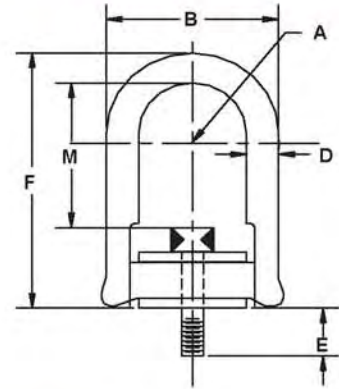


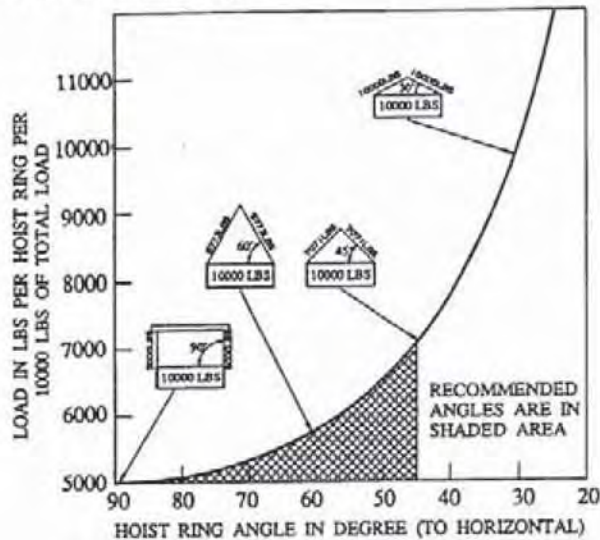
# Hoist Rings 吊環

## Hoist Ring (Metric) 公制吊環

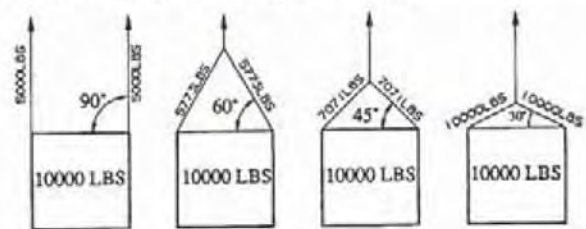


Product Code	Rated Load	Dimensions 規格尺寸						Thread	M	Torque Load N.M.	Weight
		A	B	D	E	F	M				
<b>Imperial</b>											
	Kg	mm	mm	mm	mm	mm		mm		Kg	
434212	400	16.50	58.20	11.10	16.00	82.00	M8 x 1.25	38.50	9.50	0.24	
434214	400	16.50	58.20	11.10	21.00	82.00	M8 x 1.26	38.50	9.50	0.25	
434312	450	16.50	58.20	11.10	16.00	82.00	M10 x 1.5	36.50	16.00	0.25	
434314	450	16.50	58.20	11.10	26.00	82.00	M10 x 1.5	36.50	16.00	0.26	
434515	1,050	25.40	88.90	19.10	25.00	134.90	M12 x 1.75	65.00	37.00	0.78	
434516	1,050	25.40	88.90	19.10	32.00	134.90	M12 x 1.75	65.00	37.00	0.83	
464614	1,900	25.40	88.90	19.10	25.00	134.90	M16 x 2.0	62.00	80.00	0.81	
464615	1,900	25.40	88.90	19.10	32.00	134.90	M16 x 2.0	62.00	80.00	0.85	
434714	2,200	25.40	88.90	19.10	25.00	134.90	M20 x 2.5	58.70	135.00	0.86	
434716	2,200	25.40	88.90	19.10	38.00	134.90	M20 x 2.5	58.70	135.00	0.92	
434101	3,000	35.60	129.50	25.40	28.00	177.80	M20 x 2.5	81.00	135.00	3.14	
434102	4,200	35.60	129.50	25.40	28.00	177.80	M24 x 3.0	76.30	311.00	3.29	
434103	4,200	35.60	129.50	25.40	38.00	177.80	M24 x 3.0	76.30	311.00	3.30	
434105	4,500	35.60	129.50	25.40	38.00	177.80	M30 x 3.5	70.30	311.00	3.44	
434107	4,500	35.60	129.50	25.40	48.00	177.80	M30 x 3.5	70.30	311.00	3.55	
434401	7,000	50.80	171.50	31.80	67.00	234.20	M30 x 3.5	95.00	637.20	7.26	
434402	11,000	50.80	171.50	31.80	67.00	234.20	M36 x 4.0	88.60	1085.50	8.21	
434403	12,500	50.80	171.50	31.80	80.00	234.20	M42 x 4.5	88.60	1085.50	10.14	
434404	13,500	50.80	171.50	31.80	80.00	234.20	M48 x 5.0	88.60	1085.50	10.59	

Angular Lifting Graph



Effect of Hoist Ring Angle on Load



**INSTALLATION INSTRUCTIONS:** Drill and tap workpiece for hoist ring screw with axis vertical to mounting surface. Work surface should be flat and smooth to provide full 360° flush seating for the bushing flange. (SAFETY NOTE: Some loosening may develop after prolonged service in a permanent installation. It is advisable to periodically re-tighten the mounting screw to maintain the specified torque value.) The use of free fit spacers between the bushing flange and mounting surface is not recommended as this will reduce the safe load rating on angularly applied loads. Hoist ring must be free to swivel 360° and pivot 180° at all times.



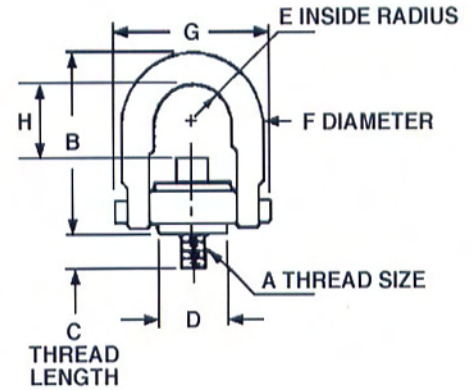
# HOIST RINGS 馬達吊環

## Center-Pull Style 拉中心型 (公制)

### Metric



- Full Swivel and Pivot Action
- Rated at 5:1 Strength Factor
- Material: Alloy Steel
- Finish: Black Oxide (Except Washer)
- Clevis, Bolt, Pins, Base, Washer and Bushing are magnetic particle inspected
- Washer: Zinc plated silver
- Proof Tested to 200% of Rated Load Capacity
- Available in FixturePro™ Design Software and PartSpec CD



Available with Envirolox™ protective finish. See page 5 for information.

## Metric Center-Pull Hoist Rings

## Bolt Kits<sup>3</sup>

THREAD SIZE A	LOAD <sup>1</sup> CAPACITY (lbs)	STD. CLEVIS		LONG CLEVIS		ENVIROLOX PART NUMBER <sup>4</sup>	THREAD LENGTH C	D	E	F	G	STD. CLEVIS H	LONG CLEVIS H	TORQUE <sup>2</sup> (ft. lbs.)	WT. (lbs)	PART NUMBER	WT. (lbs)
		PART NUMBER	B	PART NUMBER	B												
M8x1.25	400	23456	67.8	—	—	23356	12.5	19.0	10.9	9.7	46.7	32	—	1.0	.17	23656	.02
M10x1.50	450	23458	67.8	—	—	23358	17.5	19.0	10.9	9.7	46.7	30	—	1.7	.17	23658	.03
M12x1.75	1050	23462	121.4	23562	170.7	23362	19.0	38.1	22.4	19.0	89.4	60.5	108	3.8	1.08	23662	.06
M16x2.0	1900	23465	121.4	23565	170.7	23365	29.0	38.1	22.4	19.0	89.4	56.5	106	8.2	1.12	23665	.12
M20x2.5	2150	23468	121.4	23568	170.7	23368	34.0	38.1	22.4	19.0	89.4	52.5	101	13.6	1.19	23668	.21
M20x2.5	3000	23471	165.6	23571	206.0	23371	32.0	58.7	35.6	25.4	130.6	73	101	13.6	3.03	23671	.23
M24x3.0	4200	23474	165.6	23574	206.0	23374	37.0	58.7	35.6	25.4	130.6	69	111	31.0	3.10	23674	.40
M30x3.5	7000	23478	221.7	—	—	23378	41.9	81.0	44.5	31.7	165.1	107.4	—	60.0	6.3	23678	.79
M30x3.5	7000	23479	221.7	—	—	23379	61.7	81.0	44.5	31.7	165.1	107.4	—	60.0	6.4	23679	.91
M36x4.0	11000	23483	316.7	—	—	23383	63.5	106.4	57.2	44.4	217.2	166.5	—	100.0	15.5	23683	1.52
M42x4.5	12500	23484	316.7	—	—	23384	68.0	106.4	57.2	44.4	217.2	160.5	—	100.0	16.0	23684	2.75
M48x5.0	13500	23485	316.7	—	—	23385	88.0	106.4	57.2	44.4	217.2	154.5	—	100.0	16.8	23685	3.27
M64x6.0	22500	23488	419.1	—	—	23388	96.0	146.0	76.2	57.15	297.6	210	—	290.0	40.0	23688	15.70



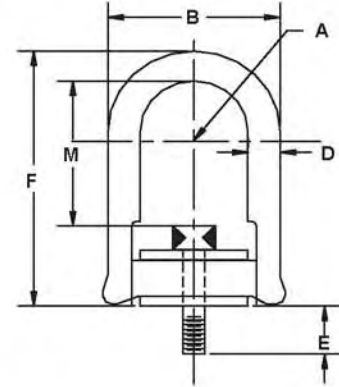
HWE WANG ENTERPRISES INC.

# Hoist Rings 英制吊環

## Hoist Ring Forged 鍛造吊環



- Pivots 180° and swivels 360° simultaneously
- Back and side pins constructed of one piece of forged alloy steel
- 100% magnetic particle inspected
- Bale and center body are closed die forged to assure superior grain flow and consistent dimensional accuracy
- Large bale allows use of a variety of hook sizes



Product Code	Rated Load	Dimensions 尺寸							Torque Load	Weight	
		A	B	D	E	F	Thread	M			
<b>Imperial</b>											
	lb.	in.	in.	in.	in.	in.	in.	in.	in.	Ft.-Load	lb.
433112	500	0.65	2.29	0.44	0.56	3.23	1/4-20	1.57	5	0.50	
433212	800	0.65	2.29	0.44	0.56	3.23	5/16-18	1.51	7	0.52	
433214	800	0.65	2.29	0.44	1.06	3.23	5/16-18	1.51	7	0.54	
433312	1,000	0.65	2.29	0.44	0.56	3.23	3/8-16	1.45	12	0.56	
433314	1,000	0.65	2.29	0.44	1.06	3.23	3/8-16	1.45	12	0.58	
433512	2,500	1.00	3.50	0.75	0.75	5.31	1/2-13	2.56	28	1.71	
433515	2,500	1.00	3.50	0.75	1.00	5.31	1/2-13	2.56	28	1.72	
433516	2,500	1.00	3.50	0.75	1.25	5.31	1/2-13	2.56	28	1.82	
433612	4,000	1.00	3.50	0.75	0.75	5.31	5/8-11	2.44	60	1.76	
433614	4,000	1.00	3.50	0.75	1.00	5.31	5/8-11	2.44	60	1.78	
433615	4,000	1.00	3.50	0.75	1.25	5.31	5/8-11	2.44	60	1.88	
433714	5,000	1.00	3.50	0.75	1.00	5.31	3/4-10	2.31	100	1.89	
433716	5,000	1.00	3.50	0.75	1.50	5.31	3/4-10	2.31	100	2.02	
433102	7,000	1.40	5.10	1.00	1.20	7.00	3/4-10	3.20	100	7.23	
433103	7,000	1.40	5.10	1.00	1.70	7.00	3/4-10	3.20	100	7.25	
433101	8,000	1.40	5.10	1.00	1.20	7.00	7/8-9	3.07	160	7.33	
433105	10,000	1.40	5.10	1.00	1.45	7.00	1-8	2.95	230	7.57	
433106	10,000	1.40	5.10	1.00	1.70	7.00	1-8	2.95	230	7.63	
433107	10,000	1.40	5.10	1.00	2.45	7.00	1-8	2.95	230	7.84	
433401	15,000	2.00	6.75	1.25	2.63	9.22	11/4-7	3.74	470	16.00	
433420	20,000	2.00	6.75	1.25	2.63	9.22	13/8-6	3.62	670	17.20	
433424	24,000	2.00	6.75	1.25	2.63	9.22	11/2-6	3.49	800	18.10	
433427	30,000	2.00	6.75	1.25	2.96	9.22	2-4.5	3.49	800	22.90	
433432	30,000	2.00	6.75	1.25	2.96	9.22	2-8	3.49	800	22.90	

### ⚠ WARNING ⚠

**Improper installation and use of hoist rings can cause injury**

**To avoid injury:**

- Do not exceed rated load.
- Install rings per instructions. Verify full 360° seating - Retorque periodically.
- Consult angular lifting graph when lifting at other than 90°.

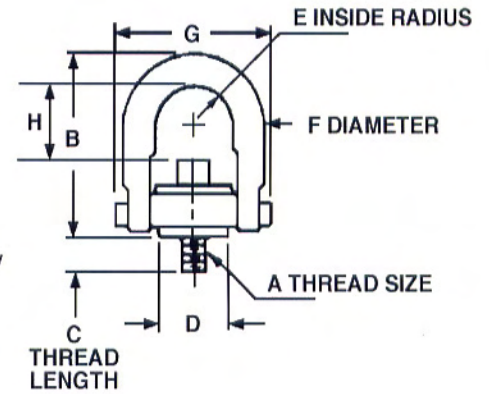


# HOIST RINGS 馬達吊環

## Center-Pull Style 拉中心型(英制)



- Full Swivel and Pivot Action
- Rated at 5:1 Strength Factor
- Material: Alloy Steel
- Finish: Black Oxide (Except Washer)
- Clevis, Bolt, Pins, Base, Washer and Bushing are magnetic particle inspected
- Washer: Zinc Plated Gold
- Proof Tested to 200% of Rated Load Capacity
- Available in FixturePro™ Design Software and PartSpec CD



Available with Envirolox™ protective finish. See page 5 for information.

### Center-Pull Hoist Rings

### Bolt Kits<sup>3</sup>

THREAD SIZE A	LOAD <sup>1</sup> CAPACITY (lbs)	STD. CLEVIS		LONG CLEVIS		ENVIROLOX PART NUMBER <sup>4</sup>	THREAD LENGTH C	D	E	F	G	STD. CLEVIS H	LONG CLEVIS H	TORQUE <sup>2</sup> (ft. lbs.)	WT. (lbs)	PART NUMBER	WT. (lbs)
		PART NUMBER	B	PART NUMBER	B												
5/16-18	800	23406	2.67	—	—	23306	9/16	.75	.43	.38	1.84	1 1/4	—	7	.3	23606	.03
3/8-16	1000	23408	2.67	—	—	23308	9/16	.75	.43	.38	1.84	1 1/4	—	12	.3	23608	.05
1/2-13	2500	23410	3.75	—	—	23310	1 1/16	1.20	.69	.50	2.56	2 3/8	—	28	1.0	23610	.16
1/2-13	2500	23411	4.78	23511	6.72	23311	3/4	1.50	.88	.75	3.52	2 3/8	4 1/4	28	2.5	23611	.14
1/2-13	2500	23412	4.78	23512	6.72	23312	1	1.50	.88	.75	3.52	2 3/8	4 1/4	28	2.5	23612	.16
1/2-13	2500	23413	4.78	23513	6.72	23313	1 1/4	1.50	.88	.75	3.52	2 3/8	4 1/4	28	2.5	23613	.17
5/8-11	4000	23414	4.78	23514	6.72	23314	1	1.50	.88	.75	3.52	2 1/4	4 3/16	60	2.7	23614	.27
5/8-11	4000	23415	4.78	23515	6.72	23315	1 1/4	1.50	.88	.75	3.52	2 1/4	4 3/16	60	2.7	23615	.29
3/4-10	5000	23417	4.78	23517	6.72	23317	1	1.50	.88	.75	3.52	2 1/8	4	100	3.0	23617	.40
3/4-10	5000	23418	4.78	23518	6.72	23318	1 1/2	1.50	.88	.75	3.52	2 1/8	4	100	3.0	23618	.46
3/4-10	7000	23420	6.52	23520	8.11	23320	1	2.31	1.40	1.00	5.14	2 15/16	4	100	7.0	23620	.46
3/4-10	7000	23421	6.52	23521	8.11	23321	1 1/2	2.31	1.40	1.00	5.14	2 15/16	4	100	7.0	23621	.52
7/8-9	8000	23423	6.52	23523	8.11	23323	1	2.31	1.40	1.00	5.14	2 13/16	4 3/8	160	7.0	23623	.62
7/8-9	8000	23424	6.52	23524	8.11	23324	1 1/4	2.31	1.40	1.00	5.14	2 13/16	4 3/8	160	7.0	23624	.66
1-8	10000	23425	6.52	23525	8.11	23325	1 1/4	2.31	1.40	1.00	5.14	2 11/16	4 3/8	230	7.5	23625	.92
1-8	10000	23426	6.52	23526	8.11	23326	1 1/2	2.31	1.40	1.00	5.14	2 11/16	4 3/8	230	7.5	23626	.97
1-8	10000	23427	6.52	23527	8.11	23327	2 1/4	2.31	1.40	1.00	5.14	2 11/16	4 3/8	230	7.5	23627	1.13
1 1/4-7	15000	23429	8.73	—	—	23329	1 7/8	3.19	1.75	1.25	6.50	4 1/4	—	470	14	23629	2.90
1 1/4-8	15000	23429-08	8.73	—	—	—	1 7/8	3.19	1.75	1.25	6.50	4 1/4	—	470	14	23629-08	2.90
1 1/2-6	24000	23433	12.47	—	—	23333	2 3/4	4.19	2.25	1.75	8.55	6 1/2	—	800	33	23633	3.50
1 1/2-8	24000	23433-08	12.47	—	—	—	2 3/4	4.19	2.25	1.75	8.55	6 1/2	—	800	33	23633-08	3.50
2-4 1/2	30000	23435	12.47	—	—	23335	3 1/8	4.19	2.25	1.75	8.55	6 1/8	—	800	36	23635	7.30
2-8	30000	23435-08	12.47	—	—	—	3 1/8	4.19	2.25	1.75	8.55	6 1/8	—	800	36	23635-08	7.30
2 1/2-4	50000	23438	16.50	—	—	23338	4	5.75	3	2.25	11.72	8 1/2	—	2100	89	23638	15.66
2 1/2-8	50000	23438-08	16.50	—	—	—	4	5.75	3	2.25	11.72	8 1/2	—	2100	89	23638-08	15.96