

TOLL FREE 844-527-8665 solutions@keystoneassembly.com





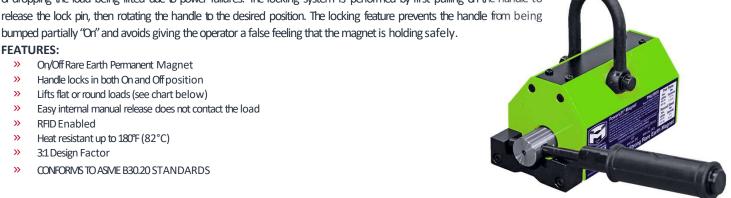
PERMANENT RARE EARTH LIFT MAGNETS

MAG-MATE® **POWERLIFT®**

These compact yet powerful Rare Earth permanent lift magnets can be used on flat or round surfaces and contain an internal release On/ Off device that does not contact or damage the surface of the part being lifted. Permanent magnetic lifts eliminate the fear of dropping the load being lifted due to power failures. The locking system is performed by first pulling on the handle to release the lock pin, then rotating the handle to the desired position. The locking feature prevents the handle from being

FEATURES:

- On/Off Rare Earth Permanent Magnet
- >> Handle locks in both On and Off position
- Lifts flat or round loads (see chart below)
- Easy internal manual release does not contact the load
- RFID Enabled
- Heat resistant up to 180°F (82°C)
- 3:1 Design Factor
- CONFORMS TO ASME B30,20 STANDARDS



			Overall		Magnet		Handle		Bail		
Model No.	Lift - Ibs (kg)	Ht. (in)	Ln. (in)	Ht. (in)	Wd. (in)	Ln. (in)	Ln. (in)	Th. (in)	Ht. (in)	Wd. (in)	Wt. (lbs)
PNL0250	250 (113)	6-5/8	5	2-5/8	2-5/8	3-5/8	4	3/16	1-3/8	1-1/2	7
PNL0800	800 (363)	8-7/8	7-7/8	3-7/8	3-5/8	6-3/8	8	1/2	2-3/8	1-3/4	21
PNL1600	1600 (726)	8-7/8	10-3/4	4-3/4	4-7/8	9-1/8	9	5/8	3-1/2	2-1/4	51
PNL2500	2500 (1134)	8-7/8	12-5/8	6-1/2	7-1/8	10-5/8	10-3/4	3/4	4-3/4	3-3/4	122
PNL5000	5000 (2268)	18	16-1/2	8-3/8	9-1/4	14-7/8	16-3/4	7/8	6	4-3/4	288
PNL6600	6600 (2993)	22-1/4	20	10-1/4	11-1/4	18-1/16	20-5/8	1-7/16	7-1/4	5-3/4	485

Lifting Value in Ibs (kg) & *Maximum Sheet Length Due To Sag For Material Thickness For Single Magnet Use

Model No.	1/4" (6' Length)	3/8" (8' Length)	1/2" (8' Length)	3/4" (8' Length)	1" (10' Length)	2" (10' Length)	3" (10' Length)
PNL0250	180 (81)	250 (113)	250 (113)	250 (113)	250 (113)	250 (113)	250 (113)
PNL0800	270 (122)	500 (226)	615 (279)	800 (363)	800 (363)	800 (363)	800 (363)
PNL1600	CF	CF	800 (362)	1600 (726)	1600 (726)	1600 (726)	1600 (726)
PNL2500	NA	NA	CF	CF	1490 (675)	2500 (1134)	2500 (1134)
PNL5000	NA	NA	NA	NA	NA	2625 (1190)	5000 (2268)
PNL6600	NA	NA	NA	NA	NA	NA	6600 (2993)

Round	Liftina	Applications
-------	---------	--------------

Model No.	Lift - lbs (kg)	Min. Dia. (in)	Min. Th. (in)	
PNL0250	125 (57)	2	1/2	
PNL0800	400 (181)	3	1/2	
PNL1600	800 (363)	4	1	
PNL2500	1250 (567)	5	2	
PNL5000	2500 (1134)	14	4	
PNL6600	3300 (1496)	CF	CF	

NOTE: Holding Values for the PowerLift® Magnets are stated at 33% of the actual value. We recommend when lifting sheets over 8', use 2 or more lifts on a spreader bar to prevent sheet flexing, sagging or peel-off. Thin material is susceptible to magnetic bleed through, resulting in two sheets being lifted at once. Round Item Holding Values are based on ideal conditions. Pipe length, wall thickness, diameter and surface condition can all affect the magnet's performance. Please consult the factory before specifying these magnets for use on round materials. *These maximum sheet lengths are selected due to the sag characteristics of the specified sheet. The item to be lifted must cover the entire length and width of the magnetic poles to properly engage and release the part. CF = Consult Factory NA = Not Applicable (Magnets listed will not turn "ON" on specified material thicknesses.)











MAG-MATE®

PERMANENT CERAMIC LIFT MAGNETS

BASIClift™

IMI's BasicLift™ is a powerful, no frills permanent ceramic lift magnet perfect for basic flat steel lifting. Featuring a lightweight and durable Stainless Steel design, the BasicLift™ has a full width cam to release the magnet from the steel surface and a tall lift lug for easy use with crane hooks and slings. The BasicLift™ offers a good value for your dollar with strong lifting capacity and basic lifting features.

FEATURES:

- >> Heat resistant up to 300°F (148°C)
- » Lightweight Design
- Durable Stainless Steel Casing
- >> Large Lift Lug
- >> Full Width Cam Release
- >> 2:1 Design Factor
- >> USA M.A.D.E.™



			Overall				Magnet		Ва	Bail Opening		
Model No.	Lift - Ibs (kg)	Height (in)	Width (in)	Length (in)	Handle (in)	Ht. (in)	Wd. (in)	Ln. (in)	Height (in)	Width (in)	Wt. (lbs)	
BL0400	400 (181)	5-1/2	6-1/2	6-1/2	12	1-5/8	3	4	2-1/4	3	11	
BL1000	1000 (453)	5-1/2	6-1/2	9-1/2	12	1-5/8	3	6-1/2	2-1/4	3	17	
BL1500	1500 (680)	5-1/2	6-1/2	13-3/4	12	1-5/8	3	10	2-1/4	3	24	

Lifting Value in lbs (kg) & *Maximum Sheet Length Due To Sag For Material Thickness For Single Magnet Use

Model No.	3/16" (6' Length)	1/4" (6' Length)	3/8" (8' Length)	1/2" (8' Length)	3/4" (8' Length)	1" (10' Length)	3" (10' Length)
BL0400	375 (170)	400 (181)	400 (181)	400 (181)	400 (181)	400 (181)	400 (181)
BL1000	725 (328)	800 (362)	875 (396)	975 (442)	1000 (453)	1000 (453)	1000 (453)
BL1500	875 (396)	1000 (453)	1400 (635)	1400 (635)	1500 (680)	1500 (680)	1500 (680)

NOTE: Holding Values for the BasicLiftTM Magnets are stated at 50% of the actual value. We recommend when lifting sheets over 8', use 2 or more lifts on a spreader bar to prevent sheet flexing, sagging or peel-off. Thin material is susceptible to magnetic bleed through, resulting in two sheets being lifted at once. *These maximum sheet lengths are selected due to the sag characteristics of the specified sheet. The item to be lifted must cover the entire length and width of the magnetic poles to properly engage and release the part.

CREATIVE LIFT®

Permanent lift magnets are ideal for handling steel plates, die castings, forgings, etc. They eliminate the need for clamping devices, slings or chains. One person can perform operations previously calling for two or more people. FEATURES:

- » Non-Marring Roller Cam Release will easily release parts without gouging your valuable materials
- Spring return handle
- >> Less torque required to release load
- "Jack Screw", Secondary Release
- » RFID Enabled
- » Lift capacity clearly stated on magnet
- Durable Stainless Steel Casing
- Heat Resistant up to 300°F (148°C)
- >> 3:1 Design Factor
- >> USA M.A.D.E.™
- CONFORMS TO ASME B30.20 STANDARDS





Lifting Value in lbs (kg) & *Maximum Sheet Length Due To Sag For Material Thickness For Single Magnet Use

Model No.	3/16" (6' Length)	1/4" (6' Length)	3/8" (8' Length)	1/2" (8' Length)	3/4" (8' Length)	1" (10' Length)	3" (10' Length)
CL0400	400 (181)	400 (181)	400 (181)	400 (181)	400 (181)	400 (181)	400 (181)
CL1000	600 (272)	900 (408)	1000 (453)	1000 (453)	1000 (453)	1000 (453)	1000 (453)
CL1500	800 (362)	1000 (453)	1500 (680)	1500 (680)	1500 (680)	1500 (680)	1500 (680)
CL2200	800 (362)	1064 (482)	1725 (782)	2000 (907)	2200 (998)	2200 (998)	2200 (998)
CL3000	800 (362)	1100 (498)	1800 (816)	2700 (1224)	3000 (1360)	3000 (1360)	3000 (1360)

NOTE: Holding Values for the Creative Lift® Magnets are stated at 33% of the actual value. We recommend when lifting sheets over 8', use 2 or more lifts on a spreader bar to prevent sheet flexing, sagging or peel-off. Thin material is susceptible to magnetic bleed through, resulting in two sheets being lifted at once. *These maximum sheet lengths are selected due to the sag characteristics of the specified sheet. The item to be lifted must cover the entire length and width of the magnetic poles to properly engage and release the part.







PERMANENT RARE EARTH LIFT MAGNETS

ADVANTAGELIFT™ MAGNETS

The AdvantageLift™ has many advantages over other lift magnets on the market. This On/Off Permanent Rare Earth Lift magnet built to last in a heavy-duty industrial work environment while providing all the safety features that protect workers and equipment. First, the handle operation is by far the best and most ergonomic feature of the magnet. Handle moves laterally in and out instead of pulling the handle or pressing a release button or lever. While other magnets are not equipped to use a "cheater bar" to turn the magnet On and Off, we encourage the use with this lift magnet. No need to bend over to turn the magnet On and

Off. Use a pipe "cheater bar" to side over the handle to turn the magnet On/Off when lifting steel off pallets or floor. Second, the lifting bail is the "lock-out" feature for this magnet. When magnet is under load, the lifting bail lock-out prevents the handle from being rotated to the Off position. This feature works on the vertical lifting bail as well.

FEATURES:

- On/Off Permanent Rare Earth Magnet
- Handle moves laterally instead of pulling, pressing buttons or levers
- >> Locking lifting bail(s) prevents accidental load release during lift
- » Recessed (protected) labels for extended life
- >> Lifts flats both horizontally and vertically with Vertical Lift Bail
- » RFID Enabled. Embedded RFID Chip
- Supports custom pole shoes (1/4"-20 Tapped Holes, ½" deep)
- Stationary Lift Bail(s)
- >> Heat resistant up to 180°F (82°C)
- >> 3:1 Design Factor
- ASME B30.20 BTH-1Design Category B Service Class 3



	W	'LL		Overall		Magnet Handle Bail							
Model No.	LBS	KG	Ht. (in)	Wd. (in)	Ln. (in)	Ht. (in)	Wd.(in)	Ln. (in)	Ln. (in)	Th. (in)	Ht. (in)	Wd. (in)	Wt. (lbs)
AL0500	500	227	8	5-7/16	10-1/8	4-5/8	3-3/8	6-3/16	10-1/8	1/2	1-7/8	1-1/2	33
AL1000	1000	454	8	5-7/16	13-1/4	4-5/8	3-3/8	9-3/16	10-1/8	1/2	1-7/8	1-1/2	46
AL1500	1500	680	10	6-7/8	13-5/16	6	4-3/8	9-3/16	11-7/16	5/8	2-7/32	1-3/4	80
AL2000	2000	907	10	6-7/8	16-5-/1/6	6	4-3/8	12-3/16	11-7/16	5/8	2-7/32	1-3/4	102
ALLUG1	-	-	3-9/16	4-3/8	4-11/16	-	-	-	-	1/2	1-7/8	1-1/2	4
ALLUG2			1-3/1	5-3//	5-3//					5/8	2-7/32	1_3//	6

Working	Norking Load Limit (WLL) in Ibs (kg) & *Max Sheet Length Due To Sa For Material Thickness For Single Magnet Use						Applications			WLL Vertical Flat Only				
Model No.	1/4" (6' Ln)	3/8" (8' Ln)	1/2" (8' Ln)	3/4" (8' Ln)	1" (10' Ln)	2" (10' Ln)	WLL- lbs (KG) 8"O.D. 1" Th	Min. Dia. (in)	Min. Th. (in)	Model No.	Lbs*	KG*	Length (in)	Weight (lbs)
AL0500	220 (100)	410 (186)	480 (218)	500 (227)	500 (227)	500 (227)	250 (113)	2	1/2	AL0500LUG	125	57	14-7/8	37
AL1000	290 (132)	590 (268)	670 (304)	1000 (454)	1000 (454)	1000 (454)	500 (226)	3	1/2	AL1000LUG	250	113	17-15/16	50
AL1500	340 (154)	670 (304)	770 (349)	1350 (612)	1500 (680)	1500 (680)	750 (340	4	1	AL1500LUG	375	170	18	86
AL2000	NA	NA	NA	1720 (780)	2000 (907)	2000 (907)	NA	5	2	AL2000LUG	500	227	22	108

*Note: Lift Capacity Based On 1" Minimum Material Thickness

NOTE: Working Load Limit (WLL) lifting values for the PowerLift® Magnets are stated at 33% of the actual value. We recommend when lifting sheets over 8', use 2 or more lifts on a spreader bar to prevent sheet flexing, sagging or peel-off. Thin material is susceptible to magnetic bleed through, resulting in two sheets being lifted at once. Round Item Lifting Values are based on ideal conditions. Pipe length, wall thickness, diameter and surface condition can all affect the magnet's performance. Please consult the factory before specifying these magnets for use on round materials. *These maximum sheet lengths are selected due to the sag characteristics of the specified sheet. The item to be lifted must cover the entire length and width of the magnetic poles to properly engage and release the part. CF = Consult Factory NA = Not Applicable (Magnets listed will not turn "ON" on specified material thicknesses.)



TOLL FREE 844-527-8665 solutions@keystoneassembly.com

ASSEMBLY SOLUTIONS, LLC



FXC PERMANENT LIFTING MAGNETS



The FXC lift magnets have a round, multi-pole magnetic field designed for lifting flat, circular-shaped parts such as rings, sleeves, bearing housings, flange plates and end of billet/pipe/shaft pieces. The on/off handle only requires 90° rotation and locks at both on/off positions. Durable construction with metal name plates and corrosion-resistant plated magnet surface. Features a 31 design factor and meets 2018 ASME B30.20 BTH-1 Design Category B, Service Class 3.

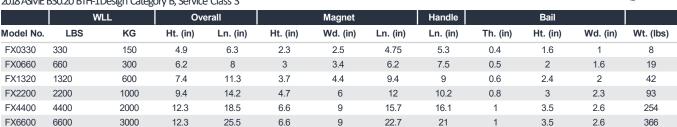
	WL	.L	WLL	WLL	Ove	erall	Depth	Magnet		Handle		Bail		
Model No.	LBS	KG	Min Thk	Min Dia	Ht.	Dia.	Ht. (in)	Ht. (in)	Dia.	Ln. (in)	Th.	Ht.	Wd.	Wt.
woder No.	LDS	NO	(in)	(in)	(in)	(in)	Ht. (III)	rit. (III <i>)</i>	(in)	LII. (III)	(in)	(in)	(in)	(lbs)
FXC0385	385	175	0.39	2.4	8.3	4.7	5	5.1	4.5	7.5	0.5	2	1.6	17
FXC0550	550	250	0.47	3.3	9.5	6.3	5.8	5.7	6	7.5	0.6	2.4	2	33
FXC0990	990	450	0.59	4.7	11.2	9.4	6.5	6.1	9.3	9	8.0	3	2.3	77



The FX universal, On/Off permanent lift magnets are ideal for a variety of manufacturing applications where you're mostly lifting flat material, but occasionally need to lift rounds.

- On/off, Rare-Earth Permanent Magnet
- On/off handle only requires 90° rotation and locks at both on/off positions
- Durable, recessed metal name plates, not stickers
- Corrosion resistant, plated-magnet surface >>
- >> Heat resistant up to 180°F (82°C)
- >> 3:1 Design Factor

2018 ASME B30.20 BTH-1 Design Category B, Service Class 3



Worki	ng Load Lin	nit (WLL) in I	bs (kg) & *Ma	Round Li	Vertical						
			For Sin	gle Magnet Us	se			Kouliu Li	•	20115	Part Flat
Model No.	1/4 (6')	3/8 (8')	1/2 (8')	3/4 (8')	1 (10')	2 (10')	3 (10')	WLL RD	Min/Max Dia	Min Thk	WLL
FX0330	142 (65)	330 (150)	330 (150)	330 (150)	330 (150)	330 (150)	330 (150)	165 (75)	2 - 8	5/16	66 (30)
FX0660	355 (152)	507 (230)	580 (263)	660 (300)	660 (300)	660 (300)	660 (300)	330 (150)	2 - 12	1/2	132 (60)
FX1320	331(150)	661 (300)	965 (438)	1320 (599)	1320 (599)	1320 (599)	1320 (599)	660 (300)	4 - 16	5/8	264 (120)
FX2200	NA	772 (350)	1160 (526)	1984 (900)	2200 (998)	2200 (998)	2200 (998)	1100 (500)	4 - 18	3/4	440 (200)
FX4400	NA	NA	965 (438)	2200 (998)	2646 (1200)	4400 (1996)	4400 (1996)	2200 (998)	6 - 24	1-1/2	NA
FX6600	NA	NA	NA	3850 (1746)	3968 (1800)	6600 (2994)	6600 (2994)	3300 (1497)	6 - 24	1-1/2	NA



Ideal for thin sheets or parts, tanks/containers and thin-walled pipe that normally can't be lifted with a permanent, On/Off magnet. The magnetic field on the FXP is concentrated and shallow to drive the strength into thin material.

- On/off Rare Earth Permanent Magnet >>
- On/off handle only requires 90° rotation and locks at both on/off positions >>
- >> Recessed metal name plates, not stickers
- Corrosion resistant, plated-magnet surface
- Heat resistant up to 180°F (82°C)
- 3:1 Design Factor

2018 ASME B30.20 BTH-1 Design Category B, Service Class 3

	W	/LL	Ove	erall		Magnet		Handle		Bail		
Model No.	LBS	KG	Ht. (in)	Ln. (in)	Ht.(in)	Wd. (in)	Ln. (in)	Ln. (in)	Th. (in)	Ht. (in)	Wd. (in)	Wt. (lbs)
FXP0375	375	170	5.3	7.7	2.7	2.5	6.8	5.3	0.4	1.6	1	12
FXP0725	725	330	6.7	10.4	3.5	3.4	9.4	7.5	0.5	2	1.6	28
FXP1450	1450	650	8	13.8	4.2	4.4	12.6	9	0.6	2.4	2	58

Wo	orking Load Li	Round Lifting Applications								
Model No.	9 ga (6')	3/16 (6')	1/4 (6')	3/8 (8')	1/2 (8')	3/4 (8')	1 (10')	WLL RD	Min/Max Dia	Min Thk
FXP0375	176 (80)	200 (91)	265 (120)	375 (170)	375 (170)	375 (170)	375 (170)	330 (150)	1 - 4	5/16
FXP0725	220 (100)	275 (125)	353 (160)	725 (329)	725 (329)	725 (329)	725 (329)	660 (300)	2 - 6.5	1/2
FXP1450	353 (160)	375 (170)	441 (200)	1060 (481)	1125 (510)	1450 (658)	1450 (658)	1210 (550)	3 - 9	5/8





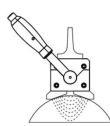
FX SERIES LIFTING MAGNETS

INDUSTRIAL MAGNETICS.

FXR PERMANENT LIFTING MAGNETS

The FXR is recommended for when lifting round/curved surfaces such as shafts, thick walled pipe, or billet, but occasionally need to lift flat material. Specially designed pole shoes provide a deep penetrating magnetic field and part stability.

- >> On/off, Rare-Earth Permanent Magnet
- >> On/off handle only requires 90° rotation and locks at both on/off positions
- >> Durable, recessed metal name plates, not stickers
- Corrosion resistant, plated-magnet surface
- Heat resistant up to 180°F (82°C)
- 3:1 Design Factor
- >> 2018 ASME B30.20 BTH-1 Design Category B, Service Class 3





	WLL		Overall		Magnet			Handle	Bail			
Model No.	LBS	KG	Ht. (in)	Ln. (in)	Ht. (in)	Wd. (in)	Ln. (in)	Ln. (in)	Th. (in)	Ht. (in)	Wd. (in)	Wt.(lbs)
FXR0220	220	100	5.2	6.3	2.7	2.7	5.4	5.3	0.4	1.6	1	9
FXR0500	500	225	6.7	8	3.5	3.8	7.2	7.5	0.5	2	1.6	21
FXR1000	1000	450	8.1	11.3	4.4	4.9	10.2	9	0.6	2.4	2	49
FXR1650	1650	750	10.3	14.2	5.6	6.7	13	10.2	8.0	3	2.3	108
FXR2650	2650	1200	13.1	18.5	7.5	9.7	18.2	16.1	1	3.5	2.6	280
FXR4000	4000	1800	13.1	25.5	7.5	9.7	24.1	21	1	3.5	2.6	402

Woi	rking Load L	imit (WLL) in I	Round	Round Lifting Applications						
Model No.	1/4 (6')	3/8 (8')	1/2 (8')	3/4 (8')	1 (10')	2 (10')	3 (10')	WLL RD	Min/Max Dia	Min Thk
FXR0220	154 (70)	220 (100)	220 (100)	220 (100)	220 (100)	220 (100)	220 (100)	220 (100)	1 - 6	5/16
FXR0500	310 (141)	500 (227)	500 (227)	500 (227)	500 (227)	500 (227)	500 (227)	500 (225)	2 - 8	3/8
FXR1000	331 (150)	661 (300)	780 (354)	1000 (454)	1000 (454)	1000 (454)	1000 (454)	1000 (450)	2 - 11	3/4
FXR1650	NA	882 (400)	1200 (544)	1650 (748)	1650 (748)	1650 (748)	1650 (748)	1650 (750)	3 - 15	3/4
FXR2650	NA	450 (204)	900 (408)	1764 (800)	2205 (1000)	2650 (1202)	2650 (1202)	2650 (1200)	5 - 22	1-1/2
FXR4000	NA	NA	1250 (567)	2646 (1200)	3307 (1500)	4000 (1814)	4000 (1814)	4000 (1800)	5 - 22	1-1/2

FXV PERMANENT LIFTING MAGNETS

The FXV On/Off permanent lift magnets are ideal for handling 90° shapes like angle iron, square tubing, and hot parts. Also works extremely well for inside webbing of I-beams where you need higher handle rotation. The on/off handle only requires 90° rotation and locks at both on/off positions. Durable construction with recessed metal name plates and corrosion-resistant plated magnet surface. Features a 31 design factor and meets 2018 ASME B30.20 BTH-1 Design Category B, Service Class 3.

Hot part Handling: contact time and cooling times

302°F (150°C) = 100%

392°F (200°C) = 50%, Max 4 minutes contact, 4 minutes cooling time

482°F (250°C) = 33%, Max. 4 minutes contact, 8 minutes cooling time

Ht. (in)

5.5

6.9

8.3

Overall

Ln. (in)

7.7

10.4

13.5

(Note: WLL reduces as temperature raises)

KG

220

440

800

LBS

440

880

1775

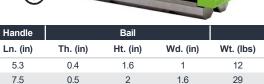
Model No.

FXV0440

FXV0880

FXV1775





2.4

FLAT SURFACES						ANGLE IRON LEGS DOWN (^) ANGLE LEGS UP (V)										
Working Load Limit (WLL) in lbs (kg) & *Max sheet Length Due To Sag For Material Thickness For Single Magnet Use						٨	V	٨	V	٨	٧	٨	V	٨	v	
Model No.	1/4 (6')	3/8 (8')	1/2 (8')	3/4 (8')	1 (10')	Model No.	1/4 (6')	1/4 (6')	3/8 (8')	3/8 (8')	1/2 (8')	1/2 (8')	3/4 (8')	3/4 (8')	1 (14')	1 (14')
FXV0440	270	415	440	440	440	FXV0440	260	100	260	175	260	220	260	220	260	220
	(125)	(190)	(200)	(200)	(200)		(120)	(50)	(120)	(80)	(120)	(100)	(120)	(100)	(120)	(100)

Magnet

Wd. (in)

2.5

3.4

4.4

Ln. (in)

6.8

9.4

12.6

Ht. (in)

3

3.8

4.5



0.6

62