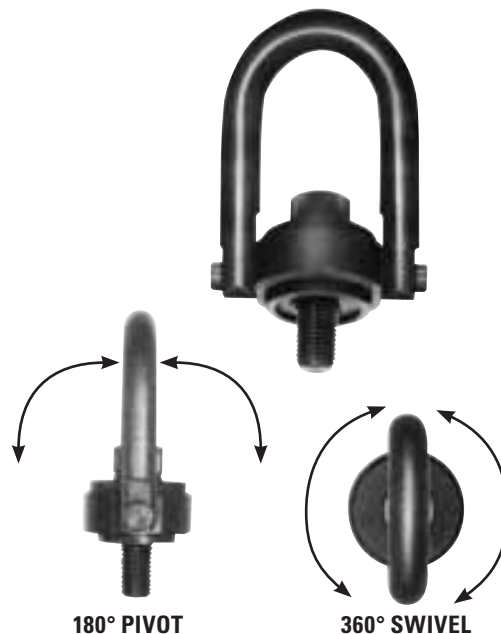


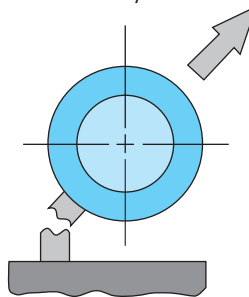
Hoist Rings – Inch

Whether you're hoisting an 800-pound mold base or a 15,000-pound piece of molding room equipment, D-M-E Hoist Rings can add a margin of performance and convenience to the job at hand. The inherent danger posed by conventional static eyebolts (side-load breakage and hook disengagement) combined with stricter safety regulations make D-M-E Hoist Rings an important addition to any mold shop or molding plant. Unlike eyebolts, these Hoist Rings will not yield to heavy side loads within their rated capacity and can pivot 180° and swivel 360° to compensate for pitch, roll and sway when lifting heavy, unbalanced loads. As with all mechanical devices, regular inspection for wear, and strict adherence to installation and operating guidelines is necessary to prevent failure due to misuse.

- Safer and stronger than conventional eyebolts
- Pivots and swivels to compensate for pitch, roll and sway when lifting heavy or unbalanced loads
- Prevents accidents caused by eyebolt breakage or lifting hook disengagement
- Will not yield to heavy side loads when used in accordance with manufacturer's instructions
- Manufactured from high-quality alloy steel (certified heat treatment)
- Meets or exceeds MIL-STD-1365 (OR-11) and MIL-STD-209C
- Seven sizes to handle loads from 800 to 15,000 pounds
- Safety factor is 5 times the rated load capacity in any direction

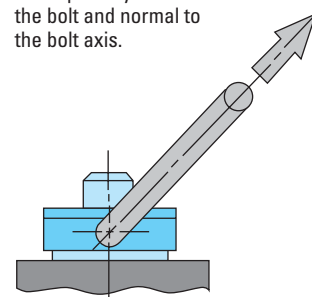


See what happens when heavy side loads are applied to a conventional eyebolt.



EXCESSIVE SIDE LOADS CAN CAUSE BOLT FAILURE.

The same load applied to a D-M-E Hoist Ring is translated into a primary tension load at the bolt and normal to the bolt axis.



HIGH-TENSION LOADS ARE WELL WITHIN THE DESIGNED SAFETY LIMITS OF THE STRESSED HOIST RING.



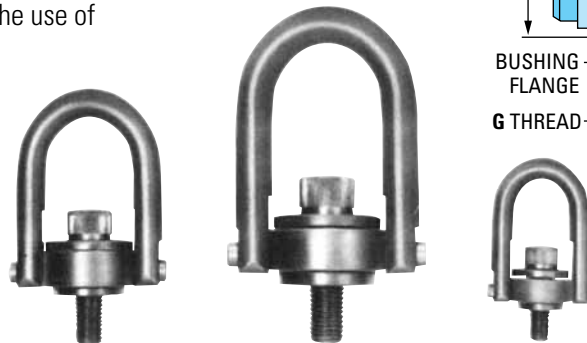
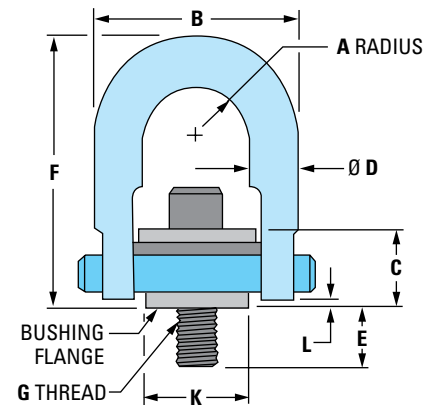
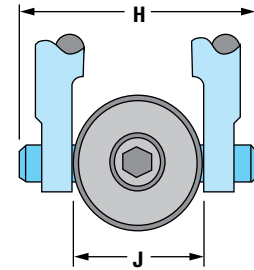
Hoist Rings – Inch Installation and Ordering Information

Installation Data

Tap workpiece for hoist ring bolt with axis vertical to mounting surface. Work surface should be flat and smooth to provide full 360° flush seating for the bushing flange. For installation in ferrous materials, the screw should be tightened to the full torque loading recommended in column TL below, +25% – 0.

(SAFETY NOTE: Some loosening may develop after prolonged service in a permanent installation. It is advisable to periodically retighten the mounting bolt to maintain the specified torque value.) For maximum safety with soft metal workpieces such as aluminum, use extra length bolts with minimum effective thread engagement of 2 times thread diameter. 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.

Material: Alloy steel (certified heat treatment), black oxide
Safety Factor: 5 times rated load in any direction
Range of Movement: 360° swivel; 180° pivot
Dimensions: Shown in inches (in)



NOTE: Additional hoist ring sizes and bolt lengths (including metric versions) are also available on request.

Hoist Rings – SHR (includes bolt and retaining ring)

ITEM NUMBER	RATED LOAD (LBS)	A RADIUS	B	C	Ø D	E EFFECTIVE THREAD PROJECTION	F	G	H CLEARANCE DIMENSION	J	K	L	TL** FOOT LBS	WEIGHT
SHR0001	800	7/16	15/8	41/64	3/8	9/16	25/8	5/16-18	2	1	3/4	3/32	7	5 OZ.
SHR0002	1,000	7/16	15/8	41/64	3/8	9/16	25/8	3/8-16	2	1	3/4	3/32	12	5 OZ.
SHR0003	2,500	7/8	3 1/4	15/32	3/4	3/4	4 3/4	1/2-13	3 5/8	2	1 1/2	3/32	28	2 LB. 5 OZ.
SHR0004	4,000	7/8	3 1/4	15/32	3/4	1	4 3/4	5/8-11	3 5/8	2	1 1/2	3/32	60	2 LB. 7 OZ.
SHR0005	5,000	7/8	3 1/4	15/32	3/4	1	4 3/4	3/4-10	3 5/8	2	1 1/2	3/32	100	2 LB. 9 OZ.
SHR0006	10,000	1 13/32	4 13/16	1 11/16	1	1 1/2	6 1/2	1"-8	5 1/8	3	2 5/16	17/64	230	7 LB.
SHR0007	15,000	1 3/4	6	2 1/8	1 1/4	1 7/8	8 3/4	1 1/4-7	6 1/2	3 3/4	3 1/4	1 11/32	470	14 LB.

**Recommended torque load +25% – 0

Replacement Bolt Kits – SHK (includes bolt and retaining ring)

ITEM NUMBER	USED WITH	SIZE	E
SHK0001	SHR0001	5/16-18 X 1 1/4	9/16
SHK0002	SHR0002	3/8-16 X 1 1/4	9/16
SHK0003	SHR0003	1/2-13 X 2	3/4
*SHK0004		1/2-13 X 2 1/4	1
SHK0005	SHR0004	5/8-11 X 2 1/4	1
*SHK0006		5/8-11 X 2 1/2	1 1/4
SHK0007	SHR0005	3/4-10 X 2 1/4	1
*SHK0008		3/4-10 X 2 3/4	1 1/2
SHK0009	SHR0006	1"-8 X 3 1/4	1 1/2
*SHK0010		1"-8 X 3 3/4	2
SHK0011	SHR0007	1 1/4-7 X 4	1 7/8



NOTES:

E = Effective Thread Projection

Bolts not marked with an asterisk () are identical to those supplied with hoist rings.

Bolts marked with an asterisk are longer, to provide thread projection of twice the bolt diameter, recommended for use with softer metals.

QUANTITY DISCOUNTS:

Discounts apply to current Net Prices. Ring and replacement bolts counted separately for quantity discounts. Different sizes may be combined.

25 to 49 Less 10%
 50 to 99 Less 13%
 100 or more Quoted by request

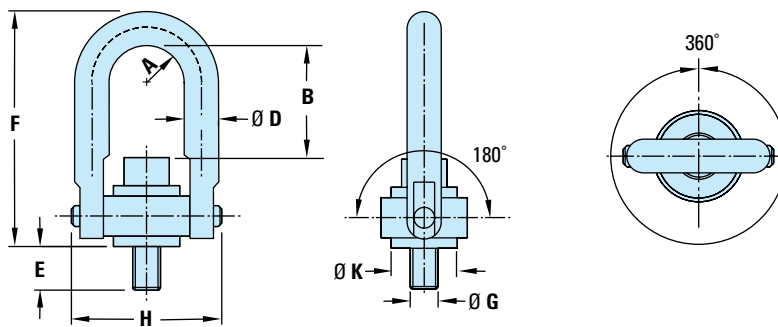
Hoist Rings – Metric

Hoist Rings – SHM, SHMR

Anillos elevadores | Olhais de suspensão articulados | Anneaux de levage articulés | Sicherheitsringschrauben

INFORMATION KEY:

- A** = U-Bar Inside Radius
- B** = Inside U-Bar Clearance
- D** = U-Bar Diameter
- E** = Thread Length Projection
- F** = U-Bar Height
- G** = Thread Diameter and Pitch
- H** = Dimension Over Pins
- K** = Flange Diameter
- Material:** See Features below
- Max. Temp.:** 200°C (392°F)
- Dimensions:** Shown in Millimeters (mm)



HOIST RING ASSEMBLY											REPLACEMENT KIT		
ITEM NUMBER	A	B	D	E	F	G	H	K	TL* (Kgm)	P* (Kg)	W* (Kg)	ITEM NUMBER	G
SHM 0001	10.9	32.0	9.7	12.5	67.8	M8 X 1.25	46.7	19.0	1.0	400	0.17	SHMR 0001	M8 X 1.25
SHM 0002	10.9	30.0	9.7	17.5	67.8	M10 X 1.50	46.7	19.0	1.7	450	0.17	SHMR 0002	M10 X 1.50
SHM 0003	22.4	60.5	19.0	19.0	121.4	M12 X 1.75	89.4	38.1	3.8	1050	1.08	SHMR 0003	M12 X 1.75
SHM 0004	22.4	56.5	19.0	29.0	121.4	M16 X 2.00	89.4	38.1	8.2	1900	1.12	SHMR 0004	M16 X 2.00
SHM 0005	22.4	52.5	19.0	34.0	121.4	M20 X 2.50	89.4	38.1	13.6	2150	1.19	SHMR 0005	M20 X 2.50
SHM 0006	35.6	69.0	25.4	37.0	165.6	M24 X 3.00	130.6	58.7	31.0	4200	3.10	SHMR 0006	M24 X 3.00
SHM 0007	44.5	107.4	31.7	41.9	221.7	M30 X 3.50	165.1	81.0	60.0	7000	6.30	SHMR 0007	M30 X 3.50
SHM 0009	57.2	166.5	44.4	63.5	316.7	M36 X 4.00	217.2	106.4	100.0	11000	15.50	SHMR 0009	M36 X 4.00
SHM 0010	57.2	160.5	44.4	68.0	316.7	M42 X 4.50	217.2	106.4	100.0	12500	16.00	SHMR 0010	M42 X 4.50
SHM 0011	57.2	154.5	44.4	82.4	316.7	M48 X 5.00	217.2	106.4	100.0	13500	16.80	SHMR 0011	M48 X 5.00
SHM 0012	76.2	210.0	57.15	101.6	419.1	M64 X 6.00	297.6	146.0	290.0	22500	40.0	SHMR 0012	M64 X 6.00

HOW TO ORDER: Specify Item Number. Omit spaces (spaces are only shown here for easier reading).

NOTE: All hoist ring assemblies and replacement kits listed in chart are in stock. (No specials available.)

REPLACEMENT KIT INCLUDES SCREW AND RETAINING RING

FEATURES

- Pivots and swivels to compensate for pitch, roll and sway when lifting heavy or unbalanced loads.
- High-strength alloy steel with minimum tensile strength of 1,250 MPa (125 kg/mm²).
- Certified heat treatment with 100% Magnaflux inspection.
- Corrosion-resistant plating.
- Maximum operating temperature 200°C (392°F).
- Safety factor is 5 times the rated load in any direction.

*NOTE

- Standard tolerance ± 0.8mm.
- **E** = the use of spacers between bushing flange and mounting surface is not recommended as this will reduce the safety load rating.
- **TL** = recommended torque load + 25% - 0.
- **P** = rated.
- **W** = weight (of Hoist Ring Assembly)

CARACTERÍSTICAS

- Gira y pivotea para compensar la inclinación, el rodaje y la oscilación al levantar cargas pesadas o sin equilibrio.
- Aleación de acero de gran resistencia con fuerza elástica mínima de 1,250 MPa (125 kg/mm²).
- Tratamiento de calor certificado con inspección Magnaflux del 100%.
- Enchapado resistente a la corrosión.
- Temperatura máxima de operación: 200°C.
- El factor de seguridad es 5 veces la carga calificada en cualquier dirección.

*NOTA

- Tolerancia estándar ±0.8mm.
- **E** = el uso de espaciadores entre el borde del cojinete y la superficie de montaje no se recomienda ya que esto reducirá la calificación de seguridad de la carga.
- **TL** = carga de torsión recomendada + 25% - 0.
- **P** = carga nominal.
- **W** = peso.

MERKMALE

- Gleichmäßiges anheben von schweren oder einseitigen Lasten durch Drehgelenke und Abstandsausgleichung. Keine Abweichung nach der schweren Lastseite.
- Legierter Spezialstahl mit min. Streckgrenze von 1.250 MPa (125 Kg/mm²)
- Beglaubigte Wärmebehandlung mit 100% iger Magnaflux.
- Kontrolle Korrosionsbeständiger Oberflächenschutz.
- Alle Materialangaben gelten bis zu einer Temp. bis max. 200°C.
- Alle Heberinge sind in allen Richtungen mit 5-facher Sicherheit ausgelegt.

*BEMERKUNGEN

- Allgemeine Toleranzen ± 0.8mm.
- **E** = zwischen Flansch und Montageoberfläche keine Distanzscheibe einlegen: dadurch wird die Sicherheit der Hebeleistung reduziert.
- **TL** = empfohlene Drehmomentbelastung.
- **P** = Nennlast.
- **W** = Gewicht.

CARACTÉRISTIQUES

- Ils pivotent et tournent pour amortir le balancement des charges lourdes ou déséquilibrées. Résistent aux charges latérales.
- Acier allié avec une résistance de 1.250 MPa (125 kg/mm²).
- Une trempe garantie par une inspection Magnaflux de 100%.
- Résiste à la corrosion grâce à un traitement de surface.
- Température de fonctionnement 200°C.
- Coefficient de sécurité 5:1 quelle que soit l'orientation de la charge.

*NOTE

- Tolérance standard ± 0.8 mm.
- **E** = L'emploi d'une rondelle de réglage entre l'anneau et la surface d'appui est à déconseiller. Elle réduirait le coefficient de sécurité.
- **TL** = couple de serrage + 25% - 0.
- **P** = charge maximum.
- **W** = Poids en kg.

CARACTERÍSTICAS

- Eles se articulam e giram para compensar a inclinação, rolagem e balanço de cargas pesadas ou desequilibradas.
- Liga de aço de alta resistência de 1,250 MPa (125 kg/mm²).
- Tratamento a calor, certificado por inspeção 100% Magnaflux.
- Revestimento resistente à corrosão.
- Temperatura máxima operacional de 200°C.
- Coeficiente de segurança de 5 vezes a carga nominal, em qualquer direção.

*NOTA

- Tolerancia padrão: ± 0.8mm.
- **E** = não se recomenda o uso de espaçadores entre o flange da bucha e a superfície de montagem, pois isto reduziria o valor da carga nominal de segurança.
- **TL** = carga recomendada de torque + 25% - 0.
- **P** = carga nominal.
- **W** = peso.

Lifting Holes

Lifting Holes can be used to install hoist rings for ease of handling. Mold base can be configured only with Lifting Holes which are appropriate for the specific mold base size. Refer to the preceding pages for a comprehensive selection of hoist rings.

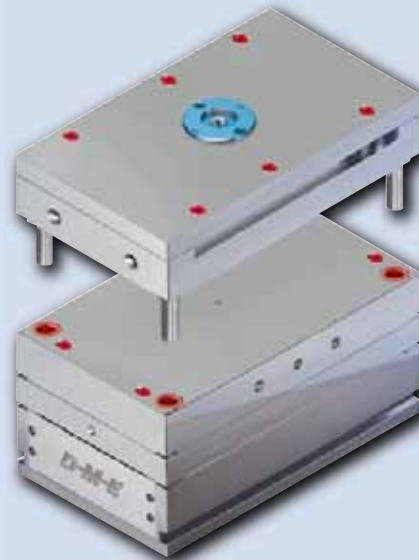


Lifting Hole Diameters

BASE SIZE	PLATE THICKNESS	
	0.875	1.375
88-1118	1/2-13 UNC	1/2-13 UNC
1123-1524	5/8-11 UNC	5/8-11 UNC
1529-1829	5/8-11 UNC	3/4-10 UNC
1835-2429	5/8-11 UNC	1"-8 UNC
2435	N/A	1"-8 UNC

Lifting Holes

THREAD SIZE	S	T MAX.
1/2-13	1.00	1.38
5/8-11	1.25	1.75
3/4-10	1.50	2.00
1"-8	2.00	2.62



FOR QUOTING OR ORDERING, SPECIFY:

Lifting Holes

Lifting holes can be selected up to three per plate edge. They are available in top clamp plate, A-plate, B-plate, support plate, and bottom clamp plate.

Note that for safety reasons, only the recommended hole diameters (or larger) shown in the table are offered.

Diameter _____

Quantity in each plate _____

Plates with lift holes _____

(Prints required if not on center)

