

SWIVEL HOIST RING, METRIC THREAD WARNINGS AND APPLICATION INSTRUCTIONS



WARNING

- Loads may slip or fall if proper Hoist Ring assembly and lifting procedures are not used. • A falling load may cause serious injury or death.
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- Install hoist ring bolt to torque requirements listed in tables 1 for the 8-203 respectively.
- Read, understand and follow all instructions and chart information.
- Do not use with damaged slings, chain, or webbing. For inspection criteria see ASME B30.9.
- Use only genuine YOKE parts as replacements.

Hoist Ring Application Assembly Safety

- After determining the loads on each hoist ring, select the proper size hoist ring using the Working Load Limit ratings in Table 1 for Metric threads.
- Drill and tap the work piece to the correct size to a minimum depth of one-half the threaded shank diameter plus the threaded shank length. See rated load limit and bolt torque requirements imprinted on top of the swivel trunnion (See Table 1).
- Install hoist ring to recommended torque with a torque wrench making sure the bushing flange meets the load (work piece) surface.
- Never use spacers between bushing flange and mounting surface.
- Always select proper load rated lifting device for use with Swivel Hoist Ring.
- Attach lifting device ensuring free fit to hoist ring bail (lifting ring) (Fig. 1).
- Apply partial load and check proper rotation and alignment. There should be no interference between load (work piece) and hoist ring bail (Fig. 2).

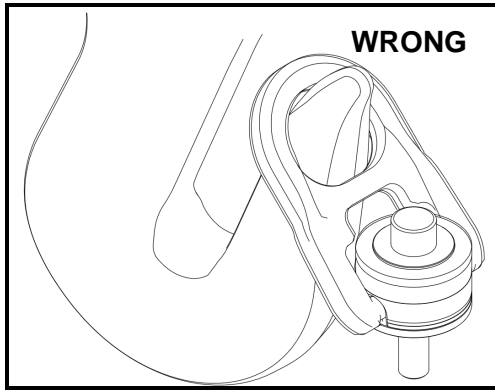


Figure 1

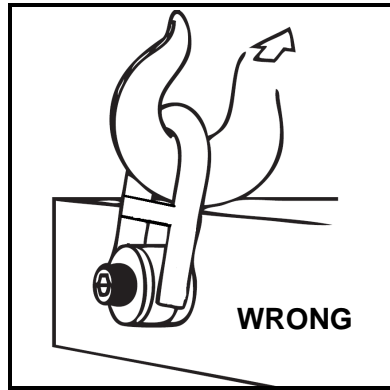


Figure 2

- Special Note: When a Hoist Ring is installed with a retention nut, the nut must have a full thread engagement and must meet one of the following standards to develop the Working Load Limit (WLL).

1. **ASTM A-563** A. Grade D Hex Thick B. Grade DH Standard Hex

2. **SAE Grade 8** — Standard Hex

Hoist Ring Inspection / Maintenance

- Always inspect hoist ring before use.
- Regularly inspect hoist ring parts (Fig.3).

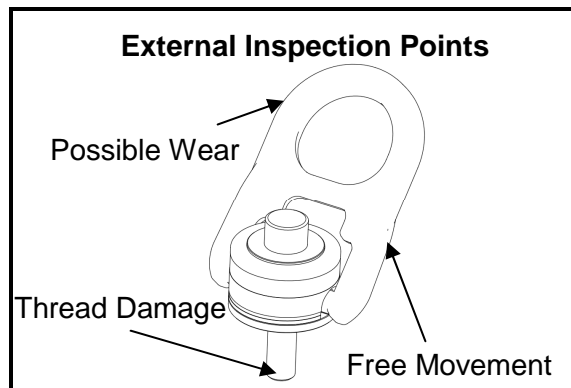


Figure 3

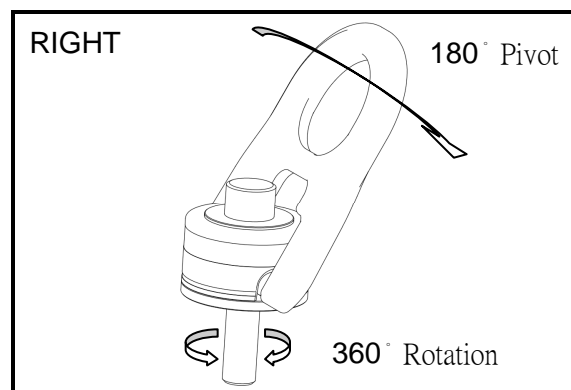


Figure 4

- Never use hoist ring that shows signs of corrosion, wear or damage.
- Never use hoist ring if bail is bent or elongated.
- Always be sure threads on shank and receiving hole are clean, not damaged, and fit properly.
- Always check with torque wrench before using an already installed hoist ring.
- Always make sure there are no spacers (washers) used between bushing flange and the mounting surface. Remove any spacers (washers) and retorque before use.
- Always ensure free movement of bail. The bail should pivot 180 degrees and swivel 360 degrees (Fig. 4).
- Always be sure total work piece surface is in contact with hoist ring bushing mating surface. Drilled and tapped hole must be 90 degrees to load (work piece) surface.

Operating Safety

- Never exceed the capacity of the swivel hoist ring, see Tables 1 for Metric threads.
- When using lifting slings of two or more legs, make sure the forces in the legs are calculated using the angle from the horizontal sling angle to the leg and select the proper size swivel hoist ring to allow for the angular forces.

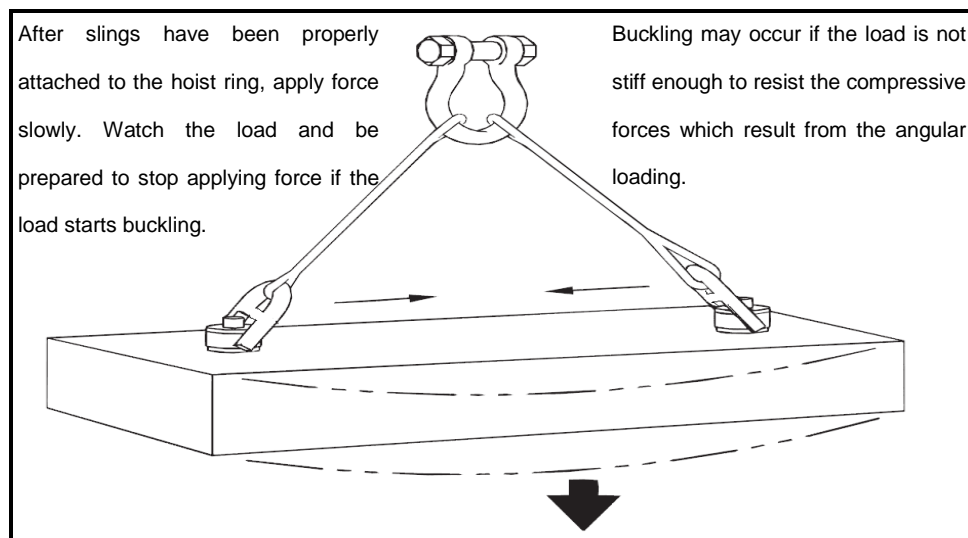
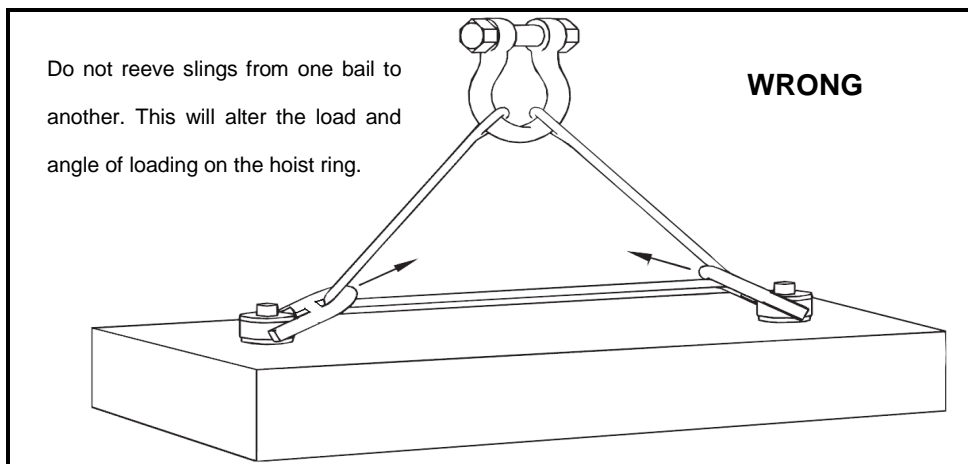


Table 1

Item No.	Working Load Limit		Torque in Nm	Bolt Size	Dimensions (mm)						N.W. Kg
	tonnes*				E	A	B	D	F	G	
	5 : 1	4 : 1									
8-203-004	0.40	0.50	10	M 8x1.25x 50	17.0	40	41	9	102	65	0.4
8-203-005	0.45	0.55	16	M10x1.50x 45	11.0	40	41	9	102	65	0.5
§ 8-203-005L	0.45	0.55	16	M10x1.50x 60	26.0	40	41	9	102	65	0.5
§ 8-203-010	1.05	1.30	38	M12x1.75x 60	15.0	65	64	15	158	105	1.7
§ 8-203-010L	1.05	1.30	38	M12x1.75x 75	30.0	65	64	15	158	105	1.7
§ 8-203-019	1.90	2.40	81	M16x2.00x 65	20.0	65	64	15	158	105	1.8
§ 8-203-019L	1.90	2.40	81	M16x2.00x 80	35.0	65	64	15	158	105	1.8
§ 8-203-021	2.15	2.70	136	M20x2.50x 70	25.0	65	64	15	158	105	1.9
§ 8-203-021L	2.15	2.70	136	M20x2.50x 90	45.0	65	64	15	158	105	2.1
§ 8-203-030	3.00	3.75	136	M20x2.50x 80	25.0	85	79	19	204	134	4.2
§ 8-203-030L	3.00	3.75	136	M20x2.50x100	45.0	85	79	19	204	134	4.2
§ 8-203-042	4.20	5.25	312	M24x3.00x 80	26.0	85	79	19	204	134	4.2
§ 8-203-042L	4.20	5.25	312	M24x3.00x110	56.0	85	79	19	204	134	4.3
** 8-203-070	7.00	8.75	637	M30x3.50x140	81.0	100	100	25	241	160	6.7
** 8-203-110	11.00	13.75	1005	M36x4.00x160	76.0	120	111	30	286	194	15.5
** 8-203-125	12.50	15.60	1005	M42x4.50x180	95.0	120	111	30	286	220	16.5
** 8-203-135	13.50	16.90	1350	M48x5.00x190	105.0	120	111	30	286	220	16.8
** 8-203-155	15.50	19.40	1350	M56x5.50x180	94.0	138	109	34	308	241	19.3
** 8-203-223	22.30	27.90	2847	M64x6.00x190	98.0	138	100	38	312	241	20.7
** 8-203-315	31.50	39.40	5830	M72x6.00x240	131.0	166	127	45	377	300	43.0

* Proof Load is 2.5 times the Working Load Limit on the 4:1 design factor. § Long Bolts are designed for soft metal work piece.
The depths of thread need to be in a minimum 1 times thread for steel, 1.25 times thread for cast iron and, 2 times thread for aluminum work piece.
** Will be supplied with a hex head bolt.

Additional Information

- For information concerning parts, special application, or situations requiring other features, contact:

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