Wirbelbock-Gewinde
> VWBG-V in pink<

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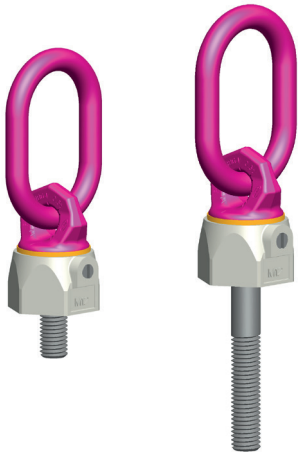

Safety instructions

This safety instruction has to be kept on file for the whole lifetime of the product and forwarded with the product.

TRANSLATION OF THE ORIGINAL SAFETY INSTRUCTION

> VWBG-V in pink<

Hoist ring for bolting

Vario (variable bolt lengths)

EN

RUD®

DGUV Test
HM 220055
Sicherheit geprüft
tested safety
dguv.de/pruefzeichen

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RUD-Art.-Nr.: 8503854-EN - V08 / 04.025

4:1 · 360° · 230° · BLUE-ID · 400°C max. · -40° 200°C · M · MF · UNC · 8-UN · UNF · VARIO · DGUV TEST

RUD®

EG-Konformitätserklärung

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

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

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

Produktbezeichnung: Wirbelbock
VWBG-V / VWBG

Folgende harmonisierten Normen wurden angewandt:

DIN EN 1677-1 : 2009-03 **DIN EN 1677-4 : 2009-03**
DIN EN ISO 12100 : 2011-03

Folgende nationalen Normen und technische Spezifikationen wurden außerdem angewandt:

DGUV-R 109-017 : 2020-12

Für die Zusammenstellung der Konformitätsdokumentation bevollmächtigte Person:
Michael Betzler, RUD Ketten, 73432 Aalen

Aalen, den 15.04.2021 Hermann Kolb, Bereichsleitung MA

Name, Funktion und Unterschrift Verantwortlicher

RUD®

EC-Declaration of conformity

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

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

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

Product name: Load ring
VWBG-V / VWBG

The following harmonized norms were applied:

DIN EN 1677-1 : 2009-03 **DIN EN 1677-4 : 2009-03**
DIN EN ISO 12100 : 2011-03

The following national norms and technical specifications were applied:

DGUV-R 109-017 : 2020-12

Authorized person for the configuration of the declaration documents:
Michael Betzler, RUD Ketten, 73432 Aalen

Aalen, den 15.04.2021 Hermann Kolb, Bereichsleitung MA

Name, function and signature of the responsible person

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Before initial usage of the RUD VWBG-V hoist rings please read carefully the safety instructions. Make sure that you have understood all subjected matters. Non-observance can lead to serious personal injuries and material damage and eliminates warranty.

1 Safety instructions

ATTENTION
Wrong assembled or damaged lifting points as well as improper use can lead to injuries of persons and damage of objects when load drops.
Please inspect all lifting points before each use.

- Remove all body parts (fingers, hands, arms, etc.) out of the hazard area (danger of crushing or squeezing) during the lifting process.
- RUD VWBG-V lifting points must only be used by instructed and competent persons considering DGUV 109-017 and outside Germany noticing the country specific statutory regulations.
- Do not exceed the working load limit (WLL) indicated on the lifting point (except except when used at straight lift and with an optimized suspension link position - see *Pic. 8 and* see *Table 3*).
- Continuous rotary movement under load is not permissible. RUD swivel hoist rings can be rotated 90° to the bolt-in direction under nominal load capacity.
- The ball bearing resp. the bush bearing disc must not be disassembled.
- The load ring must not be bend.
- No technical alterations must be implemented on the VWBG-V.
- No people may stay in the danger zone.
- Jerky lifting (strong impacts) should be prevented.
- Always ensure a stable position of the load when lifting. Swinging must be prevented.
- Damaged or worn VWBG-V must never be utilised.

2 Intended use of VWBG-V

RUD VWBG-V lifting points must only be used for the assembly at the load or at lifting means.

They are intended for suspending slings and can be rotated 90° to the screw-in direction under nominal load capacity. Continuous rotary movement under load is not permissible.

HINT
Observe the specifications for turning in Chapter 3.3.1.

RUD VWBG-V lifting points can also be used as lashing points to attach lashing means.

RUD VWGB-V lifting points must only be used in the hereby described operation purpose.

3 Assembly- and instruction manual

3.1 General information

- Capability of temperature usage:
  Usage at higher temperatures is not recommended due to the grease filling in the ball bearing. Should this though be necessary, the working load limit (WLL) of the VWBG-V must be reduced as follows:
  - -40°C up to 100°C no reduction
  - 100°C up to 200°C minus 15 %
  - 200°C up to 250°C minus 20 %
  - 250°C up to 350°C minus 25 %
  - **Temperatures exceeding 350°C are prohibited!**

  Please pay attention when using DIN EN 7042 (DIN 980) nuts the max. operation temperature of 150°C (acc. to DIN EN ISO 2320).
- RUD VWBG-V lifting points must not be used with aggressive chemicals such as acids, alkaline solutions and their vapours.
- Please mark mounting position of lifting point with a coloured contrast paint for better visibility.

3.2 Hints for the assembly

Basically essential:

- The material construction to which the lifting point will be attached should be of adequate strength to withstand forces during lifting without deformation. The German testing authority BG, recommends the following minimum for the bolt lengths:
  1 x M (thread diameter) in steel (min. quality 235JR [1.0037])
  1.25 x M (thread diameter) in cast iron (e.g. GG 25)
  2 x M (thread diameter) in aluminium
  2.5 x M (thread diameter) in light alloys of low strength
  (M = thread size/diameter, e.g. M20)
- When lifting light metals, nonferrous metals and gray cast iron the thread has to be chosen in such a way that the WLL of the thread corresponds to the requirements of the base material.
- The position of the lifting points must be carried out in such a way that unintended movement like turning or flipping will be avoided.
  - For single leg lifts, the lifting point should be vertically above the centre of gravity of the load.
  - For two leg lifts, the lifting points must be equidistant to/ or above the centre of gravity of the load.
  - For three and four leg lifts, the lifting points should be arranged symmetrical around the centre of gravity, in the same plane if possible.
- Load symmetry: Determine the necessary WLL of each lifting point for a symmetrical load by using the following physical calculation formula:

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

W_{LL} = necessary WLL of lifting point / single strand
G = weight of load
n = number of load bearing strands
ß = inclination angle of single strand

Number of load bearing strands:

	Symmetric
two leg	2
three / four leg	3

Table 1: Load bearing strands

HINT
At unsymmetrical loads, even if several lifting points are used, the WLL of a single lifting point must be at least equal to the load weight or ask the manufacturer.

- A plane bolt-on surface (with a minimum ØD) with a perpendicular thread hole must be guaranteed. The thread must be carried out acc. to DIN 76 (counterbore diameter at the max. 1.05xd).
- Thread holes must be machined deep enough so that the bearing surface of the lifting point will be supported. Machine through holes up to DIN EN 20273-middle.
- The VWBG-V must be able to rotate by 360° when installed and tightened. Observe the following hints:
  - Due to the ball bearing it is sufficient for a **single lift** to manually tighten the VWBG-V until the bearing surface has support by using a spanner acc. to DIN 895 resp. DIN 894, without using an extension.

  Attention: Do not exceed the specified tightening torque.
  - If the VWBG-V shall **permanently installed** at the load, tensioning must be carried out with a torque (± 10 %) according to *Table 2*.
  - When **turning loads several times** with the VWBG-V (see section *3.3.1 Rotating and turning of loads*) it is necessary to tighten the bolt with a torque (± 10 %) acc. to *Table 2*.
- The type VWBG-V can be supplied with different thread lengths (see Fvario in *Table 2*), and the metric versions with washer und crack detected nut.
  The assembly resp. the installation of bolts with different thread lengths is only allowed, if camed out by either RUD or an authorized RUD distributor.

ATTENTION
Disassembly of the ball bearing resp. the bush bearing disc carried out by the user is forbidden.

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- Check finally the correct assembly (see chapter *4 Inspection / Repair / Disposal*).
- The VWBG-V must not be loaded with the Manufacturing Proof Force MPF (2.5 x WLL). Should at the production of lifting means or similar products, a singular proof loading be necessary, please ask RUD in advance.

3.3 User instructions

- Check frequently and before each operation the whole lifting mean in regard of linger ability as a lifting mean, regarding corrosion, wear, deformation etc. (see chapter *4 Inspection / Repair / Disposal*).

ATTENTION
Wrong assembled or damaged lifting means as well as improper use can lead to injuries of persons and damage of objects when load falls. Please inspect all lifting points before each use.

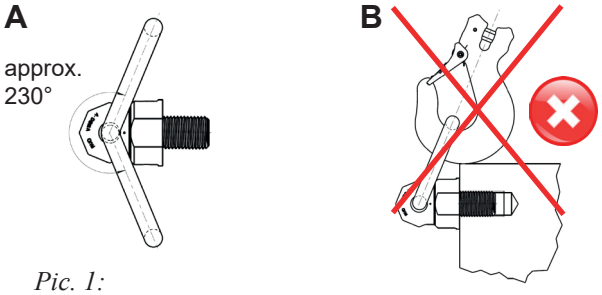
- RUD components are designed according to DIN EN 818 and DIN EN 1677 for a dynamic load of 20,000 load cycles.
  - Keep in mind that several load cycles can occur with a lifting procedure
  - Keep in mind that, due to the high dynamic stress with high numbers of load cycles, that there is a danger that the product will be damaged
  - The BG/DGUV recommends: For higher dynamic loading with a high number of load cycles (continuous operation), the working load stress must be reduced according to the driving mechanism group 1Bm (M3 in accordance with DIN EN 818-7). Use a lifting point with a higher working load limit.
- The VWBG-V are suitable for turning and rotating loads.
- During rotation and turning, all positions of the suspension link can occur.
- The nominal load capacity is indicated on the component. The nominal load capacity corresponds to the most unfavorable possible application ,resp. worst case scenario (see *Pic. 8* - Part. X).
- When turning under 90° to the bolt-in axis (see *Pic. 8*), the load capacity per VWBG-V is limited to the nominal load capacity (WLL).
- With the suspension ring manually aligned (see *Pic. 8* - Part Y), the higher () values from *Table 3* can be applied if no rotation or turning is performed.

ATTENTION
Pay attention during the usage that the load type will not be change.

If the VWBG-V is will be loaded only perpendicular (in axial direction of the thread, see *Pic. 8* - part Z) the corresponding WLL values from *Table 3* (inclination angle 0°) can be used.

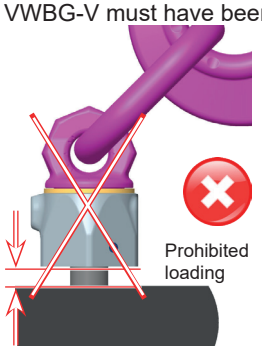
- The suspension ring of the manually adjusted VWBG-V can be pivoted by approx. 230° (see *Pic. 1*).

ATTENTION
*The suspension ring resp. the attached lifting mean must rotate and pivot without interference during lifting and must **neither** have support at the load edge **nor** at the bottom part of the VWBG-V (see Pic. 1).*



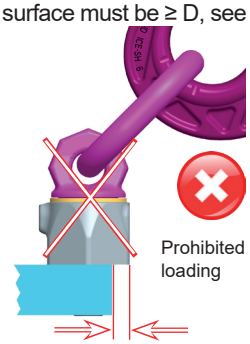
Pic. 1:
A: Pivoting area
B: Forbidden contact or support at/ or with edge

- When lifting means (sling chains) are hinged or unhinged, no pinching, shearing or joint spots must occure during the handling. Avoid damage of lifting means resulting from sharp edges.
- Leave direct danger zone as far as possible.
- Watch always your hinged loads.
- VWBG-V must have been fully bolted in (*Pic. 2*).



Pic. 2: VWBG-V must have been fully bolted in

- Thread of the VWBG-V must be completely engaged and the lifting point must be installed full-faced. (The diameter of the bearing surface must be ≥ D, see *Pic. 3* / *Table 2*).



Pic. 3: The diameter of the bearing surface must be ≥ D

- Avoid impulsive and tiltful loading.

ATTENTION
Impulsive loading or vibration, especially at through hole connections with nuts, can lead to unintentional loosening.

Securing possibilities: liquid thread securing products f.e. Loctite (read manufacturer´s instruction) or form closed bolt securing such as a crown nut with split pin, lock nut etc. can be used. Secure in general all lifting points which are installed permanently, e.g. with glue.

- Please observe for the whole lifting mean the RUD sling chain safety instruction.

3.3.1 Rotating and turning of loads

Observe the following additional specifications for turning and rotating loads:

ATTENTION
The VWBG-V are suitable for turning and rotating of loads. However, a continuous rotating movement under load is not permitted in any load direction (Pic. 8).

ATTENTION
When using, take special care not to change the load type.

HINT
To extend the service life, we recommend the use of a VWBG-V with a higher load capacity

- When turning under 90° to the bolt-in axis (*Pic. 8* / Part X and Y), the load capacity per VWBG-V is limited to the nominal load capacity (*Table 3*: Columns with angle of inclination 90°). The nominal load capacity is indicated on the component and included in the product designation (*Table 2* and *Table 3*: e.g. VWBG-V 2.0 M20).

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- When rotating below 90° to the bolt-in axis, the increased load capacity „Y“ is not permissible (*Pic. 8* - Part Y / value in brackets in *Table 3*).
- When rotating exclusively perpendicular to the bolt -in axis (*Pic. 8* - Part Z), the corresponding load capacity values from *Table 3* (angle of inclination 0°) can be applied.
- For a single turning or reversing operation, tightening with an open-end wrench is sufficient. Observe section *3.2 Hints for the assembly*.
- If the VWBG-V is to remain permanently attached to a load for regular turning and reversing, a suitable thread locking device must be used in addition to the specified tightening torque (*Table 2*) (see chapter *3.3*).
- Regularly check for repeated turning and twisting with a VWBG-V:
  - Ensure that the bolts are firmly tightened.
  - The bearing surface of the VWBG-V must lie fully on the bolt-on surface.
  - The maximum clearance between upper and lower part of the VWBG-V must not be exceeded (see *4.2*).
  - Further tests may be necessary, depending on the result of the risk assessment.
  - In addition, observe the notes from chapters *4.2* and *4.3*.

4 Inspection / Repair / Disposal

4.1 Hints for periodical inspections

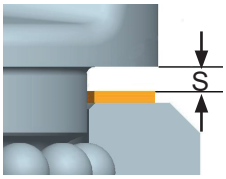
The operator must determine and specify the nature and scope of the required tests as well as the periods of repeating tests by means of a risk assessment (see sections *4.2* and *4.3*).

The continuing suitability of the anchor point must be checked at least 1x year by an expert.

Depending on the usage conditions, f.e. frequent usage, increased wear or corrosion, it might be necessary to check in shorter periods than one year. The inspection has also to be carried out after accidents and special incidents.

4.2 Test criteria for the regular visual inspection by the user

- Correct bolt- and nut size plus thread engagement
- Solid bolt fixture - Inspection of bolting torque
- The bearing surface of the VWBG-V must lay plane and holohedral on the bolting area.
- Completeness of the lifting point
- Complete, readable WLL statements as well as manufacturer sign.
- Deformation at load bearing components like base body, suspension ring and threaded pin.
- Mechanical damage, like strong notches, especially in areas where tensile stress occurs.
- Locking screw at the side must be tightened
- Easy turning without jerk between upper and base part of the VWBG-V must be guaranteed.
- The maximum gap S between upper and base part must not be exceeded (*Pic. 4*):
  - VWBG-V 0.3 - 0.45: S max. 1.2 mm
  - VWBG-V 0.6 - 2.0: S max. 1.5 mm
  - VWBG-V 3.5 - 5.0: S max. 3.0 mm



Pic. 4: Distance between upper and base part

4.3 Additional test criteria for the competent person / repair worker

- Reduction of cross section caused by wear > 10 %, or when the wear lenses have been reached in the main load bearing directions

Pic. 5: wear lenses

- Strong corrosion
- Function and damage of bolt threads and nuts
- further checks may be required, depending on the result of the risk assessment (e.g. testing for cracks in load-bearing parts).

4.4 Disposal

Dispose worn out components / attachments or packaging according to the local waste removal requirements.

5 Hints for repairing

Repair work must only be carried out by a competent person at RUD or by a RUD trained and authorized service station, which has obtained the necessary knowledge and skills.

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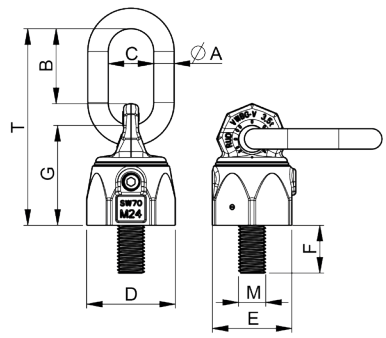
6 Tables

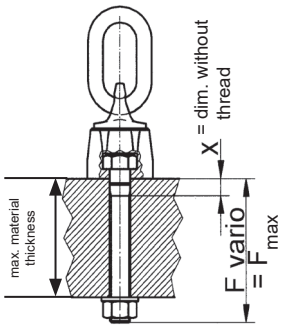
	Thread	Tragf. WLL X [t]	Tragf. WLL (Y) [t]	Tragf. WLL Z [t]	T [mm	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	G [mm]	torque [Nm]	weight [kg]	F [mm]	X [mm]	M	Ref.-no.
VWBG-V 0.3	M8	0.3	0.4	0.6	76	8	31	29	30	27	36	10	0.18	13	0	M8	7103720
	M8 Vario[1]												*	8-102			8600330
	5/16" -18 UNC												0.18	13		5/16" -18 UNC	7991090
VWBG-V 0.45	M10	0.45	0.6	0.9	78	8	31	29	33.5	30	38	10	0.29	17	0	M10	7103715
	M10 Vario[1]												*	10-122	0		8600331
	3/8"- 16 UNC												0.29	17	0	3/8" - 16 UNC	7991091
	3/8"- 16 UNC Vario												*	31-124	19		8600331
VWBG-V 0.6	M12	0.6	0.75	1.2	107	10	49	35	42	36	47	10	0.41	21	0	M12	7100180
	M12 Vario[1]												*	12-140	0		8600332
	M12 x 1.5												*	12-55	0	M12 x 1.5	8600332
	1/2"- 13 UNC												0.41	21	0	1/2" - 13 UNC	7991092
	1/2"- 13 UNC Vario												*	40-149	21		8600332
VWBG-V 1	M14	1	1.25	2	114	13	46	38	48	41	56	25	0.63	21	0	M14	7910221
	M14 Vario[1]												*	14-160			8600337
	M14 x 1.5												*	14-65		M14 x 1.5	
VWBG-V 1.3	M16	1.3	1.5	2.6	114	13	46	38	48	41	56	30	0.59	25	0	M16	7100430
	M16 Vario[1]												*	16-180	0		8600333
	M16 Vario[1]													181-225	28		
	M16 x 1.5												*	16-70	0	M16 x 1.5	
	5/8"- 11 UNC												0.52	29	0	5/8" - 11 UNC	7991093
	5/8"- 11 UNC Vario												*	29	0		8600333
	5/8"- 11 UNC Vario													49-180	28		
VWBG-V 1.8	M18	1.8	2	3.6	137	13	54	35	62	55	67	50	1.18	27	0	M18	8600338
	M18 Vario[1]												*	18-83			8600338
	M18 x 1.5												*			M18 x 1.5	
VWBG-V 2	M20	2	2.5	4	137	13	54	35	62	55	67	70	1.42	33	0	M20	7100800
	M20 Vario[1]												*	20-223	0		8600334
	M20 x 1.5												*	20-88	0	M20 x 1.5	
	3/4"- 10 UNC												1.42	28	0	3/4" - 10 UNC	7991094
	3/4"- 10 UNC Vario												*	19-29	0		8600334
	3/4"- 10 UNC Vario													56-222	30		
	3/4"- 16 UNF												*	19-66	0	3/4" - 16 UNF	
VWBG-V 2	M22	2	2.5	4	137	13	54	35	62	55	67	120	1.45	33	0	M22	8600334
	M22 Vario[1]												*	22-94			8600334
VWBG-V 3.5	M24	3.5	4	7	173	18	66	40	81	70	88	150	2.63	40	0	M24	7100640
	M24 Vario[1]												*	24-257	0		8600335
	M24 x 1.5												*	24-97	0	M24 x 1.5	
	M24 x 2												*	24-42	0	M24 x 2	
	1"- 8 UNC												2.63	40	0	1" - 8 UNC	7991095
	1"- 8 UNC Vario												*	25-71	0		8600335
	1"- 8 UNC Vario													72-246	31		
VWBG-V 3.5	M27	3.5	4	7	173	18	66	40	81	70	88	200	2.65	41	0	M27	8600335
	M27 Vario[1]												*	27-92			8600335
VWBG-V 5	M30	5	6	10	221	22	90	50	99	85	106	225	5.09	50	0	M30	7100650
	M30 Vario[1]												*	30-150	0		8600336
	M30 Vario[1]													151-330	32		
	M30 x 2												*	30-125	0	M30 x 2	
	1 1/4"- 7 UNC												5.09	47	0	1 1/4" - 7 UNC	7991096
	1 1/4"- 7 UNC Vario												*	31-91	0		8600336
	1 1/4"- 7 UNC Vario													92-331	37		
	1 1/4"- 8 UN												*	31-91	0	1 1/4" - 8 UN	

Table 2: Dimensioning *Subject to technical alterations*

[1] *with washer/nut* * *weight depends on the design*



Pic. 6: VWBG-V



Pic. 7: VWBG-V (Vario)

Example to investigate the required thread length Fvario:
Plate thickness 50 mm, through hole for M 20
bolt, height of nut 20 mm, thickness of the washer 3 mm, plus bolt projection 5 mm (2x pitch).
Order length: VWBG-V-2.0 M 20 x 78.

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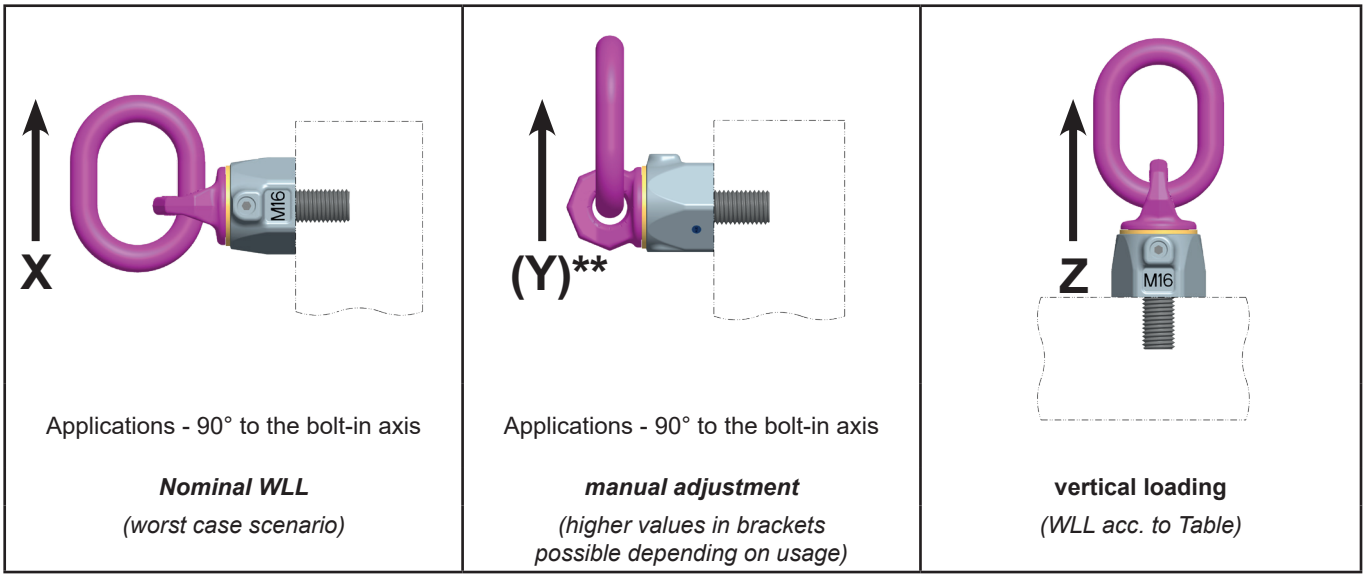


Applications - 90° to the bolt-in axis

Nominal WLL

(worst case scenario)

Applications - 90° to the bolt-in axis

manual adjustment

(higher values in brackets possible depending on usage)

vertical loading

(WLL acc. to Table)

Pic. 8: Loading directions

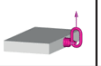
methode of lifting											
no. of strands		1	2	1	2	2	2	2	3 / 4 *	3 / 4 *	3 / 4 *
inclination angle		0°-7°	0°-7°	90°	90°	0-45°	>45-60°	Un-symm.	0-45°	>45-60°	Un-symm.
Factor				1	2	1.4	1	1	2.1	1.5	1
Loading directions (*Pic. 8*)		Z	Z	X (Y)	X (Y)	X (Y)	X (Y)	X (Y)	X (Y)	X (Y)	X (Y)
Type	thread	For the max. total load weight >G< in metric tons. tightened and adjusted to force direction.									
VWBG-V 0.3	M8 / $^{5}/_{16}$"	0.6	1.2	0.3 (0.4)	0.6 (0.8)	0.42 (0.56)	0.3 (0.4)	0.3 (0.4)	0.63 (0.84)	0.45 (0.6)	0.3 (0.4)
VWBG-V 0.45	M10 / $^{3}/_{8}$"	0.9	1.8	0.45 (0.6)	0.9 (1.2)	0.63 (0.84)	0.4 (0.6)	0.4 (0.6)	0.94 (1.26)	0.67 (0.9)	0.4 (0.6)
VWBG-V 0.6	M12 / $^{1}/_{2}$"	1.2	2.4	0.6 (0.75)	1.2 (1.5)	0.84 (1)	0.6 (0.75)	0.6 (0.75)	1.26 (1.57)	0.9 (1.12)	0.6 (0.75)
VWBG-V 1.0	M14	2.0	4.0	1.0 (1.25)	2.0 (2.5)	1.4 (1.75)	1.0 (1.25)	1.0 (1.25)	2.1 (2.62)	1.5 (1.87)	1.0 (1.25)
VWBG-V 1.3	M16 / $^{5}/_{8}$"	2.6	5.2	1.3 (1.5)	2.6 (3)	1.82 (2.12)	1.3 (1.5)	1.3 (1.5)	2.73 (3.15)	1.95 (2.24)	1.3 (1.5)
VWBG-V 1.8	M18	3.6	7.2	1.8 (2.0)	3.6 (4.0)	2.52 (2.8)	1.8 (2)	1.8 (2)	3.78 (4.25)	2.7 (3)	1.8 (2)
VWBG-V 2.0	M20 / $^{3}/_{4}$"	4	8	2 (2.5)	4 (5)	2.8 (3.5)	2 (2.5)	2 (2.5)	4.25 (5.25)	3 (3.75)	2 (2.5)
VWBG-V 2.0	M22	4	8	2 (2.5)	4 (5)	2.8 (3.5)	2 (2.5)	2 (2.5)	4.25 (5.25)	3 (3.75)	2 (2.5)
VWBG-V 3.5	M24 / 1"	7	14	3.5 (4)	7 (8)	4.9 (5.6)	3.5 (4)	3.5 (4)	7.35 (8.4)	5.25 (6)	3.5 (4)
VWBG-V 3.5	M27	7	14	3.5 (4)	7 (8)	4.9 (5.6)	3.5 (4)	3.5 (4)	7.35 (8.4)	5.25 (6)	3.5 (4)
VWBG-V 5,0	M30 / $1^{1}/_{4}$"	10	20	5 (6)	10 (12)	7 (8.4)	5 (6)	5 (6)	10.5 (12.6)	7.5 (9)	5 (6)
		EN: At a lift with one strand and two parallel strands where the inclination angles are at the max.± 7°, the lifting methode can be assumed as a vertical lift.				**EN:** When lifting with two, three or four leg lifting means, inclination angles of less than 15° shall be avoided, if possible (Risk of instability).					

Table 3: WLL overview (observe Hints!)

HINT

***Values in brackets () from Table 3 are only permissible for manual alignment (cf. Pic. 8 - Part Y) during the lifting process!*

** Hint: Stated WLL for 3-4 strands is only valid when it is guaranteed that the load is distributed equal to more than 2 strands. Otherwise the 2 strand values must be taken (see DGUV 109-017).*

ATTENTION

Please mind at the use especially that the method of lifting does not get changed.

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