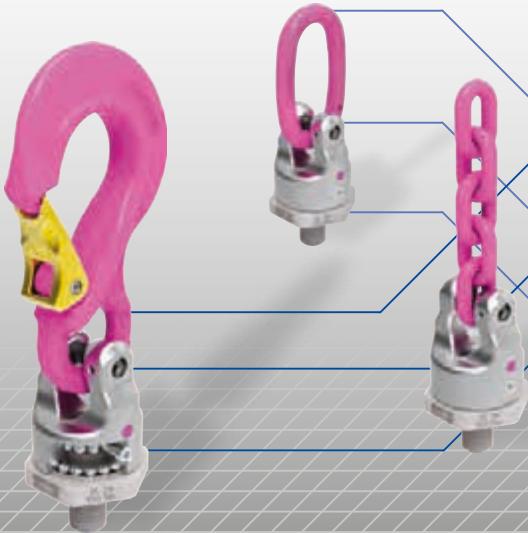


Easy to rotate and always the right connection

Rotating 360°, pivoting 230°

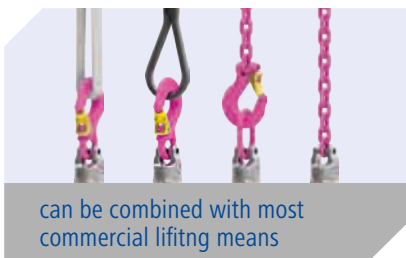
Universal, unmistakable VIP connection for chain, hook and eye

Double ball bearing for turning/rotating operations



PP-S // -B // -VIP

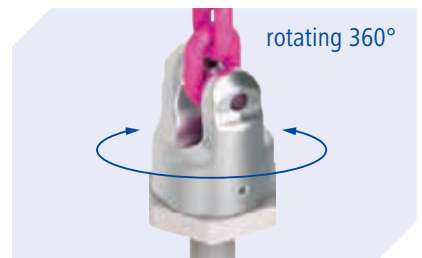
PowerPoint®-Star /-B-Ring connect. /-VIP-chain connect.



can be combined with most commercial lifting means



double ball bearing



rotating 360°

PP-S

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

- Can be combined with most commercial 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.
- Lifting points rotates 360°.

PP-B

Ring connection for hook assemblies



PP-VIP

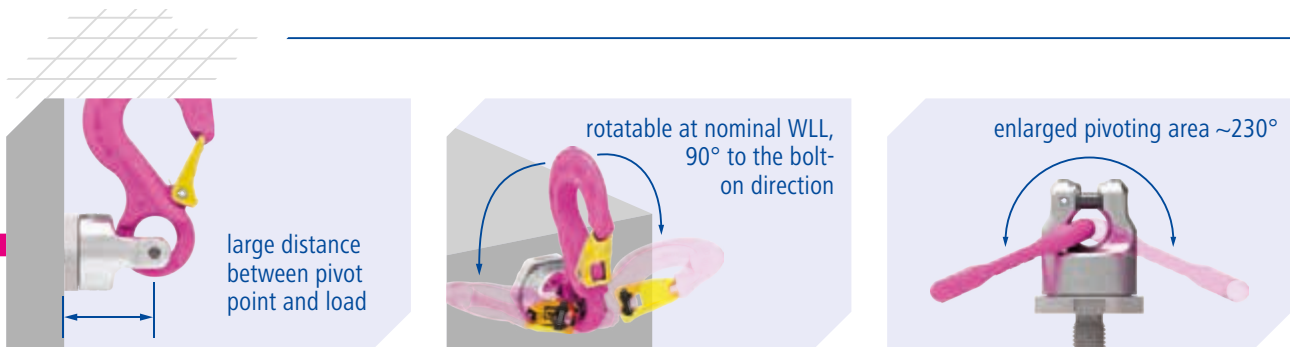
direct VIP-chain connection

- Clear marking of the minimum WLL for all loading directions.
- So-PP-S, So-PP-B, So-PP-VIP: Variable Gewindelängen
- Available as:
 - Standard Metric Thread (DIN EN 13)
 - Coarse Pitch Thread UNC (ANSI B1.1)

Product features

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

- 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.
- 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).
- So-PP-S, So-PP-B, So-PP-VIP: Variable thread lengths are available for use of threaded holes and through hole fixtures.



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

- 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
-
- 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 9 and in the specific user instruction (www.rud.com).**

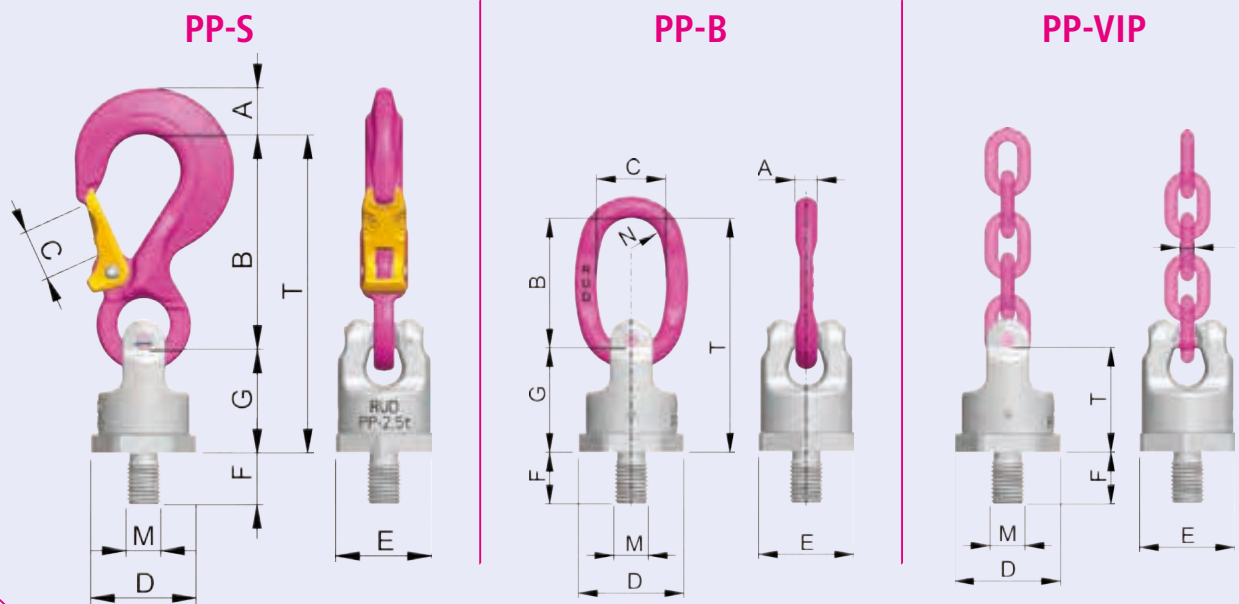


PP-S / PP-B / PP-VIP // metric thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	M	N [mm]	torque [Nm]	Ref. No.
PP-S – PowerPoint®-Star universal connection – metric														
PP-S-0.63t-M12	0.63	0.4	116	13	75	18	40	36	18	41	M12	-	10	7990719
PP-S-1.5t-M16	1.5	0.9	147	20	97	25	46	41	25	50	M16	-	30	7989719
PP-S-2.5t-M20	2.5	1.7	187	28	126	30	61	55	30	61	M20	-	70	7989075
PP-S-4t-M24	4	3.5	227	36	150	35	78	70	36	77	M24	-	150	7989076
PP-S-5t-M30	5 (6.7)	7.5	267	37	174	40	95	85	45	93	M30	-	225	7989720
PP-S-8t-M36	8 (10)	9.2	310	49	208	48	100	90	54	102	M36	-	410	7989077
PP-B – PowerPoint® Ring connection – metric														
PP-B-0.63t-M12	0.63	0.35	106	9	65	35	40	36	18	41	M12	15	10	7989522
PP-B-1.5t-M16	1.5	0.6	115	11	65	35	46	41	25	50	M16	15	30	7989523
PP-B-2.5t-M20	2.5	1.1	135	13	74	40	61	55	30	61	M20	18	70	7989081
PP-B-4t-M24	4	2.4	172	16	95	45	78	70	36	77	M24	20	150	7989082
PP-B-5t-M30	5 (6.7)	5.2	223	19	130	60	95	85	45	93	M30	25	225	7989524
PP-B-8t-M36	8 (10)	6.3	242	24	140	65	100	90	54	102	M36	28	410	7989083
PP-VIP – PowerPoint® direct VIP-chain connection – metric														
PP-VIP4-0.63t-M12	0.63	0.25	41	4	-	-	40	36	18	-	M12	-	10	7989525
PP-VIP6-1.5t-M16	1.5	0.45	50	6	-	-	46	41	25	-	M16	-	30	7989526
PP-VIP8-2.5t-M20	2.5	0.95	61	8	-	-	61	55	30	-	M20	-	70	7989527
PP-VIP10-4t-M24	4	2.2	77	10	-	-	78	70	36	-	M24	-	150	7989528
PP-VIP13-5t-M30	5 (6.7)	3.5	93	13	-	-	95	85	45	-	M30	-	225	7989529
PP-VIP16-8t-M36	8 (10)	5.2	102	16	-	-	100	90	54	-	M36	-	410	7989530

() = higher WLL due to axial loading

subject to technical modifications



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

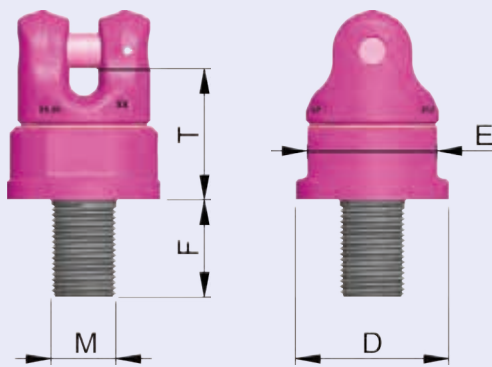
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	D [mm]	E [mm]	F [mm]	M	torque [Nm]	Ref. No.
VWBG-KA direct VIP-chain connection – metric										
VWBG-KA-28**	31.5	26.4	146	-	170	145	108	M72	1200	7903437
So-VWBG-KA-28**	31.5	*	146	-	170	145	72–300	M72–M76	1200	8600239
So-VWBG-KA-28**	31.5	*	146	-	170	145	72–300	3"-4UNC	1200	8600239
So-PP-VIP *** – Special-PowerPoint® direct VIP-chain connection – metric with longer Vario bolt										
So-PP-VIP4-0.6t-M12	0.6 (0.63)	*	47	4	42	36	12-140	M12	10	8600320
So-PP-VIP6-1.0t-M14	1 (1.5)	*	58	6	48	41	14-65	M14	25	8600326
So-PP-VIP6-1.3t-M16	1.3 (1.5)	*	58	6	48	41	16-180	M16	30	8600321
So-PP-VIP8-2.0t-M20	2 (2.5)	*	73	8	61	55	20-224	M20	70	8600322
So-PP-VIP8-2.0t-M22	2 (2.5)	*	73	8	61	55	22-94	M22	70	8600322
So-PP-VIP10-3.5t-M24	3.5 (4.0)	*	94	10	81	70	24-255	M24	150	8600323
So-PP-VIP10-3.5t-M27	3.5 (4.0)	*	94	10	81	70	27-92	M27	200	8600323
So-PP-VIP13-5t-M30	5 (6.7)	*	108	13	99	85	30-330	M30	225	8600324
So-PP-VIP16-8t-M36	8 (10)	*	100	16	100	90	36-300	M36	410	8600305
So-PP-VIP16-8t-M39	8 (10)	*	100	16	100	90	39-300	M39	410	8600305
So-PP-VIP16-8t-M42	8 (10)	*	100	16	100	90	42-300	M42	410	8600305
So-PP-VIP *** – Special-PowerPoint® direct VIP-chain connection – metric fine thread with longer Vario bolt										
So-PP-VIP4-0.6t-M12×1.5	0.6 (0.63)	*	47	4	42	36	12-55	M12×1.5	10	8600320
So-PP-VIP6-1.0t-M14×1.5	1 (1.5)	*	58	6	48	41	14-65	M14×1.5	25	8600326
So-PP-VIP6-1.3t-M16×1.5	1.3 (1.5)	*	58	6	48	41	16-70	M16×1.5	30	8600321
So-PP-VIP8-2.0t-M20×1.5	2 (2.5)	*	73	8	61	55	20-89	M20×1.5	70	8600322
So-PP-VIP10-3.5t-M24×1.5	3.5 (4.0)	*	94	10	81	70	24-95	M24×1.5	150	8600323
So-PP-VIP13-5t-M30×2	5 (6.7)	*	108	13	99	85	30-125	M30×2	225	8600324

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

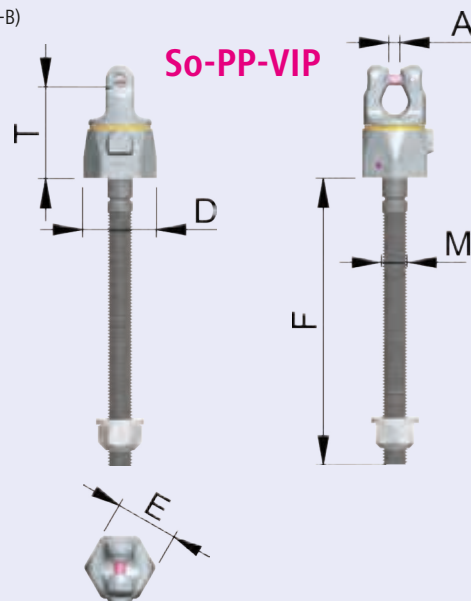
** = pivoting range: 180°
*** = So-PP is also available with the VIP Cobra hook (So-PP-S) or with the VIP Load ring (So-PP-B)

subject to technical modifications

VWBG-KA



So-PP-VIP



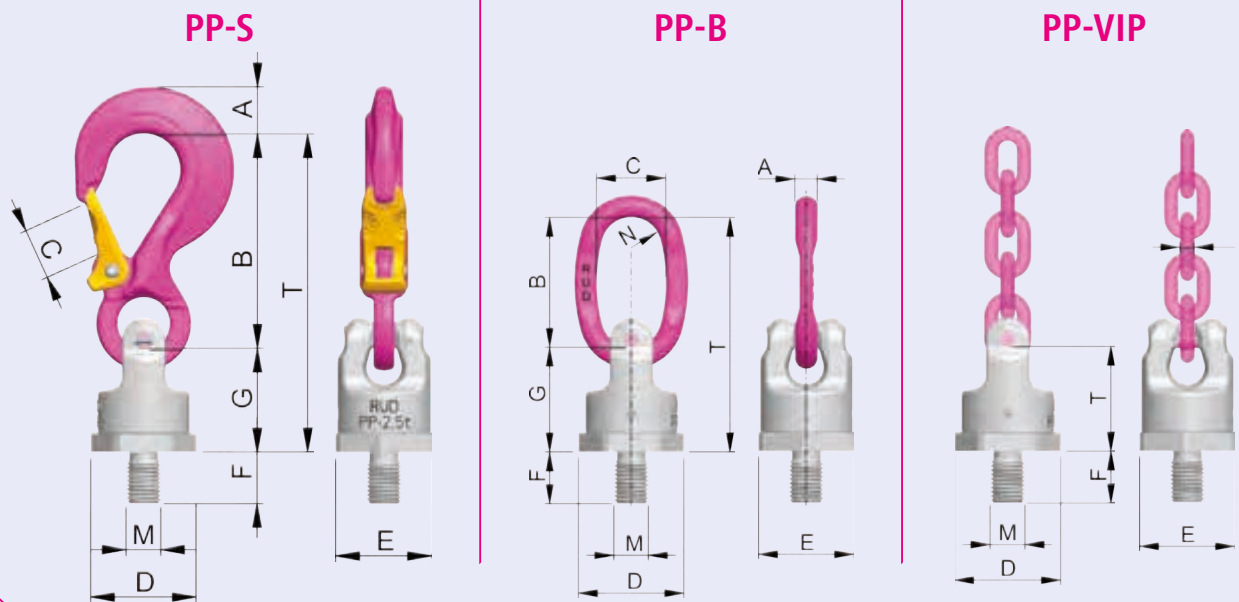


PP-S / PP-B / PP-VIP // UNC inch thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	M	N [mm]	torque [Nm]	Ref. No.
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	36	18	41	1/2"-13UNC	-	10	7990720
PP-S-1.5t-5/8"-11UNC	1.5	0.9	147	20	97	25	46	41	25	50	5/8"-11UNC	-	30	7989908
PP-S-2.5t-3/4"-10UNC	2.5	1.7	187	28	126	30	61	55	30	61	3/4"-10UNC	-	70	7989909
PP-S-2.5t-7/8"-9UNC	2.5	1.7	187	28	126	30	61	55	30	61	7/8"-9UNC	-	70	7989910
PP-S-4t-1"-8UNC	4	3.5	227	36	150	35	78	70	36	77	1"-8UNC	-	150	7989911
PP-S-5t-1 1/4"-7UNC	5 (6.7)	7.5	267	37	174	40	95	85	45	93	1 1/4"-7UNC	-	225	7989912
PP-S-8t-1 1/2"-6UNC	8 (10)	9.2	310	49	208	48	100	90	54	102	1 1/2"-6UNC	-	410	7989913
PP-B – PowerPoint® Ring connection – UNC inch thread														
PP-B-0.63t-1/2"-13UNC	0.63	0.35	105	9	65	35	40	36	18	41	1/2"-13UNC	15	10	7989901
PP-B-1.5t-5/8"-11UNC	1.5	0.6	115	11	65	35	46	41	25	50	5/8"-11UNC	15	30	7989902
PP-B-2.5t-3/4"-10UNC	2.5	1.1	135	13	74	40	61	55	30	61	3/4"-10UNC	18	70	7989903
PP-B-2.5t-7/8"-9UNC	2.5	1.1	135	13	74	40	61	55	30	61	7/8"-9UNC	18	70	7989904
PP-B-4t-1"-8UNC	4	2.4	172	16	95	45	78	70	36	77	1"-8UNC	20	150	7989905
PP-B-5t-1 1/4"-7UNC	5 (6.7)	5.2	223	19	130	60	95	85	45	93	1 1/4"-7UNC	25	225	7989906
PP-B-8t-1 1/2"-6UNC	8 (10)	6.3	242	24	140	65	100	90	54	102	1 1/2"-6UNC	28	410	7989907
PP-VIP – PowerPoint® direct VIP-chain connection – UNC inch thread														
PP-VIP4-0.63t-1/2"-13UNC	0.63	0.25	41	4	-	-	40	36	18	-	1/2"-13UNC	-	10	7989920
PP-VIP6-1.5t-5/8"-11UNC	1.5	0.45	50	6	-	-	46	41	25	-	5/8"-11UNC	-	30	7989921
PP-VIP8-2.5t-3/4"-10UNC	2.5	0.95	61	8	-	-	61	55	30	-	3/4"-10UNC	-	70	7989922
PP-VIP8-2.5t-7/8"-9UNC	2.5	1	61	8	-	-	61	55	30	-	7/8"-9UNC	-	70	7989923
PP-VIP10-4t-1"-8UNC	4	2.2	77	10	-	-	78	70	36	-	1"-8UNC	-	150	7989924
PP-VIP13-5t-1 1/4"-7UNC	5 (6.7)	3.5	93	13	-	-	95	85	45	-	1 1/4"-7UNC	-	225	7989925
PP-VIP16-8t-1 1/2"-6UNC	8 (10)	5.2	102	16	-	-	100	90	54	-	1 1/2"-6UNC	-	410	7989926

() = higher WLL due to axial loading

subject to technical modifications



So-PP-VIP // UNC inch thread // VIP Cobra hook // VIP Load ring

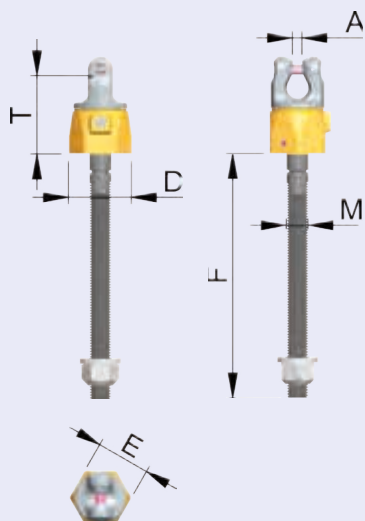
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	D [mm]	E [mm]	F [mm]	M	torque [Nm]	Ref. No.			
So-PP-VIP** – Special-PowerPoint® direct VIP-chain connection – UNC inch thread with longer Vario bolt													
So-PP-VIP4-0.6t-1/2"-13UNC	0.6 (0.63)	*	47	4	42	36	12-45	1/2"-13UNC	10	8600320			
So-PP-VIP6-1.0t-5/8"-11UNC	1 (1.5)	*	58	6	48	41	16-55	5/8"-11UNC	25	8600321			
So-PP-VIP8-2.0t-3/4"-10UNC	2 (2.5)	*	73	8	61	55	20-65	3/4"-10UNC	70	8600322			
So-PP-VIP10-3.5t-1"-8UNC	3.5 (4.0)	*	94	10	81	70	25-74	1"-8UNC	150	8600323			
So-PP-VIP13-5t-1 1/4"-7UNC	5 (6.7)	*	108	13	99	85	31-91	1 1/4"-7UNC	225	8600324			
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	for M	G [mm]	H [mm]	Ref. No.
VCÖH – VIP Cobra hook for PowerPoint®													
VCÖH 4	0.63	0.14	75	18	18	12	13	14	18	M12 / 1/2"-13UNC	52	8	8502323
VCÖH 6	1.5	0.5	98	24	22	16	22	24	25	M16 / 5/8"-11UNC	73	11	8502203
VCÖH 8	2.5	0.8	126	32	28	20	28	31	30	M20 / 3/4"-10UNC / 7/8"-9UNC	95	13	8502142
VCÖH 10	4	1.58	150	38	36	26	36	39	35	M24 / 1"-8UNC	118	17	8502145
VCÖH 13	6.7	2.9	170	48	45	30	37	48	40	M30 / 1/4"-7UNC	135	21	8502204
VCÖH 16	10	4.2	208	63	56	36	49	58	50	M36 / 1 1/2"-6UNC	161	27	8502146
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	N [mm]	for M	G [mm]	H [mm]	Ref. No.	
VIP Load ring PowerPoint®													
PP 0.63t-B	0.63	0.1	65	9	-	35	4	15	M12 / 1/2"-13UNC	52	8	7989531	
PP 1.5t-B	1.5	0.13	65	11	-	35	6	15	M16 / 5/8"-11UNC	73	11	8502173	
PP 2.5t-B	2.5	0.22	75	13	-	40	8	18	M20 / 3/4"-10UNC / 7/8"-9UNC	95	13	8502174	
PP 4t-B	4	0.42	95	16	-	45	10	20	M24 / 1"-8UNC	118	17	8502175	
PP-VIP13-B	6.7	1	130	21	-	60	13	25	M30 / 1/4"-7UNC	135	21	8502176	
PP-VIP16-B	10	1.4	140	24	-	65	16	28	M36 / 1 1/2"-6UNC	161	27	8502177	

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

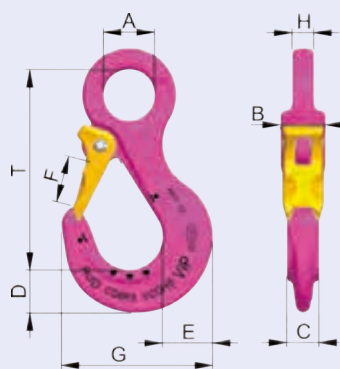
** = pivoting range: 180°
*** = So-PP is also available with the VIP Cobra hook (So-PP-S) or with the VIP Load ring (So-PP-B)

subject to technical modifications

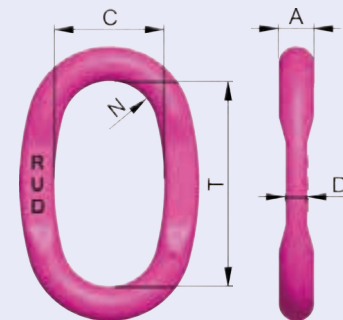
So-PP-VIP – UNC inch



VIP Cobra hook



VIP Load ring





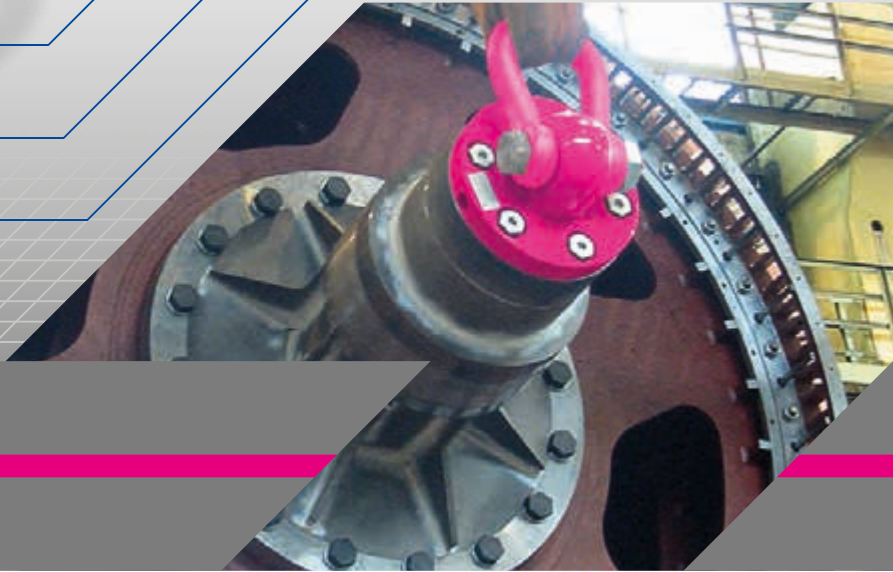
Ball bearing mounted for heavy loads



Heavy duty design

WLL up to 250 t

Rotating 360°



WBPG

Hoist ring boltable on plate



- ✓ **Heavy Duty Generation:** WBPG up to 250 t WLL.
- ✓ **Lifting points rotates 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.



WBPG

A versatile RUD solution for heavy-duty loads.

Product features

Hoist ring boltable on plate

Application-specific features **WBPG**

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

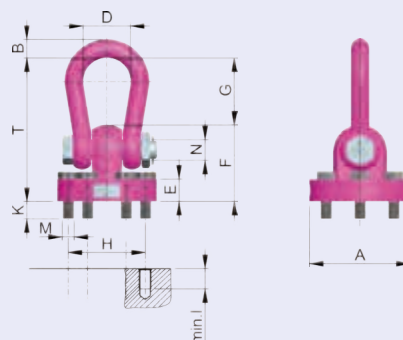
Other important RUD specific information and specialities to our RUD lifting points can be found on page 9 and in the specific user instruction (www.rud.com).



WBPG // metric thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	K [mm]	M	N [mm]	torque [Nm]	Ref. No.
WBPG Hoist ring boltable on plate – metric																
WBPG 85t/400mm 6×M48	85	170	577	400	75	190	89	304	273	310	73	71	6×M48	83	6000	7993712
WBPG 100t/400mm 6×M48	100	198	577	400	83	190	89	304	273	310	73	71	6×M48	83	6000	7993245
WBPG 120t/570mm 6×M48	120	360	651	571	95	238	110	344	307	445	77	75	6×M48	95	6000	7900917
WBPG 200t/650mm 10×M48	200	678	880	650	120	290	100	460	426	500	73	71	10×M48	130	6000	7900383
WBPG 250t/730mm 12×M48	250	992	1110	730	130	305	138	496	424	580	74	72	12×M48	140	6000	7905690

subject to technical modifications





Tried and tested – full WLL in all directions

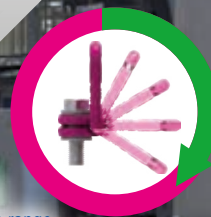
The Original, now with 45 % higher WLL at an average (M8 – M30)

NEU

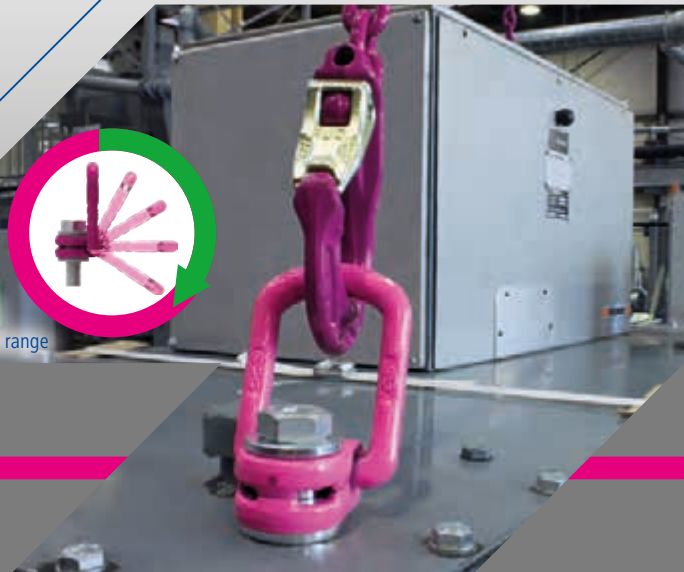


Bracket adjustable in force direction

Comprehensive range of threads



Permissible only within the green range



VLBG-PLUS

VIP Load ring for bolting PLUS

4:1



DGVV Test



VLBG-PLUS



VLBG



-40° - 100°C

350°C max.

LBG-RS



-60° - 100°C

400°C max.



rotating 360°, pivoting 180°

ICE-Bolt made out of patented steel.



up to 110 % higher WLL



clamping spring

✓ Lifting points rotates 360°. Suspension ring pivots 180°.

✓ **VLBG-PLUS: 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 occurrence. Original ICE-Bolt is available as a spare part. Clear marking at the bolt head: RUD, ICE, thread size, batch-no., class of strength.



VLBG-PLUS

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

✓ **Clamping spring** works as a noise reduction and holds the suspension ring in the requested position; therefore simple hinge of lifting point mean possible respectively flat design if turned down.

Product features

VIP Load ring for bolting PLUS

- ✓ **Clear marking of the minimum WLL** for all loading directions.
- ✓ Available as:
 - VLBG-PLUS/LBG-RS: 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-PLUS/VLBG: Variable bolt lengths available for tapped or through holes (see p.53).
- ✓ VLBG-PLUS: Tested and certified by DGUV
 - Testing specifications: GS-OA-15-04:2015-12
 - Certificate No.: OA 1651053
- ✓ LBG-RS: Component made out of 1.4571: therefore higher resistancy against intergranular corrosion.



Application-specific features VLBG-PLUS / LBG-RS

- ✓ 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 9 and in the specific user instruction (www.rud.com).**

Accessories VLBG-PLUS

- ✓ 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.



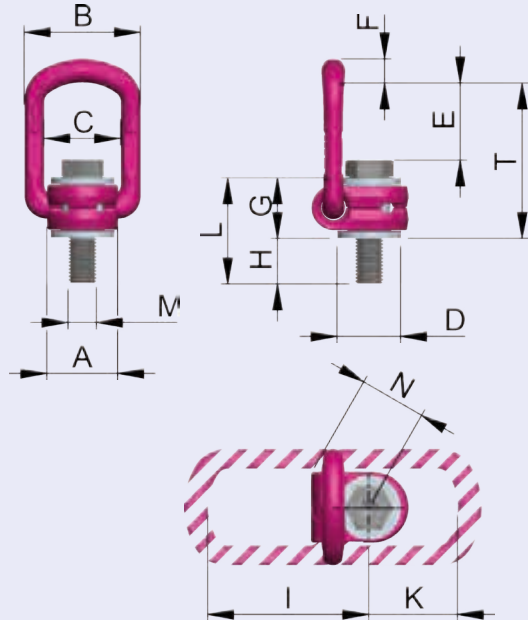
VLBG-PLUS / VLBG // metric thread

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]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
VLBG-PLUS VIP Load ring for bolting PLUS – metric																		
VLBG-PLUS 0.63t M8	0.63	0.3	75	30	54	34	24	40	10	29	11	75	45	40	M8	32	30	8504651
VLBG-PLUS 0.9t M10	0.9	0.32	75	30	54	34	24	39	10	29	15	75	45	44	M10	32	60	8504652
VLBG-PLUS 1.35t M12	1.35	0.33	75	32	54	34	26	38	10	29	18	75	45	47	M12	32	150	8504653
VLBG-PLUS 2t M16	2	0.55	85	33	56	36	30	39	13.5	36	22	86	47	58	M16	38	150	8504655
VLBG-PLUS 3.5t M20	3.5	1.3	110	50	82	54	45	55	16.5	43	32	113	64	75	M20	48	400	8504657
VLBG-PLUS 4.5t M24	4.5	1.5	125	50	82	54	45	67	18	43	37	130	78	80	M24	48	760	8504659
VLBG-PLUS 6.7t M30	6.7	3.3	147	60	103	65	60	67	22.5	61	49	151	80	110	M30	67	1000	8504661
VLBG-PLUS 8t M36	8	6.2	197	77	122	82	70	97	26.5	77	63	205	110	140	M36	87	800	7983553
VLBG-PLUS 10t M42	10	6.7	197	77	122	82	70	94	26.5	77	73	205	110	150	M42	70	1000	7983554
VLBG-PLUS 15t M42	15	10.9	222	95	156	100	85	109	36	87	63	230	130	150	M42	100	1500	7982966
VLBG-PLUS 20t M48	20	11.6	222	95	156	100	95	105	36	87	73	230	130	160	M48	100	2000	7982967
VLBG Load ring for bolting – metric intermediate thread sizes with longer Vario bolt																		
VLBG 1.2t M14 (H=21)	1.2	*	85	33	56	36	30	39	13.5	36	14-34	86	47	50-70	M14	38	120	8600399
VLBG 2t M18 (H=27)	2	*	110	50	82	54	45	55	16.5	43	18-47	113	64	61-90	M18	48	200	8600384
VLBG 2.5t M22 (H=33)	2.5	*	110	50	82	54	45	54	16.5	43	22-57	113	64	65-100	M22	48	250	8600385
VLBG 4t M27	4	*	147	60	103	65	60	69	22.5	61	27-239	151	80	88-300	M27	67	400	8600387
VLBG 7t M36 (So-Schr.)	7	3.4	146	60	103	65	60	74	22.5	55	52	151	80	107	M36	67	700	8500829

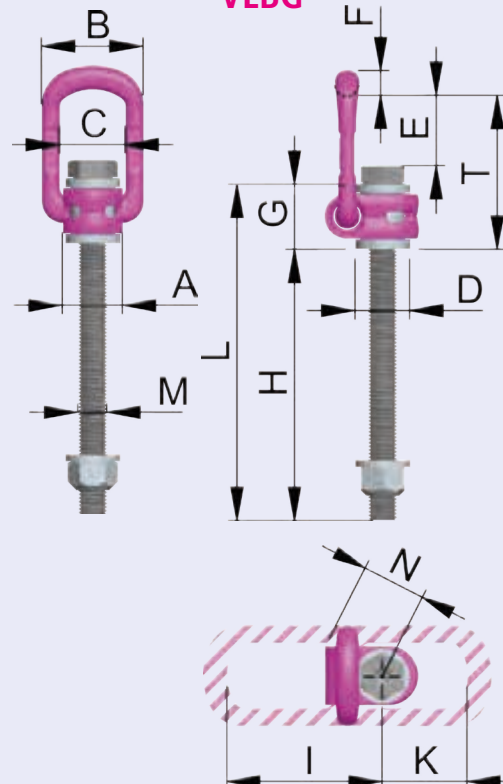
* = weight depends on design specifics

subject to technical modifications

VLBG-PLUS



VLBG

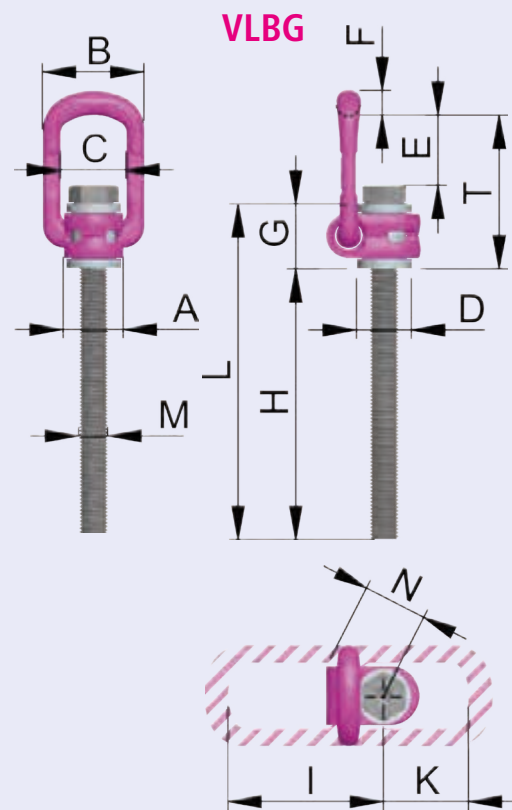
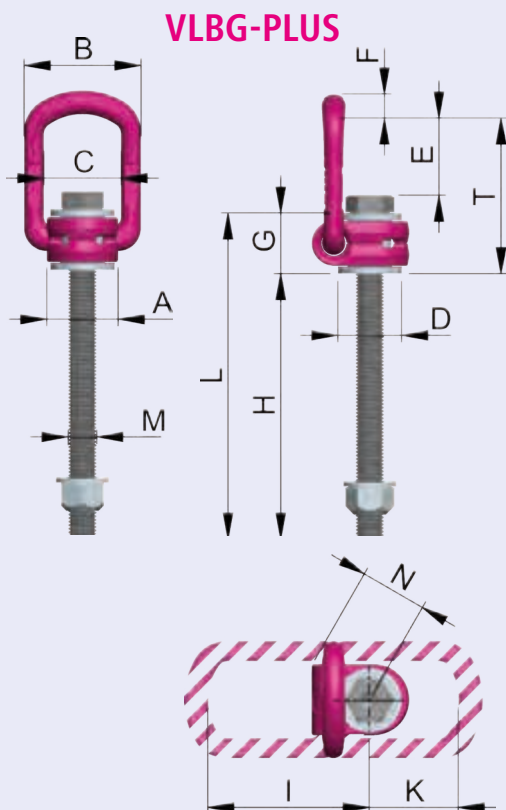


VLBG-PLUS / VLBG // metric, longer Vario bolt / metric fine thread Vario

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]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
VLBG-PLUS VIP Load ring for bolting PLUS – metric with longer Vario bolt																		
VLBG-PLUS 0.63t M8	0.63	*	75	30	54	34	24	40	10	29	8-76	75	45	37-105	M8	32	30	8600470
VLBG-PLUS 0.9t M10	0.9	*	75	30	54	34	24	39	10	29	10-96	75	45	39-125	M10	32	60	8600471
VLBG-PLUS 1.35t M12	1.35	*	75	32	54	34	26	38	10	29	12-116	75	45	41-145	M12	32	150	8600472
VLBG-PLUS 2t M16	2	*	85	33	56	36	30	39	13.5	36	16-149	86	47	52-185	M16	38	150	8600474
VLBG-PLUS 3.5t M20	3.5	*	110	50	82	54	45	55	16.5	43	20-187	113	64	63-230	M20	48	400	8600476
VLBG-PLUS 4.5t M24	4.5	*	125	50	82	54	45	67	18	43	24-222	130	78	67-265	M24	48	760	8600478
VLBG-PLUS 6.7t M30	6.7	*	147	60	103	65	60	67	22.5	61	30-279	151	80	91-340	M30	67	1000	8600480
VLBG-PLUS 8t M36	8	*	197	77	122	82	70	97	26.5	77	36-223	205	110	113-300	M36	87	800	8600289
VLBG-PLUS 10t M42	10	*	197	77	122	82	70	94	26.5	77	42-273	205	110	119-350	M42	70	1000	8600290
VLBG-PLUS 15t M42	15	*	222	95	156	100	85	109	36	87	42-263	230	130	129-350	M42	100	1500	8600291
VLBG-PLUS 20t M48	20	*	222	95	156	100	95	105	36	87	48-303	230	130	135-350	M48	100	2000	8600292
VLBG VIP Load ring for bolting PLUS – metric fine thread with longer Vario bolt																		
VLBG 1t M12x1.5	1	*	75	32	54	34	26	38	10	29	12-31	75	45	41-60	M12 x 1.5	32	100	8600382
VLBG 1.2t M14x1.5	1.2	*	85	33	56	36	30	39	13.5	36	14-34	86	47	50-70	M14 x 1.5	38	120	8600399
VLBG 1.5t M16x1.5	1.5	*	85	33	56	36	30	39	13.5	36	16-39	86	47	52-75	M16 x 1.5	38	150	8600383
VLBG 2t M18x1.5	2	*	110	50	82	54	45	55	16.5	43	18-47	113	64	61-90	M18 x 1.5	48	200	8600384
VLBG 2.5t M20x1.5	2.5	*	110	50	82	54	45	55	16.5	43	20-52	113	64	63-95	M20 x 1.5	48	250	8600385
VLBG 4t M24x1.5	4	*	125	50	82	54	45	67	18	43	24-62	130	78	67-105	M24 x 1.5	48	400	8600386

* = weight depends on design specifics

subject to technical modifications





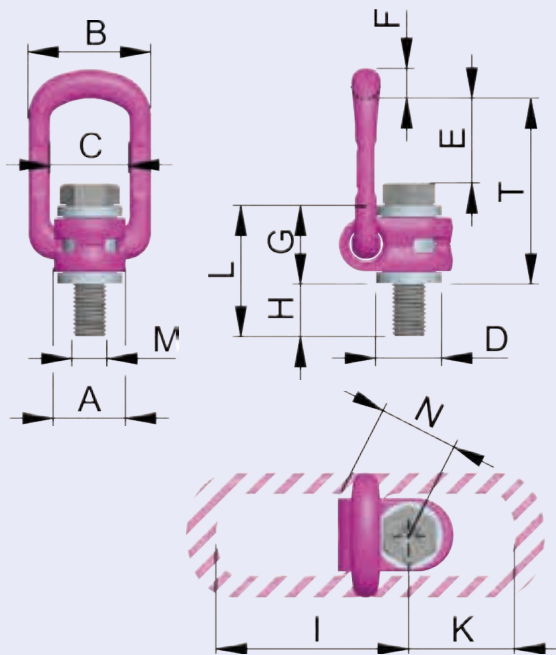
VLBG-Z // UNC inch thread // UNC inch thread with longer Vario bolt

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
VLBG-Z VIP Load ring for bolting – UNC inch thread																		
VLBG-Z 0.63t 3/8"-16UNC	0.63	0.29	75	30	54	34	24	39	10	29	16	75	45	45	3/8"-16UNC	32	60	8504256
VLBG-Z 1t 1/2"-13UNC	1	0.36	75	32	54	34	26	38	10	29	22	75	45	50	1/2"-13UNC	32	100	8502349
VLBG-Z 1.5t 5/8"-11UNC	1.5	0.50	85	33	56	36	30	39	13.5	36	24	86	47	60	5/8"-11UNC	38	150	8502350
VLBG-Z 2.5t 3/4"-10UNC	2.5	1.3	110	50	82	54	45	55	16.5	43	28	113	64	71	3/4"-10UNC	48	250	8502351
VLBG-Z 2.5t 7/8"-9UNC	2.5	1.25	110	50	82	54	45	55	16.5	43	27	113	64	70	7/8"-9UNC	48	250	8502352
VLBG-Z 4t 1"-8UNC	4	1.50	125	50	82	54	45	67	18	43	41	130	78	84	1"-8UNC	48	400	8502353
VLBG-Z 5t 1-1/4"-7UNC	5	3.33	147	60	103	65	60	64	22.5	61	41	151	80	102	1-1/4"-7UNC	67	500	8503187
VLBG-Z 5t 1-1/4"-8UNC	5	3.33	147	60	103	65	60	64	22.5	61	41	151	80	102	1-1/4"-8UNC	67	500	8502354
VLBG-Z 8t 1-1/2"-6UNC	8	6.2	197	77	122	82	70	97	26.5	77	62	205	110	140	1-1/2"-6UNC	87	800	8504257
VLBG-Z 20t 2"-4.5UNC	20	11.7	222	95	156	100	95	105	36	87	69	230	130	156	2"-4.5UNC	100	2000	8504258
VLBG-Z VIP Load ring for bolting – UNC inch thread with longer Vario bolt																		
VLBG-Z 0.63t 3/8"-16UNC	0.63	*	75	30	54	34	24	39	10	29	10-98	75	45	39-127	3/8"-16UNC	32	60	8600440
VLBG-Z 1t 1/2"-13UNC	1	*	75	32	54	34	26	38	10	29	13-123	75	45	42-152	1/2"-13UNC	32	100	8600441
VLBG-Z 1.5t 5/8"-11UNC	1.5	*	85	33	56	36	30	39	13.5	36	16-148	86	47	52-184	5/8"-11UNC	38	150	8600442
VLBG-Z 2.5t 3/4"-10UNC	2.5	*	110	50	82	54	45	55	16.5	43	19-185	113	64	62-228	3/4"-10UNC	48	250	8600443
VLBG-Z 2.5t 7/8"-9UNC	2.5	*	110	50	82	54	45	55	16.5	43	22-211	113	64	65-254	7/8"-9UNC	48	250	8600444
VLBG-Z 4t 1"-8UNC	4	*	125	50	82	54	45	67	18	43	25-211	130	78	68-254	1"-8UNC	48	400	8600445
VLBG-Z 5t 1-1/4"-7UNC	5	*	147	60	103	65	60	64	22.5	61	32-278	151	80	93-339	1-1/4"-7UNC	67	500	8600446
VLBG-Z 8t 1-1/2"-6UNC	8	*	197	77	122	82	70	97	26.5	77	38-270	205	110	115-347	1-1/2"-6UNC	87	800	8600447
VLBG-Z 20t 2"-4.5UNC	20	*	222	95	156	100	95	105	36	87	51-302	230	130	138-389	2"-4.5UNC	100	2000	8600448

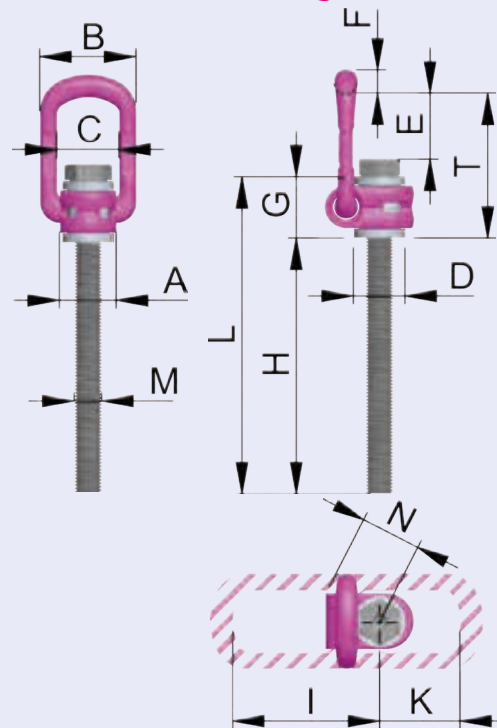
* = weight depends on design specifics

subject to technical modifications

VLBG-Z – UNC



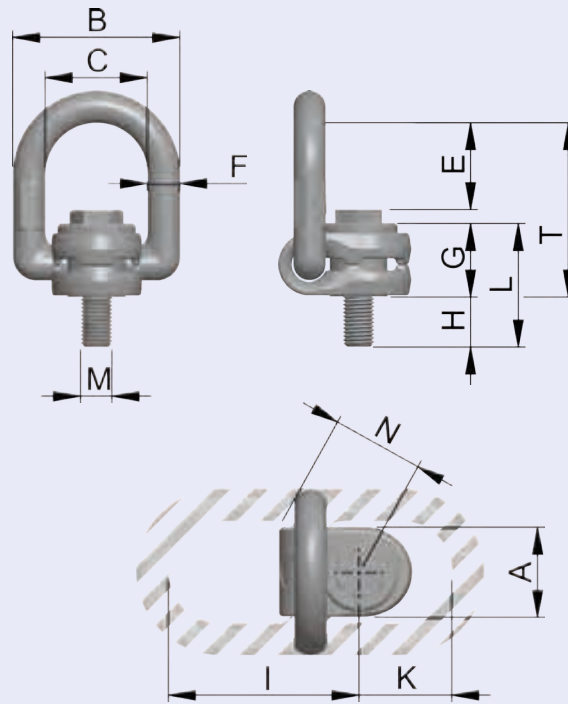
VLBG – UNC with longer vario bolt



LBG-RS // metric thread stainless steel

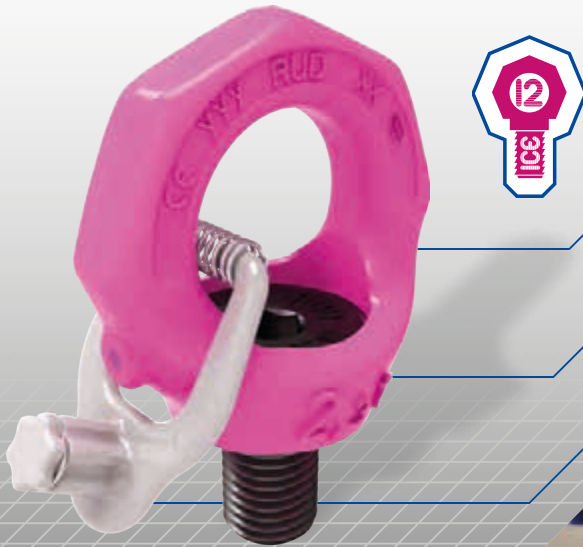
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
LBG-RS Load ring for bolting stainless steel – metrisch																		
LBG 1t M16 RS	1	1.1	88	50	85	50		43	16.5	38	25	95	45	63	M16	45	100	62086
LBG 2t M20 RS	2	1.2	88	50	85	50		42	16.5	38	27	95	45	65	M20	45	200	62813

subject to technical modifications





Clever installation, simple alignment



360° adjustable in force direction

several times higher WLL than the DIN 580 eye bolt

Easy-Fit-Key for easy assembly and disassembly



VRS "STARPOINT"

Vario eye bolt

4:1



Rotating 360°. Easy adjustment in load direction.



ICE-Bolt made out of patented steel.



Variable bolt lengths available



- ✓ **Lifting point rotates 360°.** Easy adjustment in load direction.
- ✓ **ICE-Bolt** made out of patented steel (M6–M24). Non-hazardous deep temperature usage; higher toughness and therefore higher bending strength as well as less wear occurrence.
- ✓ Not exchangeable special bolt (this reduces the usage of improper standard bolts).



VRS

The STARPOINT amongst the eye 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).

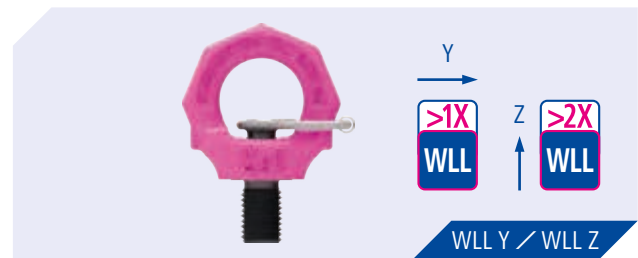
Product features

Vario eye bolt "STARPOINT"

- ✓ Clear marking at the bolt head: RUD, thread size, batch-no, ICE.
- ✓ **Variable bolt lengths available** for tapped or through holes (see p.59).
- ✓ 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)

- ✓ Tested and certified by DGUV

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



Please refer to the Working Load Limit chart on p.23.

Application-specific features VRS

- ✓ 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 recurrent lifts we can offer a special socket wrench to apply the requested torque (fits to a common Inch torque wrench, see p.61).

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

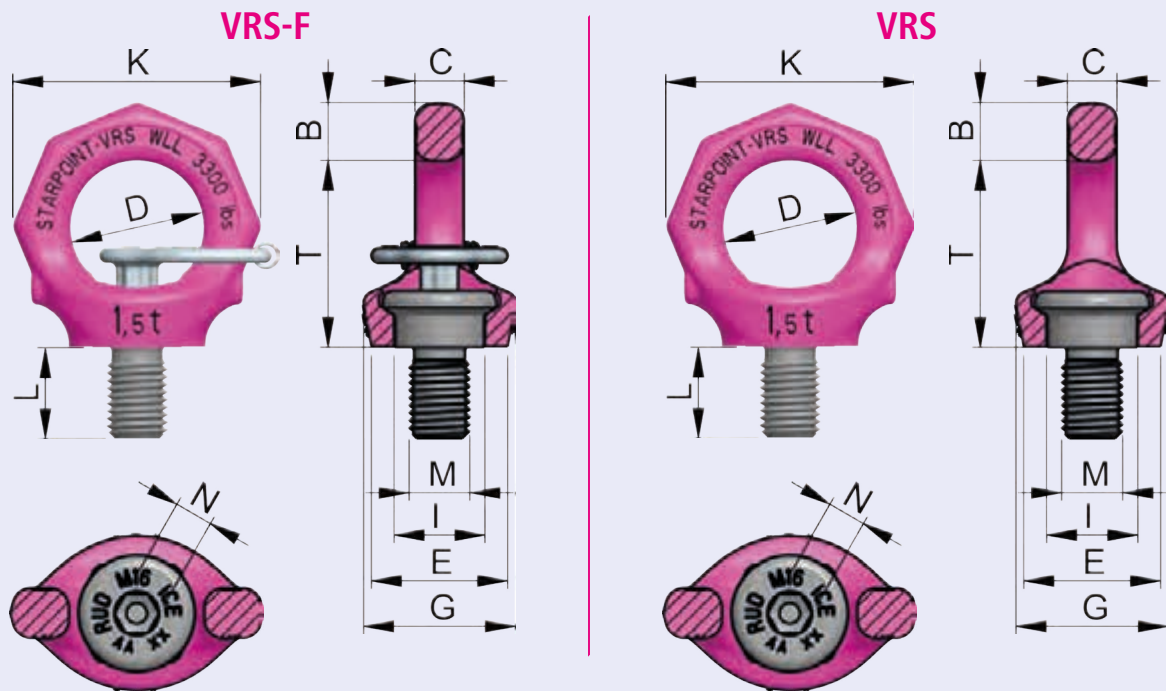
- ✓ For permanent installation of the lifting point for through hole fixtures we recommend the securing nut acc. to DIN 980-V (standard distribution, washer included), for variable installations with just one lifting action please use collar nut acc. to DIN 6331 (available upon request).
- ✓ For special 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 VRS-F [kg/pc.]	weight VRS [kg/pc.]	T [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]	I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No. VRS-F	Ref. No. VRS	
VRS-F / VRS STARPOINT – metric with (VRS-F) and without STAR KEY																		
VRS-F-M6 / VRS-M6	0.1	0.07	0.07	28	9	7	20	23	28	13	37	9	M6	6	5	7900906	7900909	
VRS-F-M8 / VRS-M8	0.3	0.12	0.1	35	11	9	25	25	30	16.3	47	12	M8	6	10	8500911	7100554	
VRS-F-M10 / VRS-M10	0.4	0.12	0.1	35	11	9	25	25	30	16.3	47	15	M10	6	10	7104029	7100555	
VRS-F-M12 / VRS-M12	0.75	0.2	0.2	42	13	10	30	30	34	19.8	56	18	M12	8	25	7101313	7100556	
VRS-F-M14 / VRS-M14	0.75	0.21	0.2	42	13	10	30	30	34	19.8	56	18	M14	8	30	7999330	7100557	
VRS-F-M16 / VRS-M16	1.5	0.3	0.33	49	15	13	35	36	40	23.5	65	24	M16	10	60	7101314	7100558	
VRS-F-M16-SL35	1.5	0.3	-	49	15	13	35	36	40	23.5	65	35	M16	10	60	7983306	-	
VRS-F-M18 / VRS-M18	1.5	0.35	0.3	49	15	13	35	36	40	23.5	65	24	M18	10	60	7903387	7992219	
VRS-F-M20 / VRS-M20	2.3	0.5	0.5	58	17	16	40	41	50	29.3	76	30	M20	12	115	7101315	7100559	
VRS-F-M22 / VRS-M22	2.3	0.5	0.61	58	17	16	40	41	50	29.3	76	30	M22	12	125	7992197	7904625	
VRS-F-M24 / VRS-M24	3.2	0.8	0.86	70	20	19	49	51	60	35	92	36	M24	14	190	7101316	7100560	
VRS-M24-SL2M	3.2	-	1	70	20	19	49	51	60	35	92	48	M24	14	190	-	7990615	
VRS-F-M27 / VRS-M27	3.2	1	0.94	70	20	19	49	51	60	35	92	36	M27	14	250	7994138	7904626	
VRS-F-M30 / VRS-M30	4.5	1	1.5	87	26	24	60	66	75	44	114	45	M30	17	330	7101317	7100561	
VRS-F-M33 / VRS-M33	4.5	1.8	1.66	87	26	24	60	66	75	44	114	45	M33	17	350	7993439	7904627	
VRS-F-M36 / VRS-M36	7	3.5	3.5	103	32	29	72	76	97	53	135	54	M36	22	590	7984201	7984198	
VRS-F-M36-SL2M	7	-	3.3	103	32	29	72	76	97	53	135	72	M36	22	590	-	7991247	
VRS-F-M42	9	4.9	4.6	121	37	33	84	86	111	62	158	63	M42	24	925	7984202	7984199	
VRS-F-M48	12	7	7.44	138	42	42	94	100	128	70	180	72	M48	27	1400	7984203	7984200	

subject to technical modifications



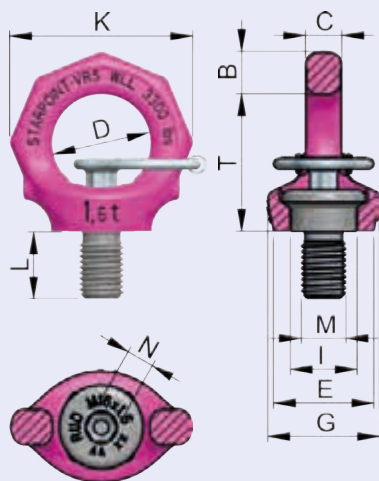
VRS-F / VRS // metric fine thread / metric, longer Vario bolt / pipe thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]	I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No. VRS-F
VRS-F STARPOINT – metric fine thread															
VRS-F-M8×1	0.3	0.12	35	11	9	25	25	30	16.3	47	12	M8 x 1	6	10	7904332
VRS-F-M12×1.5	0.75	0.2	42	13	10	30	30	34	19.8	56	18	M12 x 1.5	8	25	7902929
VRS-F-M16×1.5	1.5	0.3	49	15	13	35	36	40	23.5	65	24	M16 x 1.5	10	60	7902676
VRS-F-M20×2	2.3	0.5	58	17	16	40	41	50	29.3	76	30	M20 x 2	12	115	7992634
VRS-F-M24×2	3.2	0.8	70	20	19	49	51	60	35	92	36	M24 x 2	14	190	7992566
VRS-F-M30×2	4.5	1.6	87	26	24	60	66	75	44	114	45	M30 x 2	17	330	7991856
VRS-M36×3	7	3.5	103	32	29	72	76	97	53	135	54	M36 x 3	22	59	7992728
VRS-F STARPOINT – metric with longer Vario bolt															
VRS-F-M10	0.4	*	35	11	9	25	25	30	16.3	47	16-70	M10	6	10	8600270
VRS-F-M12	0.75	*	42	13	10	30	30	34	19.8	56	19-150	M12	8	25	8600271
VRS-F-M16	1.5	*	49	15	13	35	36	40	23.5	65	16-120	M16	10	60	8600272
VRS-F-M20	2.3	*	58	17	16	40	41	50	29.3	76	31-160	M20	12	115	8600273
VRS-F-M24	3.2	*	70	20	19	49	51	60	35	92	37-140	M24	14	190	8600274
VRS-F-M30	4.5	*	87	26	24	60	66	75	44	114	46-190	M30	17	330	8600275
Type	WLL [t]	weight [kg/pc.]	T [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No. VRS-G
VRS STARPOINT – pipe thread ISO 228-1 without STAR KEY															
VRS-G 1/4" *	0.75	0.2	42	13	10	30	30	–	38	56	18	G 1/4"	8	25	7999269
VRS-G 1/2"	0.75	0.3	52	13	10	30	35	30	–	56	20	G 1/2"	8	25	7998682
VRS-G 3/4"	1.5	0.53	61	15	13	35	42	36	–	65	23	G 3/4"	10	60	7998880
VRS-G 1"	1.5	0.5	61	15	13	35	47	41	–	65	32	G 1"	10	60	7999163
VRS-G 1-1/4"	1.5	1	64	15	13	35	58	50	–	65	40	G 1-1/4"	10	60	7903732
VRS-G 2"	1.5	1.5	64	15	13	35	81	70	–	65	45	G 2"	10	100	7999164
VRS-G 2"	2.3	1.9	73	17	16	40	81	70	–	76	45	G 2"	12	115	7900433
VRS-G 3"	1.5	3.3	64	15	13	35	115	100	–	65	45	G 3"	10	100	7905324

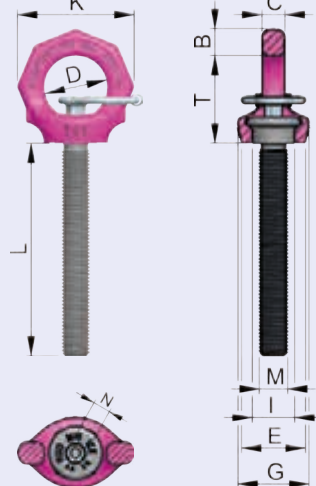
* = identically constructed as VRS metric thread

subject to technical modifications

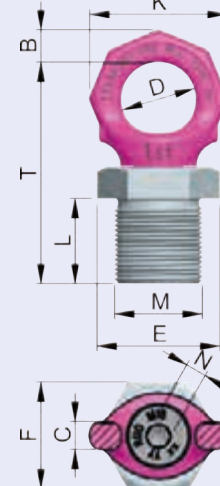
VRS-F – metric fine thread



VRS-F – metric, longer Vario bolt



VRS-G – pipe thread

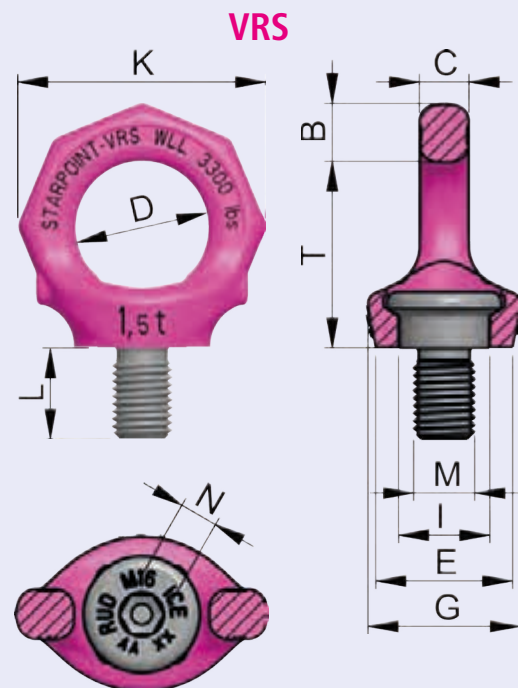
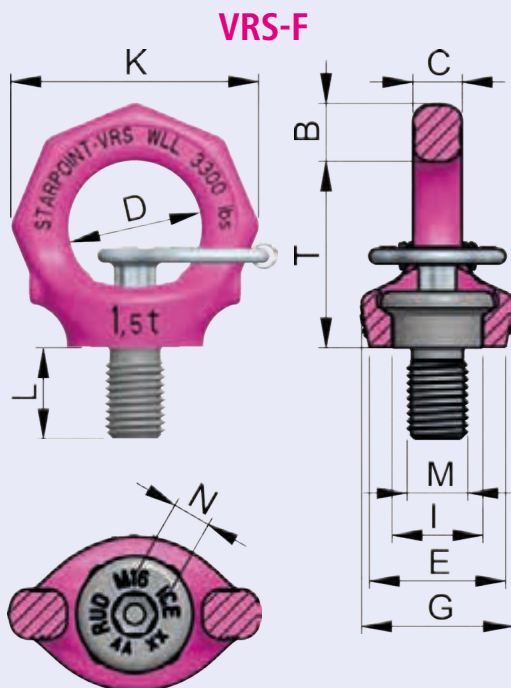




VRS-F / VRS // UNC inch thread with and without STAR KEY

Type	WLL [t]	weight VRS-F [kg/pc.]	weight VRS [kg/pc.]	T [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]	I [mm]	K [mm]	L [mm]	M [mm]	N [mm]	torque [Nm]	Ref. No. VRS-F	Ref. No. VRS	
VRS-F / VRS STARPOINT – UNC inch thread with (VRS-F) and without STAR KEY																		
VRS-F 5/16"-18UNC	0.3	0.13	-	35	11	9	25	25	30	16.3	47	12	5/16"-18UNC	1/4"	10	7999106	-	
VRS-1/4"-20UNC	0.1	-	0.24	28	9	7	20	23	28	13	37	9	1/4"-20UNC	1/4"	5	-	7999105	
VRS-F 3/8"-16UNC	0.4	0.12	-	35	11	9	25	25	30	16.3	47	19	3/8"-16UNC	1/4"	10	7104480	-	
VRS-3/8"-16UNC	0.4	-	0.09	35	11	9	25	25	30	16.3	47	15	3/8"-16UNC	1/4"	15	-	7103959	
VRS-F / VRS-7/16"-14UNC	0.4	0.12	0.1	35	11	9	25	25	30	16.3	47	19	7/16"-14UNC	1/4"	10	7904195	7903118	
VRS-F / VRS-1/2"-13UNC	0.75	0.22	0.2	42	13	10	30	30	34	19.8	56	19	1/2"-13UNC	5/16"	25	7104481	7103960	
VRS-F / VRS-5/8"-11UNC	1.5	0.33	0.3	49	15	13	35	36	40	23.5	65	24	5/8"-11UNC	3/8"	60	7104482	7103961	
VRS-F / VRS-3/4"-10UNC	1.5	0.45	0.35	49	15	13	35	36	40	23.5	65	24	3/4"-10UNC	1/2"	115	7104483	7103962	
VRS-F / VRS-7/8"-9UNC	2.3	0.64	0.6	58	17	16	40	41	50	29.5	76	33	7/8"-9UNC	1/2"	115	7104484	7103963	
VRS-F / VRS-1"-8UNC	3.2	0.98	0.9	70	20	19	49	51	60	35	92	38	1"-8UNC	9/16"	190	7104485	7103964	
VRS-F / VRS-1 1/8"-8UN	3.2	0.98	0.9	70	20	19	49	51	60	35	92	36	1 1/8"-8UN	9/16"	250	7903386	7999385	
VRS-F / VRS-1 1/8"-7UNC	3.2	0.98	0.9	70	20	19	49	51	60	35	92	36	1 1/8"-7UNC	9/16"	250	7903383	7999384	
VRS-F / VRS-1 1/4"-7UNC	4.5	1.82	1.7	87	26	24	60	66	75	44	114	48	1 1/4"-7UNC	3/4"	330	7104486	7103965	
VRS-F / VRS-1 1/2"-6UNC	7	3.6	2.9	103	32	29	72	76	97	53	135	54	1 1/2"-6UNC	7/8"	590	7104487	7103966	
VRS-F / VRS-1 3/4"-5UNC	9	4.95	4.6	121	37	33	84	86	111	62	158	63	1 3/4"-5UNC	1"	925	7104488	7103967	
VRS-F-2"-4.5UNC	12	7.6	7	138	42	42	94	100	128	70	180	72	2"-4.5UNC	1 1/8"	1400	7104469	7103968	

subject to technical modifications

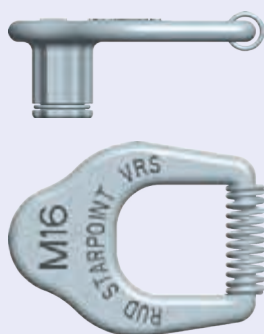


VRS // STAR KEY / socket wrench

Type	weight [kg/pc.]	A [mm]	B [mm]	C [mm]	D [mm]	M / UNC	Ref. No. VRS-F
VRS STAR KEY – metric							
STAR KEY	0.02	-	-	-	-	M6+M8+M10	7983986
STAR KEY	0.02	-	-	-	-	M12+M14	7905453
STAR KEY	0.03	-	-	-	-	M16+M18	7903254
STAR KEY	0.04	-	-	-	-	M20+M22	7904282
STAR KEY	0.08	-	-	-	-	M24+M27	7904283
STAR KEY	0.12	-	-	-	-	M30+M33	7904284
STAR KEY	0.15	-	-	-	-	M36	7904285
STAR KEY	0.3	-	-	-	-	M42	7904286
STAR KEY	0.4	-	-	-	-	M48	7904287
VRS STAR KEY – UNC inch thread							
STAR KEY	0.02	-	-	-	-	5/16"-18UNC + 3/8"-16UNC + 7/16"-14UNC	7983995
STAR KEY	0.02	-	-	-	-	1/2"-13UNC	7984001
STAR KEY	0.03	-	-	-	-	5/8"-11UNC	7983997
STAR KEY	0.04	-	-	-	-	3/4"-10UNC + 7/8"-9UNC	7983998
STAR KEY	0.08	-	-	-	-	1"-8UNC + 1 1/8"-8UN + 1 1/8"-7UNC	7983999
STAR KEY	0.12	-	-	-	-	1 1/4"-7UNC	7984000
STAR KEY	0.15	-	-	-	-	1 1/2"-6UNC	7984001
STAR KEY	0.3	-	-	-	-	1 3/4"-5UNC	7984002
STAR KEY	0.4	-	-	-	-	2"-4.5UNC	7984003
VRS socket wrench							
socket wrench VRS	0.09	118	7.5	6	1/2"	M6+M8+M10	7997749
socket wrench VRS	0.11	118	9	8	1/2"	M12+M14	7997750
socket wrench VRS	0.15	138	12	10	1/2"	M16+M18	7997751
socket wrench VRS	0.2	137	14	12	1/2"	M20+M22	7997752
socket wrench VRS	0.24	140	16.5	14	1/2"	M24+M27	7997753
socket wrench VRS	0.47	152	22	17	1/2"	M30+M33	7902078
socket wrench VRS	1.0	192	26	22	1"	M36	7902079
socket wrench VRS	1.2	276	29	24	1"	M42	7902080
socket wrench VRS	2.0	304	33	27	1"	M48	7902081

subject to technical modifications

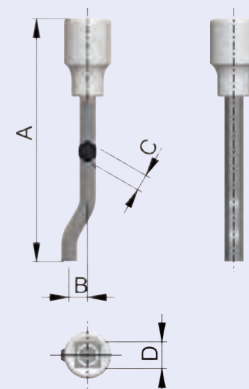
VRS STAR KEY – metric



**VRS STAR KEY –
UNC inch thread**

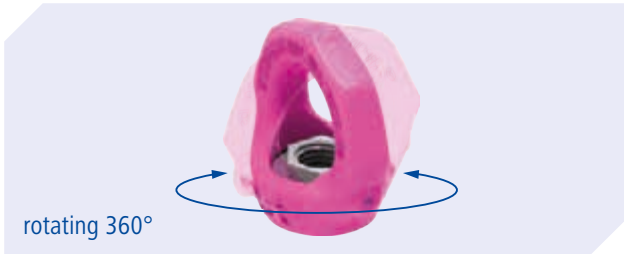


VRS socket wrench





Product features VRM



rotating 360°



Clear marking of the minimum WLL.

- ✓ **Lifting points rotates 360°** for an easy adjustment in load direction.
- ✓ **Clear marking of the minimum WLL** for all loading directions.



VRM

The Starpoint among the eye nuts.

VRM

VIP eye nut "STARPOINT"



- ✓ 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)



Please refer to the Working Load Limit chart on p.24.

Technical data

VIP eye nut "STARPOINT"

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.

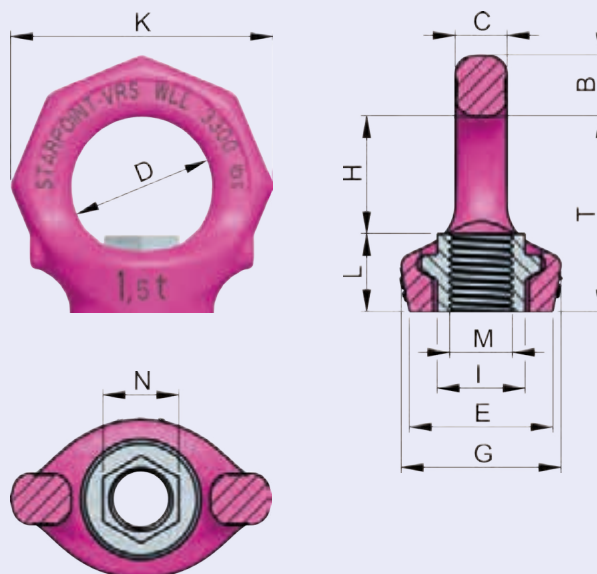
Other important RUD specific information and specialities to our RUD lifting points can be found on page 9 and in the specific user instruction (www.rud.com).

VRM // metric thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]	H [mm]	I [mm]	K [mm]	L [mm]	M	N [mm]	Ref. No.
VRM VIP eye nut – metric															
VRM-M6	0.1	0.05	28	9	7	20	23	28	17	13	37	11	M6	9	7900786
VRM-M8	0.3	0.1	35	11	9	25	25	30	21	16	47	14	M8	12	7992989
VRM-M10	0.4	0.1	35	11	9	25	25	30	21	16	47	14	M10	12	7990311
VRM-M12	0.75	0.2	42	13	10	30	30	34	25	20	56	17	M12	14	7990312
VRM-M16	1.5	0.3	49	15	13	35	36	40	31	22	65	21	M16	19	7990314
VRM-M20	2.3	0.5	58	17	16	40	41	50	35	29	76	23	M20	24	7990315
VRM-M24	3.2	0.9	70	20	19	49	51	60	41	35	92	29	M24	30	7990316
VRM-M30	4.5	1.5	87	26	24	60	66	75	51	44	114	36	M30	36	7993008

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

subject to technical modifications

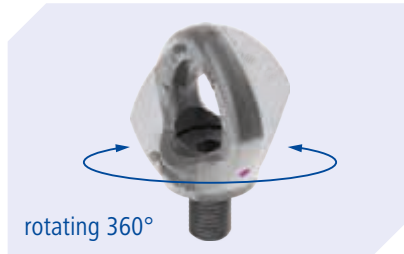




Product features INOX-STAR



Pentagonal shape



rotating 360°



Clear marking of the minimum WLL.

- ✓ **Pentagonal shape** for a clear determination to common lifting points (i.e. eye bolts).
- ✓ **Lifting points rotates 360°** for an easy adjustment in load direction.



INOX-STAR

Approved concept in INOX Stainless Steel®.

INOX-STAR

Stainless steel eye bolt



- ✓ **Clear marking of the minimum WLL** for all loading directions. Higher WLL possible when location and installation is optimised (compare WLL chart / product information).
- ✓ **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).

- ✓ **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.



WLL Y



WLL Z

Please refer to the Working Load Limit chart on p.24.

Technical data

INOX-STAR – Stainless steel eye bolt

Application-specific features INOX-STAR

- ✓ 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.

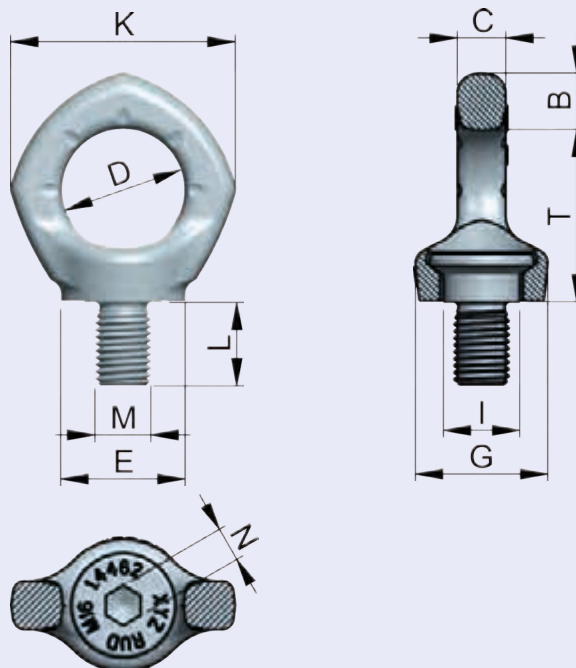
- ✓ For permanent installation and recurrend lifts we can offer a special socket wrench to apply the requested torque (fits to a common Inch torque wrench).

Other important RUD specific information and specialities to our RUD lifting points can be found on page 9 and in the specific user instruction (www.rud.com).

INOX-STAR // metric thread

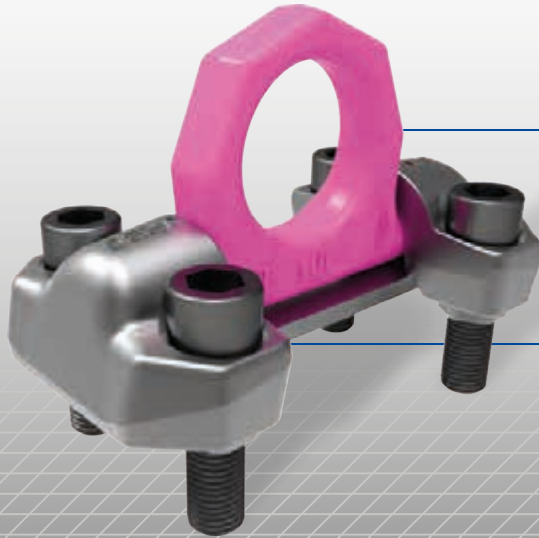
Type	WLL [t]	weight [kg/pc.]	T [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]	I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
INOX-STAR Stainless steel eye bolt – metric															
INOX-STAR M12	0.5	0.19	43	14	12	30	30	32	20	56	18	M12	8	25	7993835
INOX-STAR M16	1	0.31	50	16	14	35	36	38	23.5	65	24	M16	10	60	7993836
INOX-STAR M20	2	0.53	57	19	16	40	42	47	29	74	30	M20	12	115	7993837
INOX-STAR M24	2.5	0.92	69	24	19	48	50	56	35	92	36	M24	14	190	7993838
INOX-STAR M12 L=50	0.5	0.22	43	14	12	30	30	32	20	56	50	M12	8	25	7997822
INOX-STAR M20 L=60	2	0.6	57	19	16	40	42	47	29	74	60	M20	12	115	7998714

subject to technical modifications





Force application made easy



Full load in 90° according to ring plane

Part-protecting application of force through several fixtures

Working Load Limit up to 50 t



© RUD

RBG // VRBG

Load ring eye plate

VIP Load ring eye plate

4:1

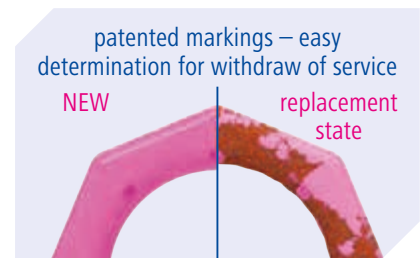
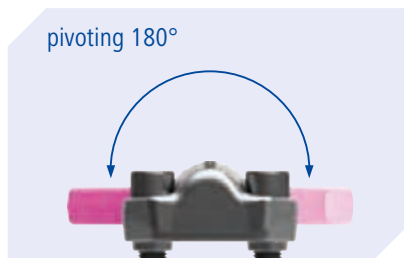
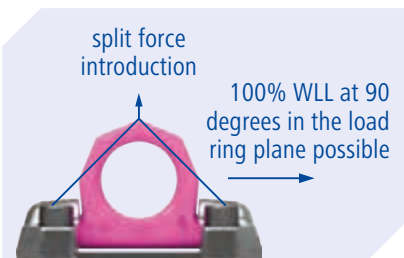


180°



-20°
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.



RBG / VRBG

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

- ✓ Original RUD bolt available as spare part.
- ✓ Component according to the test criterias of BG/DGUV "GS-OA-15-04".

Product features

Load ring eye plate / VIP Load ring eye plate

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.

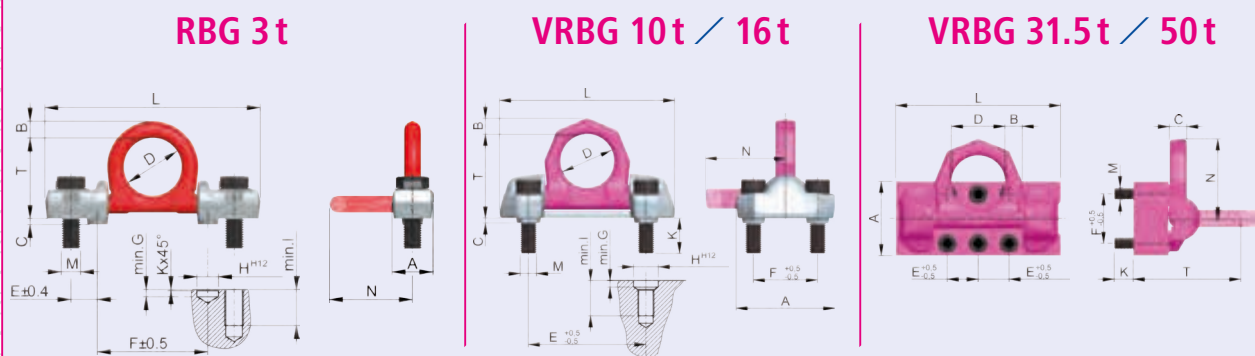
Other important RUD specific information and specialities to our RUD lifting points can be found on page 9 and in the specific user instruction (www.rud.com).



RBG / VRBG / 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]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
RBG 3 – Load ring eye plate																		
RBG 3	3	1.07	67	34	16	5	48	22	92	6	18	30	1	178	2×M16	71	120	51817
VRBG 10 / 16 – VIP Load ring eye plate // VRBG 31.5 / 50 – VIP Load ring welded an boltable plate																		
VRBG 10	10	5.43	103	125	22	6	65	143	78	8	30	50	43	213	4×M20	100	300	7994537
VRBG 16	16	11.3	131	170	30	8	90	198	104	10	46	70	63	270	4×M30	134	600	7993255
VRBG 31.5	31.5	67.5	265	180	42	42	130	75	120	-	-	-	46	400	6×M30	195	900	7985866
VRBG 50	50	198	412	270	70	55	230	100	200	-	-	-	58	650	8×M36	340	1000	7985867

subject to technical modifications

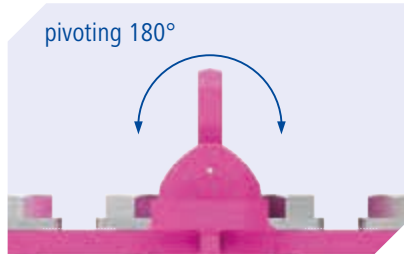




Product features T-FRB / B-FRB



high flexibility



pivoting 180°



axial bush bearing disc for optimised 90° loading

- ✓ **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.**

T-FRB / B-FRB

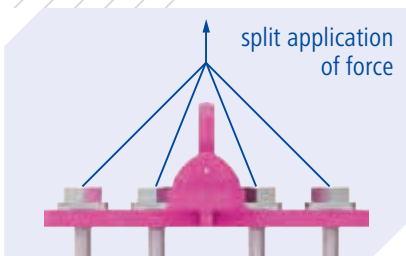
Flange Load ring with a high flexibility. Available as Top and Bottom Flange.

T-FRB // B-FRB

Flange load ring top flange / bottom flange



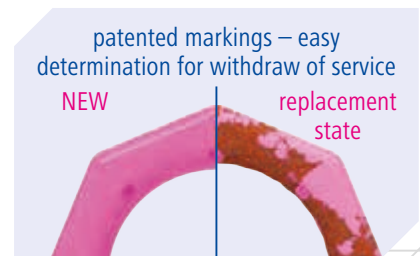
- ✓ **Split force introduction due to multiple point fixing.**
- ✓ **Large distance between bolt-on surface and load to avoid damage.**
- ✓ **Patented markings for easy determination for withdraw of service.**
- ✓ **Clear marking at the bolt head: RUD, thread size, batch-no., class of strength.**
- ✓ **Original RUD bolt available as spare part.**
- ✓ **Variable thread lengths are available for usage at thread holes and at through hole fixtures.**



split application of force



large distance between bolt-on surface and load



patented markings – easy determination for withdraw of service
NEW replacement state

Technical data

FLARIBO // Flange load ring top flange / Flange load ring bottom flange

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.

Other important RUD specific information and specialities to our RUD lifting points can be found on page 9 and in the specific user instruction (www.rud.com).



FLARIBO on pipe segment



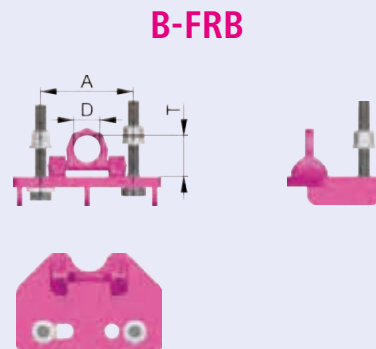
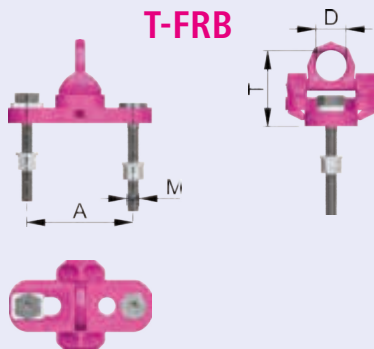
T-FRB / B-FRB // VIP 4-leg suspension

T-FRB / B-FRB // technical data

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	D [mm]	possible threads	Ref. No.
T-FRB Flange load ring FLARIBO top flange							
T-FRB-F	max. 18 t	*	214	150-400	90	M20, M24, M27, M30	8600170
T-FRB-G	max. 18 t	*	228	160-320	90	M30, M36, M39, M42, M45, M48	8600180
T-FRB-H	max. 31.5 t	*	307	180-390	130	M42, M45, M48, M56, M64	8600190
B-FRB Flange load ring FLARIBO bottom flange							
B-FRB-G	max. 18 t	*	141	160-320	90	M30, M36, M39, M42, M45, M48	8600181
B-FRB-H	max. 31.5 t	*	197	180-390	130	M42, M45, M48, M56, M64	8600191

Technical characteristics will be acquired and evaluated through the FLARIBO-questionnaire – according to the specifications of the order. The production is customized.

subject to technical modifications
* = weight depends on design specifics



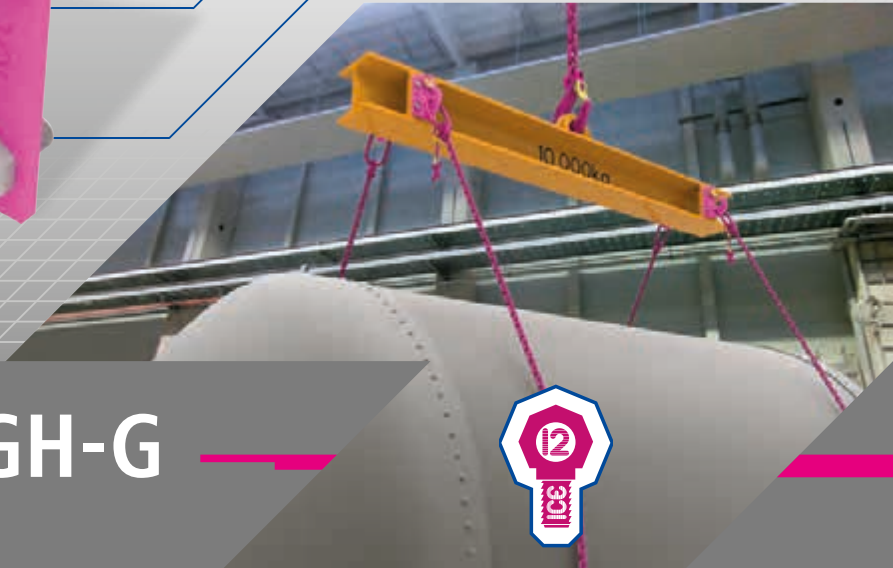
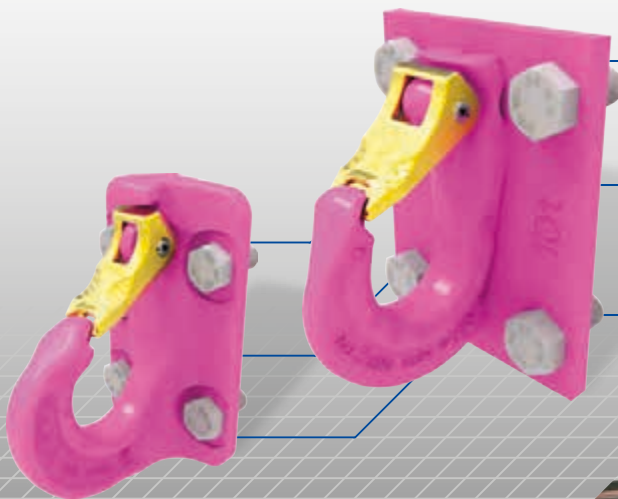


The threaded hook for all lifting means

Lifting point for spreaders and beams

For wire ropes and round slings

For lifting means with loop or oval suspension ring



VABH-B // VCGH-G

VIP Excavator hooks for bolting

4:1



350°C max.

VABH-B

-40° - 100°C

VCGH-G

-20° - 100°C

can be combined with most commercial lifting means



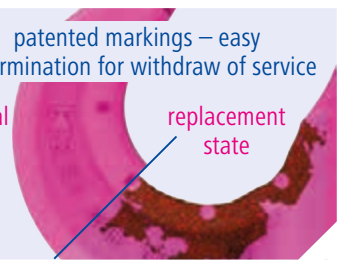
ICE-Bolt made out of patented steel.



patented markings – easy determination for withdraw of service

original

replacement state



- Can be combined with most commercial 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 occurrence.
- Patented markings for easy determination for withdraw of service.
- Robust, forged safety latch.



VABH-B / VCGH-G

Threaded Excavator hook for all lifting means.

Product features

VIP Excavator hooks for bolting

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 9 and in the specific user instruction (www.rud.com).

VABH-B

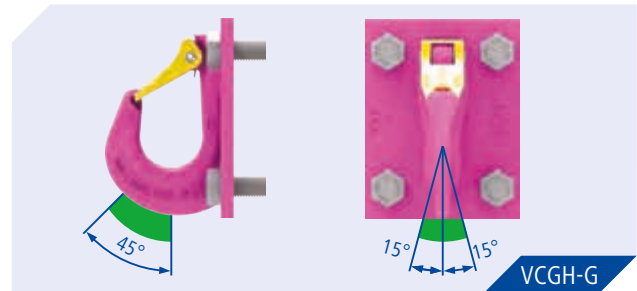
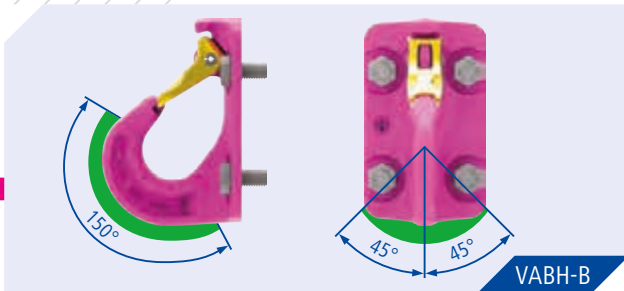
Area of application in hook plane: 150°

Area of application at lateral load: +45°, -45°

VCGH-G

Area of application in hook plane: 45°

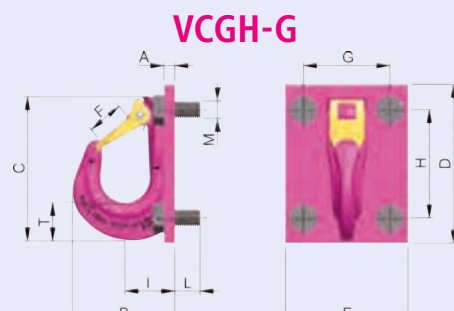
Area of application at lateral load: +15°, -15°



VABH-B / VCGH-G // 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]	L [mm]	M	torque [Nm]	Ref. No.
VABH-B VIP Excavator hook – metrisch																
VABH-B 1.5t	1.5	0.78	26	6.5	76	115	111	70	26	48	60	38	13.5	4×M10	55	7991205
VABH-B 2.5t	2.5	1.73	39	7.5	98	148	143	85	31.5	60	75	49	18	4×M12	100	7991206
VABH-B 4t	4	3.0	40	11	119	168	164	104	35	70	90	59	25	4×M16	240	7991207
VABH-B 6.7t	6.7	5.58	51	13	147	205	200	120	40	85	110	70	28	4×M20	450	8502238
VCGH-G VIP Excavator hook – metrisch																
VCGH-G 16	10	8.49	49	15	141	200	220	170	48	120	150	69	35	4×M24	800	7984048
VCGH-G 20	16	18.0	69	20	187	272	288	210	63	150	2×110	87	30	6×M24	800	7984311
VCGH-G 22	20	18.9	74	20	196	276	292	240	63	150	2×110	92	30	6×M24	950	7984313

subject to technical modifications





Product features B-ABA

No rattling noise or shaking



ICE-Bolt made out of patented steel.

clear marking of the minimum WLL



- ✓ **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 occurrence.



B-ABA

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

B-ABA

Boltable lifting point, full working load in all directions



4:1



-40°C
100°C

350°C
max.

- ✓ **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)

- ✓ Tested and certified by DGUV

Testing specifications: GS-OA-15-04:2015-12
Certificate No.: OA 1651055



Please refer to the Working Load Limit chart on p.28.

Technical data

Boltable lifting point, full working load in all directions

Application-specific features B-ABA

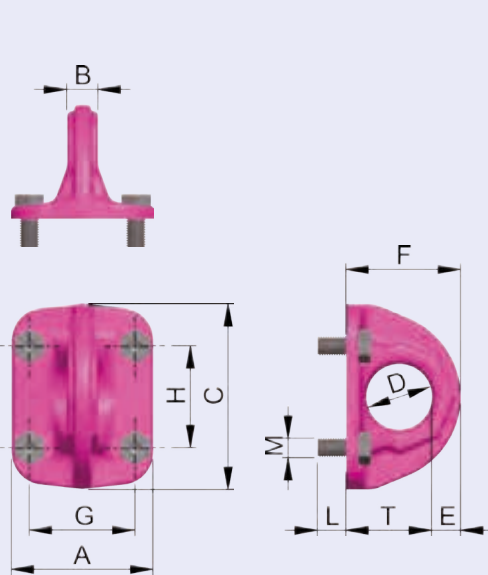
- Patented markings for easy determination for withdraw of service.
- Pink powder coated surface.
- Other important RUD specific information and specialities to our RUD lifting points can be found on page 20 and in the specific user instruction (www.rud.com).

B-ABA // metric thread

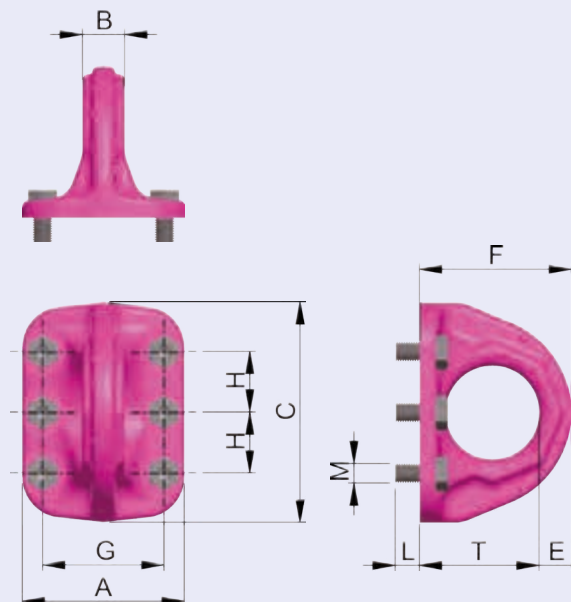
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	L [mm]	M	Ref. No	
B-ABA – Boltable lifting point, full working load in all directions															
B-ABA 1.6t	1.6	0.88	46.5	75	16	100	35	16	62.5	55	55	13	4×M10	7906266	
B-ABA 3.2t	3.2	2	65	92	23	137	50	21	86	70	75	16	4×M12	7906267	
B-ABA 5t	5	4.1	80	113	27	172	60	28	108	84	95	24	4×M16	7906268	
B-ABA 10t	10	9,3	105	146	38	228	80	36	141	110	125	25	4×M20	7906269	
B-ABA 20t	20	21	148	200	52	272	115	40	188	150	75	30	6×M24	7906270	
B-ABA 31.5t	31.5	29.5	165	230	64	320	130	50	215	175	87.5	40	6×M30	7906271	

subject to technical modifications

B-ABA 1.6t – 10t

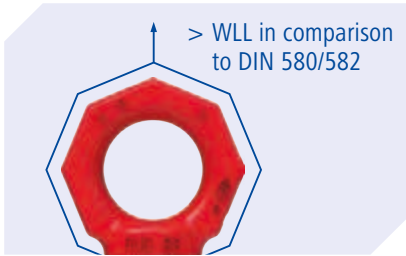


B-ABA 20t / 31.5t





Product features RS / RM



- ✓ **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)



RS / RM

High-strength octagon shaped Eye bolt/Eye nut.



RS // RM

Eye bolt / Eye nut



only RS



- ✓ **Large thread and WLL range (continued)**
 - 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.**



For the actual WLL data of the RS please refer to the Working Load Limit chart on p.29.

Technical data

Eye bolt / Eye nut

Application-specific features RS / RM

- Quick and easy installation with just one bolt connection.

Other important RUD specific information and specialties to our RUD lifting points can be found on page 9 and in the specific user instruction (www.rud.com).

Indication for the RS

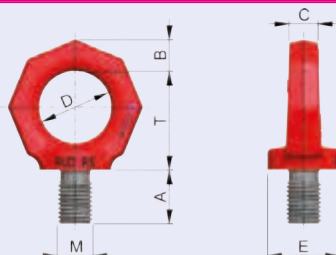
In accordance with the test principles of DGUV GS-OA-15-04, eyebolts with rigid eyes serve as mounting aids, e.g. on motors and gear units.

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

RS // metric thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	M	Ref. No.
RS Eye bolt – metric										
RS M6	0.1	0.1	34	12	11	10	25	25	M6	61401
RS M8	0.2	0.1	34	12	11	10	25	25	M8	61402
RS M10	0.25	0.1	34	15	11	10	25	25	M10	56397
RS M12	0.4	0.18	41	18	13	12	30	30	M12	56398
RS M14	0.75	0.3	48	21	15	14	35	35	M14	56403
RS M16	1	0.3	48	24	15	14	35	35	M16	56404
RS M18	1.2	0.47	55	30	17	16	40	40	M18	53850
RS M20	1.5	0.47	55	30	17	16	40	40	M20	56407
RS M22	1.5	0.88	70	36	21	20	50	50	M22	53346
RS M24	2	0.88	70	36	21	20	50	50	M24	56408
RS M27	2	1.6	85	45	26	24	60	60	M27	53347
RS M30	3	1.62	85	45	26	24	60	60	M30	56409
RS M33	3	6.1	130	50	43	38	90	100	M33	57770
RS M36	4	6.5	130	54	43	38	90	100	M36	56954
RS M39	5	6.5	130	59	43	38	90	100	M39	57771
RS M42	6	6.5	130	63	43	38	90	100	M42	56955
RS M45	7	6.5	130	67	43	38	90	100	M45	58044
RS M48	8	6.5	130	67	43	38	90	100	M48	56956

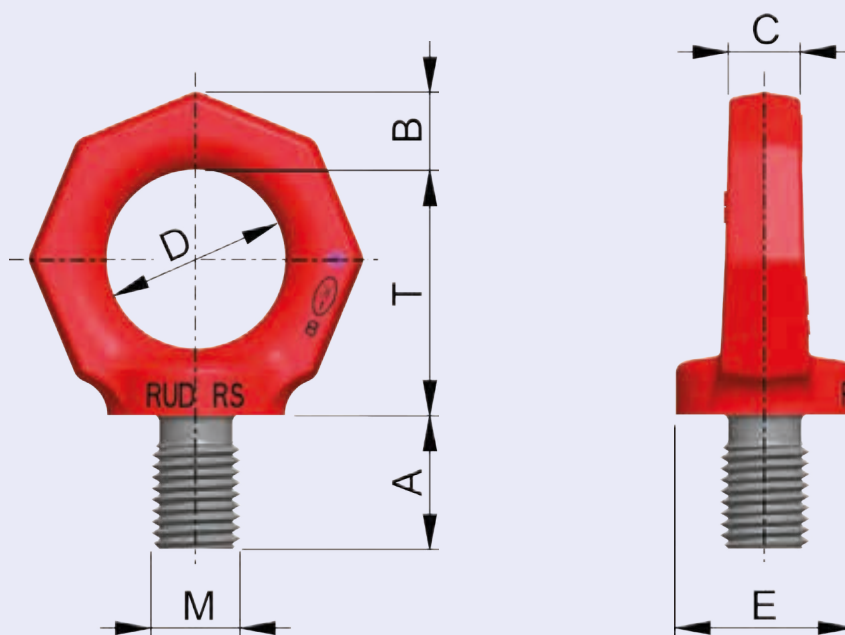
subject to technical modifications



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

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	M	Ref. No.
RS Eye bolt – metric fine thread										
RS M10×1	0.25	0.1	34	15	11	10	25	25	M10×1	7985047
RS M10×1.25	0.25	0.1	34	15	11	10	25	25	M10×1.25	56877
RS M12×1	0.4	0.18	41	18	13	12	30	30	M12×1	56868
RS M12×1.25	0.4	0.18	41	18	13	12	30	30	M12×1.25	56869
RS M12×1.5	0.4	0.18	41	18	13	12	30	30	M12×1.5	59830
RS M14×1.5	0.75	0.3	48	21	15	14	35	35	M14×1.5	53844
RS M16×1.5	1	0.3	48	24	15	14	35	35	M16×1.5	59832
RS M18×1.5	1.2	0.45	55	30	17	16	40	40	M18×1.5	50986
RS M20×1.5	1.5	0.47	55	30	17	16	40	40	M20×1.5	57203
RS M20×2	1.5	0.47	55	30	17	16	40	40	M20×2	59833
RS M22×1.5	1.5	0.78	70	34	21	20	50	50	M22×1.5	7901656
RS M24×1.5	2	0.88	70	30	21	20	50	50	M24×1.5	57210
RS M24×2	2	0.88	70	36	21	20	50	50	M24×2	59834
RS M27×2	2	1.6	85	45	26	24	60	60	M27×2	57259
RS M30×2	3	1.6	85	45	26	24	60	60	M30×2	59835
RS M36×3	4	6.5	130	54	43	38	90	100	M36×3	53853
RS M42×3	6	6.5	130	63	43	38	90	100	M42×3	53872
RS M48×3	8	6.5	130	67	43	38	90	100	M48×3	53885
RS Eye bolt – pipe thread ISO 228-1										
RS G 1/4"	0.4	0.18	41	18	13	12	30	30	G 1/4"	7986067
RS G 3/8"	1	0.45	55	24	17	16	40	40	G 3/8"	7986853
RS G 3/4"	2	1.6	85	40	26	24	60	60	G 3/4"	7989219

subject to technical modifications



RS // UNC inch thread / UNC inch fine thread / BSW-Whitworth inch thr.

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	M	Ref. No.
RS Eye bolt – UNC inch thread										
RS 1/4"-20UNC	0.1	0.1	34	12	11	10	25	25	1/4"-20UNC	56887
RS 5/16"-18UNC	0.2	0.1	34	12	11	10	25	25	5/16"-18UNC	56885
RS 3/8"-16UNC	0.25	0.1	34	15	11	10	25	25	3/8"-16UNC	56879
RS 7/16"-14UNC	0.4	0.18	41	18	13	12	30	30	7/16"-14UNC	56870
RS 1/2"-13UNC	0.4	0.18	41	18	13	12	30	30	1/2"-13UNC	56871
RS 9/16"-12UNC	0.75	0.3	48	22	15	14	35	35	9/16"-12UNC	57120
RS 5/8"-11UNC	1	0.3	48	24	15	14	35	35	5/8"-11UNC	57198
RS 3/4"-10UNC	1.2	0.47	55	30	17	16	40	40	3/4"-10UNC	57205
RS 7/8"-9UNC	1.5	0.8	70	34	21	20	50	50	7/8"-9UNC	57212
RS 1"-8UNC	2	0.85	70	36	21	20	50	50	1"-8UNC	57213
RS 1 1/8"-7UNC	2.5	1.6	85	45	26	24	60	60	1 1/8"-7UNC	57471
RS 1 1/8"-8UN	2.5	1.6	85	45	26	24	60	60	1 1/8"-8UN	7985010
RS 1 1/4"-7UNC	3	1.6	85	46	26	24	60	60	1 1/4"-7UNC	57685
RS 1 1/4"-8UN	3	1.6	85	46	26	24	60	60	1 1/4"-8UN	57686
RS 1 3/8"-6UNC	3	6.1	130	55	43	38	90	100	1 3/8"-6UNC	58599
RS 1 1/2"-6UNC	4	6.2	130	58	43	38	90	100	1 1/2"-6UNC	58615
RS 1 3/4"-5UNC	6	6.3	130	67	43	38	90	100	1 3/4"-5UNC	58616
RS 2"-4.5UNC	8	6.5	130	67	43	38	90	100	2"-4.5UNC	58658
RS Eye bolt – UNC inch fine thread										
RS 3/8"-24UNF	0.25	0.1	34	15	11	10	25	25	3/8"-24UNF	56881
RS 7/16"-20UNF	0.4	0.18	41	18	13	12	30	30	7/16"-20UNF	56872
RS 1/2"-20UNF	0.4	0.18	41	18	13	12	30	30	1/2"-20UNF	56873
RS 3/4"-16UNF	1.2	0.47	55	30	17	16	40	40	3/4"-16UNF	57204
RS 1"-12UNF	2	0.85	70	36	21	20	50	50	1"-12UNF	57215
RS Eye bolt – BSW-Whitworth inch thread										
RS 1/4"-BSW	0.1	0.1	34	12	11	10	25	25	1/4"-BSW	51806
RS 5/16"-BSW	0.2	0.1	34	12	11	10	25	25	5/16"-BSW	51807
RS 3/8"-BSW	0.25	0.1	34	15	11	10	25	25	3/8"-BSW	51808
RS 1/2"-BSW	0.4	0.18	41	18	13	12	30	30	1/2"-BSW	51810
RS 5/8"-BSW	1	0.3	48	24	15	14	35	35	5/8"-BSW	51811
RS 3/4"-BSW	1.2	0.45	55	30	17	16	40	40	3/4"-BSW	51813
RS 7/8"-BSW	1.5	0.8	70	34	21	20	50	50	7/8"-BSW	51816
RS 1"-BSW	2	0.85	70	36	21	20	50	50	1"-BSW	51774
RS 1 1/8"-BSW	3	1.6	85	45	26	24	60	60	1 1/8"-BSW	51775
RS 1 1/4"-BSW	3	1.6	85	45	26	24	60	60	1 1/4"-BSW	51776
RS 1 1/2"-BSW	4	6.2	130	58	43	38	90	100	1 1/2"-BSW	51779
RS 1 3/4"-BSW	6	6.3	130	67	43	38	90	100	1 3/4"-BSW	51803
RS 2"-BSW	8	6.8	130	67	43	38	90	100	2"-BSW	51805

subject to technical modifications



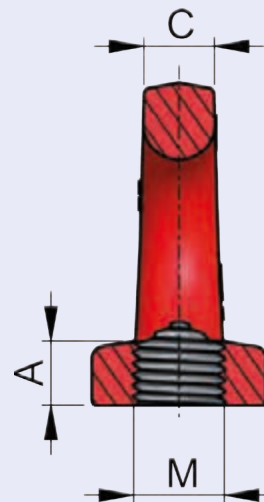
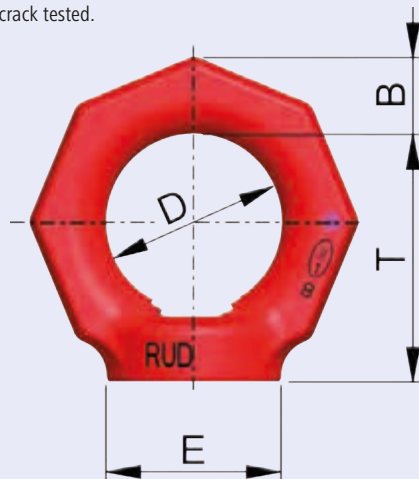
RM // metric / metric fine thread / pipe thread ISO 228-1

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	M	Ref. No.
RM Eye nut – metric										
RM M6	0.1	0.1	34	11	11	10	25	25	M6	55254
RM M8	0.2	0.1	34	11	11	10	25	25	M8	55255
RM M10	0.25	0.1	34	11	11	10	25	25	M10	55258
RM M12	0.4	0.16	41	12	13	12	30	30	M12	55271
RM M14	0.75	0.26	48	13	15	14	35	35	M14	55281
RM M16	0.8	0.26	48	13	15	14	35	35	M16	55460
RM M18	1.2	0.4	55	16	17	16	40	40	M18	55342
RM M20	1.5	0.4	55	16	17	16	40	40	M20	55343
RM M22	1.5	0.7	70	20	21	20	50	50	M22	55387
RM M24	2	0.7	70	20	21	20	50	50	M24	55394
RM M27	2	1.35	85	25	26	24	60	60	M27	55399
RM M30	3	1.32	85	25	26	24	60	60	M30	55438
RM M33	3	5.8	130	37	43	38	90	100	M33	7994437
RM M36	4	5.8	130	37	43	38	90	100	M36	53093
RM M39	5	5.6	130	37	43	38	90	100	M39	7904790
RM M42	6	5.5	130	37	43	38	90	100	M42	53095
RM M48	8	5.3	130	37	43	38	90	100	M48	53098
RM Eye nut – metric fine thread *										
RM M14×1.5	0.75	0.26	48	13	15	14	35	35	M14×1.5	7902750
RM M18×1.5	1.2	0.4	55	16	17	16	40	40	M18×1.5	7902751
RM M24×2	2	0.7	70	20	21	20	50	50	M24×2	7907625
RM M27×2	2	1.35	85	25	26	24	60	60	M27×2	7901995
RM M48×3	8	5.3	130	37	43	38	90	100	M48×3	7995961
RM Eye nut – pipe thread ISO 228-1										
RM G 1/4"	0.4	0.16	41	14	13	12	30	30	G 1/4"	7998753
RM G 1/2"	1.5	0.39	55	18	17	16	40	40	G 1/2"	7998754
RM G 3/4"	2	0.74	70	22	21	20	50	50	G 3/4"	7998755

ADVICE! WLL of the RM are only in effect when using a quality grade 8.8 threaded bolt.min. Threaded bolt of quality grade 8.8 must be crack tested.

* = further thread sizes on request

subject to technical modifications

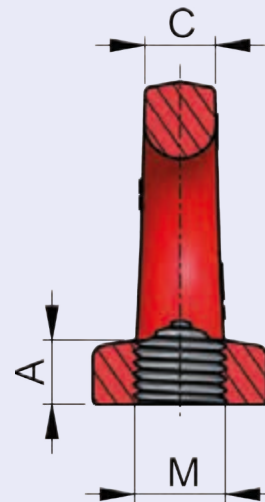
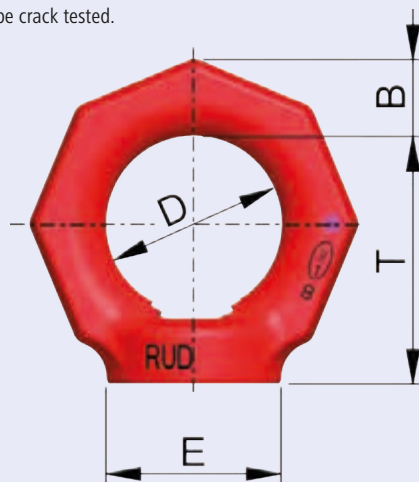


RM // UNC inch thread / BSW-Whitworth inch thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	M	Ref. No.
RS Eye nut – UNC inch thread										
RM 3/8"-16UNC	0.2	0.1	34	12	11	10	25	25	3/8"-16UNC	7101103
RM 1/2"-13UNC	0.35	0.17	41	14	13	12	30	30	1/2"-13UNC	7101104
RM 5/8"-11UNC	0.75	0.29	48	16	15	14	35	35	5/8"-11UNC	7101105
RM 3/4"-10UNC	1.2	0.39	55	18	17	16	40	40	3/4"-10UNC	7101106
RM 7/8"-9UNC	1.5	0.7	70	22	21	20	50	50	7/8"-9UNC	7101107
RM 1"-8UNC	2	1.4	85	28	26	24	60	60	1"-8UNC	7101108
RM 1 1/4"-7UNC	3	1.35	85	28	26	24	60	60	1 1/4"-7UNC	7982594
RS Eye nut – BSW-Whitworth inch thread										
RM 1/2"-BSW	0.35	0.17	41	14	13	12	30	30	1/2"-BSW	7993984
RM 5/8"-BSW	0.75	0.3	48	16	15	14	35	35	5/8"-BSW	7993985
RM 3/4"-BSW	1.2	0.42	55	18	17	16	40	40	3/4"-BSW	7993986
RM 7/8"-BSW	1.5	0.7	70	22	21	20	50	50	7/8"-BSW	7993988
RM 1"-BSW	2	0.7	70	22	21	20	50	50	1"-BSW	7993989
RM 1 1/8"-BSW	2.5	1.3	85	28	26	24	60	60	1 1/8"-BSW	7994198

ADVICE! WLL of the RM are only in effect when using a quality grade 8.8 threaded bolt.min. Threaded bolt of quality grade 8.8 must be crack tested.

subject to technical modifications










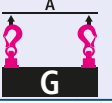
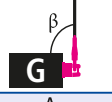
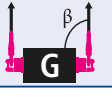
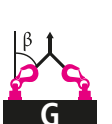

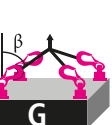
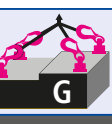
Lifting Points ready for welding





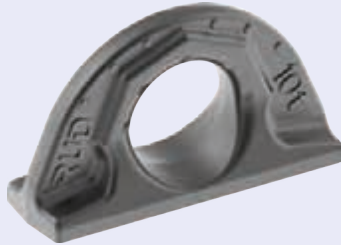
WORKING LOAD LIMIT

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

WLL 0.63t–8t see p.90		PowerPoint® – pivoting 360°			not pivoting			
		 WPP-S / WPP-B / WPP-VIP S-Star / B-Ring connect. / VIP-chain connect.			 WPPH-S / WPPH-B / WPPH-VIP S-Star / B-Ring connect. / VIP-chain connection			
type		0.63 t	1.5 t	2.5 t	4 t	5 t	8 t	
weld seam		a 4△	a 5△	HY 3 + a 5△	HY 3 + a 6△	HY 3 + a 8△	HY 3 + a 10△	
number of legs								
β								
	1	0°	0.63	1.5	2.5	4	6.7	10
	2	0°	1.26	3	5	8	13.4	20
	1	90°	0.63	1.5	2.5	4	5	8
	2	90°	1.26	3	5	8	10	16
	2	0-45°	0.88	2.1	3.5	5,6	7	11.2
	2	45-60°	0.63	1.5	2.5	4	5	8
	2	unsymmetrical	0.63	1.5	2.5	4	5	8
	3+4	0-45°	1.32	3.15	5.25	8,4	10.5	16.8
	3+4	45-60°	0.95	2.25	3.75	6	7.5	12
	3+4	unsymmetrical	0.63	1.5	2.5	4	5	8

LIFTING

Lifting points – ready for welding

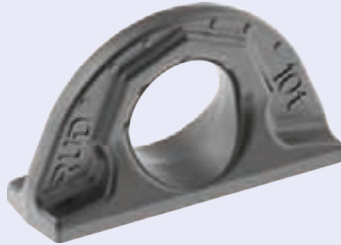

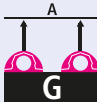
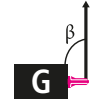
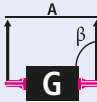
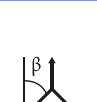







ABA

Weldable lifting point, full load in all directions

WLL
0.8t–31.5t

see p.94

 <p>ABA Weldable lifting point, full load in all directions</p>							<p>WLL 0.8t–31.5t see p.94</p>	
0.8t	1.6t	3.2t	5t	10t	20t	31.5t	type	
a 3△	a 4△	a 6△	a 7△	a 8△	a 12△	a 15△	weld seam	
							β	number of legs
0.8	4	9	12	20	20	31.5	0°	1 
1.6	8	18	24	40	40	63	0°	2 
0.8	1.6	3.2	5	10	20	31.5	90°	1 
1.6	3.2	6.4	10	20	40	63	90°	2 
1.1	5.6	12.6	16.8	28	28	45	0-45°	2 
0.8	4	9	12	20	20	31.5	45-60°	2 
0.8	4	9	12	20	20	31.5	unsymmetrical	2 
1.7	3.4	6.8	10.6	21.2	42	67	0-45°	3+4 
1.2	2.4	4.8	7.5	15	30	47.5	45-60°	3+4 
0.8	1.6	3.2	5	10	20	31.5	unsymmetrical	3+4 



WORKING LOAD LIMIT

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

WLL 4 t – 100 t see p.96		 VRBS-FIX VIP Load ring FIX weldable						
type		4 t	6.7 t	10 t	16 t	31.5 t	50 t	100 t
weld seam		HY 3	HY 5	HY 6	HY 9	HY 12	HY 19	HY 28
number of legs	β							
	1 0°	4	6.7	10	16	31.5	50	100
	2 0°	8	13.4	20	32	63	100	200
	1 90°	4	6.7	10	16	31.5	50	100
	2 90°	8	13.4	20	32	63	100	200
	2 0-45°	5.6	9.4	14	22.4	44.1	70	140
	2 45-60°	4	6.7	10	16	31.5	50	100
	2 unsym- metrical	4	6.7	10	16	31.5	50	100
	3+4 0-45°	8.4	14.1	21	33.6	66.2	105	210
	3+4 45-60°	6	10.1	15	24	47.3	75	150
	3+4 unsym- metrical	4	6.7	10	16	31.5	50	100

LIFTING

Lifting points – ready for welding



VRBK-FIX

VIP Load ring FIX for 90°-edges weldable

WLL
4t–50t

see p.96

 VRBK-FIX VIP Load ring FIX for 90°-edges weldable					WLL 4t–50t see p.96	
4t	6.7t	10t	31.5t	50t *	type	
HY 4 + a 3 ▽	HY 5 + a 3 ▽	HY 8 + a 3 ▽	HY 17	HY 25	weld seam	
					β	number of legs
4	6.7	10	31.5	50	0°	1 
8	13.4	20	63	100	0°	2 
4	6.7	10	31.5	50	90°	1 
8	13.4	20	63	100	90°	2 
5.6	9.4	14	44.1	70	0-45°	2 
4	6.7	10	31.5	50	45-60°	2 
4	6.7	10	31.5	50	unsymmetrical	2 
8.4	14.1	21	66.2	105	0-45°	3+4 
6	10.1	15	47.3	75	45-60°	3+4 
4	6.7	10	31.5	50	unsymmetrical	3+4 

* without clamping effect



WORKING LOAD LIMIT

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

WLL 4t–50t see p.100		 VRBS VIP Load ring weldable					
type		4t	6.7t	10t	16t	31.5t	50t
weld seam		HY 4 + a 3 ▽	HY 5.5 + a 3 ▽	HY 6 + a 4 ▽	HY 8.5 + a 4 ▽	HY 18 + a 4 ▽	HY 25 + a 8 ▽
number of legs	β						
	1 0°	4	6.7	10	16	31.5	50
	2 0°	8	13.4	20	32	63	100
	1 90°	4	6.7	10	16	31.5	50
	2 90°	8	13.4	20	32	63	100
	2 0-45°	5.6	9.4	14	22.4	44.1	70
	2 45-60°	4	6.7	10	16	31.5	50
	2 unsymmetrical	4	6.7	10	16	31.5	50
	3+4 0-45°	8.4	14.1	21	33.6	66.2	105
	3+4 45-60°	6	10.1	15	24	47.3	75
	3+4 unsymmetrical	4	6.7	10	16	31.5	50

LIFTING

Lifting points – ready for welding



VLBS
VIP Load ring for welding



LBS-RS
Load ring weldable
stainless steel

WLL
0.5t – 16t




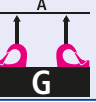
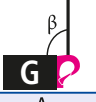
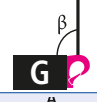
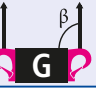


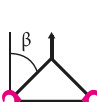




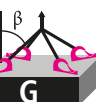
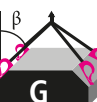
see p.102

VLBS						LBS-RS			WLL 0.5t – 16t see p.102		
1.5t	2.5t	4t	6.7t	10t	16t	0.5t	1t	2t	type		
HV 5 + a 3	HV 7 + a 3	HV 8 + a 3	HV 12 + a 4	HV 16 + a 4	HV 25 + a 6	HV 4 + a 3	HV 7 + a 3	HV 12 + a 4	weld seam		
									β	number of legs	
1.5	2.5	4	6.7	10	16	0.5	1	2	0°	1	
3	5	8	13.4	20	32	1	2	4	0°	2	
1.5	2.5	4	6.7	10	16	0.5	1	2	90°	1	
3	5	8	13.4	20	32	1	2	4	90°	2	
2.1	3.5	5.6	9.5	14	22.4	0.7	1.4	2.8	0-45°	2	
1.5	2.5	4	6.7	10	16	0.5	1	2	45-60°	2	
1.5	2.5	4	6.7	10	16	0.5	1	2	unsymmetrical	2	
3.15	5.25	8.4	14	21	33.6	1.05	2.1	4.2	0-45°	3+4	
2.25	3.75	6	10	15	24	0.75	1.5	3	45-60°	3+4	
1.5	2.5	4	6.7	10	16	0.5	1	2	unsymmetrical	3+4	



WORKING LOAD LIMIT

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

WLL 1.5t–20t see p.106		 VABH-W VIP Excavator hook for welding				 VCGH-S VIP Excavator hook for welding			
type		1.5t	2.5t	4t	6.7t		10t	16t	20t
weld seam		a 4△	a 5△	a 6△	a 6△		a 8△	a 8△	a 8△
number of legs	β								
	1 0°	1.5	2.5	4	6.7	assembly VCGH-S ↓	–	–	–
	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

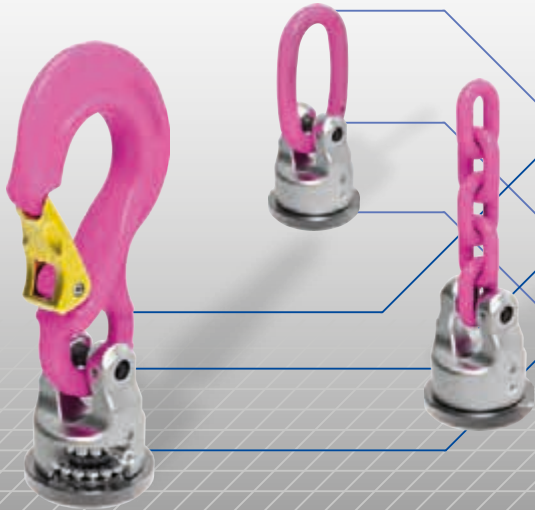
LIFTING

Lifting points – ready for welding





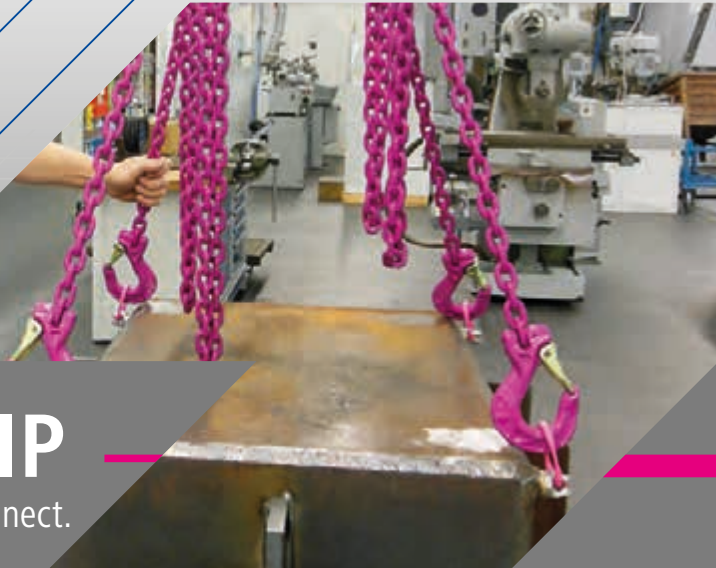
Universal connection with many attachment options



WPP: rotating 360°, pivoting 230°

Universal, unmistakable VIP connection for chain, hook and eye

WPP: double ball bearing for rotating and turning actions



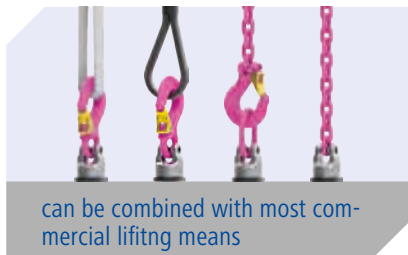
WPP(H)-S // -B // -VIP

PowerPoint®-Star /-B-Ring connect. /-VIP-chain connect.
for welding for welding for welding

WPP



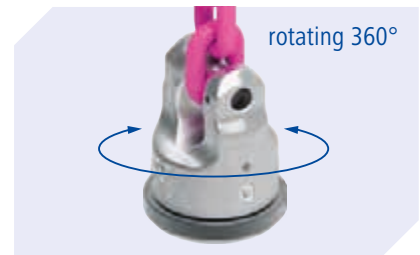
WPPH



can be combined with most commercial lifting means



double ball bearing



rotating 360°

WPP-S

weldable universal hook connection for ring assemblies, round slings, wire ropes, hook assemblies

WPP-B

weldable ring connection for hook assemblies



WPP-VIP

weldable, direct VIP-chain connection

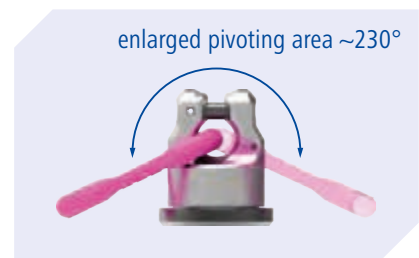
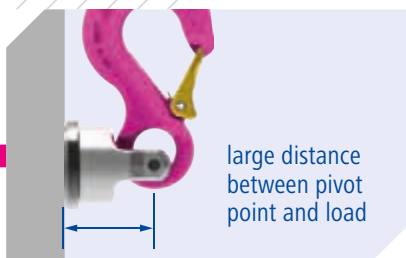
Can be combined with most commercial lifting means without additional connecting element.

WPP-S / WPP-B / WPP-VIP
– **Double ball bearing** is the optimal solution for turning and flipping operations under full load.
– **Lifting points pivots 360°.**
– **Parallel to the weld-on surface under nominal WLL.**

Product features

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

- ✓ 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.
- ✓ WPPH-S / WPPH-B / WPPH-VIP:
Ideal connection link for crossbar construction.
- ✓ WPP-VIP / WPPH-VIP: **Universal and non-mix-up clevis connection for easy construction with chains, hooks and eye.**
- ✓ Clear marking of the minimum WLL for all loading directions.
- ✓ Requirements of the DIN 18800 are fulfilled by the weld arrangement (circular fillet weld), this means non occurrence of contact/crevice corrosion due to the endless weld seam (therefore suitable for outdoor constructions). The circular weld seam HY requires only a small welding volume.



Differences between the WPP and the WPPH (not turnable). Regard the orientation of the hook, the ring connection and the chain. **For further information refer to the specific user instruction.**

WPPH product website



Product features / Application-specific features WPP(H)-S / -B / -VIP

- ✓ Compact design and high wear resistancy due to the usage of high tensile material.
- ✓ Material of weld-on-block 1.6541 (23MnNiCrMo52) (please observe user instruction).
- ✓ 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).
- ✓ Significant product characteristics of the WPP-S, WPP-B, WPP-VIP, WPPH-S, WPPH-B and WPPH-VIP are subject to property right claims.
- ✓ Tested and certified by DGUV. Testing specifications: GS-OA-15-04:2012-05
- WPP
Certificate-No.: OA 1451023
- WPPH
Certificate-No.: OA 1451022
- ✓ Simple and fast welding installation.



Other important RUD specific information and specialities to our RUD lifting points can be found on page 9 and in the specific user instruction (www.rud.com).



WPP-S / WPP-B / WPP-VIP / VWBS / VWBS-KA // technical data

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	G [mm]	N [mm]	weld seam	Ref. No.
WPP-S – PowerPoint®-Star Universal connection for welding (turnable)											
WPP-S 0.63t	0.63	0.4	115	13	75	18	40	40	-	a 4	7990721
WPP-S 1.5t	1.5	1	147	20	97	25	46	50	-	a 5	7989944
WPP-S 2.5t	2.5	1.5	187	28	126	30	61	61	-	HY 3 + a 5	7989945
WPP-S 4t	4	3.3	227	36	150	35	78	77	-	HY 3 + a 6	7989946
WPP-S 5t	5 (6.7)	7.1	267	37	174	40	95	93	-	HY 3 + a 8	7989947
WPP-S 8t	8 (10)	8.2	310	49	208	48	100	102	-	HY 3 + a 10	7989948
WPP-B – PowerPoint® Ring connection for welding (turnable)											
WPP-B 0.63t	0.63	0.35	105	9	65	35	40	40	15	a 4	7989954
WPP-B 1.5t	1.5	0.6	115	11	65	35	46	50	15	a 5	7989955
WPP-B 2.5t	2.5	1	135	13	74	40	61	61	18	HY 3 + a 5	7989956
WPP-B 4t	4	2.3	172	16	95	45	78	77	20	HY 3 + a 6	7989957
WPP-B 5t	5 (6.7)	4.7	223	19	130	60	95	93	25	HY 3 + a 8	7989958
WPP-B 8t	8 (10)	5.3	242	24	140	65	100	102	28	HY 3 + a 10	7989959
WPP-VIP – PowerPoint® VIP-chain connection for welding (turnable)											
WPP-VIP4-0.63t	0.63	0.23	41	4	-	-	40	-	-	a 4	7989960
WPP-VIP6-1.5t	1.5	0.45	50	6	-	-	46	-	-	a 5	7989961
WPP-VIP8-2.5t	2.5	0.85	61	8	-	-	61	-	-	HY 3 + a 5	7989962
WPP-VIP10-4t	4	2.1	77	10	-	-	78	-	-	HY 3 + a 6	7989963
WPP-VIP13-5t	5 (6.7)	3.4	93	13	-	-	95	-	-	HY 3 + a 8	7989964
WPP-VIP16-8t	8 (10)	4.5	102	16	-	-	100	-	-	HY 3 + a 10	7989965
VWBS – VIP Load ring connection for welding (turnable)											
VWBS 40 (50)t	40 (50)	27.9	380	46	170	110	170	161	55	HY 22 + a 19	7903650
VWBS-KA – VIP-chain connection for welding (turnable)											
VWBS-KA-28-31.5t *	31.5	24	146	28	-	-	170	-	-	HY 22 + a 19	7903440

() = higher WLL at axial loading

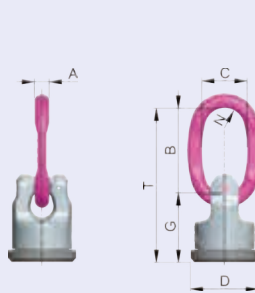
* = pivoting range: 180°

subject to technical modifications

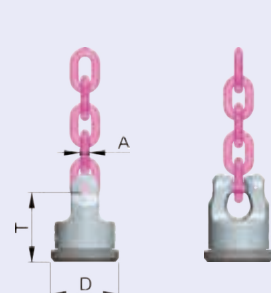
WPP-S



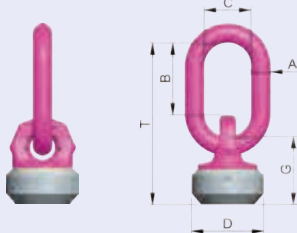
WPP-B



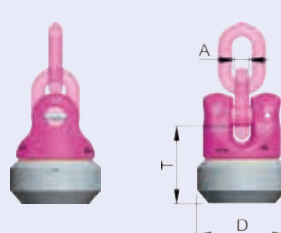
WPP-VIP



VWBS



VWBS-KA

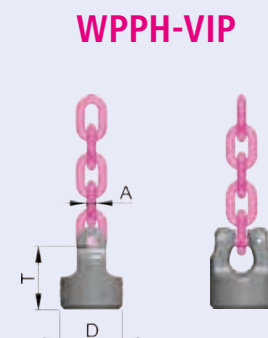
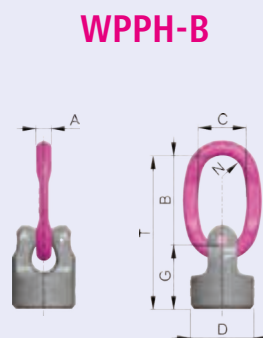


WPPH-S / WPPH-B / WPPH-VIP / WPPH-KA // technical data

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	G [mm]	N [mm]	weld seam	Ref. No.
WPPH-S – PowerPoint®-Star Universal connection for welding (not turnable)											
WPPH-S 0.63t	0.63	0.35	109	13	75	18	40	40	-	a 4	7990721
WPPH-S 1.5t	1.5	1	141	20	97	25	46	50	-	a 5	7989944
WPPH-S 2.5t	2.5	1.4	179	28	126	30	61	61	-	HY 3 + a 5	7989945
WPPH-S 4t	4	3.2	217	36	150	35	78	77	-	HY 3 + a 6	7989946
WPPH-S 5t	5 (6.7)	7	253	37	174	40	95	93	-	HY 3 + a 8	7989947
WPPH-S 8t	8 (10)	8	296	49	208	48	100	102	-	HY 3 + a 10	7989948
WPPH-B – PowerPoint® Ring connection for welding (not turnable)											
WPPH-B 0.63t	0.63	0.25	99	9	65	35	34	34	15	a 4	7989976
WPPH-B 1.5t	1.5	0.5	109	11	65	35	40	44	15	a 5	7989977
WPPH-B 2.5t	2.5	0.9	137	13	74	40	53	53	18	HY 3 + a 5	7989978
WPPH-B 4t	4	2.2	163	16	95	45	68	66	20	HY 3 + a 6	7989979
WPPH-B 5t	5 (6.7)	4.5	209	19	130	60	83	79	25	HY 3 + a 8	7989980
WPPH-B 8t	8 (10)	5.1	228	24	140	65	88	88	28	HY 3 + a 10	7989981
WPPH-VIP – PowerPoint® VIP-chain connection for welding (not turnable)											
WPPH-VIP4-0.63t	0.63	0.2	34	4	-	-	34	-	-	a 4	7989982
WPPH-VIP6-1.5t	1.5	0.35	44	6	-	-	40	-	-	a 5	7989983
WPPH-VIP8-2.5t	2.5	0.75	53	8	-	-	53	-	-	HY 3 + a 5	7989984
WPPH-VIP10-4t	4	2.0	66	10	-	-	68	-	-	HY 3 + a 6	7989985
WPPH-VIP13-5t	5 (6.7)	3.1	79	13	-	-	83	-	-	HY 3 + a 8	7989986
WPPH-VIP16-8t	8 (10)	4.3	88	16	-	-	88	-	-	HY 3 + a 10	7989987
WPPH-KA – PowerPoint® VIP-chain connection for welding (not turnable)											
VWBS 40 (50)t	40 (50)	27.9	380	46	170	110	170	161	55	HY 22 + a 19	7903650

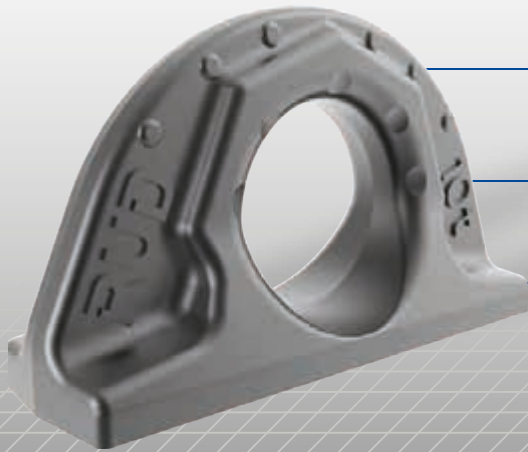
() = higher WLL at axial loading

subject to technical modifications





Ready and indestructible – from all directions



4:1 safety against breaking

Patented markings for easy determination for withdraw of service

Tempered base body, therefore wear-resistant



ABA

Weldable lifting point, full working load in all directions

4:1

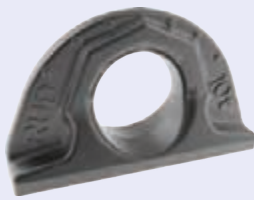


DGUV Test

-40°
200°C

400°C
max.

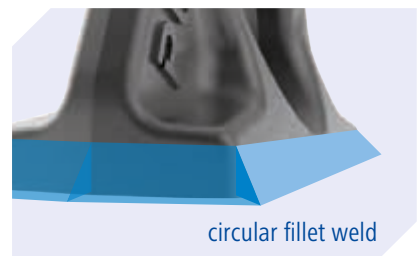
forged lifting point



clear marking of the minimum WLL



circular fillet weld



- ✓ **Forged**, no rattling noise or shaking even at strong vibrations or shock loads, simple connection of lifting means possible.
- ✓ **Clear marking of the minimum WLL for all loading directions.**
- ✓ **Requirements of the DIN 18800 are fulfilled by the weld arrangement (circular fillet weld)**, this means non occurrence of contact/crevice corrosion due to the endless weld seam (therefore suitable for outdoor constructions). Material of weld-on-block 1.6541 (23MnNiCrMo52) (please observe user instruction).



ABA

Weldable lifting point, full working load in all directions

- ✓ Patented markings for easy determination for withdraw of service.
- ✓ Tested and certified by DGUV

Testing specifications: GS-OA-15-04:2012-05
Certificate-Nr.: OA 1451020

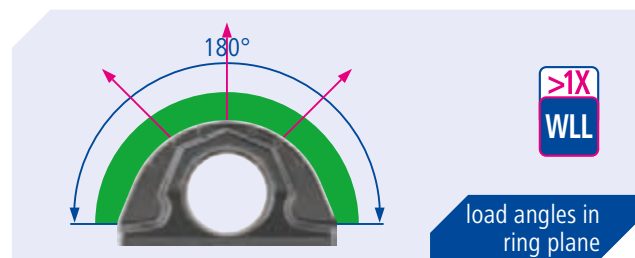
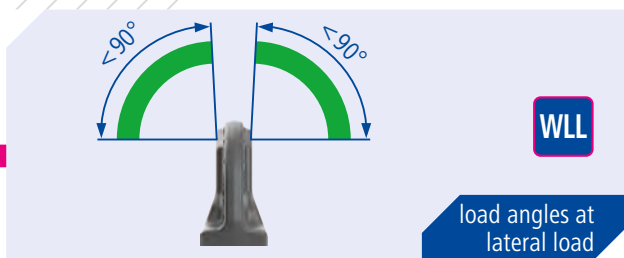


Product features

Weldable lifting point, full working load in all directions

Product features / Application-specific features ABA

- ✓ Phosphated surface.
 - ✓ Significant product characteristics of the ABA are subject to property right claims.
 - ✓ Simple and fast welding installation.
 - ✓ Confirmation of the low temperature ability to -40°C by the notch bar impact test is possible upon request (before order is placed).
 - ✓ Appropriateness for hot dip galvanising after welding has to be analysed process related and liberised.
 - ✓ The WLL statement corresponds to the minimum WLL in all loading directions. Higher WLL possible when location and installation is optimised (compare WLL chart / user instruction).
- Other important RUD specific information and specialities to our RUD lifting points can be found on page 9 and in the specific user instruction (www.rud.com).**

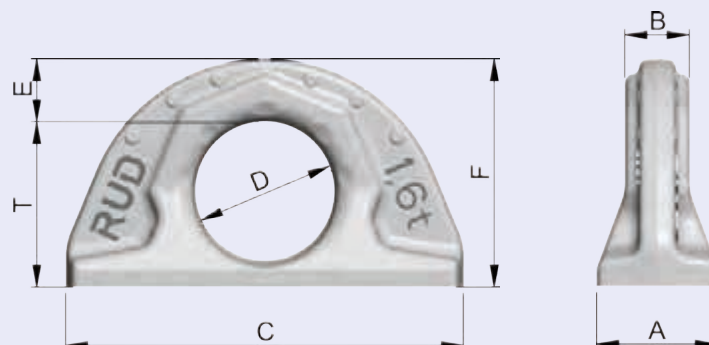


ABA // technical data

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	weld seam	Ref. No.
ABA – Weldable lifting point, full working load in all directions											
ABA 0.8t	0.8	0.2	32	22	12	70	32	12	50	a 3	7907698
ABA 1.6t	1.6 (4)	0.45	42	30	16	100	35	16	57	a 4	7900352
ABA 3.2t	3.2 (9)	1.15	59	41	23	137	50	21	80	a 6	7900353
ABA 5t	5 (12)	2.26	72	51	27	172	60	28	99	a 7	7900354
ABA 10t	10 (20)	5.37	95	70	38	228	80	35	130	a 8	7900355
ABA 20t	20	10.72	135	90	52	272	115	40	175	a 12	7902174
ABA 31.5t	31.5	18.33	154	108	64	320	130	50	204	a 15	7902175

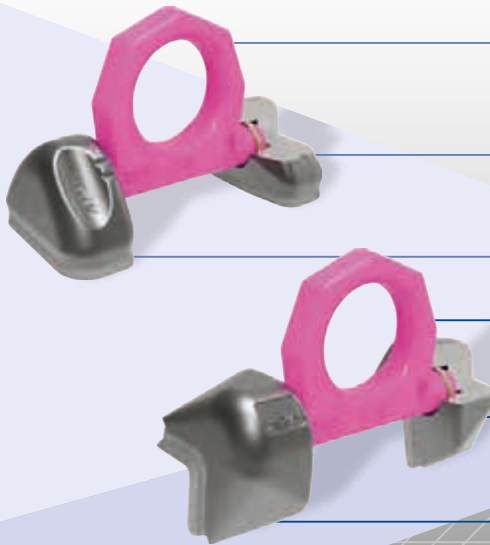
() = higher WLL when loading in ring plane.

subject to technical modifications





The perfect shared-force welding solution



No complex leveling of the components to each other

No crevice corrosion: endless HY weld seam

Clamping spring holds all parts together



VRBS-FIX

VIP Load ring FIX weldable

VRBK-FIX

VIP Load ring FIX weldable for edges

4:1



DGUV Test



-40°-200°C

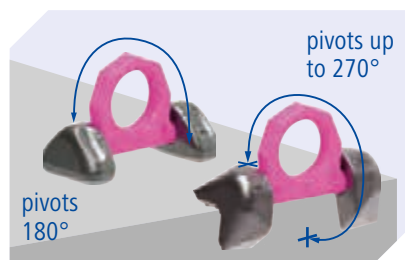
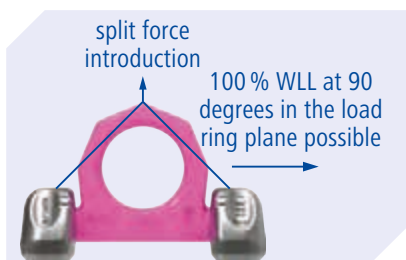
400°C max.

VRBS-FIX

180°

VRBK-FIX

270°



- ✓ **Split force introduction** due to multiple point fixing.
- ✓ **VRBS-FIX: Suspension ring pivots 180°.**
VRBK-FIX: Suspension ring with enlarged pivoting area.
- ✓ **100 % WLL at 90° in the load ring plane possible (up to 270°).**
- ✓ Requirements of the DIN 18800 are fulfilled by the weld arrangement (circular fillet weld), this means non occurrence of contact/crevice corrosion due to the endless weld seam (therefore suitable for outdoor constructions). The circular weld seam HY requires only a small welding volume.



VRBS-FIX

The new VRBS-FIX with considerable improvements! Operable up to -40°C.



VRBK-FIX

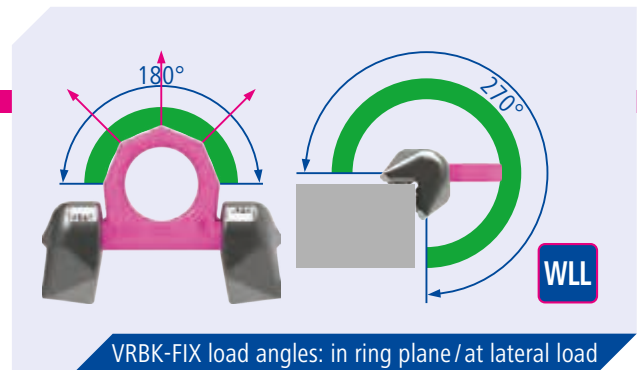
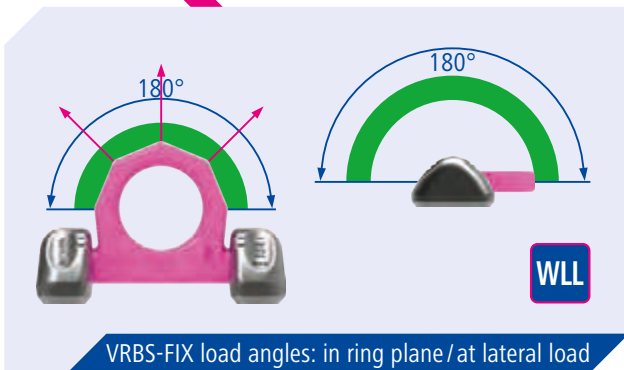
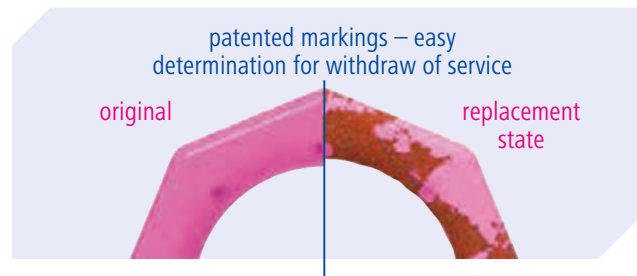
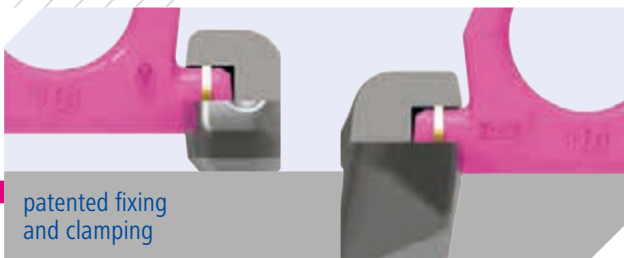
Ideal for use on edges – only half the number of lashing points needed.

Product features

VIP Load ring FIX weldable / VIP Load ring FIX weldable for edges

Product features VRBS-FIX / VRBK-FIX

- ✓ **Clamping spring** works as a noise reduction and holds the suspension ring in the requested position; therefore simple hinge of lifting mean possible.
- ✓ **Patented markings for easy determination for withdraw of service.** VRBS-FIX: patented markings for determination of the load angle.
- ✓ Simple and process safe positioning for the welding of pre-assembled components consisting of suspension ring and weld-on blocks.
- ✓ Clear marking of the minimum WLL for all loading directions.
- ✓ The weld-on-block is made (forged) out of a quality weldable steel.



The VRBS-FIX and VRBK-FIX are being used at differing loading angles.
Please refer to the Working Load Limit chart on p.84.

Product features / Application-specific features VRBS-FIX / VRBK-FIX

- ✓ Tested and certified by DGUV
Testing specifications: GS-OA-15-04:2012-05

VRBS-FIX
Certificate-No.: OA 1651057



VRBK-FIX
Certificate-No.: OA 1451019



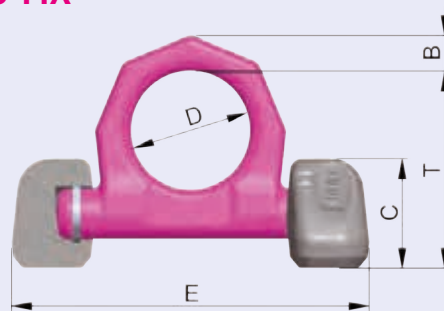
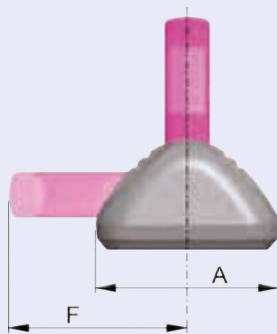
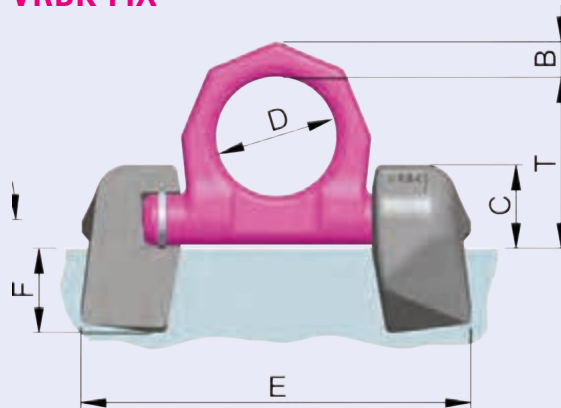
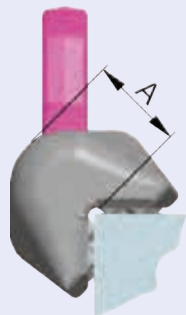
- ✓ Significant product characteristics of the VRBS-FIX and VRBK-FIX are subject to property right claims.
- ✓ Simple and fast welding installation.
- ✓ Confirmation of the low temperature ability to -40°C by the notch bar impact test is possible upon request (before order is placed).

Other important RUD specific information and specialities to our RUD lifting points can be found on page 9 and in the specific user instruction (www.rud.com).

**VRBS-FIX / VRBK-FIX // technical data**

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	weld seam	Ref. No.
VRBS-FIX – VIP Load ring FIX with all around welding seam											
VRBS-FIX 4t	4	0.94	74	60	14	39	48	132	69	HY 3	7999019
VRBS-FIX 6.7t	6.7	2.24	97	88	20	50	60	167	91	HY 5	7999020
VRBS-FIX 10t	10	3.72	108	100	22	60	65	191	100	HY 6	7999021
VRBS-FIX 16t	16	8.23	140	130	30	72	90	267	134	HY 9	7999301
VRBS-FIX 31.5t	31.5	18.36	202	160	42	99	130	366	195	HY 12	7999302
VRBS-FIX 50t	50	64.86	330	246	70	148	230	596	335	HY 19	7906272
VRBS-FIX 100t	100	126.85	390	320	97	195	250	763	392	HY 28	7906273
VRBK-FIX – VIP Load ring FIX for 90°-edges with all around welding seam											
VRBK-FIX 4t	4	1.05	65	32	14	28	48	140	29	HY 4 + a 3	7902149
VRBK-FIX 6.7t	6.7	2.16	84	40	20	35	60	180	33	HY 5 + a 3	7902150
VRBK-FIX 10t	10	4.40	94	52	22	46	65	212	46	HY 8 + a 3	7902256
VRBK-FIX 31.5t	31.5	24.84	177	89	42	78	130	394	70	HY 17	7906225
VRBK 50t	50	76.35	303	133	70	118	230	626	96	HY 25	7904653

subject to technical modifications

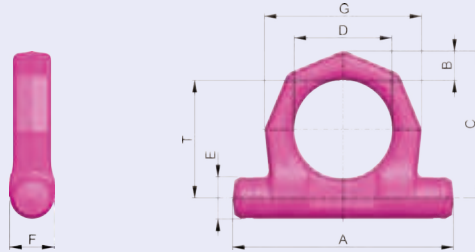
VRBS-FIX**VRBK-FIX**

VRL Load ring Octagon // technical data

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	Ref. No.
VRL Load ring Octagon											
VRL-FIX 4t	4	0.4	55	107	14	69	48	17	18	76	7906890
VRL-FIX 6.7t	6.7	0.90	71	134	20	91	60	23	23	99	7906891
VRL-FIX 10t	10	1.44	78	147	19	97	65	26	29	105	7906892
VRL-FIX 16t	16	3.2	104	204	27	131	90	35	37	146	7906893
VRL-FIX 31.5t	31.5	8.8	152	292	41	192	130	46	47	214	7906894
VRL-FIX 50t	50	27.9	265	510	70	335	230	63	63	371	7907412
VRL-FIX 100t*	100	64.4	295	206	97	417	250	90	90	447	7906204

* = phosphated load ring

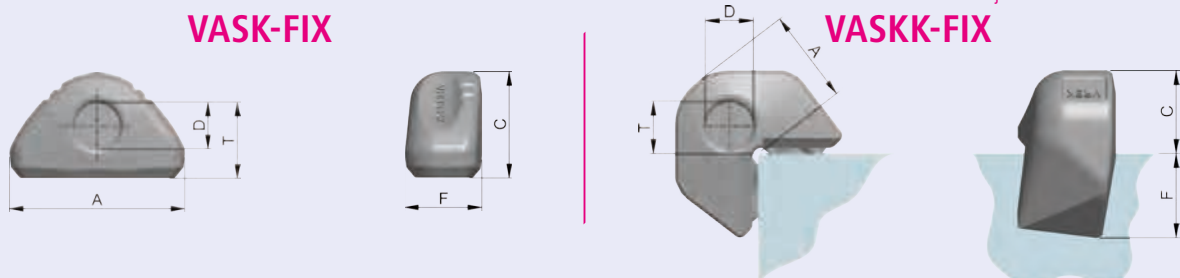
subject to technical modifications



VRBS-FIX / VRBK-FIX / weld-on block // technical data

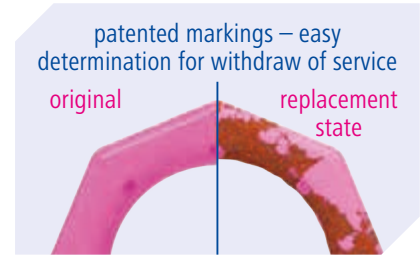
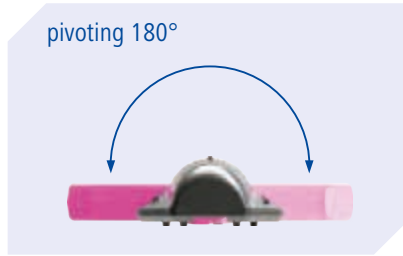
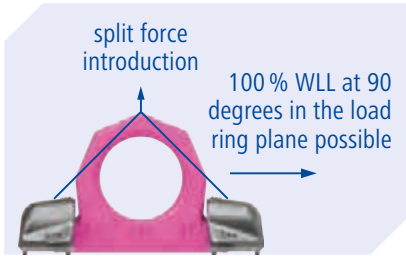
Type	WLL [t]	weight [kg/St.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	weld seam	Ref. No.
VRBS-FIX – weld-on block											
VASK-FIX 4t	4	0.28	27	60	-	38	15.5	-	29	HY 3	7999025
VASK-FIX 6.7t	6.7	0.63	37	88	-	52	21.5	-	34	HY 5	7999026
VASK-FIX 10t	10	1.15	43	100	-	60	26.5	-	44	HY 6	7999027
VASK-FIX 16t	16	2.43	52	130	-	72	33	-	62	HY 9	7999290
VASK-FIX 31.5t	31.5	4.93	71	160	-	99	44	-	76	HY 12	7999291
VASK-FIX 50t	50	18.4	98	246	-	148	66	-	123	HY 19	7906205
VASK-FIX 100t	100	41.9	142	320	-	195	94	-	166	HY 28	7906206
VRBK-FIX – weld-on block											
VASKK-FIX 4t	4	0.33	17.5	32	-	28	15.5	-	30	HY 4 + a 3	7901699
VASKK-FIX 6.7t	6.7	0.61	23.5	40	-	35	21.5	-	34	HY 5 + a 3	7901700
VASKK-FIX 10t	10	1.5	29	52	-	46	26.5	-	46	HY 8 + a 3	7901701
VASKK-FIX 31.5t	31.5	8.1	47	89	-	78	44	-	69	HY 17	7906354
VASKK-FIX 50t	50	23.5	71	133	-	118	67	-	96	HY 25	7903914

subject to technical modifications





Product features VRBS



- ✓ Split force introduction due to multiple point fixing.
- ✓ Suspension ring pivots 180°.
- ✓ 100 % WLL at 90° in the load ring plane possible.



VRBS

Load ring weldable with split force introduction.

VRBS

VIP Load ring weldable

4:1

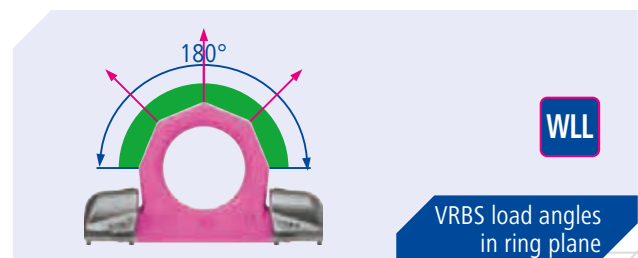


180°

-40°
200°C

400°C
max.

- ✓ Clear marking of the minimum WLL for all loading directions.
- ✓ Patented markings for easy determination for withdraw of service.
- ✓ Distance knobs at the weld-on block to achieve the necessary distance for the root weld.
- ✓ The weld-on-block is made (forged) out of a good weldable steel.
- ✓ Component according to the test criterias of BG/DGUV "GS-OA-15-04"



Please refer to the Working Load Limit chart on p.86.

Technical data

VIP Load ring weldable

Application-specific features VRBS

- Confirmation of the low temperature ability to -40°C by the notch bar impact test is possible upon request (before order is placed).

Other important RUD specific information and specialities to our RUD lifting points can be found on page 9 and in the specific user instruction (www.rud.com).

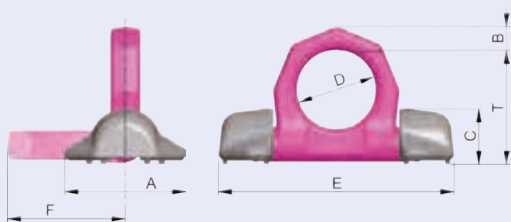
VRBS // technical data

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	weld seam	Ref. No.
VRBS – VIP Load ring weldable											
VRBS 4t	4	0.8	65	62	14	28	48	135	71	HY 4 + a 3	7992488
VRBS 6.7t	6.7	1.6	84	88	20	39	60	170	92	HY 5.5 + a 3	7992489
VRBS 10t	10	3.0	95	100	22	46	65	195	100	HY 6 + a 4	7992490
VRBS 16t	16	6.6	127	130	30	57	90	263	134	HY 8.5 + a 4	7992491
VRBS 31.5t	31.5	15.6	178	160	42	79	130	375	195	HY 18 + a 4	60267
VRBS 50t	50	54	313	240	70	120	230	620	340	HY 25 + a 8	56834
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	Ref. No.
VRL Load ring Octagon											
VRL-FIX 4t	4	0.4	55	107	14	69	48	17	18	76	7906890
VRL-FIX 6.7t	6.7	0.90	71	134	20	91	60	23	23	99	7906891
VRL-FIX 10t	10	1.44	78	147	19	97	65	26	29	105	7906892
VRL-FIX 16t	16	3.2	104	204	27	131	90	35	37	146	7906893
VRL-FIX 31.5t	31.5	8.8	152	292	41	192	130	46	47	214	7906894
VRL-FIX 50t	50	27.9	265	510	70	335	230	63	63	371	7907412
VRL-FIX 100t*	100	64.4	295	206	97	417	250	90	90	447	7906204
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	weld seam	Ref. No.
VASK – VRBS weld-on block											
VASK 4t	4	0.13	19	62	-	28	-	-	30	HY 4 + a 3	7992004
VASK 6.7t	6.7	0.34	24	88	-	39	-	-	36	HY 5.5 + a 3	7992005
VASK 10t	10	0.63	31	100	-	46	-	-	46	HY 6 + a 4	7992007
VASK 16t	16	1.6	39	130	-	57	-	-	57	HY 8.5 + a 4	7992008
VASK 31.5t	31.5	3.0	49	160	-	78	-	-	82	HY 18 + a 4	7987160

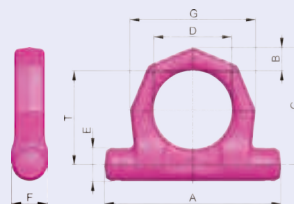
* = phosphated load ring

subject to technical modifications

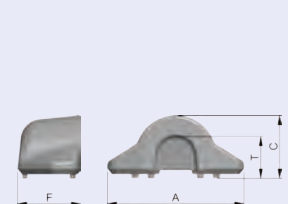
VRBS



VRL Octagon



VASK





The compact welding solution



Suspension ring pivots 180°

Suspension ring & weld-on-block of the VLBS-U are undetachable

Suspension ring can be angled into position (VLBS-U)



VLBS

VIP Load ring for welding

VLBS-U

VIP Load ring for welding undetachable

4:1



DGUV Test



-20°–200°C

400°C max.

VLBS-U-LT

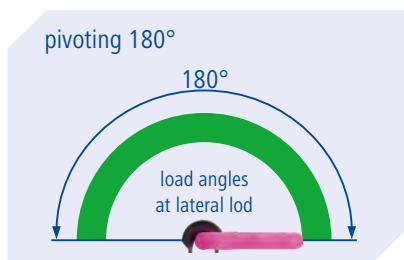
-45°–200°C

LBS-RS

-100°–200°C



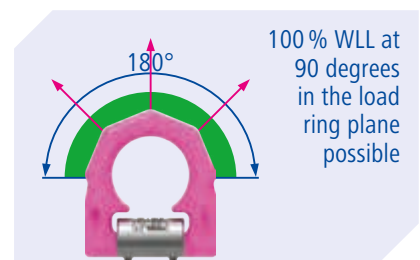
suspension ring with optimised function form



pivoting 180°

180°

load angles at lateral load



180°

100 % WLL at 90 degrees in the load ring plane possible

- ✓ VLBS/-U, VLBS-U-LT, VLBS-P: Suspension ring with optimised function form for a better support at side loading and protection of the clamping spring.
- ✓ Suspension ring pivots 180°. VLBS-P: Suspension ring with enlarged pivoting area.
- ✓ 100 % WLL at 90° in the load ring plane possible.
- ✓ Clamping spring works as a noise reduction and holds the suspension ring in the requested position; therefore simple hinge of lashing mean possible.



VLBS / VLBS-U

Universal Lifting point for welding with a diverse operating range in engineering and plant manufacturing.

- ✓ VLBS/-U, VLBS-U-LT, LBS-RS: Distance knobs at the weld-on block to achieve the necessary distance for the root weld.
- ✓ Clear marking of the minimum WLL for all loading directions.

Product features

VIP Load ring for welding / VIP Load ring for welding undetachable

- Simple and process safe positioning for the welding of pre-assembled components consisting of suspension ring and weld-on blocks.
- VLBS, VLBS-U-LT, VLBS-P: The weld-on-block is made (forged) out of a good weldable steel.
- Appropriate for hot dip galvanising after welding has to be analysed process related and liberised (only VLBS).
- VLBS-U-LT, VLBS-P: Component according to the test criterias of BG/DGUV "GS-OA-15-04".

- VLBS: tested and certified by DGUV

Testing specifications: GS-OA-15-04:2012-05
Certificate-No.: OA 1451021



- Significant product characteristics of the VLBS are subject to property right claims.



Product features / Application-specific features VLBS / VLBS-U-LT

- VLBS-P: For tube diameter 82-220 mm (at bigger diameters the standard version of the VLBS can be used).
- VLBS-U-LT: Phosphated surface. Confirmation of the deep temperature ability to -45°C by the notch bar impact test.
- LBS-RS: Component made out of 1.4571: therefore higher resistancy against intergranular corrosion.
- Simple and fast welding installation.

- VLBS, VLBS-P, LBS-RS: Confirmation of the deep temperature ability to -40°C by the notch bar impact test is on request possible (before order is placed).

Other important RUD specific information and specialities to our RUD lifting points can be found on page 9 and in the specific user instruction (www.rud.com).



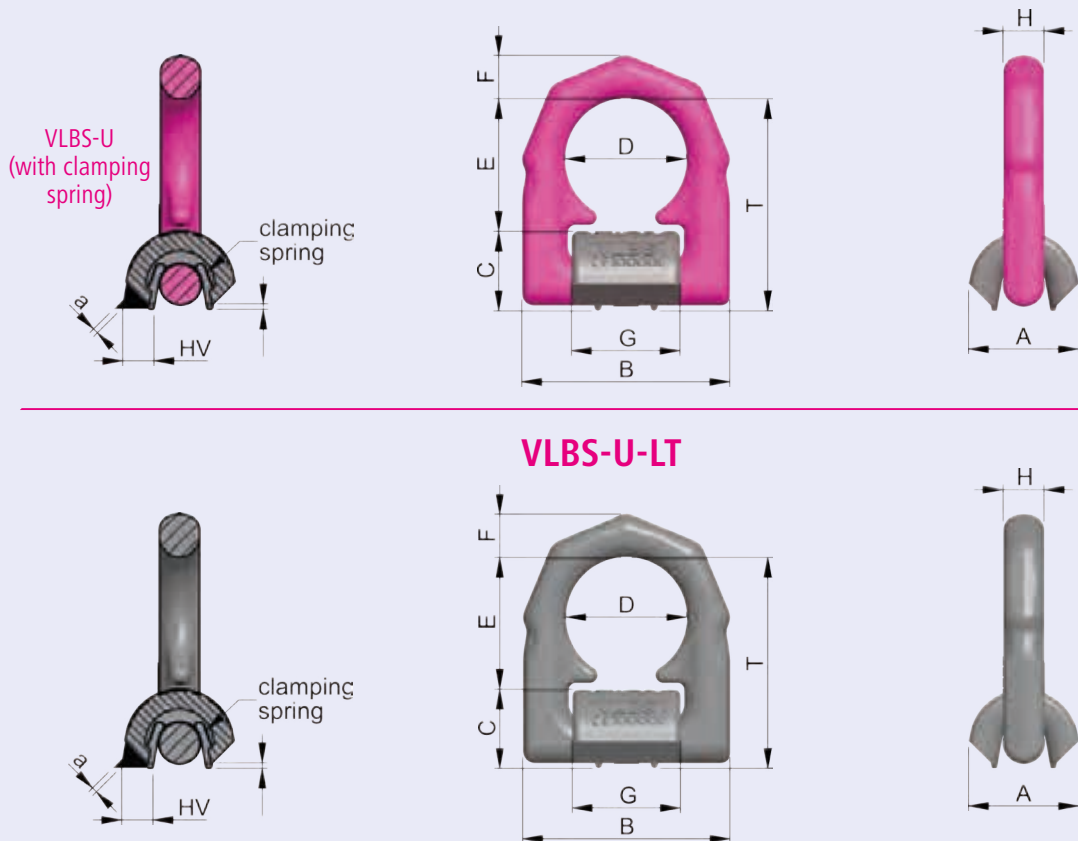


VLBS-U / VLBS / VLBS-U-LT // technical data

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	weld seam	Ref. No.
VLBS-U – VIP Load ring for welding undetachable (with clamping spring)													
VLBS-U 1.5t	1.5	0.35	65	33	66	25	38	40	14	33	14	HV5 + a 3	7993035
VLBS-U 2.5t	2.5	0.47	75	36	77	27	45	48	16	40	14	HV7 + a 3	7994830
VLBS-U 4t	4	0.76	83	42	87	31	51	52	18	46	16	HV8 + a 3	7993036
VLBS-U 6.7t	6.7	1.9	117	61	115	44	67	73	24	60	22	HV12 + a 4	7993037
VLBS-U 10t	10	2.9	126	75	129	55	67	71	26.5	60	26	HV16 + a 4	7993040
VLBS-U 16t	16	6.8	174	96	190	69	100	105	40	90	26	HV25 + a 6	7906640
VLBS – VIP Load ring for welding													
VLBS 1.5t*	1.5	0.35	65	33	66	25	38	40	14	33	14	HV5 + a 3	7993115
VLBS 2.5t*	2.5	0.47	75	36	77	27	45	48	16	40	14	HV7 + a 3	7995346
VLBS 4t*	4	0.76	83	42	87	31	51	52	18	46	16	HV8 + a 3	7993116
VLBS 6.7t*	6.7	1.9	117	61	115	44	67	73	24	60	22	HV12 + a 4	7993117
VLBS 10t*	10	2.9	126	75	129	55	67	71	26.5	60	26	HV16 + a 4	7993118
VLBS 16t*	16	6.8	174	96	190	69	100	105	40	90	26	HV25 + a 6	7993041
VLBS-U-LT – VIP Load ring for welding for low temperature													
VLBS-U-LT 2.5t	2.5	0.47	75	36	77	27	45	48	16	40	14	HV7 + a 3	7903522
VLBS-U-LT 4t	4	0.76	83	42	87	31	51	52	18	46	16	HV8 + a 3	7903400
VLBS-U-LT 6.7t	6.7	1.9	117	61	115	44	67	73	24	60	22	HV12 + a 4	7903684
VLBS-U-LT 10t	10	2.9	126	75	129	55	67	71	26.5	60	26	HV16 + a 4	7903135

* = without clamping spring

subject to technical modifications

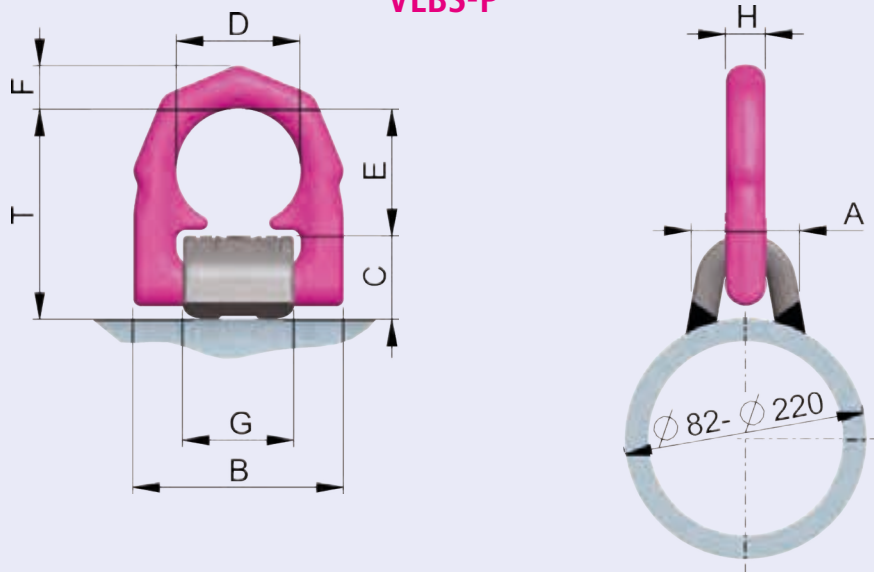


VLBS-P / LBS-RS // technical data

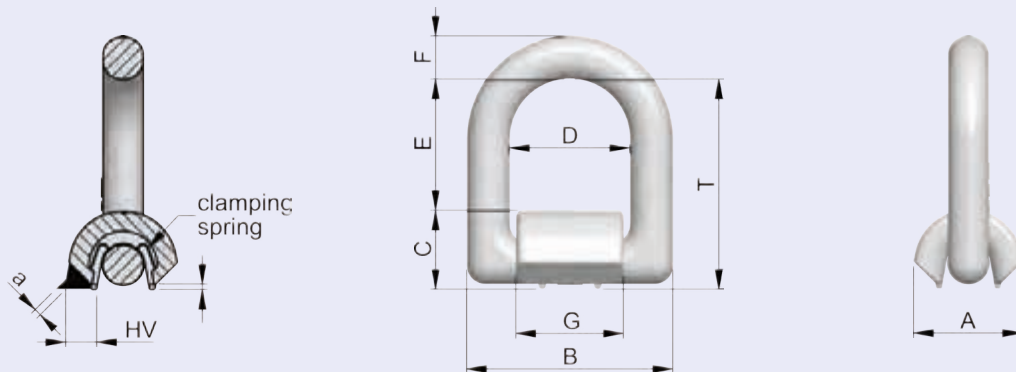
Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	weld seam	Ref. No.
VLBS-P – VIP Load ring weldable for pipes													
VLBS-P 4t	4	0.8	87	45	87	35	51	52	18	46	16.5	HV13 concave	7995472
LBS-RS – Load ring for welding stainless steel													
LBS (1) RS-0.5t	0.5	0.3	64	32	65	25	36	39	13.5	33		HV4 + a 3	51630
LBS (3) RS-1t	1	0.6	81	42	85	31	50	50	16.5	46		HV7 + a 3	51740
LBS (5) RS-2t	2	1.7	116	61	110	44	65	72	22.5	60		HV12 + a 4	53377

subject to technical modifications

VLBS-P

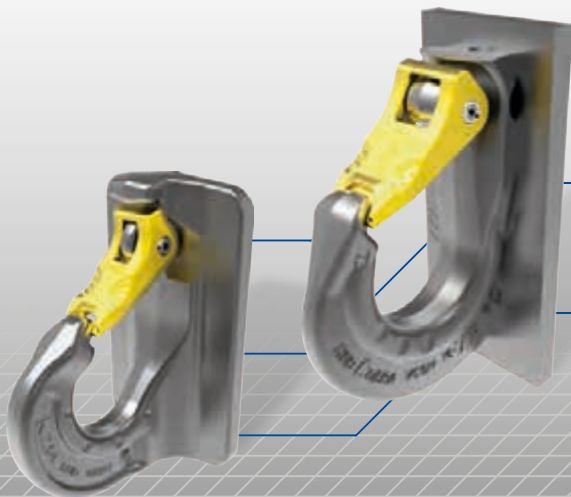


LBS-RS





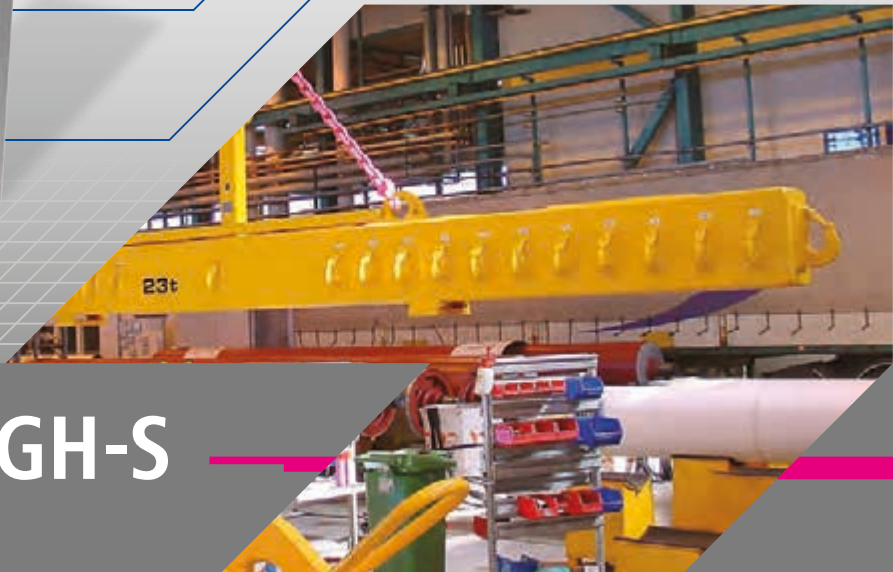
The weldable hook for all lifting means



Lifting point for spreaders and beams

For wire rope slings and round slings

For lifting means with loop or oval suspension ring



VABH-W // VCGH-S

VIP Excavator hook for welding

4:1

350°C max.

VABH-B

-40°C – 200°C

VCGH-G

-20°C – 200°C

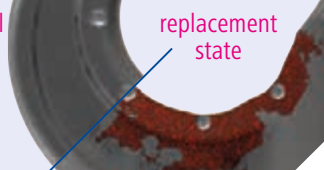
can be combined with most commercial lifting means



patented markings – easy determination for withdraw of service

original

replacement state



Robust, forged safety latch.



- ✓ Can be combined with most commercial lifting means without additional connecting element.
- ✓ Patented markings for easy determination for withdraw of service.
- ✓ Robust, forged safety latch.
- ✓ Phosphated surface.
- ✓ Weld-on point can be used as excavator hook.
- ✓ Simple and fast welding installation.



VABH-W / VCGH-S

Used as a lifting point for spreader bars, wire rope slings, round slings, lifting means: oval suspension ring.

- ✓ VCGH-S: The weld-on-block is made (forged) out of quality weldable steel.

Product features

VIP Excavator hook for welding

Application-specific features VABH-W / VCGH-S

- VABH-W: Material of weld-on-block 1.6541 (23MnNi CrMo52) (please observe user instruction).

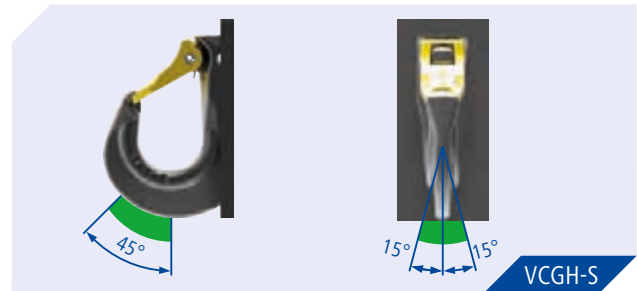
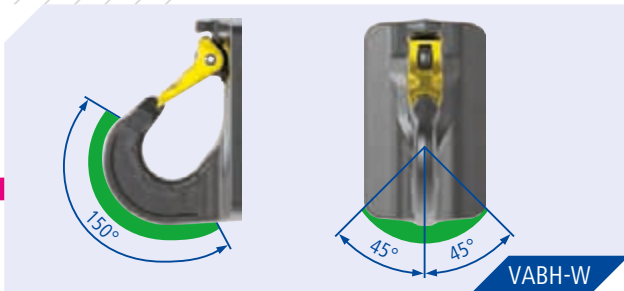
Other important RUD specific information and specialities to our RUD lifting points can be found on page 9 and in the specific user instruction (www.rud.com).

VABH-W

Area of application in hook plane: 150°
Area of application at lateral load: +45°, -45°

VCGH-S

Area of application in hook plane: 45°
Area of application at lateral load: +15°, -15°



VABH-W / VCGH-S // technical data

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	I [mm]	weld seam	Ref. No.
VABH-W – VIP Excavator hook for welding												
VABH-W 1.5t	1.5	0.8	26	7.5	76	115	111	70	26	38	a 4	7991208
VABH-W 2.5t	2.5	1.8	33	8.5	98	148	143	85	31.5	49	a 5	7991209
VABH-W 4t	4	3.12	46	12	119	168	164	104	35	59	a 6	7991210
VABH-W 6.7t	6.7	5.89	51	13	147	205	200	120	40	70	a 6	8502239
VCGH-S – VIP Excavator hook for welding												
VCGH-S 16	10	5.67	49	15	141	200	220	100	48	69	a 8	7984047
VCGH-S 20	16	8.4	69	20	187	272	288	120	63	87	a 8	7984310
VCGH-S 22	20	14.5	74	20	196	276	292	120	63	92	a 8	7984312

subject to technical modifications





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