



# Round Electro Lift Magnets

Deep Reaching Electromagnets For Thick and Heavy Ferrous Items

**MAG-MATE®**

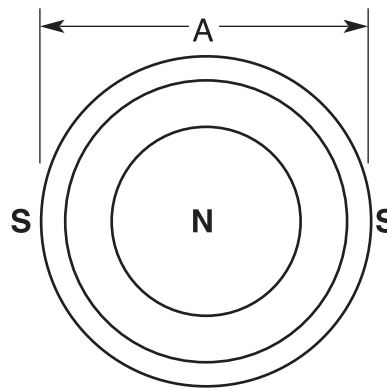
MG-02D

Round Electro Lift Magnets (RELM) provide concentrated holding power and a deep reaching magnetic field to lift thick, ferrous items. These electromagnetic lifts are an extremely valuable material handling tool. The RELM's durable construction make them suitable for working in most environments handling thick, non-flexing ferrous items such as steel plates, billets, die castings, forgings and more. Designed for plug-in use (no separate power supply required), the control switch for the "on, off and release" functions of the magnet are mounted on the top of the unit. When compared to our competitors electro lifts, IMI's RELM series of lift magnets offers lower wattage requirements, higher lifting capacities and a lower unit weight.

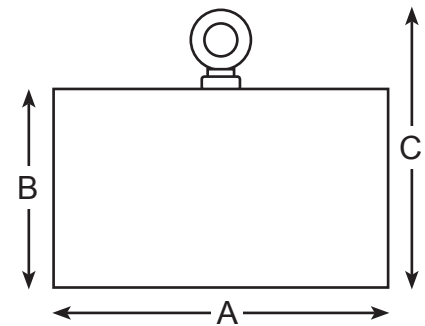


**NOTE:** RELM's are not intended to be used as scrap handling magnets. Picking up several pieces of steel at once is not recommended and may result in serious injury or property damage.

Never stand under load being lifted. Always use extra caution. Only use magnetic lifts on material that does not flex or bend. The surface of the lift and the load must be clean & free of chips, oil, slag, dirt, etc. Lifts must be centered on the load. Not recommended for painted or finish coated surfaces.



**BOTTOM VIEW**



**SIDE VIEW**

Magnets are supplied with a 3' long, heavy-duty cord. 100% duty cycle.  
 RELM06-RELM12: #16-3 SO Cord with mating twist-lock plug & receptacle  
 RELM16-RELM20: #14-3 SO Cord with mating twist-lock plug & receptacle

Part No.	*Holding Value (lbs.)	Voltage (VAC)	Watts	Amps	Magnet Dia. (A)	Magnet Height (B)	Overall Height (C)	Bail Ht.	Bail Wd.	Weight (lbs.)
RELM06	1,000	120	85	0.8	6"	3"	6"	1-5/16"	1-5/16"	30
RELM08	2,000	120	130	1.1	8"	4-1/8"	7-3/8"	1-5/16"	1-5/16"	58
RELM10	3,000	120	170	1.5	10"	4-3/8"	8-3/8"	1-5/16"	1-5/16"	86
RELM12	4,500	120	200	2.0	12"	5-1/4"	9-1/4"	1-3/4"	1-3/4"	152
RELM16	8,000	120	310	3.0	16"	6-3/4"	12-3/4"	6"	3-1/2"	365
RELM20	12,000	120	570	5.0	20"	7-1/2"	14"	7"	4"	545

\*RELM Holding Values are stated at 50% of the actual value for a 2 to 1 design factor.

### Key Markets

Fabrication, Machine Tool, Foundries, Steel Service Center, Machine Builders

### Related Products

PowerLifts®, Creative Lifts®, Sheet Handlers, Battery Lifts, Electromagnets, Floor Sweepers, Pick-Up Tools, Welding Squares & Grounds

All Photos And Drawings Represent The Products At The Time Of Publication (06/16)

# Round Electro Lift Magnets

Deep Reaching Electromagnets For Thick and Heavy Ferrous Items

## ROUND LIFT MAGNET - LIFTING GUIDELINES

MODEL NUMBER	WORKPIECE THICKNESS (in)	ZERO AIR GAP (Surface ground or CRS finish)			.010" AIR GAP (As HRS scale) Recommended max. limits		
		MAX. LOAD (lbs)	MAX. SIZE (Sq. Ft.)	MAX. LENGTH (Ft.)	MAX. LOAD (lbs)	MAX. SIZE (Sq. Ft.)	MAX. LENGTH (Ft.)
RELM06	1+	1000	25	5	700	16	4
	3/4	600	20	5	420	14	4
	1/2	480	24	5	380	19	5
	3/8	400	25	5	300	20	5
	1/4	180	16	4	160	16	4
RELM08	1-1/2+	2000	32	6	1500	24	6
	1-1/4	1400	27	6	950	18	6
	1	1000	25	6	900	22	6
	3/4	860	28	6	700	23	6
	1/2	700	35	6	550	27	6
	3/8	450	30	6	400	26	6
	1/4	200	20	5	180	18	4
RELM10	2+	3000	36	6	2000	24	6
	1-1/2	2200	36	6	1800	29	6
	1	1700	42	7	1400	35	6
	3/4	1400	45	7	1250	40	6
	1/2	700	35	7	600	30	5
	3/8	500	32	7	450	30	5
	1/4	250	25	5	200	20	5
RELM12	2+	4500	50	7	3400	40	7
	1-1/2	3500	56	8	3000	48	7
	1	2800	70	8	2300	57	7
	3/4	2100	70	8	1900	62	7
	1/2	1100	52	7	1000	46	7
	3/8	600	40	7	500	32	6
	1/4	300	30	6	200	20	5
RELM16	2-1/2+	8000	78	10	7500	72	10
	2	7500	90	10	7000	85	10
	1-1/2	6500	100	10	6000	96	10
	1	4500	112	10	4100	96	10
	3/4	2500	82	9	2200	72	10
	1/2	1300	64	8	1100	52	7
	3/8	750	46	7	600	36	6
	1/4	350	35	6	250	25	6
RELM20	2-1/2+	12,000	117	11	11,000	107	10
	2	10,000	120	11	9000	109	10
	1-1/2	8000	120	11	7200	116	10
	1	5500	134	11	5000	120	10
	3/4	3000	96	10	2600	82	10
	1/2	1500	70	9	1300	60	8
	3/8	1100	68	9	900	56	8
	1/4	400	40	7	350	35	6

**OPERATOR MUST READ ALL INSTRUCTIONS AND MANUALS  
CAUTION: THESE ARE GENERAL GUIDELINES ONLY**

Operator must be trained to check each lift for sufficient holding power.

The chart shows the effect of various lifting conditions on the lifting capacity. DO NOT EXCEED THE MAXIMUM WEIGHT, SIZE OR LENGTH.

The ratings shown are for SAE 1020 steel. Any alloys will reduce the lifting capacity. Multiply the rated capacity by the derating factor shown below.

ALLOY	DERATING FACTOR
CAST IRON	0.45
CAST STEEL	0.90
SAE 1095	0.70
3% SILICON STEEL	0.80
PURE NICKEL	0.10
VARIOUS TOOL STEELS	0.50
416 STAINLESS STEEL	0.50