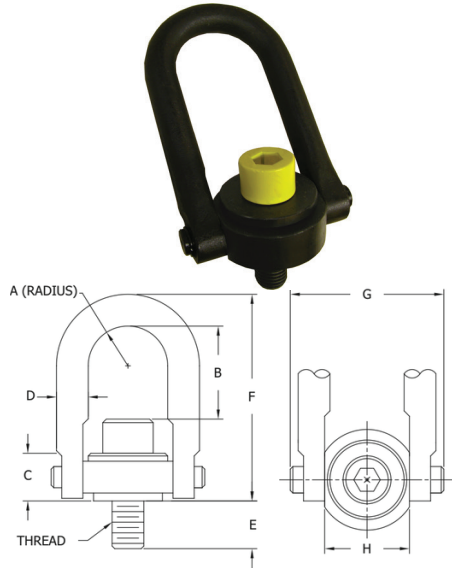




SAFETY SWIVEL HOIST RING

**READ SAFETY PRECAUTION PRIOR TO USE
(SAFETY INFORMATION PAGE 144)**



- 200% Proof-Load Tested with Serial Number for Traceability
- Swivels 360° - Pivots 180°
- Material: Alloy Steel
- Finish: Black Oxide (Also available: Cadmium Plated, Electroless Nickel Plated, Zinc Plated)
- Safety Factor: 5:1
- Magnetic Particle Inspected
- Certified Heat Treatment
- Rated at 100% from 0°-90°
- Fatigue Tested to 20,000 Cycles at 1-1/2x the Rated Load
- Meets or Exceeds the Requirements of ASME B30.26
- Thread: Longer Thread Projection and Fine Threads Available
- Comforms to CE

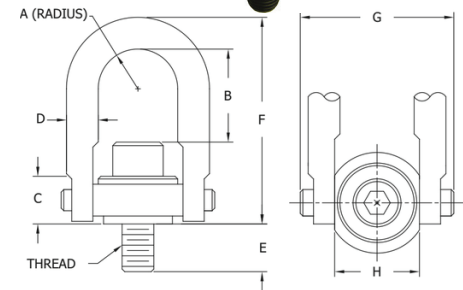
RATED LOADS (LBS)	THREAD SIZE	A	C	D	E	STANDARD U-BAR			LONG U-BAR			G	H	TORQUE (FT-LBS)	WT. (LBS)
						PART NO.	B	F	PART NO.	B	F				
600	1/4-20	0.43	0.71	3/8	0.54	46100	1.27	2.67				1.84	1.00	6	0.3
800	5/16-18	0.43	0.71	3/8	0.29	46102	1.27	2.67				1.84	1.00	7	0.3
800	5/16-18	0.43	0.71	3/8	0.54	46104	1.27	2.67				1.84	1.00	7	0.3
1,000	3/8-16	0.43	0.71	3/8	0.54	46106	1.27	2.67				1.84	1.00	12	0.3
1,250	7/16-14	0.43	0.73	3/8	0.79	46351	1.20	2.67				1.84	1.00	22	0.4
1,500	1/2-13	0.43	0.73	3/8	0.79	46352	1.15	2.67				1.84	1.00	28	0.4
2,000	7/16-14	0.70	0.93	1/2	1.07	46606	1.90	3.77				2.58	1.49	22	1.0
2,500	1/2-13	0.70	0.93	1/2	1.07	46602	1.84	3.77				2.58	1.49	28	1.0
2,000	7/16-14	0.88	1.22	3/4	0.78	46000	2.37	4.78	46638	4.34	6.72	3.52	1.99	22	2.6
2,500	1/2-13	0.88	1.22	3/4	0.78	46008	2.31	4.78	46644	4.25	6.72	3.52	1.99	28	2.6
2,500	1/2-13	0.88	1.22	3/4	1.03	46010	2.31	4.78	46646	4.25	6.72	3.52	1.99	28	2.6
2,500	1/2-13	0.88	1.22	3/4	1.28	46012	2.31	4.78	46648	4.25	6.72	3.52	1.99	28	2.6
2,500	9/16-12	0.88	1.22	3/4	0.78	46007	2.25	4.78	46651	4.19	6.72	3.52	1.99	30	2.6
4,000	5/8-11	0.88	1.22	3/4	0.78	46002	2.18	4.78	46641	4.12	6.72	3.52	1.99	60	2.6
4,000	5/8-11	0.88	1.22	3/4	1.03	46004	2.18	4.78	46640	4.12	6.72	3.52	1.99	60	2.6
4,000	5/8-11	0.88	1.22	3/4	1.28	46006	2.18	4.78	46642	4.12	6.72	3.52	1.99	60	2.6
4,000	5/8-11	0.88	1.22	3/4	1.53	46005	2.18	4.78	46643	4.12	6.72	3.52	1.99	60	2.6
5,000	3/4-10	0.88	1.22	3/4	1.03	46014	2.06	4.78	46650	4.00	6.72	3.52	1.99	100	3.0
5,000	3/4-10	0.88	1.22	3/4	1.53	46018	2.06	4.78	46654	4.00	6.72	3.52	1.99	100	3.0
6,000	7/8-9	0.88	1.24	3/4	1.53	46353	1.94	4.78	41604	3.88	6.72	3.52	1.99	160	3.0
6,500	1-8	0.88	1.24	3/4	1.53	46354	1.71	4.78	41606	3.75	6.72	3.52	1.99	230	3.0
7,000	3/4-10	1.40	1.71	1	1.04	46204	3.06	6.52	46658	4.65	8.11	5.14	3.00	100	7.0
7,000	3/4-10	1.40	1.71	1	1.54	46206	3.06	6.52	46660	4.65	8.11	5.14	3.00	100	7.0
8,000	7/8-9	1.40	1.71	1	1.04	46202	2.93	6.52	46656	4.52	8.11	5.14	3.00	160	7.0
8,000	7/8-9	1.40	1.71	1	1.29	46203	2.93	6.52	46657	4.52	8.11	5.14	3.00	160	7.0
8,000	7/8-9	1.40	1.71	1	1.54	46205	2.93	6.52	46655	4.52	8.11	5.14	3.00	160	7.0
10,000	1-8	1.40	1.71	1	1.29	46210	2.81	6.52	46662	4.40	8.11	5.14	3.00	230	7.5
10,000	1-8	1.40	1.71	1	1.54	46212	2.81	6.52	46664	4.40	8.11	5.14	3.00	230	7.5
10,000	1-8	1.40	1.71	1	2.29	46214	2.81	6.52	46666	4.40	8.11	5.14	3.00	230	7.5
10,000	1 1/8-7	1.40	1.71	1	2.29	46216	2.69	6.52	46668	4.28	8.11	5.14	3.00	230	7.5
10,000	1 1/8-8	1.40	1.71	1	2.29	46217	2.69	6.52	46669	4.28	8.11	5.14	3.00	230	7.5
11,500	1 1/4-7	1.40	1.88	1	2.10	46355	2.44	6.52	41612	4.24	8.11	5.14	3.00	470	8.0
12,000	1 3/8-6	1.40	1.88	1	2.10	46356	2.31	6.52	41614	4.13	8.11	5.14	3.00	470	8.0
12,500	1 1/2-6	1.40	1.88	1	2.10	46357	2.19	6.52	41616	4.00	8.11	5.14	3.00	800	8.0



SAFETY SWIVEL HOIST RING

**READ SAFETY PRECAUTION PRIOR TO USE
(SAFETY INFORMATION PAGE 144)**

- 200% Proof-Load Tested with Serial Number for Traceability
- Swivels 360° - Pivots 180°
- Material: Alloy Steel
- Finish: Black Oxide (Also available: Cadmium Plated, Electroless Nickel Plated, Zinc Plated)
- Safety Factor: 5:1
- Magnetic Particle Inspected
- Certified Heat Treatment
- Rated at 100% from 0°-90°
- Fatigue Tested to 20,000 Cycles at 1-1/2x the Rated Load
- Meets or Exceeds the Requirements of ASME B30.26
- Thread: Longer Thread Projection and Fine Threads Available
- Comforms to CE



RATED LOADS (LBS)	THREAD SIZE	A	C	D	E	STANDARD U-BAR			LONG U-BAR			G	H	TORQUE (FT-LBS)	WT. (LBS)
						PART NO.	B	F	PART NO.	B	F				
15,000	1 1/4-7	1.75	2.11	1-1/4	1.89	46802	4.12	8.73				6.50	3.76	470	14.0
15,000	1 1/4-8	1.75	2.11	1-1/4	1.89	46805	4.12	8.73				6.50	3.76	470	14.0
15,000	1 3/8-6	1.75	2.11	1-1/4	1.89	46806	4.06	8.73				6.50	3.76	470	14.5
15,000	1 3/8-8	1.75	2.11	1-1/4	1.89	46807	4.06	8.73				6.50	3.76	470	14.5
16,500	1 1/2-6	1.75	2.17	1-1/4	2.80	46359	4.02	8.73				6.50	3.76	800	16.0
17,000	1 5/8-5 1/2	1.75	2.17	1-1/4	2.80	46360	3.90	8.73				6.50	3.76	800	16.0
17,500	1 3/4-5	1.75	2.17	1-1/4	2.80	46361	3.77	8.73				6.50	3.76	800	16.0
18,000	1 7/8-5	1.75	2.17	1-1/4	2.80	46362	3.65	8.73				6.50	3.76	800	16.0
18,500	2-4 1/2	1.75	2.17	1-1/4	2.80	46363	3.52	8.73				6.50	3.76	800	16.0
20,000	1 3/8-6	2.00	2.43	1-1/2	2.50	46702	5.35	10.66				7.46	4.31	540	23.0
24,000	1 1/2-6	2.25	2.81	1-3/4	2.70	46404	6.41	12.47				8.55	4.87	800	34.0
24,000	1 1/2-8	2.25	2.81	1-3/4	2.70	46405	6.41	12.47				8.55	4.87	800	34.0
24,000	1 3/4-5	2.25	2.81	1-3/4	3.20	46408	6.16	12.47				8.55	4.87	800	34.0
24,000	1 3/4-8	2.25	2.81	1-3/4	3.20	46406	6.16	12.47				8.55	4.87	800	34.0
30,000	2-4 1/2	2.25	2.81	1-3/4	3.20	46400	5.91	12.47				8.55	4.87	800	36.0
30,000	2-8	2.25	2.81	1-3/4	3.20	46440	5.91	12.47				8.55	4.87	800	36.0
32,500	2 1/4-4 1/2	2.25	3.03	1-3/4	2.75	46364	5.86	12.47				8.55	4.87	800	40.0
32,500	2 1/4-8	2.25	3.03	1-3/4	2.75	46364-8	5.86	12.47				8.55	4.87	800	40.0
35,000	2 1/2-4	2.25	3.03	1-3/4	3.90	46365	5.63	12.47				8.55	4.87	2100	40.0
35,000	2 1/2-8	2.25	3.03	1-3/4	3.90	46368	5.63	12.47				8.55	4.87	2100	40.0
50,000	2 1/2-8	3.00	4.09	2-1/4	4.00	47002	8.03	16.87				10.67	6.52	2100	88.0
50,000	2 1/2-4	3.00	4.09	2-1/4	4.00	47006	8.03	16.87				10.67	6.52	2100	88.0
55,000	2 3/4-4	3.00	4.34	2-1/4	4.00	46366	6.16	16.87				11.67	6.52	2100	92.0
55,000	2 3/4-8	3.00	4.34	2-1/4	4.00	46366-8	6.16	16.87				11.67	6.52	2100	92.0
60,000	3-4	3.00	4.34	2-1/4	5.00	46367	6.16	16.87				11.67	6.52	4300	92.0
75,000	3-4	3.75	5.27	2-3/4	5.25	47200	8.48	19.50				14.15	8.10	4300	166.0
75,000	3-8	3.75	5.27	2-3/4	5.25	47202	8.48	19.50				14.15	8.10	4300	166.0
80,000	3 1/2-4	3.75	5.27	2-3/4	5.00	46332	7.98	19.50				14.15	8.10	5100	172.0
80,000	3 1/2-8	3.75	5.27	2-3/4	5.00	46334	7.98	19.50				14.15	8.10	5100	172.0
100,000	3 1/2-4	4.00	6.06	3-1/4	7.00	47402	9.28	22.09				15.90	8.60	5100	265.0
100,000	3 1/2-8	4.00	6.06	3-1/4	7.00	47406	9.28	22.09				15.90	8.60	5100	265.0
250,000	6-4	6.00	14.00	5	9.00	47602	14.00	33.00				25.00	13.00	9900	790.0



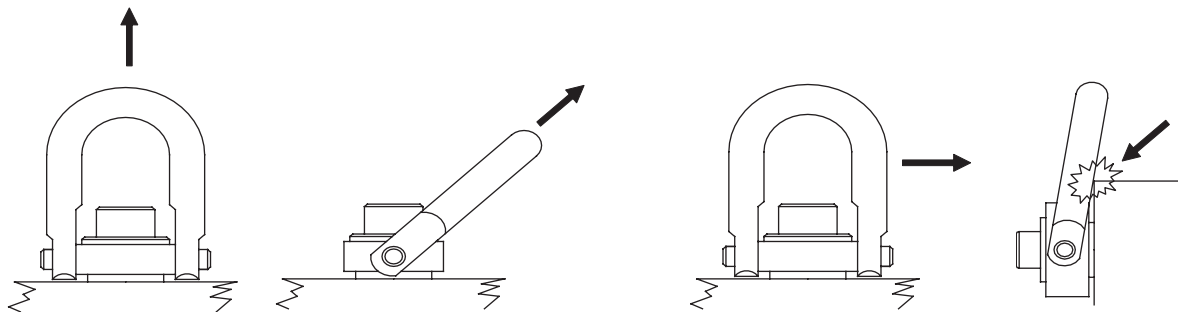
SAFETY ENGINEERED SWIVEL HOIST RING SAFETY PRECAUTION

WARNING: PRIOR TO USING ANY HOIST RING, PLEASE READ THE FOLLOWING FOR PROPER INSTALLATION AND USAGE.

As with all mechanical devices, regular inspection for wear and strict adherence to use instruction is necessary to prevent misuse failure.

- Despite the 5:1 safety factor, **NEVER EXCEED THE RATED LOAD CAPACITY**. This safety margin is needed in case of misuse, which could drastically lower load capacity.
- Tighten mounting screws to torque recommended. Periodically check torque because screws could loosen in extended service.
- Tensile strength of parent material should be above 80,000 PSI to achieve full load rating. For weaker material, consider through-hole mounting with a nut and washer on the other side.
- **DO NOT APPLY SHOCK LOADS**. Always lift gradually. Repeat magnaflux testing if shock loading ever occurs.

Make sure the hoist ring pivots and rotates in all directions freely.



RIGHT

RIGHT

WRONG

WRONG

Important: The load on each hoist ring is not simply total weight divided by the number of hoist rings. The resultant force can be significantly greater at shallow lift angles and with unevenly distributed loads. See the example below.

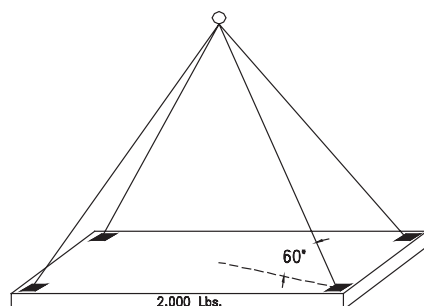
L = Load N = Number of hoist rings = 4 W = Total weight = 2,000 Lbs. A = Lifting angle

$$L = \frac{W}{N \sin A}$$

If A = 60:

$$L = \frac{2000}{4 \sin 60} = 577 \text{ Lbs.}$$

GOOD



If A = 20:

$$L = \frac{2000}{4 \sin 20} = 1,462 \text{ Lbs.}$$

BAD

