



> STARPOINT <

Safety instructions

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

Translation of the original instructions



Another generation of eyebolt



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EG-Konformitätserklärung

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

Hersteller:

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

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

Produktbezeichnung: StarPoint Ringschraube
VRS

Folgende harmonisierten Normen wurden angewandt:

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

Folgende nationalen Normen und technische Spezifikationen wurden außerdem angewandt:

BGR 500, KAP2.8 : 2008-04

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

Aalen, den 27.06.2014

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



EC-Declaration of conformity

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

Manufacturer:

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

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

Product name: STARPOINT eye bolt
VRS

The following harmonized norms were applied:

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

The following national norms and technical specifications were applied:

BGR 500, KAP2.8 : 2008-04

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

Aalen, den 27.06.2014

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

User Instructions

1. Application only by designated and trained people, by observing the BGR 500/DGUV 100-500 requirements and outside of Germany according to the country specific statutory regulations.

2. Please inspect regularly and before each usage the lifting points in regard of tightening, strong corrosion, wear, deformation etc.

3. Determine the location for the lifting point in regard of design with adequate base material strength so that introduced forces will be absorbed without causing deformations. The engagement depth for steel with a tensile strength of $R_m > 340 \text{ N/mm}^2$, f.e. S235JR (1.0037) or cast iron GG25 (0.6025-without blowholes): $1.5 \times M (=L)$

For material with lower tensile strength please use lifting points with longer thread engagement.

The German BG (Employer's insurance association), recommends the following minimum thread engagements:

- 2 x M in aluminium alloys
- 2,5 x M in light alloys with low strength

(M = thread Ø, e.g. M 20)

When lifting light metals, nonferrous metals and gray cast iron or other materials the thread assignment has to be chosen in such a way that the WLL of the thread, corresponds to the requirements of the base material.

4. The lifting points must be positioned at the load in such a way that prohibited assignments like turning or flipping of the load are avoided.

- a.) Position the lifting point for a single leg lift vertically above the centre of gravity of the load.
- b.) For two leg lifts, the lifting points must be equidistant to/ or above the centre of gravity of the load.
- c.) For three and four leg lifts, the lifting points should be arranged symmetrical around the centre of gravity, coplanar, if possible.

5. Symmetry of loading

Determine the required WLL of the individual RUD lifting point for symmetrical resp. unsymmetrical loading according to the following physical formula context:

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

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

The calculation of load bearing legs is as follows:

	symmetrical	asymmetrical
two leg	2	1
three/four leg	3	1

(see table 3)

6. A plane bolt-on surface (ØE) with a perpendicular thread hole must be guaranteed.

The thread must be carried out acc. to DIN 76 (countersink max. $1.05 \times d$). Tapped holes must be machined deep enough so that the bearing surface of the lifting point will be supported.

7. For mounting without a tool, especially for a one-time lift, the STARPOINT can be supplied resp. retrofitted with a key (type: VRS-F) see also chart 2. Simply engage into the hexagon socket bolt the star profile key - use your fingers to respectively tighten or untighten the arrangement. Disengage key before you attach the lifting mean - STARPOINT must be rotatable! Do not use an extension for the tightening in combination with the profile key.

Hint: For the usage of a torque wrench a joggled hexagon tool is available on request (see table 2).

For a permanent installation, please tighten the VRS with a torque moment according to chart 2 (+/- 10 %).

8. Shock loading or vibrations can cause unintentional dismantling. Securing options: Torque moment + liquid thread locker such as Loctite or WEICONLOCK (depending on the application, please pay attention to the manufacturer's instruction).

Attention: Ring must be free rotatable.

In general secure all lifting points which are permanently installed, f.e. by using glue.

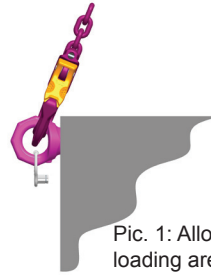
9. The STARPOINT must be adjustable by 360° when fitted and with disengaged key. Adjust to direction of pull before lifting mean is attached.

Attention: STARPOINTS are not suited to be turned under load!

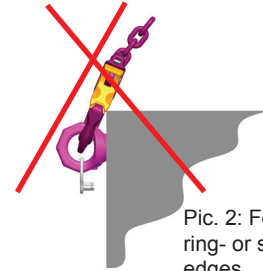


10. The lifting mean must be free moveable in the STARPOINT and must not bear the load edge.

The WLL mentioned in the user instruction are relating to the cross and axial loading. **In addition to that, the loading of the lifting point with nominal load can also be done in the direction of the tapped hole of the work piece (pic. 1 and 2).**



Pic. 1: Allowed loading area



Pic. 2: Forbidden bearing- or support point at edges

11. When connecting and disconnecting lifting means (sling chains, wire rope slings and webbings) no pinches, shearings and impacts must occur.

Damage of the lifting means caused by sharp edges must be avoided.

12. Temperature usage capability

Due to installed DIN/EN bolts in the STARPOINTS, the working load limit must be reduced accordingly to the strength class of the bolts as follows:

-40° to 100°C	no reduction	-40°F to 212°F
100° to 200°C	minus 15 %	212°F to 392°F
200° to 250°C	minus 20 %	392°F to 482°F
250° to 350°C	minus 25 %	482°F to 662°F

Temperatures above 350°C (662°F) are not permitted.

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

14. The position where the lifting points will be installed should be clearly marked with a contrast colour.

15. If lifting points are used solely for lashing, the value of the working load limit can be doubled: Lashing capacity $LC = 2 \times WLL$.

16. After installation, an annual inspection or if necessary even sooner must be carried out by a competent person to guarantee the lingering ability. This is becomes also effective after a damage or a special occurrence.

Inspection criteria concerning paragraphs 2 and 16:

- Observe correct torque moment.
- The lifting point must be complete.
- The working load limit and manufacturer's stamp should be clearly visible.
- Deformation of the component parts such as body and bolt.
- Mechanical damage, such as notches, particularly in high stress areas.
- Wear should be no more than 10 % of cross sectional diameter.
- Strong of corrosion.
- Cracks at load bearing areas
- Damage at the bolt and/or thread.
- Easy and jerk free turning of the ring must be guaranteed.

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

Type	WLL	weight	A	B	C	D	E	G	K	L	M	N	S	VRS	reference VRS-F	Key
VRS-M6	0.1 t	0.06 kg	27	9	7	20	23	28	37	9	6	6	13	7900909*	7900906*	7983986
VRS-M 8	0.3 t	0.1 kg	34	11	8,5	25	25	32	47	12	8	6	16	7100554*	8500911*	7983986
VRS-M 10	0.4 t	0.1 kg	34	11	8,5	25	25	32	47	15	10	6	16	7982219*	7982213*	7983986
VRS-M 12	0.75 t	0.2 kg	42	13	10	30	30	34	56	18	12	8	20	7982220*	7982214*	7983987
VRS-M 14	0.75 t	0.2 kg	42	13	10	30	30	34	56	18	14	8	20	7999337**	7999330**	7983987
VRS-M 16	1.5 t	0.3 kg	49	15	14	35	35	40	65	24	16	10	23.5	7982221**	7982215**	7983988
VRS-M 18	1.5 t	0.3 kg	49	15	15	35	35	40	65	24	18	10	23.5	7992219**	7903387**	7983988
VRS-M 20	2.3 t	0.5 kg	57	17	16	40	42	50	75	30	20	12	29	7982222**	7982216**	7983989
VRS-M 22	2.3 t	0.5 kg	57	17	16	40	42	50	75	30	22	12	29	7904625**	7992197**	7983989
VRS-M 24	3.2 t	0.9 kg	70	21	19	48	50	60	90	36	24	14	35	7982223**	7982217**	7983990
VRS-M 27	3.2 t	0.9 kg	70	21	19	48	48	60	90	36	27	14	35	7904626**	7994138**	7983990
VRS-M 30	4.5 t	1.7 kg	86	26	24	60	60	75	112	45	30	17	44	7982224***	7982218***	7983991
VRS-M 33	4,5 t	1.8 kg	86	36	24	60	60	75	112	45	33	17	41.5	7904627	7993439	7983991
VRS-M 36	7 t	2.9 kg	103	32	29	72	75	90	135	54	36	22	53	7100562	7104030	7983992
VRS-M 42	9 t	4.6 kg	120	38	34	82	85	105	158	63	42	24	61.5	7100563	7104031	7983993
VRS-M 48	12 t	7.0 kg	137	43	38	94	100	120	180	72	48	27	70.5	7100564	7104032	7983994
VRS-M 12 x 1.5	0.75 t	0.2 kg	42	13	10	30	30	34	56	18	12	8	20	-	7992929	7983987
VRS-M 16 x 1.5	1.5 t	0.3 kg	49	15	14	35	35	40	65	24	16	10	23.5	-	7902676	7983988
VRS-M 20 x 2	2.3 t	0.5 kg	57	17	16	40	42	50	75	30	20	12	29	-	7992634	7983989
VRS-M 24 x 2	3.2 t	0.9 kg	70	21	19	48	50	60	90	36	24	14	35	-	7992566	7983990
VRS-M 30 x 2	4.5 t	1.7 kg	86	26	24	60	60	75	112	45	30	17	44	-	7991856	7983991
VRS-1/4"-20UNC	220 lbs	0.13 lbs	1 1/16"	11/32"	9/32"	3/4"	29/32"	1 1/8"	1 7/16"	11/32"	1/4"	7/32"	1/2"	7999105	-	-
VRS-5/16"-18UNC	660 lbs	0.26 lbs	1 11/32"	7/16"	11/32"	63/64"	63/64"	1 1/4"	1 7/8"	15/32"	5/16"	1/4"	5/8"	-	7999106*	7983995
VRS-3/8"-16UNC	880 lbs	0.26 lbs	1 5/16"	7/16"	5/16"	1"	1"	1 1/8"	1 7/8"	9/32"	3/8"	1/4"	9/16"	7103959	7984214*	7983995
VRS-7/16"-14UNC	880 lbs	0.26 lbs	1 5/16"	7/16"	5/16"	1"	1"	1 1/8"	1 7/8"	9/32"	3/8"	1/4"	9/16"	7999272	-	7983995
VRS-1/2"-13UNC	1650 lbs	0.44 lbs	1 5/8"	1/2"	3/8"	1 3/16"	1 3/16"	1 5/16"	2 3/16"	11/16"	1/2"	5/16"	11/16"	7103960	7984215*	7983996
VRS-5/8"-11UNC	3300 lbs	0.66 lbs	1 15/16"	9/16"	9/16"	1 3/8"	1 3/8"	1 9/16"	2 9/16"	15/16"	5/8"	3/8"	7/8"	7103961	7984216**	7983997
VRS-3/4"-10UNC	5070 lbs	1.1 lbs	2 1/4"	11/16"	11/16"	1 9/16"	1 9/16"	2"	2 15/16"	1 3/16"	3/4"	1/2"	1 1/16"	7103962	7984217**	7983998
VRS-7/8"-9UNC	5070 lbs	1.1 lbs	2 1/4"	11/16"	11/16"	1 9/16"	1 9/16"	2"	2 15/16"	1 1/16"	14/16"	1/2"	1 1/16"	7103963	7984218**	7983998
VRS-1"-8UNC	7050 lbs	2.0 lbs	2 3/4"	13/16"	13/16"	1 7/8"	1 15/16"	2 3/8"	3 9/16"	1 27/64"	1"	9/16"	1 5/16"	7103964	7984219**	7983999
VRS-1 1/8"-7UNC	7050 lbs	2.0 lbs	2 3/4"	13/16"	13/16"	1 7/8"	1 15/16"	2 3/8"	3 9/16"	1 27/64"	1 1/8"	9/16"	1 5/16"	7999384	-	7983999
VRS-1 1/8"-8UN	7050 lbs	2.0 lbs	2 3/4"	13/16"	13/16"	1 7/8"	1 15/16"	2 3/8"	3 9/16"	1 27/64"	1 1/8"	9/16"	1 5/16"	7999385	-	7983999
VRS-1 1/4"-7UNC	9920 lbs	3.7 lbs	3 3/8"	1"	1"	2 3/8"	2 3/8"	2 15/16"	4 7/16"	1 25/32"	1 1/4"	5/8"	1 5/8"	7103965	7984220***	7984000
VRS-1 1/2"-6UNC	15430 lbs	6.4 lbs	4 1/16"	1 1/4"	1 1/4"	2 13/16"	2 15/16"	3 9/16"	5 5/16"	2 1/8"	1 1/2"	7/16"	1 15/16"	7103966	7104487	7984001
VRS-1 3/4"-5UNC	19480 lbs	10.2 lbs	4 3/4"	1 1/2"	1 1/2"	3 1/4"	3 3/8"	4 1/8"	6 1/4"	2 1/2"	1 3/4"	1"	2 1/2"	7103967	7104488	7984002
VRS-2"-4.5UNC	26450 lbs	15.4 lbs	5 3/8"	1 11/16"	1 11/16"	3 11/16"	3 15/16"	4 3/4"	7 1/16"	2 13/16"	2"	1 2/16"	5 5/8"	7103968	7104489	7984003

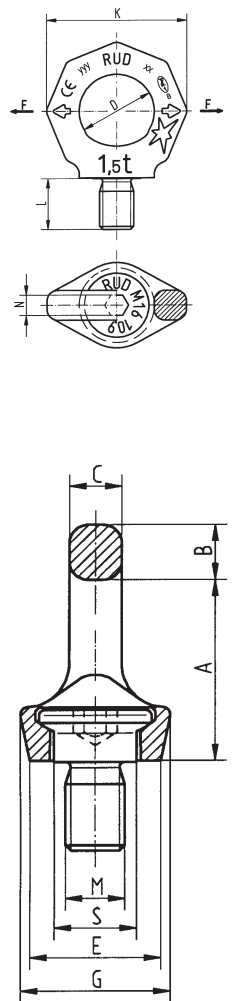


Table 1 * = package unit 20 pieces ** = package unit 10 pieces *** = package unit 4 pieces Subject to technical alterations!

Type metric	Type metric fine thread	Type Inch	Torque	Socket wrench
VRS-M6*		VRS-1/4"-20UNC	5 Nm	7997749
VRS-M8		VRS-5/16"-18UNC	10 Nm	7997749
VRS-M10		VRS-3/8"-16UNC	15 Nm	7997749
		VRS-7/16"-14UNC	15 Nm	
VRS-M12	VRS-M12 x 1,5	VRS-1/2"-13UNC	25 Nm	7997750
VRS-M14			30 Nm	7997750
VRS-M16	VRS-M16 x 1,5	VRS-5/8"-11UNC	60 Nm	7997751
VRS-M18			80 Nm	7997751
VRS-M20	VRS-M20 x 2	VRS-3/4"-10UNC	115 Nm	7997752
VRS-M22		VRS-7/8"-9UNC	125 Nm	7997752
VRS-M24	VRS-M24 x 2	VRS-1"-8UNC	190 Nm	7997753
VRS-M27		VRS-1 1/8"-7UNC	250 Nm	7997753
		VRS-1 1/8"-8UN	250 Nm	
VRS-M30	VRS-M30 x 2	VRS-1 1/4"-7UNC	330 Nm	7902078
VRS-M33			400 Nm	7902078
VRS-M36		VRS-1 1/2"-6UNC	590 Nm	7902079
VRS-M42		VRS-1 3/4"-5UNC	925 Nm	7902080
VRS-M48		VRS-2"-4.5UNC	1400 Nm	7902081













Special lengths and surface coatings possible on request.

Table 2 *Attention: When tightening the VRS M6, do not exceed the torque value of 12 Nm.



Translation of the original instruction manual In case of doubts or misunderstandings, the German version of the document is decisive.

Method of lift										
Number of legs	1	1	2	2	2	2	2	3 and 4	3 and 4	3 and 4
Angle of inclination α	0°	90°	0°	90°	0-45°	45-60°	unsymm.	0-45°	45-60°	unsymm.
Factor		1		2	1.4	1	1	2.1	1.5	1

Type		STARPOINT -WLL in metric tons, bolted and adjusted to the direction of pull									
VRS-M6	VRS-1/4"-20UNC	0.5 t	0.1 t	1 t	0.2 t	0.14 t	0.1 t	0.1 t	0.21 t	0.15 t	0.1 t
VRS-M8	VRS-5/16"-18UNC	1 t	0.3 t	2 t	0.6 t	0.42 t	0.3 t	0.3 t	0.63 t	0.45 t	0.3 t
VRS-M10	VRS-3/8"-16UNC	1 t	0.4 t	2 t	0.8 t	0.56 t	0.4 t	0.4 t	0.84 t	0.6 t	0.4 t
	VRS-7/16"-14UNC	1 t	0.4 t	2 t	0.8 t	0.56 t	0.4 t	0.4 t	0.84 t	0.6 t	0.4 t
VRS-M12	VRS-1/2"-13UNC	2 t	0.75 t	4 t	1.5 t	1.0 t	0.75 t	0.75 t	1.6 t	1.12 t	0.75 t
VRS-M12x1.5		2 t	0.75 t	4 t	1.5 t	1.0 t	0.75 t	0.75 t	1.6 t	1.12 t	0.75 t
VRS-M14		2 t	0.75 t	4 t	1.5 t	1.0 t	0.75 t	0.75 t	1.6 t	1.12 t	0.75 t
VRS-M16	VRS-5/8"-11UNC	4 t	1.5 t	8 t	3 t	2.1 t	1.5 t	1.5 t	3.15 t	2.25 t	1.5 t
VRS-M16x1.5		4 t	1.5 t	8 t	3 t	2.1 t	1.5 t	1.5 t	3.15 t	2.25 t	1.5 t
VRS-M18		4 t	1.5 t	8 t	3 t	2.1 t	1.5 t	1.5 t	3.15 t	2.25 t	1.5 t
VRS-M20	VRS-3/4"-10UNC	6 t	2.3 t	12 t	4.6 t	3.22 t	2.3 t	2.3 t	4.83 t	3.45 t	2.3 t
VRS-M20x2		6 t	2.3 t	12 t	4.6 t	3.22 t	2.3 t	2.3 t	4.83 t	3.45 t	2.3 t
VRS-M22	VRS-7/8"-9UNC	6 t	2.3 t	12 t	4.6 t	3.22 t	2.3 t	2.3 t	4.83 t	3.45 t	2.3 t
VRS-M24	VRS-1"-8UNC	8 t	3.2 t	16 t	6.4 t	4.48 t	3.2 t	3.2 t	6.7 t	4.8 t	3.2 t
VRS-M24x2		8 t	3.2 t	16 t	6.4 t	4.48 t	3.2 t	3.2 t	6.7 t	4.8 t	3.2 t
VRS-M27	VRS-1 1/8"-7UNC	8 t	3.2 t	16 t	6.4 t	4.48 t	3.2 t	3.2 t	6.7 t	4.8 t	3.2 t
	VRS-1 1/8"-8UN	8 t	3.2 t	16 t	6.4 t	4.48 t	3.2 t	3.2 t	6.7 t	4.8 t	3.2 t
VRS-M30	VRS-1 1/4"-7UNC	12 t	4.5 t	24 t	9 t	6.3 t	4.5 t	4.5 t	9.4 t	6.7 t	4.5 t
VRS-M30x2		12 t	4.5 t	24 t	9 t	6.3 t	4.5 t	4.5 t	9.4 t	6.7 t	4.5 t
VRS-M33		12 t	4.5 t	24 t	9 t	6.3 t	4.5 t	4.5 t	9.4 t	6,7 t	4.5 t
VRS-M36	VRS-1 1/2"-6UNC	16 t	7 t	32 t	14 t	9.8 t	7 t	7 t	14.7 t	10.5 t	7 t
VRS-M42	VRS-1 3/4"-5UNC	24 t	9 t	48 t	18 t	12.6 t	9 t	9 t	18.9 t	13.5 t	9 t
VRS-M48	VRS-2"-4.5UNC	32 t	12 t	64 t	24 t	16.8 t	12 t	12 t	25.2 t	18.0 t	12 t

Type		STARPOINT -WLL in lbs, bolted and adjusted to the direction of pull									
VRS-M6	VRS-1/4"-20UNC	1100 lbs	220 lbs	2200 lbs	440 lbs	308 lbs	220 lbs	220 lbs	462 lbs	330 lbs	220 lbs
VRS-M8	VRS-5/16"-18UNC	2200 lbs	660 lbs	4400 lbs	1320 lbs	925 lbs	660 lbs	660 lbs	1380 lbs	990 lbs	660 lbs
VRS-M10	VRS-3/8"-16UNC	2200 lbs	880 lbs	4400 lbs	1760 lbs	1235 lbs	880 lbs	880 lbs	1850 lbs	1320 lbs	880 lbs
	VRS-7/16"-14UNC	2200 lbs	880 lbs	4400 lbs	1760 lbs	1235 lbs	880 lbs	880 lbs	1850 lbs	1320 lbs	880 lbs
VRS-M12	VRS-1/2"-13UNC	4400 lbs	1650 lbs	8800 lbs	3300 lbs	2200 lbs	1650 lbs	1650 lbs	3460 lbs	2470 lbs	1650 lbs
VRS-M12x1.5		4400 lbs	1650 lbs	8800 lbs	3300 lbs	2200 lbs	1650 lbs	1650 lbs	3460 lbs	2470 lbs	1650 lbs
VRS-M14		4400 lbs	1650 lbs	8800 lbs	3300 lbs	2200 lbs	1650 lbs	1650 lbs	3460 lbs	2470 lbs	1650 lbs
VRS-M16	VRS-5/8"-11UNC	8820 lbs	3300 lbs	17640 lbs	6610 lbs	4630 lbs	3300 lbs	3300 lbs	6940 lbs	4960 lbs	3300 lbs
VRS-M16x1.5		8820 lbs	3300 lbs	17640 lbs	6610 lbs	4630 lbs	3300 lbs	3300 lbs	6940 lbs	4960 lbs	3300 lbs
VRS-M18		8820 lbs	3300 lbs	17640 lbs	6610 lbs	4630 lbs	3300 lbs	3300 lbs	6940 lbs	4960 lbs	3300 lbs
VRS-M20	VRS-3/4"-10UNC	13250 lbs	5070 lbs	26500 lbs	10140 lbs	7100 lbs	5070 lbs	5070 lbs	10650 lbs	7600 lbs	5070 lbs
VRS-M20x2		13250 lbs	5070 lbs	26500 lbs	10140 lbs	7100 lbs	5070 lbs	5070 lbs	10650 lbs	7600 lbs	5070 lbs
VRS-M22	VRS-7/8"-9UNC	13250 lbs	5070 lbs	26500 lbs	10140 lbs	7100 lbs	5070 lbs	5070 lbs	10650 lbs	7600 lbs	5070 lbs
VRS-M24	VRS-1"-8UNC	17630 lbs	7050 lbs	35260 lbs	14100 lbs	9880 lbs	7050 lbs	7050 lbs	14800 lbs	10580 lbs	7050 lbs
VRS-M24x2		17630 lbs	7050 lbs	35260 lbs	14100 lbs	9880 lbs	7050 lbs	7050 lbs	14800 lbs	10580 lbs	7050 lbs
VRS-M27	VRS-1 1/8"-7UNC	17630 lbs	7050 lbs	35260 lbs	14100 lbs	9880 lbs	7050 lbs	7050 lbs	14800 lbs	10580 lbs	7050 lbs
	VRS-1 1/8"-8UN	17630 lbs	7050 lbs	35260 lbs	14100 lbs	9880 lbs	7050 lbs	7050 lbs	14800 lbs	10580 lbs	7050 lbs
VRS-M30	VRS-1 1/4"-7UNC	26450 lbs	9920 lbs	52900 lbs	19840 lbs	13880 lbs	9920 lbs	9920 lbs	20800 lbs	14880 lbs	9920 lbs
VRS-M30x2		26450 lbs	9920 lbs	52900 lbs	19840 lbs	13880 lbs	9920 lbs	9920 lbs	20800 lbs	14880 lbs	9920 lbs
VRS-M33		26450 lbs	9920 lbs	52900 lbs	19840 lbs	13880 lbs	9920 lbs	9920 lbs	2080 lbs	14880 lbs	9920 lbs
VRS-M36	VRS-1 1/2"-6UNC	35270 lbs	15430 lbs	70540 lbs	30860 lbs	21600 lbs	15430 lbs	15430 lbs	32400 lbs	23150 lbs	15430 lbs
VRS-M42	VRS-1 3/4"-5UNC	52900 lbs	19480 lbs	105800 lbs	39680 lbs	27700 lbs	19840 lbs	19840 lbs	41600 lbs	29760 lbs	19840 lbs
VRS-M48	VRS-2"-4.5UNC	70550 lbs	26450 lbs	141100 lbs	52910 lbs	37000 lbs	26450 lbs	26450 lbs	55500 lbs	39680 lbs	26450 lbs

Table 3