MAGNETIC SOLUTIONS

For Industrial, Commercial, Workshop, and Retail Applications

ECLIPSE® MAGNETICS

Over 100 Years of Magnetic Heritage

Eclipse Magnetics is at the forefront of development in magnetic materials and design. With over 100 years experience, we have a proven track record for supplying quality products and providing total customer support to some of the leading names in the industry.

Eclipse Tools North America Inc., is a wholly owned subsidiary of Spear & Jackson PLC, and is responsible for the sales, distribution, and customer service of the Eclipse Magnetics range throughout North America.

You've used our products...

There's a very good chance that today you've used something that either contains or was manufactured with the aid of an Eclipse Magnetics product.

Our range includes over 20,000

magnets and magnetic products which are used in most industries, including automotive, steel, food, environmental, communications, petrochemical, and engineering as well as in commercial, office, and retail premises. Almost all our products are available direct from stock.

Worldwide reach

Our sales and service network provides technical advice and support all over the world.

Celebrating 100 YEARS Manufacturing excellence 1914 - 2014

Contents

The world renowned HERITAGE range

Standard Magnets

Alnico Power Magnets

Product #	Length		Width		Height		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
811	1.181	30	0.787	20	0.787	20	10	5
812	1.575	40	0.984	25	0.984	25	20	9
813	1.771	45	1.181	30	1.181	30	26	12
814	2.283	57	1.594	41	1.377	35	52	24
815	2.756	70	2.251	57	1.625	41	82	37
816	3.125	79	3.250	83	2.125	54	103	47
817	2.374	60	2.440	62	1.575	40	77	35
818	3.125	79	3.374	86	2.125	54	132	60

Alnico Pockets

Product #	Length		Width		Height		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
E802	1.122	28.5	0.299	7.6	1.000	25.4	5.3	2.4
E803	1.311	33.3	0.625	15.9	1.378	35.0	8.8	4.0

Alnico Rectangular Bars

Product #	Length		Width		Height	
	in	mm	in	mm	in	mm
E842	1.968	50	0.590	15.0	0.393	10
E843	2.953	75	0.590	15.0	0.393	10
E844	0.787	20	0.393	10.0	0.197	5
E845	1.575	40	0.492	12.5	0.197	5
E846	2.362	60	0.590	15.0	0.197	5

Alnico Buttons

Product #	Diameter		Height		Pull Force	
	in	mm	in	mm	lbs	kg
E821	0.500	12.7	0.375	9.5	1.5	0.7
E822	0.750	19.1	0.500	12.7	4.2	1.9
E823	1.000	25.4	0.625	15.9	7.5	3.4
E824	1.250	31.8	1.000	25.4	10.6	4.8
E825	0.874	22.2	0.750	19.1	6.6	3.0

Alnico Cylindrical Bars

Product #	Diameter		Length	
	in	mm	in	mm
E805	0.236	6	0.787	20
E806	0.314	8	0.984	25
E807	0.393	10	1.181	30

Alnico Minor

Product #	Length		Width		Height		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
E801	0.874	22.2	0.311	7.9	0.437	11.1	2.0	0.9

Neodymium Discs

Product #	Diameter		Thickness		Pull Force		Units/Pack
	in	mm	in	mm	lbs	kg	
N100	0.12	3.0	0.06	1.5	0.7	0.3	10
N101	0.19	4.7	0.06	1.5	0.8	0.4	10
N104	0.22	5.6	0.50	12.7	4.1	1.9	5
N105	0.25	6.4	0.10	2.5	1.2	0.5	10
N106	0.25	6.4	0.13	3.2	1.4	0.6	10
N108	0.25	6.4	0.20	5.1	3.3	1.5	10
N109	0.25	6.4	0.25	6.4	3.5	1.6	10
N110	0.25	6.4	0.50	12.7	4.3	1.9	5
N112	0.38	9.5	0.06	1.5	1.8	0.8	10
N114	0.38	9.5	0.13	3.2	3.6	1.6	10
N115	0.38	9.5	0.19	4.7	4.0	1.8	10
N117	0.38	9.5	0.25	6.4	4.7	2.1	10
N119	0.38	9.5	0.50	12.7	7.2	3.3	5
N120	0.50	12.7	0.06	1.5	3.0	1.4	10
N121	0.50	12.7	0.13	3.2	4.6	2.1	10
N124	0.50	12.7	0.25	6.4	7.0	3.2	10
N125	0.50	12.7	0.38	9.5	14.3	6.5	5
N126	0.50	12.7	0.50	12.7	19.0	8.6	5
N127	0.75	19.1	0.38	9.5	22.0	10.0	5

UTILITY

Shallow Pot Magnets

Alnico Shallow Pots

Product #	Diameter		Thickness		Pull Force	
	in	mm	in	mm	lbs	kg
826	0.750	19.1	0.295	7.5	6.6	3.0
827	1.125	28.6	0.344	8.7	11.0	5.0
828	1.500	38.1	0.407	10.4	28.6	13.0

Ceramic Shallow Pots With Hook

Product #	Diameter		Thickness		Thread	Pull Force	
	in	mm	in	mm		lbs	kg
E890	1.811	46	0.421	10.7	M6	13.2	6
E891	2.205	56	0.421	10.7	M6	35.2	16
E892	2.598	66	0.421	10.7	M6	55.0	25

Ceramic Shallow Pots With Female Thread

Product #	Diameter		Thickness		Thread	Pull Force	
	in	mm	in	mm		lbs	kg
E860	0.394	10	0.177	5	M3	0.9	0.4
E861	0.512	13	0.177	5	M3	2.2	1.0
E862	0.629	16	0.177	5	M3	3.9	1.8
E863	0.787	20	0.236	6	M3	6.6	3.0
E864	0.984	25	0.276	7	M4	8.8	4.0
E865	1.260	32	0.276	7	M4	17.6	8.0
E866	1.417	36	0.276	7	M4	22.0	10.0
E867	1.575	40	0.315	8	M5	27.5	12.5
E868	1.850	47	0.354	9	M4	39.6	18.0
E869	1.969	50	0.394	10	M6	48.4	22.0
E870	2.240	57	0.433	11	M4	61.6	28.0
E871	2.480	63	0.551	14	M8	77.0	35.0
E872	3.150	80	0.708	18	M10	132.0	60.0
E873	3.543	90	0.787	20	M10	154.0	70.0
E874	3.937	100	0.866	22	M12	198.0	90.0
E875	4.921	125	1.024	26	M14	286.0	130.0

Ceramic Shallow Pots With Hook

Product #	Diameter		Height		Pull Force	
	in	mm	in	mm	lbs	kg
E895	2.598	66	0.421	10.7	55	25
E896	2.992	76	0.492	12.5	73	33
E897	3.397	100	0.590	15.5	121	55

With M6 tapped holes

Ceramic Shallow Pots With Countersunk Hole

Product #	Diameter		Thickness		Pull Force	
	in	mm	in	mm	lbs	kg
E876	0.984	25	0.276	7	9.9	4.5
E877	1.260	32	0.276	7	22.0	10.0
E878	1.575	40	0.315	8	44.1	20.0

Ceramic Pots

- Style A: Shallow Pot With Mounting Hole
- Style B: Shallow Pot With Bolt
- Style C: Shallow Pot With Loop

Style	Product #	Diameter		Thickness		Pull Force	
		in	mm	in	mm	lbs	kg
A	E680	1.25	31.8	0.19	4.8	4	2
A	E681	2.03	51.6	0.31	7.9	38	17
A	E682	2.63	66.8	0.38	9.7	82	37
A	E683	3.25	82.6	0.44	11.2	95	43
A	E2135	4.90	124.0	0.50	13.0	200	90
B	E692	1.20	30.6	1.19	30.2	4	2
B	E693	2.03	51.6	1.81	46.0	38	17
B	E694	2.25	57.2	1.19	30.2	10	5
B	E695	2.63	66.7	1.94	50.8	82	37
B	E696	3.81	96.8	1.88	47.6	95	43
C	E697	2.62	66.5	1.94	50.8	82	37
C	E698	3.25	82.6	1.19	30.2	96	43

Style A

Style B

Style C

UTILITY

Shallow Pot Magnets

Ceramic Pots With Hooks

Product #	Diameter		Height		Thickness		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
E879-RB	0.985	25	0.315	8	1.339	34	8.8	4.0
E880-RB	1.260	32	0.315	8	1.339	34	17.6	8.0
E881-RB	1.417	36	0.315	8	1.339	34	22.0	10.0

Round Base Magnets

- Style A: Shallow Pot With Mounting Hole
- Style B: Shallow Pot With Post
- Style C: Shallow Pot With Thread

Style	Product #	Diameter		Thickness		Pull Force	
		in	mm	in	mm	lbs	kg
A	E2100	1.21	30.7	0.171	4.34	4	1.8
A	E2110	1.42	36.1	0.283	7.19	16	7.3
A	E2116	1.40	35.6	0.283	7.19	16	7.3
B	E2140	3.20	81.3	0.500	12.70	95	43.1
C	E2115	1.70	43.2	0.300	7.62	12	5.4

Style A Style B Style C

Neodymium Shallow Pots With Threaded Hole

Product #	Diameter		Thickness		Thread	Pull Force	
	in	mm	in	mm		lbs	kg
E770NEO	0.236	6	0.177	4.5	M3	1.1	0.5
E771NEO	0.315	8	0.177	4.5	M3	2.9	1.3
E772NEO	0.394	10	0.177	4.5	M3	5.5	2.5
E773NEO	0.512	13	0.177	4.5	M3	13.2	6.0
E774NEO	0.630	16	0.177	4.5	M4	20.9	9.5
E775NEO	0.787	20	0.236	6.0	M4	30.8	14.0
E776NEO	0.984	25	0.275	7.0	M4	44.0	20.0
E777NEO	1.260	32	0.275	7.0	M5	77.0	35.0

Neodymium Hook Magnet

Product #	Diameter		Thickness		Pull Force	
	in	mm	in	mm	lbs	kg
E2226	1.42	36.10	0.25	6.35	40.0	18.1

Neodymium Pots

- Style A: Shallow Pot With Mounting Hole
- Style B: Shallow Pot With Bolt
- Style C: Shallow Pot With Loop

Style	Product #	Diameter		Thickness		Pull Force	
		in	mm	in	mm	lbs	kg
A	E684	2.03	51.6	0.18	4.6	148	67
A	E685	2.62	66.5	0.37	9.4	200	91
B	E686	2.03	51.6	0.18	4.6	95	43
B	E687	2.03	51.6	0.18	4.6	148	67
B	E688	2.62	66.5	0.37	9.4	200	91
C	E689	2.03	51.6	0.81	20.6	95	43
C	E690	2.03	51.6	0.81	20.6	148	67
C	E691	2.62	66.5	1.00	25.4	200	91

Style A Style B Style C

Neodymium Shallow Pots With Countersunk Hole

Product #	Diameter		Thickness		Hole Size		Pull Force	
METRIC	in	mm	in	mm	in	mm	lbs	kg
E1000/NEO	0.60	16	0.18	4.5	0.14	3.5	16.5	7.5
E1001/NEO	0.80	20	0.25	6.0	0.18	4.5	23.1	10.5
E1002/NEO	1.00	25	0.30	7.0	0.18	4.5	35.3	16.0
E1003/NEO	1.25	32	0.30	7.0	0.22	5.5	68.3	31.0
E1004/NEO	1.60	40	0.30	8.0	0.22	5.5	110.2	50.0
E1005/NEO	1.90	48	0.45	11.5	0.33	8.5	191.8	87.0

Samarium Cobalt Shallow Pots

Product #	Diameter		Height		Pull Force	
	in	mm	in	mm	lbs	kg
E760	0.236	6	0.177	4.5	1.1	0.5
E761	0.315	8	0.177	4.5	2.4	1.1
E762	0.394	10	0.177	4.5	4.4	2.0
E763	0.512	13	0.177	4.5	8.8	4.0
E764	0.630	16	0.177	4.5	13.2	6.0
E765	0.787	20	0.236	6.0	19.8	9.0
E766	0.984	25	0.276	7.0	33.0	15.0
E767	1.260	32	0.276	7.0	48.4	22.0

UTILITY

Deep Pot Magnets

Alnico Deep Pots

Product #	Diameter		Height		Thread
	in	mm	in	mm	
829	0.375	9.5	0.594	15	M3
830	0.500	12.7	0.625	16	M4
831NF	0.689	17.5	0.629	16	10UNF
832NF	0.807	20.5	0.748	19	10UNF
833NF	1.062	27.0	1.000	25	10UNF
834NF	1.377	35.0	1.181	30	10UNF

Neodymium Bi-Pole Deep Pots With Threaded Hole

Product #	Diameter		Height		Thread	Pull Force	
	in	mm	in	mm		lbs	kg
NH025	0.500	12.7	0.472	12	M5	5.5	2.5
NH065	0.630	16.0	0.630	16	M6	17.6	8.0
NH130	0.874	22.2	0.787	20	M6	35.3	16.0
NH240	1.000	25.4	0.984	25	M6	55.1	25.0

Alnico Pots

Product #	Diameter		Length		Thread	Pull Force	
	in	mm	in	mm		lbs	kg
M19169NK	0.250	6.35	0.500	12.70	No. 6 UNC	0.2	0.09
M19170NK	0.250	6.35	0.750	19.05	No. 6 UNC	0.3	0.14
M19171NK	0.250	6.35	1.000	25.40	No. 6 UNC	0.4	0.18
M19172NK	0.375	9.53	0.500	12.70	No. 6 UNC	1.4	0.64
M19173NK	0.375	9.53	0.750	19.05	No. 6 UNC	1.5	0.68
M19174NK	0.375	9.53	1.000	25.40	No. 6 UNC	1.7	0.77
M19175NK	0.500	12.70	0.500	12.70	No. 6 UNC	2.5	1.13
M19176NK	0.500	12.70	0.750	19.05	No. 6 UNC	3.0	1.36
M19177NK	0.500	12.70	1.000	25.40	No. 6 UNC	3.0	1.36
M19178NK	0.625	15.88	0.500	12.70	No. 10 UNC	2.3	1.04
M19179NK	0.625	15.88	0.750	19.05	No. 10 UNC	4.0	1.81
M19180NK	0.625	15.88	1.000	25.40	No. 10 UNC	4.0	1.81
M19181NK	0.750	19.05	0.500	12.70	No. 10 UNC	5.0	2.27
M19182NK	0.750	19.05	0.750	19.05	No. 10 UNC	9.0	4.08
M19183NK	0.750	19.05	1.000	25.40	No. 10 UNC	9.0	4.08
M19184NK	1.000	25.40	0.500	12.70	1/4" UNC	7.0	3.18
M19185NK	1.000	25.40	0.750	19.05	1/4" UNC	14.0	6.35
M19186NK	1.000	25.40	1.000	25.40	1/4" UNC	16.0	7.26
M19187NK	1.250	31.75	0.500	12.70	1/4" UNC	6.0	2.72
M19188NK	1.250	31.75	0.750	19.05	1/4" UNC	15.0	6.80
M19189NK	1.250	31.75	1.000	25.40	1/4" UNC	22.0	9.98
M19190NK	1.250	31.75	1.250	31.75	1/4" UNC	25.0	11.34

Samarium Cobalt Deep Pots

Product #	Diameter		Height		Pull Force	
	in	mm	in	mm	lbs	kg
E750	0.236	6	0.787	20	1.8	0.8
E751	0.315	8	0.787	20	4.8	2.2
E752	0.394	10	0.787	20	8.8	4.0
E753	0.512	13	0.787	20	13.2	6.0
E754	0.630	16	0.787	20	27.5	12.5
E755	0.787	20	0.984	25	50.6	23.0
E756	0.984	25	1.378	35	88.0	40.0
E757	1.260	32	1.575	40	132.0	60.0

WORKSHOP

Welding Aids

Switchable Welding Clamps

Product #	Angles	Dimensions		Pull Force	
		in	m	lbs	kg
QHCSS	45°, 90°	4.4 x 3.7 x 1.1	111 x 95 x 29	88	40
QHCSL	45°, 90°	6.0 x 5.1 x 1.4	152 x 130 x 35	165	75

Inside and Outside Welding Clamps

Product #	Angles	Height		Width		Thickness		Pull Force	
		in	mm	in	mm	in	mm	lbs	kg
IOWCC*	30˚, 60˚, 90˚ 30˚, 60˚, 90˚	3.0 5.0	75.5 125.0	2.0 3.3	52 85	0.5 0.7	14 18	20 33	9 15
IOWCL	30˚, 60˚, 90˚	6.5	165.0	4.3	110	0.8	20	40	18

* Pack includes 2 clamps

90˚ Switchable Fixed Welding Clamps

Product #	Angles	Dimensions		Pull Force	
		in	m	lbs	kg
FWCSS	90°	6.0 x 6.0 x 1.5	152 x 152 x 38	121	55
FWCSL	90°	7.8 x 7.8 x 1.9	197 x 197 x 48	265	120

Magnetic Quick Clamps

Product #	Length		Height		Width		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
E951	3.95	100.5	2.58	65.5	0.47	12	22	10
E953	3.95	100.5	2.58	65.5	0.79	20	33	15

Variable Welding Clamps

Product #	Length		Height		Width		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
E952	7.68	195	7.87	200	0.43	11	44	20

Product #	Length		Height		Width		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
E974	5.51	140	5.51	140	1.38	35	88	40

90° Fixed Welding Clamps

Product #	Length		Height		Width		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
E971	5.51	140	5.51	140	1.38	35	88	40
E972	8.86	225	8.86	225	0.87	22	165	75
E973	11.81	300	11.81	300	1.38	35	440	200

Mitre Clamps

Product #	Length Base Face		Length Top Face		Height		Width		Pull Force	
	in	mm	in	mm	in	mm	in	mm	lbs	kg
923	6.14	156	2.60	66	1.77	45	1.69	43	221	100
924	7.24	184	3.70	94	1.77	45	1.69	43	150	68

Workshop Aids

Holdfasts

Product #	Diameter		Height		Fixing Holes PCD		Holes	Pull Force	
	in	mm	in	mm	in	mm		lbs	kg
E939	1.75	44.5	1.75	44.5	1.25	31.7	2 x M8	44	20
E940	2.13	54.0	1.94	49.2	1.50	38.1	2 x M8	88	40
E941	2.76	70.0	2.54	64.5	2.00	50.8	2 x M8	194	88
E942	4.00	101.6	2.94	74.6	2.72	69.0	3 N/A	403	183

Steel Plate Drag

Product #	Length		Height		Width		Vertical Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
E964	4.64	118	3.86	98	1.49	38	374.8	170

Magnetizer/ Demagnetizer

Product #	Length		Width		Depth	
	in	mm	in	mm	in	mm
MDT050	2.0	52	1.9	50	1.1	29
MDW100	3.9	98	3.9	98	1.6	41

Product #	Length		Width		Material
	in	mm	in	mm	
E2500	1.0	25.4	1.0	25.4	High-Energy Flexible

Table Top Demagnetizer

Product #	Voltage	Width		Height		Depth	
		in	mm	in	mm	in	mm
DB956CAN	110	5.90	150	4.61	117	3.43	87

Magnetic Hand Lifter

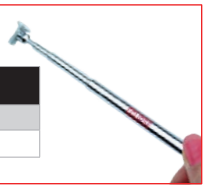
Product #	Length		Width		Height		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
MHL	5.1	130	1.1	28	3.3	85	99.2	45

Heavy Duty Hand-Held Magnetic Pick-Up Tool

Product #	Length		Width		Height		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
MPT185	4.7	120	2.8	70	7.3	185	13.2	6
MPT700	4.7	120	2.8	70	27.6	700	13.2	6

Telescopic Pick-up Tool

Product #	Length		Pull Force	
	in	mm	lbs	kg
EM967-R	5.8-26.0	147-660	2.1	1



Magnetic Pick-Up Tool

Product #	Handle Length		Pull Force	
	in	mm	lbs	kg
MPT900	36.0	914.4	65.0	29.5
MPT1100	39.0	990.6	8.8	4.0

Swarf Wand

Product #	Length		Collection Capacity	
	in	mm	lbs	kg
MW400	15.8	400	14.0	6.35
MW900	35.4	900	14.0	6.35

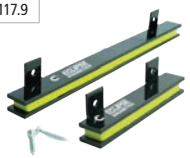
Magnetic Wristband

Product #	Overall Length		Width	
	in	mm	in	mm
MWB157	13.0	330	3.5	90

Workshop Aids

Magnetic Tool Racks

Product #	Length		Width		Hole Diameter		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
MTR330	6.0	152.4	1.0	25.4	0.25	6.35	120.0	54.4
MTR600	13.0	330.2	1.0	25.4	0.25	6.35	260.0	117.9

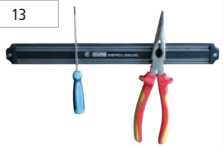


Product #	Length		Width		Hole Diameter		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
MTR120C	6.0	152.4	1.0	25.4	0.25	6.35	120.0	54.4

Heavy Duty Magnetic Tool Racks

Product #	Length		Height		Thickness	
	in	mm	in	mm	in	mm
MTR250	13.6	345	0.96	24.5	0.6	14

Product #	Length		Height		Thickness	
	in	mm	in	mm	in	mm
EM985-R	13.8	350	1.3	33	0.8	13

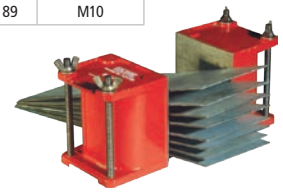


Magnetic Trays

Product #	Dimensions	
	in	mm
E630	14.2 x 6.3	360.7 x 130.0
E631	11.5 x 10.7	292.1 x 271.8
E632	9.5 x 5.6	241.3 x 142.2
E633	5.9 D	149.9 D
E634	4.3 D	109.2 D

Sheet Floaters

Product #	Width		Height		Depth		Mounting Hole Size
	in	mm	in	mm	in	mm	
E913	2.87	73	2.99	76	2.55	65	M8
E914	3.62	92	4.02	102	2.99	76	M8
E915	4.45	113	5.98	152	3.50	89	M10

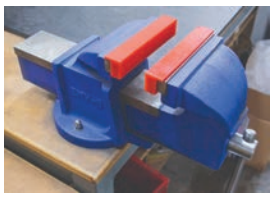


Round Holding Magnet

Product #	Diameter		Thickness		Pull Force	
	in	mm	in	mm	lbs	kg
E2600	1.425	36.2	0.283	7.2	16	7.3
E2601	2.000	50.8	0.315	8.0	25	11.3
E2602	2.625	66.7	0.374	9.5	65	29.5
E2603	3.203	81.4	0.425	10.8	95	43.1

Magnetic Soft Vise Jaws

Product #	Length		Width		Height	
	in	mm	in	mm	in	mm
MVJ/4	4.4	113	1.0	25	1.1	28
MVJ/6	6.1	156	1.0	25	1.1	28



Print Holder

Product #	Length		Pull Force	
	in	mm	lbs	kg
PH3535	1.5	38.1	18.5	8.4
PH3561	2.5	63.5	16.5	7.5
PH4267	2.0	50.8	39.6	18.0
PH6177	3.1	78.7	57.4	26.0

Workshop Aids

Magnetic Floor Sweepers

Product #	Sweeping Width		Overall Width	
	in	mm	in	mm
MSW304/HD	12.0	304.8	16.5	419.1
MSW610/HD	24.0	609.6	28.5	723.9
MSW914/HD	36.0	914.4	40.5	1028.7

Product #	Sweeping Width		Overall Width	
	in	mm	in	mm
MSW368/M	14.5	368	17	432
MSW685/M	27.0	686	30	762

Magnetic Sweeper With Quick Release

Product #	Sweeping Width		Overall Width		Wheel Size		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
MSW457/FR	18.0	457.2	22.5	571.5	7.0	177.8	97.5	44.2
MSW914/FR	36.0	914.4	44.4	1130.3	7.0	177.8	195.0	88.3

Product #	Head WIdth		Height Including Handle		Pull Force	
	in	mm	in	mm	lbs	kg
MSW385	16.0	385	41.3	1050	4.4	2
MSW620	24.0	620	41.3	1050	17.6	8
MSW940	37.0	940	41.3	1050	26.5	12

Forklift Magnetic Sweeper With Quick Release

Product #	Height		Depth		Sweeping Width	
	in	mm	in	mm	in	mm
MSW914/FLT/E	4.0	101.6	3.0	76.2	36.0	914.4
MSW1200/FLT/E	4.0	101.6	3.0	76.2	48.0	1219.2

Magnetic Clip

Product #	Diameter		Pull Force	
	in	mm	lbs	kg
E1063	1.0	25.4	3.0	1.4

Product #	Size		Material	Colour
	in	mm		
E2400	3.5	88.9	Neodymium Magnet, Plastic Clip	Red

Magnet With Carabiner Hook

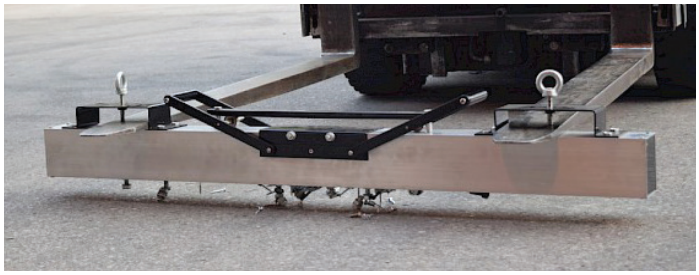
Product #	Diameter		Pull Force	
	in	mm	lbs	kg
E1066/NEO	1.102	28	44.1	20.0

Magnet With Ring

Product #	Diameter		Pull Force	
	in	mm	lbs	kg
E1067/NEO	1.125	28.575	35.0	15.9

Rubber Covered Magnet With Swivel Hook

Product #	Diameter		Pull Force	
	in	mm	lbs	kg
E2227	1.50	38.1	65	29.5

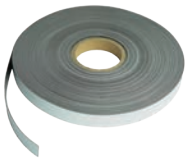


WORKSHOP

Workshop Aids

White Magnetic Strip

Product #	Length		Thickness		Width	
	ft	m	in	mm	in	mm
FM655	200	0.3	0.03	0.76	1.0	25.4
FM656	200	0.3	0.03	0.76	2.0	50.8

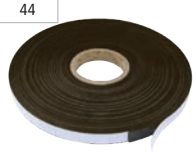


Low Profile Channel Magnets

Product #	Length		Width		Height		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
E660	5.5	139.7	1.4	34.9	0.4	9.5	28	12
E662	5.5	139.7	1.4	34.9	0.6	14.3	49	22
E663	12.0	304.8	1.5	38.1	0.3	8.7	15	6
E664	12.0	304.8	1.5	38.1	0.6	15.9	30	13
E665	12.0	304.8	2.0	50.8	0.6	15.9	45	20
E666	12.0	304.8	2.5	63.5	0.6	15.9	60	27

Adhesive Back Magnetic Tape

Product #	Width		Thickness		Length		Pull Force	
	in	mm	in	mm	ft	m	lbs/in³	g/cm³
EM884-R	0.511	13.0	0.02	0.50	3.3	1	1.0	28
FM660	0.295	7.5	0.03	0.75	32.8	10	1.6	44
FM661	0.492	12.5	0.03	0.75	32.8	10	1.6	44
FM662	0.787	20.0	0.03	0.75	32.8	10	1.6	44



Channel Magnet

Product #	Length		Width		Height		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
E898/2	5.12	130	1.81	30	0.512	13	31	14
E899	7.48	190	1.69	43	0.512	13	106	48

Standard Channel Magnet

Product #	Length		Pull Force	
	in	mm	lbs	kg
FCM20327	8.0	203.2	25.0	11.3

Magnetic Extrusion

Product #	Width		Thickness		Length		Pull Force	
	in	mm	in	mm	ft	m	lbs/in³	g/cm³
EM880-R	0.375	9.5	0.141	3.6	6.6	2	2.35	65
FM670	0.375	9.5	0.141	3.6	32.8	10	2.35	65
FM671	0.433	11.0	0.181	4.6	32.8	10	2.35	65
FM672	0.590	15.0	0.251	6.4	32.8	10	2.35	65

Rectangular Base Magnet With Thread

Product #	Length		Height		Width		Thread	Pull Force	
	in	mm	in	mm	in	mm		lbs	kg
FCM7623N	3.0	76.2	0.75	19.05	0.90	22.86	3/8-24	20.0	9.1

Rectangular Base Magnet

Product #	Length		Height		Width		Pull Force	
	in	mm	in	mm	in	mm	lbs	kg
FCM7623	3.0	76.2	0.25	6.35	0.90	22.86	20.0	9.1

Marker Magnets

- Sold in a pack of 10

Diameter		Yellow	Blue	Red	White	Green	Black	Orange
in	mm							
0.8	20	RM765/Y	RM765/BLU	RM765/R	RM765/W	RM765/G	RM765/BLK	RM765/O
1.2	30	RM768/Y	RM768/BLU	RM768/R	RM768/W	M768/G	RM768/BLK	RM768/O

Magnetic Bases

Complete Bases & Stands

E901 E903CP E905 E906 E910 E909

Product #	Product # NA	Base Part #	Switching Type	Fitment Part #	Fitment Type	Hold	
						lbs	kg
E901	E901	E901WF	Push Button	RP991BL	Heavy duty with fine adjustment	176	80
E903CP	E903CP	E900WF	Push Button	RP72CP	Light duty	66	30
E905	M19713ASS	E905WF (M15885)	Lever	RP995BL	Heavy duty	176	80
E906	M19712ASS	E905WF (M15885)	Lever	RP991BL	Heavy duty with fine adjustment	176	80
E910	E910	E905WF (M15885)	Lever	RP999	Mechanical one piece	176	80
E911FINE	M19711ASS	E905WF (M15885)	Lever	N/A	Fine adjustment	220	100
E909	E909	834	Non-switchable	RP909FIT	One pillar	31	14

Magnetic Bases With Push Button Switch

Product #	Length		Height		Width		Hole	Hold	
	in	mm	in	mm	in	mm		lbs	kg
E900WF	1.890	48	2.047	52	1.575	40	M8	66	30
E901WF	2.519	64	3.000	76	2.519	64	M8	176	80
E902WF	1.188	30	1.188	30	1.188	30	M5	38	17

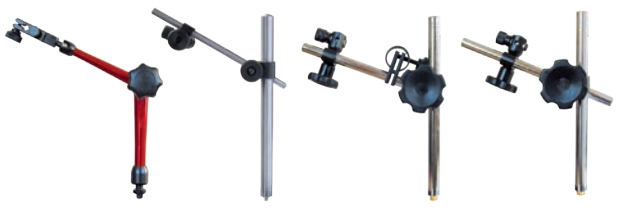
Magnetic Bases With Toggle Switch

Product #	Product # NA	Length		Height		Width		Hole	Hold	
		in	mm	in	mm	in			lbs	kg
E905WF	M15885	2.559	65	2.165	55	1.969	50	M8	176	80
E905WF/100	M19290	2.953	75	2.165	55	1.969	50	M8	220	100
M19784	M19784	4.609	117	2.165	55	1.969	50	M10	292	132
M19785	M19785	4.719	120	2.047	52	2.359	60	M8	337	153

Fitment Stands For Bases

Product #	Pillar Height		Pillar Diameter		Crossbar Length		Crossbar Diameter		Screw Fixing
	in	mm	in	mm	in	mm	in	mm	
RP72CP	7.28	185	0.492	12.5	5.90	150	0.250	6.3	M8
RP991BL	6.89	175	0.472	12.0	6.50	165	0.394	10.0	M8
RP995BL	6.89	175	0.472	12.0	6.50	165	0.394	10.0	M8

Product #	Maximum Extension Height		Screw Fixing
	in	mm	
RP999	11.6	295	M8



RP999 RP72CP RP991BL RP995BL

PRECISION

Premier Range Chucks

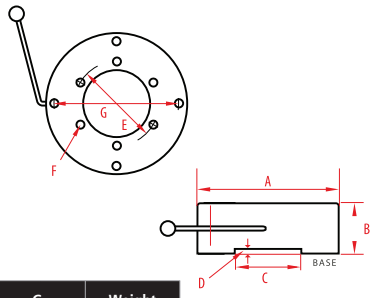
Rectangular

- Unique top plate concentrates magnetic energy on to the chuck face
- The all-metal top plate is extra thick to ensure accuracy after frequent re-grinding
- Chrome plated side and end stops for packing and positioning
- The chucks can be partially magnetized to allow part positioning
- Removable, ergonomically designed handles allow easy switching

Product #	Length		Height		Width		Pole Pitch	Weight	
	in	mm	in	mm	in	mm		lbs	kg
AX47/P	7.99	203	1.65	42	5.00	127	17.6	18.1	8.2
AX510/P	10.87	276	2.09	53	5.08	129	35.0	35.3	16.0
AXS612/P	12.68	322	2.48	63	5.95	151	32.0	48.5	22.0
AXS618/P	17.76	451	2.48	63	5.95	151	32.0	79.4	36.0
AXM824/P	24.53	601	2.48	63	7.91	201	35.0	101.4	56.0

Circular

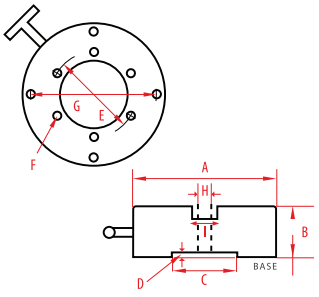
- Unique top plate concentrates magnetic energy on to the chuck face
- The chucks can be partially magnetized to aid the correct positioning of the workpiece
- Grooved rings in the top plate assist in visual positioning to aid quick changeover
- Excellent for holding thin ring-shaped components that can be subject to radial distortion



Product #	A		B		C		D		E		F	G		Weight	
	in	mm	in	mm	in	mm	in	mm	in	mm		in	mm	lbs	kg
AX475C/P	4.75	121	1.77	45	2.00	51	0.26	6.5	3.00	76	M6	4.02	102	8.8	4
AX651C/P	6.50	165	2.36	60	3.00	76	0.26	6.5	4.00	102	M10	5.51	140	22.0	10
AX91C/P	9.00	229	2.00	60	3.39	86	0.26	6.5	4.50	114	M10	7.52	191	44.1	20
AX12C/P	12.00	305	2.83	72	5.98	152	0.19	5.0	7.25	184	M12	10.00	254	101.4	46

Radial Pole

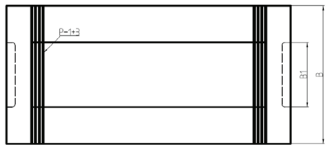
- Dynamically balanced to enable use at high RPM
- All metal top plate and a rugged industrial build ensures accuracy and longevity
- Through-bored (except NRC100C) allows through-flushing of coolant during machining
- Optional centre plug available

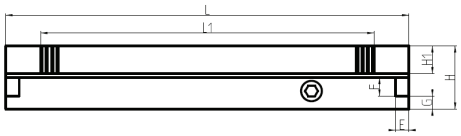


Product #	A		B		C		D		E		F	G		H		I		No. Of Poles	Weight	
	in	mm	in	mm	in	mm	in	mm	in	mm		in	mm	in	mm	in	mm		lbs	kg
NR100C	3.94	100	1.89	48	2.00	51	0.24	6	N/A	N/A	M6	3.00	76	N/A	N/A	N/A	N/A	6	6.8	3.1
NR150C	5.90	150	2.72	69	3.00	76	0.16	4	N/A	N/A	M10	4.02	102	1.26	32	1.42	36	10	19.4	8.8
NR225C	8.86	225	2.80	71	3.38	86	0.19	5	4.48	114	M10	7.52	191	1.97	50	2.13	54	14	40.8	18.5
NR300C	11.81	300	2.80	71	5.98	152	0.19	5	7.24	184	M12	10.00	254	2.44	62	2.60	66	18	88.2	40.0

Universal Range Chucks

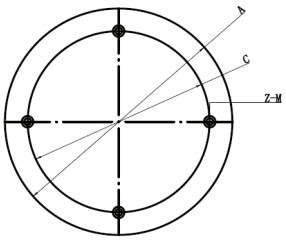
Rectangular

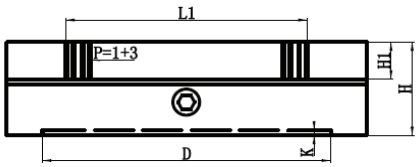


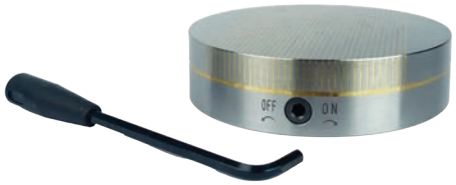


Product #	L		B		H		H1		L1		F		G		E		B1	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
ERUC1018	7.0	180	3.9	100	1.9	48	0.81	20.5	5.7	146	0.47	12	0.51	13	0.33	8.5	1.89	48
ERUC1325	9.8	250	5.0	128	1.9	48	0.81	20.5	7.7	196	0.47	12	0.51	13	0.33	8.5	2.44	62
ERUC1530	11.8	300	5.9	150	1.9	48	0.81	20.5	9.7	246	0.47	12	0.51	13	0.33	8.5	2.87	73
ERUC1545	17.7	450	5.9	150	2.0	52	0.81	20.5	15.6	396	0.55	14	0.51	13	0.33	8.5	2.87	73
ERUC2060	23.6	600	7.9	200	2.0	52	0.83	21.0	21.0	532	0.55	14	0.51	13	0.33	8.5	3.86	98

Circular







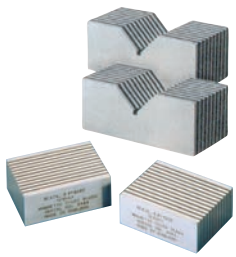
Product #	A		H		H1		C		D		K		L1	
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
ECUC100	3.9	100	1.9	48	0.8	20.5	2.8	70					2.6	66
ECUC125	4.9	125	1.9	48	0.8	20.5	3.7	95	3.1	80	0.12	3	3.3	83
ECUC160	6.3	160	1.9	48	0.8	20.5	4.7	120	3.9	100	0.12	3	4.2	107
ECUC200	7.9	200	2.0	52	0.8	20.5	6.3	160	4.7	120	0.16	4	5.7	145
ECUC250	9.8	250	2.0	52	0.8	20.5	7.1	180	6.3	160	0.16	4	7.2	182

'V' Blocks

Product #	Width		Length		Height		Max Clamping Forces Top		Bottom	
	in	mm	in	mm	in	mm	lbs	kg	lbs	kg
E934	2.75	69.85	4.0	101.6	3.75	95.25	440	200	330	150
E934MP	2.75	69.85	4.0	101.6	3.75	95.25	440	200	330	150
E935	2.75	69.85	3.2	80.0	3.75	95.25	352	160	264	120
E935MP	2.75	69.85	3.2	80.0	3.75	95.25	352	160	264	120

Chuck Blocks

Product #	Width		Length		Height		Units/Pack
	in	mm	in	mm	in	mm	
950	2.95	75	2.36	60	1.18	30	1 Matched Pair
950V	3.94	100	1.97	50	1.57	40	1 Matched Pair



ULTRALIFT

Magnetic Lifters

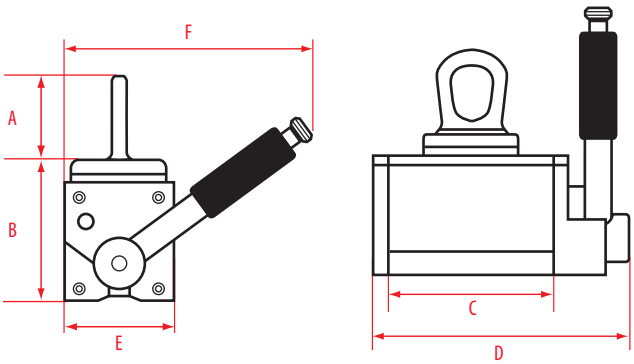
3 Patented Safety Features

- Locking switch handle mechanism
- Unique 'Safety Shim' - Pre-test any load to ensure a 3:1 safety factor
- Locking eye mechanism - Magnet cannot be switched off while holding a load

Ultralift Plus

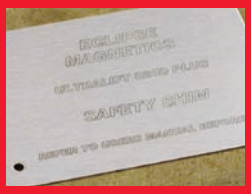
Magnetic lifters are quicker, easier and safer to use than slings, chains, hooks and grabs, and do not mark the load.

Onboard switching and permanent magnet technology mean installation and operation could not be easier and running costs are non-existent. Access is only required to the load's top face, allowing for more efficient storage and handling.



3:1 Safety Factor

The patented 'safety shim' allows pre-testing of the load to be lifted irrespective of weight, material, thickness and surface condition.

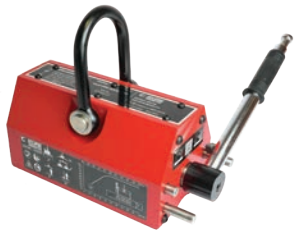


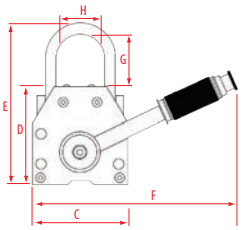
Product #	Product # UK	Self Weight	Dimensions						Material Length Max.	Flat Section		Round Section	
			A	B	C	D	E	F		WLL	Thickness Min.	WLL	Diameter Max
		lbs	in	in	in	in	in	in	in	lbs	in	lbs	in
UL0275+	UL0125+	8.8	2.5	2.9	4.0	6.1	2.7	6.0	60	275	0.8	110	8
UL0550+	UL0250+	24.2	3.7	3.8	6.1	8.4	3.6	8.6	60	550	1.0	220	12
UL1100+	UL0500+	59.4	4.8	5.0	8.8	11.8	4.8	10.5	80	1100	1.2	440	16
UL2200+	UL1000+	138.6	5.5	6.9	10.2	14.1	6.9	15.4	120	2200	1.8	880	18
UL4400+	UL2000+	345.4	7.7	8.9	14.5	18.8	9.2	19.4	120	4400	2.8	1760	24

Ultralift E

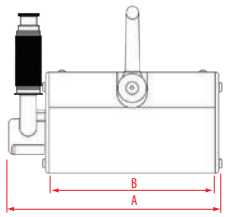
High Performance Lifter

- Lifts up to 4400 lbs (flat) 1980 lbs (round)
- Locking switch handle safety mechanism





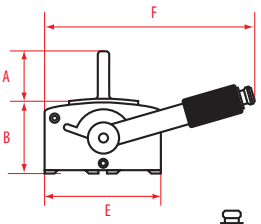
			Dimensions								Material Length Max	Flat Section		Round Section	
Product #	Product # UK	Self Weight	A	B	C	D	E	F	G	H		WLL	Thickness Min.	WLL	Diameter Max
		lbs	in	in	in	in	in	in	in	in	in	lbs	in	lbs	in
ULE0220	ULE0100	6.7	5.2	3.6	2.6	3.0	4.9	7.3	1.8	1.3	39	220	0.6	110	3.1
ULE0660	ULE0300	22.1	8.0	6.2	3.7	3.7	6.7	10.0	2.5	1.8	59	660	0.8	330	3.9
ULE1320	ULE0600	50.7	11.1	9.8	4.7	4.6	8.7	11.0	3.5	2.4	79	1320	1.2	660	5.5
ULE2200	ULE1000	86.0	13.8	12.1	5.4	5.5	10.6	12.2	4.3	3.1	98	2200	1.6	1100	7.0
ULE4400	ULE2000	163.1	17.4	14.9	6.4	6.7	12.2	16.1	4.7	3.6	118	4400	2.0	1980	11.8

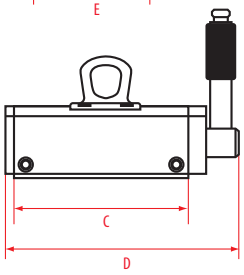


Ultralift TP

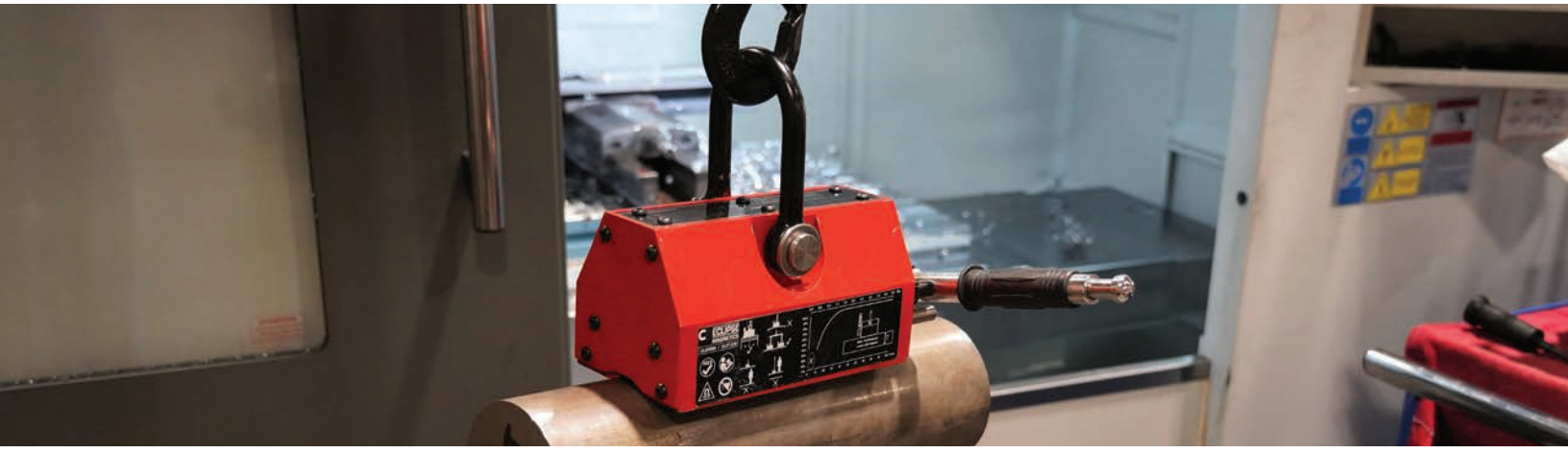
Thin Plate Lifter

- Lifts up to 880 lbs (flat)
- Specifically designed for the safe lifting of thin plate and pressings
- Can lift single sheets from the tops of stacks
- Locking switch handle safety mechanism





			Dimensions						Material Thickness							
									0.20 in		0.25 in		0.30 in		0.40 in	
Product #	Product # UK	Self Weight	A	B	C	D	E	F	WLL	Length	WLL	Length	WLL	Length	WLL	Length
		lbs	in	in	in	in	in	in	lbs	in	lbs	in	lbs	in	lbs	in
TP330	TP150	18	3	3	6	8	4	7	165	60	220	60	330	60	440	60
TP660	TP300	33	3	3	12	14	4	7	330	80	440	80	660	80	880	80



SERVICE & MAINTENANCE

Inspection and Certification

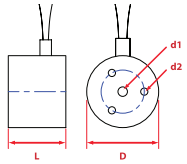
All lifting systems should be serviced every 12 months by a competant person.
Please refer to manual guidelines for inspection requirements.

Electromagnets

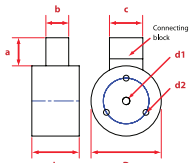
Energize to Hold Power required to turn magnet ON. Power removed to turn magnet OFF.

- Sturdy bright nickel plated cylinder, passivated with body mounting
- High-quality permeable iron for low remanence
- Armature plates to suit

Operating Voltage	12VDC & 24VDC
Connector Options	Flying leads, two-pole connector
Mounting	Threaded holes in magnet rear face
Finish	Bright nickel plated with machined face
ED Rating	100%
IP Rating	54 (20 for the two-pole connector)



25, 30mm diameter. Free leads (500mm long)
Leads: 1 red, 1 black. 0.3mm square x 500mm long)



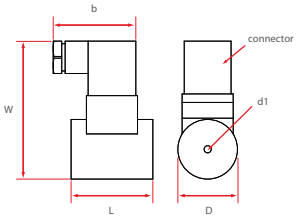
40, 50, 65, 80, 100mm diameter.
12VDC & 24VDC. Two pole connector

			Standard Operating Voltage				D		L		a		b		c		d1	d2	PCD		Pull at Zero Air Gap	
	in	mm	24VDC Product #	Current mA	12VDC Product #	Current mA	in	mm	in	mm	in	mm	in	mm	in	mm			in	mm	lbs	kg
Diameter	0.984	25	M52172/24VDC	90	M52172/12VDC	180	0.984	25	0.787	20	-	-	-	-	-	-	M4	M3	0.590	15	24.9	11.3
	1.181	30	M52173/24VDC	140	M52173/12VDC	280	1.181	30	0.945	24	-	-	-	-	-	-	M5	M3	0.709	18	55.8	25.3
	1.575	40	M52174/24VDC	230			1.575	40	1.063	27	0.62	16	0.51	13	0.74	19	M5	M4	1.023	26	126.8	57.5
	1.969	50	M52175/24VDC	240			1.969	50	1.181	30	0.62	16	0.51	13	0.74	19	M5	M4	1.339	34	241.9	109.7
	2.559	65	M52176/24VDC	340			2.559	60	1.378	35	0.62	16	0.51	13	0.74	19	M8	M5	1.575	40	369.8	167.7

Energize to Release Power required to turn magnet OFF. Power removed to turn magnet ON.

- Sturdy bright nickel plated cylinder, passivated with body mounting
- High-quality permeable iron for low remanence
- Armature plates to suit

Operating Voltage	24VDC (with rectified plug connector)
Connector Options	Hirschman connector
Mounting	Central machined hole in rear face of magnet
Finish	Bright nickel plated with machined face
IP Rating	54
Duty Cycle	S2



			Standard Operating Voltage		D		W		L		b		d1	Pull at Zero Air Gap	
	in	mm	24VDC Product #	Current mA	in	mm	in	mm	in	mm	in	mm		lbs	kg
Diameter	1.378	35	M52177/24VDC	240	1.378	35	3.070	78	1.890	48	1.968	50	M5	62.8	28.5
	1.968	50	M52178/24VDC	350	1.968	50	3.700	94	2.480	63	1.968	50	M5	103.8	47.1

Armature Plates

- To fit both types

Product #	Diameter		Height		Screw
	in	mm	in	mm	
M52171/25ARM	0.984	25	0.118	3	M3
M52171/30ARM	1.181	30	0.157	4	M4
M52171/40ARM	1.575	40	0.197	5	M4
M52171/50ARM	1.969	50	0.236	6	M4
M52171/65ARM	2.559	65	0.315	8	M5

To achieve the optimum pull force, 100% contact area must be achieved using the recommended armature plate. The force will be affected if other material specifications, thickness and surfaces are used, or if the armature fails to make positive contact over the full diameter of the face of the magnet. Where misalignment is likely to be an issue we recommend that an oversized armature plate is used to ensure 100% full contact, this however will reduce the stated pull force by approximately 10%

Guide To Magnet Materials

When choosing a magnet material for an application you should take the following factors into consideration:

- Flux requirement of the application
- Maximum operating temperature
- Likely exposure to corrosive conditions
- Magnetic stability
- Size and weight limitations

What strength/flux of magnet do you need?

This table shows the comparative magnetic strengths of the same volume of the four main magnet materials in terms of their maximum energy products (BHmax) in CGS or SI units and their typical pole face flux densities.

Magnet Material	Max Energy Product: CGS	Max Energy Product: SI	Flux Density
Ferrite	3.3 MGOe	26 Kj/m^3	1000 Gauss
Alnico	5.2 MGOe	42 Kj/m^3	1300 Gauss
Samarium Cobalt	26 MGOe	208 Kj/m^3	3500 Gauss
Neodymium	35 MGOe	279 Kj/m^3	4500 Gauss

Neodymium is the most powerful magnet material available. It is ideal for applications where high flux density is required or where space is at a premium.

What temperature will the magnet be operating in?

In most applications, operating temperature is not a consideration but extreme temperatures will have an effect on the magnetic performance.

Each material has different temperature characteristics and these must be reviewed to ensure that the correct material is used for the application. Using the wrong material could lead to loss in magnetic performance.

Other Factors To Consider

Corrosion

Another potential cause of performance loss is a breakdown of the magnet's composition due to corrosive environmental effects. This table shows relative corrosive resistance for each material when uncoated. As neodymium's corrosive resistance is poor it is usually sold with a protective coating, normally either nickel or zinc.

Magnet Material	Corrosion Resistance Uncoated	Resistance To Demagnetisation
Ferrite	Excellent	High
Alnico	Fair	Low
Samarium Cobalt	Excellent	Very High
Neodymium	Poor	Very High

External Demagnetising Fields / Magnet Stability

Temperature has the greatest effect on magnet stability but high external magnetic fields can influence performance. This table shows the relative demagnetising effect on each material.

Please note, this guide provides general information only.

For specific information please contact us at 1-800-260-2124.

In addition to the products in this catalogue, Eclipse Magnetics are innovators in other fields:

BoilerMag

Magnetic filters for removing ferrous oxide contaminants from heating systems.

BoilerMag®

Magnetic Filtration Systems

Magnetic filters for removing problem ferrous particles from industrial fluids.

Magnetic Separation

Magnetic separators for removing metal contamination from bulk materials such as grains, powders, granules, and liquids.

Material Handling & Workholding

Extensive range of products that improve safety and increase efficiency when lifting, holding, moving or clamping ferrous materials, workpieces, tools, and components.

Eclipse Tools North America Inc.
442 Millen Road, Unit 9, Stoney Creek, ON L8E 6H2
1-800-260-2124 www.eclipsemagnetics.com/na sales@eclipsetoolsinc.com

While every effort has been made to ensure the accuracy of the information within this publication, please note that specifications may change without notice.