

ELECTROMAGNETS & COUNTER WHEELS



Electromagnets and Power Supply

Electromagnets offer On/Off capability through the application of controlled DC electrical current, controlled holding power and on-command release of ferrous steel parts. Most electromagnets require specially designed power supplies to achieve optimum magnetic performance. IMI offers power supplies for all of your electromagnet applications. Continuous duty 158°F (70°C) to 192°F (89°C) temperature rise. All electromagnets are **100% Duty Cycle**.

Parallel Pole Electromagnets: Ideal for Pick and Place or Lifting Applications where parts have flat surfaces and can be custom machined to specifically fit the application. Side mounted terminal blocks allow one set of lead wires from magnet to power supply (no splicing required, minimum 18 gauge leads). These electromagnets offer broad application potential due to their ability to deliver improved reach out through air gaps (i.e. painted, plated & coated surfaces).

Rectangular & Round Island Pole Electromagnets: Ideal for Pick and Place or Lifting applications where parts have uneven surfaces or odd shapes and provide concentrated holding power & high responsiveness in manual or automatic applications.

Power Supply: Designed for manual operation. Uses 120VAC input, 16 to 26VDC variable dual output, 10-foot grounded power cord and fuse protection. Temp. range -4°F to 160°F (-20°C - 71°C). Power supplies with automatic reverse pulse upon release are available.

Rectangular Island Pole Electromagnets

WLL - lbs (kg)	Ht. (in)	Wd. (in)	Ln. (in)	Tap Size	No. of Holes	Spacing (in)	Watts	Wt. (lbs)	24 VDC	120 VAC
50 (22.68)	1-1/4	1-1/2	1-1/2	10-32	1	Centered	8.0	0.31	ES2-111	-
80 (36.29)	1-1/4	1-1/2	2-1/2	10-32	2	1	10.0	1.00	ES2-121	ESA-121
150 (68.04)	1-1/2	2-1/2	2-1/2	1/4-20	1	Centered	14.0	2.00	ES2-221	ESA-221
300 (136.08)	1-7/8	2-1/2	4-1/2	1/4-20	2	2	29.0	5.00	ES2-241	ESA-241
850 (385.55)	2-1/2	4	8	3/8-16	2	4	58.0	18.00	ES2-482	-

Round Island Pole Electromagnets

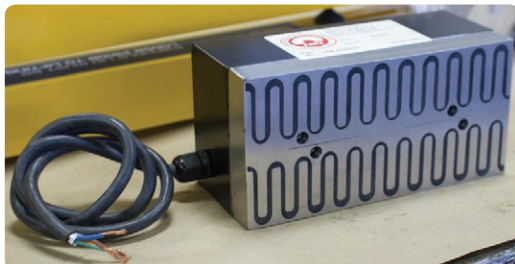
WLL - lbs (kg)	Dia. (in)	Ln. (in)	Tap Size	Watts	Wt. (lbs)	24 VDC	120 VAC
5 (2.27)	3/4	1-1/4	10-32	1.4	0.2	ER2-071	-
7 (3.18)	1	3/4	10-32	1.5	0.2	ER2-101	-
12 (5.44)	1	1-1/4	10-32	3.6	0.3	ER2-102	-
25 (11.34)	1-1/4	1-1/4	1/4-20	4.4	0.4	ER2-103	-
40 (18.14)	1-1/2	1-1/2	1/4-20	4.6	0.7	ER2-104	-
90 (40.82)	2	1-5/8	1/4-20	5.6	1.2	ER2-201	ERA-201
100 (45.36)	2	2-1/2	1/4-20	13.0	2.0	ER2-202	ERA-202
200 (90.72)	3	3	5/16-18	25.0	5.0	ER2-303	ERA-303
350 (158.76)	4	3	3/8-16	36.0	9.0	ER2-403	-

Parallel Pole Electromagnets

WLL - lbs (kg)	Ht. (in)	Wd. (in)	Ln. (in)	Tap Size	Holes	Spacing (in)	Watts	Wt. (lbs)	24 VDC
55 (24.95)	1-3/8	1	1	1/4-20	2	1	0.22	6	EP2-121
80 (36.29)	1-3/8	1	3	1/4-20	2	2	9	1.00	EP2-131
100 (45.36)	1-3/8	1	4	1/4-20	2	3	11	1.00	EP2-141
230 (104.33)	2-3/4	2	4	5/16-18	2	3	21	4.00	EP2-242
320 (140.62)	2-3/4	2	6	5/16-18	2	4.5	30	5.00	EP2-262
430 (195.04)	2-3/4	2	8	5/16-18	2	6.50	36	8.00	EP2-282

Power Supply

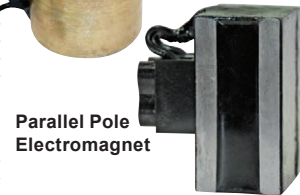
Ht. (in)	Wd. (in)	Ln. (in)	Watts	Wt. (lbs)	Amps	Model No.
1-3/8	3-5/16	6-1/4	100	1.00	4.5	PSA1210SB



Rectangular Electromagnet with 120 VAC cord



Round Electromagnet



Parallel Pole Electromagnet



Power Supply

Custom Electromagnets are available.

Magnetic Counter Wheels

Magnetic counter wheels can be used with a mechanical counter to measure the length of coiled steel and aluminum.** allowing the operator to monitor shift or roll production, detect shortages or overages and record the amount of defective stock. Unlike rubber faced wheels, magnetic wheels do not tend to slip on oily stock. When used in aluminum applications, magnetic counters can run on the steel feed or pinch rolls.



Wheel dia. is 3.8197" ±0.0010" to measure one linear foot per revolution. The face width is 0.813" with a 0.5" long hub with a 1/4-20 set screw.

Part No	Description
5C926-3/8	Counter Wheel - 3/8" Bore
5C926-1/2	Counter Wheel - 1/2" Bore

ON/OFF Magnetic Tie-Downs

Switchable Magnetic Tie-Downs for temporary or portable holding of tarps, signs, banners, etc. No need to drill, bolt or weld mounting tabs to steel surfaces. Place magnet on clean steel, push the handle slightly down and rotate 180° to turn magnet "On." Reverse steps to turn magnet "Off."

Features

- On/Off Permanent Rare Earth Magnet
- Locking On/Off Handle
- Performs best when mounted on a clean, smooth, flat, metal surface that is at least 1/4" thick
- Works on flat and round ferrous surfaces
- 4:1 design factor



Hold lbs (kg)	Round lbs (kg)	Ht. (in)	Wd. (in)	Ln. (in)	Loop Dia. (in)	Wt. (lbs)	Model No.
35.0 (15.88)	19 (8.62)	2-3/4	1-13/16	4-1/8	1-1/8	0.90	MTD035R
110 (49.90)	57 (25.85)	4-3/4	2-3/4	5-3/4	1-1/8	4.50	MTD110R