GOUDSMIT

magnetic supplies

Pot magnets

GOUDSMIT magnetic supplies

The Goudsmit Magnetic Supplies B.V. premises in Waalre

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GOUDSMIT MAGNETIC SUPPLIES BV

Since 1954 Goudsmit Magnetic Supplies has been a supplier of magnets for the widest possible range of applications. Customers, varying from the automobile industry to electronics, rely on Goudsmit Magnetic Supplies for the supply of the most suitable magnet for their applications. Here, the extensive range of **Neoflux**® (Nd-Fe-B), Ferrite, Samarium-Cobalt, Alnico and pot electromagnets often provides ready-made solutions.

Measurements and research in the field of magnets is an everyday occurrence at the state-of-the-art Goudsmit laboratory. Here, high-quality computers and special equipment are essential. Such as the Helmholtz-coil and Permagraph, with which the quality of magnets can be determined with extreme accuracy. One of the reasons why Goudsmit is able to guarantee the quality requirements in accordance with ISO 9001.

The technical competence, the advice of the personnel and the high-quality equipment form the basis for a perfect product. A product that is there to serve you. Goudsmit will be happy to advise you in this field and guarantee you the best.

Visit our website at http://www.goudsmit-magnetics.nl for further information on the company, products and services.

LLOYD'S REGISTER QUALITY ASSURANCE · ISO9001 · Accredited by the Dutch Council for Certification

ISO certified (no. 651218)

Permanent magnetic slide conveyors for removing punch and pressing waste such as pressing remnants, trimming waste, ball bearings , nails etc.

The warehouse

Magnetic sheet separators simplify the separation of stacked steelsheets without damage

An overview of all companies of the Goudsmit Magnetics Group

An in-house test room for checking that magnets or magnet systems fulfil specified requirements

The Permagraph is used to check that magnets fulfil the required magnetic specifications, even up to a temperature of 200°C!

POT MAGNETS IN GENERAL

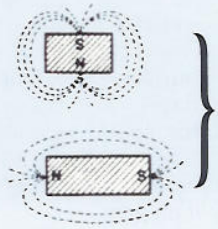
Pot magnets position ferromagnetic items quickly and easily in the required place. Thanks to its construction, these magnet systems have only one surface of magnetic attraction. In other words, all the other sides are non-magnetic. This form of construction restricts the further spread of the magnetic field. As a result, other items or machine parts in the vicinity of the pot magnet do not become magnetised.

Magnetic fields and strength

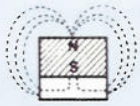
The diagrams below show the strength and direction of the magnetic field. The factors shown are target values with regard to the permanent magnet. By adding, for example, a steel plate or U-profile, the magnetic values increase. Here, the thickness of the steel elements, the volume of the magnets and the composition also play a role.

Building in possibilities

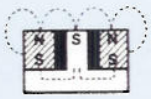
The wide range of different models means that a suitable pot magnet can almost always be found for your application. You should take the following into consideration, particularly with regard to high pot magnets that are manufactured with rare materials in a 'sandwich' form and may not be pressed directly into iron. The special structure can cause magnetic short-circuiting; this leads to a definite decrease in attractive force.



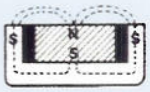
Permanent magnet
Factor 1



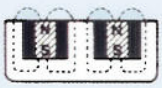
Magnet with small steel plate
Factor 1,3



Small steel plate with core
Factor 4,5

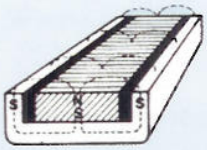


Disc magnet in steel pot
Factor 6

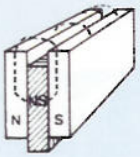


Ring magnet in steel pot
Factor 7

AlNiCo magnet in steel pot
Factor 7,5

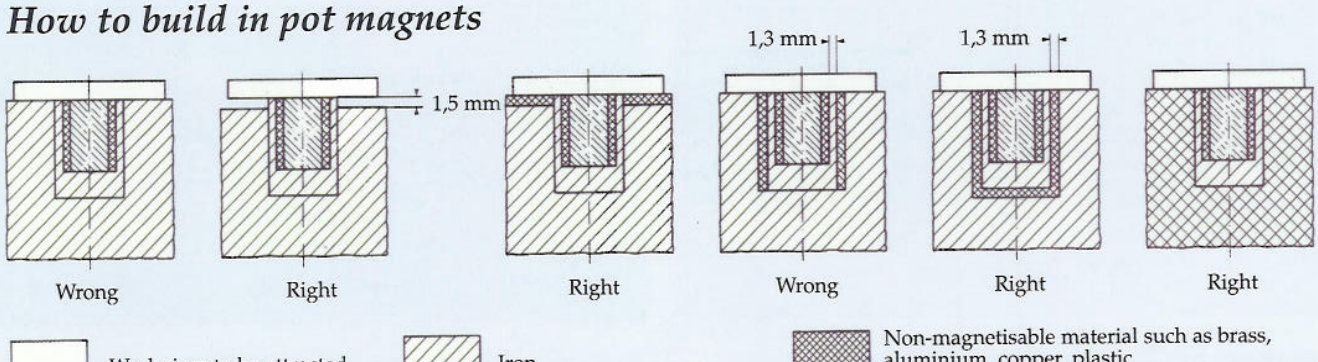


Magnetic block in steel U-profile
Factor 5,5



Magnetic block between two small steel plates (sandwich system)
Factor 18

How to build in pot magnets



OPTIMAL ATTRACTIVE FORCE

The tensile forces shown in the tables have been measured under optimum conditions. These can be achieved when the pot magnet is placed upright on smoothly polished items of soft iron or steel 37,5 mm thick. If the pole surfaces of the pot magnets are dirty or the items are not flat enough, this will considerably decrease the attractive force. Figure 3 shows the decrease in attractive force in the event of an air gap. Clean pole surfaces and smooth work pieces are therefore advisable to ensure optimum tensile force of the pot magnet.

Pot magnets retain their magnet force indefinitely. Only increases in temperature and external magnetic fields can reduce their magnetic force. The following tables show the possible decrease in magnetic force under various circumstances.

Please consult us if you know that you will be exposing the magnet to alternating current fields or high temperatures for some time. We will advise you on the installation of the magnets, in choosing the right pot magnet or to give the pot magnet a special coating. The latter is applicable in the chemical industry in particular.

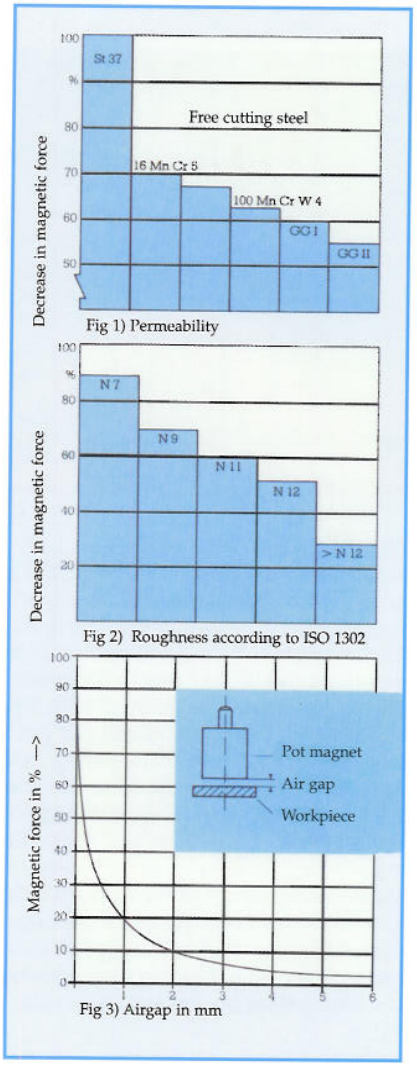


Figure 1:
Different alloys influence the magnetic force due to the permeability of the alloyed material. The higher the carbon content of the alloy components, the lower the magnetic attractive force.

Figure 2:
The magnetic force decreases in proportion to the roughness of the surface of the item.

Figure 3:
As the air gap increases in size, the attractive force of the magnet decreases. Non-magnetic materials between the magnet and the item have the same effect on the magnet as an air gap.

WHAT YOU SHOULD BEAR IN MIND!

Everyone working with magnetic materials are strongly advised to read the following and to act accordingly. The careless handling of permanent magnets can cause serious injuries. Both the attractive and repellent forces of the magnet can be dangerous.

- Slide the magnets carefully apart to avoid getting your fingers between the magnets. This also prevents damaging of the coating of **Neoflux®** magnets. Wear gloves whenever possible.
- You are strongly advised to use safety goggles and other protective measures when tooling magnets.
- Beware! **Neoflux®** magnets may never be tooled in an explosive environment as sparks can be produced.
- **Neoflux®** magnets must always be moistened before and during processing to prevent spontaneous combustion of the grinding chips. Therefore: never process dry.
- Powder and grinding chips released after processing **Neoflux®** magnets must always be kept in containers filled with water or in hermetically sealed rooms to prevent spontaneous combustion.
- Please unpack the magnets at a safe distance from iron objects.
- Keep the magnets at a safe distance from magnetic information carriers such as credit cards, tapes and diskettes and from electronic equipment such as hearing aids, pacemakers, measuring and regulation instruments, computers and watches. These can be influenced or (permanently) damaged by the extremely strong magnetic fields.

Radiation and maximum temperature deployability

- Permanent pot magnets may not be exposed to radioactive and gamma radiation for long periods of time. This decreases their magnetic force.
- The maximum permissible temperature deployability is as follows.

Type	Maximum temperature
Alnico pot magnets	450°C
Ceramic pot magnets	200°C
Neoflux® pot magnets	80°C
Samarium-Cobalt pot magnets	200°C
Pot electromagnets	180°C
Permanent electro pot magnets	200°C

Effects on the human body

- Contact with magnetic materials is not known to cause any negative effects. Persons who are allergic to ceramic and metal materials may experience a similar reaction if they should come into contact with magnetic materials.

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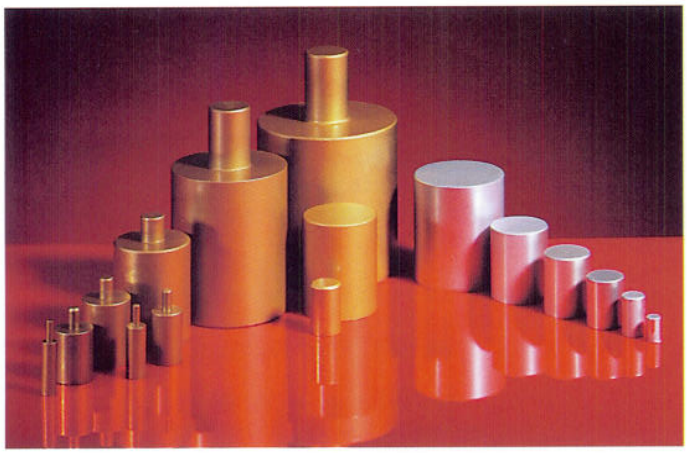
BRIEF DESCRIPTION OF POT MAGNETS



ALNICO POT MAGNETS

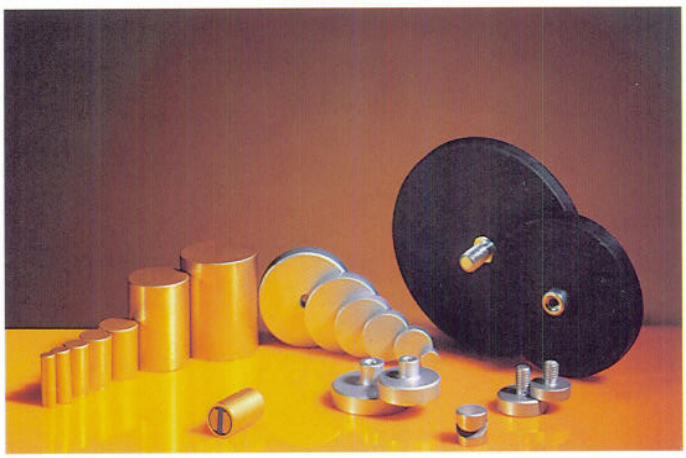
Alnico pot magnets are housed in a steel pot, with a non-magnetisable material (brass or aluminium) in between. These pot magnets can be used at temperatures of up to 450°C. A decrease in magnetic force of 30 to 40% then occurs. This is, however, not permanent, it is restored as soon as the pot magnet cools down to room temperature.

CERAMIC POT MAGNETS

Ceramic pot magnets are also fitted with a steel pot to protect the magnetic field. They require very little building-in height and therefore offer many structural advantages. Ceramic pot magnets can be used at temperatures of up to 200°C. Heating to this temperature does, however, cause a decrease in magnetic force of approximately 30 to 40%. This is restored when the magnet returns to the normal ambient temperature

SAMARIUM-COBALT POT MAGNETS

Despite the fact that Samarium-Cobalt pot magnets have a steel pot, this does not provide any protection against out-flowing magnetic force. Samarium-Cobalt pot magnets should therefore not be built into steel elements without due consideration.
One condition for building into steel is that the distance between the steel element and the pot magnet must be between 1.5 and 6 mm, depending on the size of the pot magnet.
Samarium-Cobalt pot magnets can be used in temperatures of up to 200°C. This does, however, cause a decrease in magnetic force of 15-20%. This is restored when the magnet temperature returns to normal.
The attractive force of Samarium-Cobalt pot magnets is approximately 5 times as high as that of ceramic pot magnets. These pot magnets are also more difficult to demagnetise in a strong alternating current field. Samarium-Cobalt pot magnets are often used in the welding moulds of spot-welding machines and in very small tools that nevertheless require a great attractive force. You can recognise Samarium-Cobalt pot magnets by the white colour on the magnetic side.

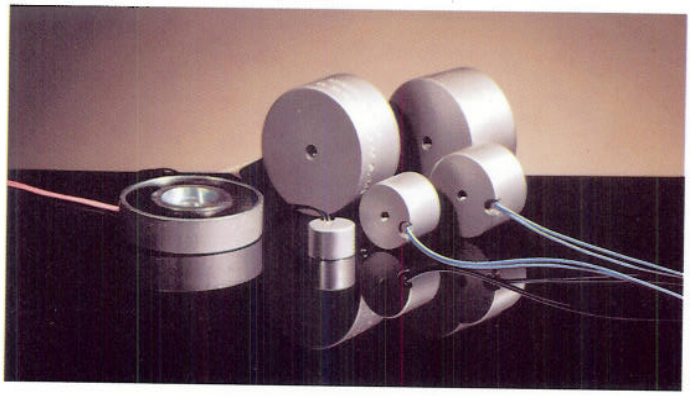


NEOFLUX® POT MAGNETS

Neoflux® pot magnets are made of a neodymium-iron-boron alloy. The magnetic force of **Neoflux®** pot magnets is - at room temperature - 7 times as high as that of ceramic pot magnets. These magnets have a casing of soft iron that provides a magnetic shield. To prevent corrosion, the adhesion area of the **Neoflux®** magnets is covered with a protective coating.
The **Neoflux®** cylindrical and flat pot magnets can be used up to a temperature of 80°C. Heating to this temperature causes a decrease in the magnetic force of 15 to 20%. This is not permanent and is restored when the magnet is returned to its ambient temperature. These **Neoflux®** magnets must under no circumstances be pressed directly into iron. This causes a magnetic short-circuit which in turn causes a decrease in adhesive power. The table shows the distance between the iron wall, bottom and circumference. To reach an optimum attractive force this should be born in mind. You can recognise **Neoflux®** pot magnets by the blue colour on the magnetic side.

ELECTRO POT MAGNETS

ADHESIVE ELECTROMAGNETS
Design and functioning of an adhesive electromagnet are in principle the same as a pot magnet. The great advantage of the adhesive electromagnet is that it can be switched. When the coil in the adhesive magnet is activated the magnet attracts the item. As soon as the magnet is switched off, it releases the item. Adhesive electromagnets can be used to pick up or position a product for a short time or when you need a strong magnet. You can mount the magnet on the back by means of a central tapped hole.



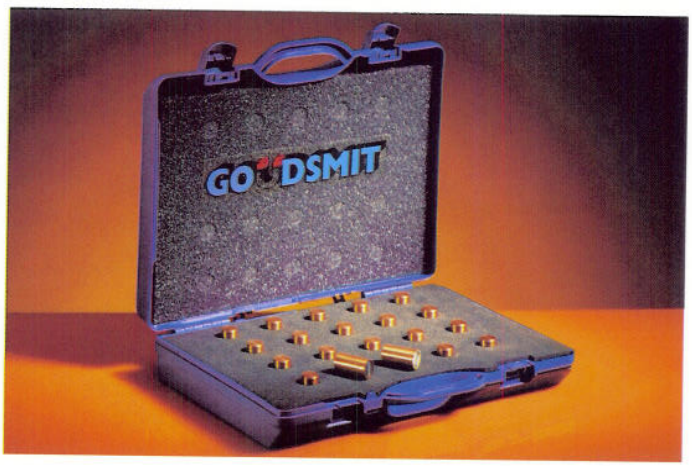
PERMANENT ADHESIVE ELECTROMAGNETS
The permanent adhesive electromagnet is known as a 'safety magnet'. The magnet works in the opposite way to the adhesive electromagnet. The load remains in place, except when the coil is activated. The permanent adhesive electromagnet is often used when long adhesive times are required and whereby the magnet is switched on for short periods or occasionally, as, for example, for transport equipment and hoisting machinery.

ULTRA FLAT ADHESIVE ELECTROMAGNETS
Ultra flat adhesive electromagnets are switchable, as are standard adhesive electromagnets. When the coil in the adhesive magnet is activated, the magnet attracts ferromagnetic items. As soon as the magnet is switched off, it releases the item. The ultra flat adhesive magnet is primarily used for lifting and positioning thin steel sheets. The flat design makes the magnet eminently suitable for places with little space for building in.

TAILOR-MADE POT MAGNETS

The combination of various different disciplines and competent craftsmen makes Goudsmit Magnetic Supplies an "attractive" partner for various different applications. This applies not only to standard work, but also to many customer-oriented solutions. Goudsmit Magnetic Supplies can both design and supply. Customers' ideas are worked out in detail by skilled craftsmen into the required system. Here, state-of-the-art CAD-CAM equipment (including a "Flux3D" simulation package) can be used as well as an advanced production-management system.

MAINS POWER
A 24 Volt DC electromagnet requires mains power! Goudsmit Magnetic Supplies has two types (max. 23 Watt and max. 70 Watt) available directly from stock. Goudsmit also produces tailor-made power systems for all voltages and currents up to 150A, with or without power failure safeguard.



PRODUCT RANGE CASE
New in the Goudsmit Magnetic Supplies range is a mixed assortment of pot magnets in a handy plastic case. This handy storage system makes the pot magnets a useful aid for toolmakers and design engineers. The storage system also gives a clear overview of the range specifically aimed at the user.

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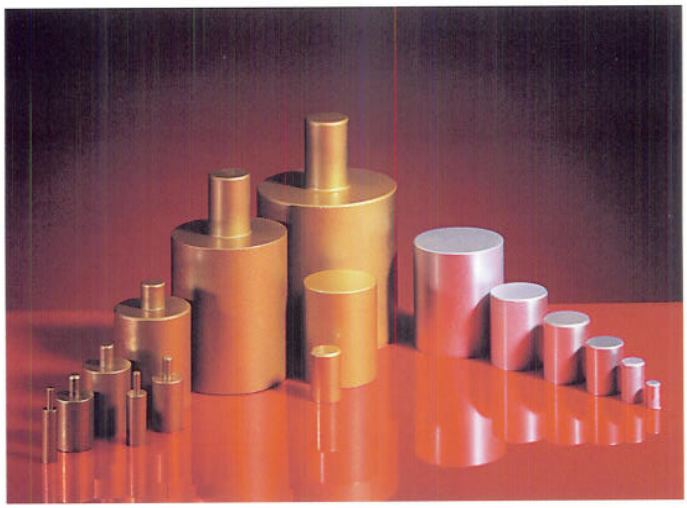
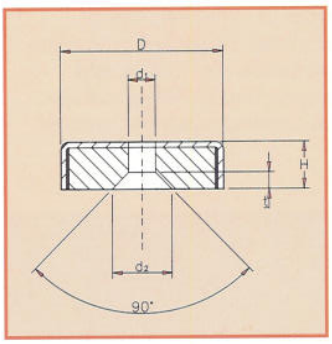
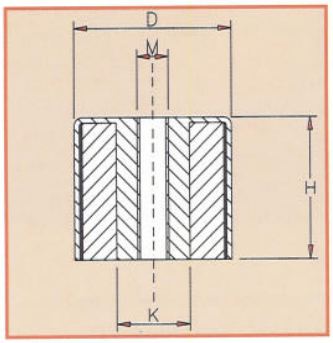


ALNICO POT MAGNETS



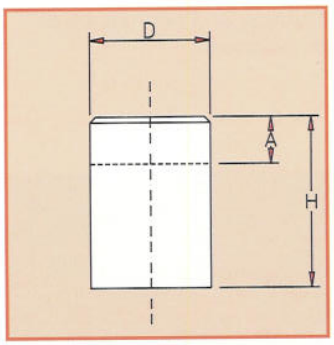
Alnico pot magnet, countersunk, red product range

Order number	Dimensions in mm					Weight in g	Magnetic force [1] in N
	D	H	d [1]	d [2]	t		
GM16201	19.1	8	4.2	7.8	0.5	13	35
GM16202	30.1	9	4.8	8.5	0.8	36	73
GM16203	38.6	11	4.8	9.2	2.2	80	144



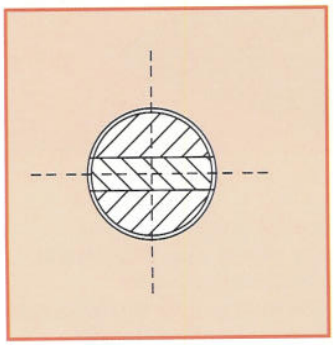
Alnico pot magnet high, with threaded hole, red product range

Order number	Dimensions in mm			Weight in g	Magnetic force [1] in N
	D	H	M		
GM16250	17.3	16.1	6	23	26
GM16251	20.6	19	6	40	40
GM16252	27	25	6	85	61
GM16253	35	30	6	184	147
GM16256	65	43	12	930	400



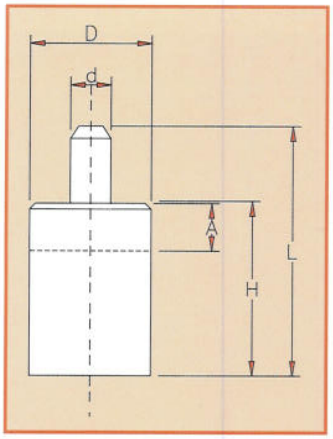
Alnico pot magnet high, flat with press fit tolerance H6

Order number	Dimensions in mm				Weight in g	Magnetic force [1] in N
	D	h	H	A [2]		
GM16001	6	6	10	2	2	1.7
GM16002	8	6	12	3	4	4
GM16003	10	6	16	6	9	8.5
GM16004	13	6	18	7	17	12
GM16005	16	6	20	5	29	20
GM16006	20	6	25	6	57	50
GM16007	25	6	30	5	110	115
GM16008	32	6	35	3	200	200
GM16009	40	6	45	5	420	240
GM16010	50	6	50	2	720	420
GM16011	63	6	60	5	1340	660



Alnico pot magnet high, flat with press fit tolerance H9

Order number	Dimensions in mm				Weight in g	Magnetic force [1] in N
	D	h	H	A [2]		
GM16101	6	9	20	12	4	1.7
GM16102	8	9	20	11	7	4
GM16103	10	9	20	10	10	8.5
GM16104	13	9	20	9	19	12
GM16105	16	9	20	5	29	20
GM16106	20	9	25	6	57	50
GM16107	25	9	35	10	140	115
GM16108	32	9	40	8	240	200
GM16109	40	9	50	10	500	240
GM16110	50	9	60	12	900	420
GM16111	63	9	65	10	1480	660



Alnico pot magnet high with threaded end h9

Order-number	Dimensions in mm						Weight in g	Magnetic force [1] in N
	D	h	H	A [2]	L	d		
GM16301	6	9	20	12	28	3	4	1.5
GM16302	8	9	20	11	28	3	7	3.5
GM16303	10	9	20	10	28	4	12	7
GM16304	13	9	20	9	28	4	20	10
GM16305	16	9	20	5	28	5	30	18
GM16306	20	9	25	6	33	6	60	42
GM16307	25	9	35	10	45	8	140	96
GM16308	32	9	40	8	50	10	250	180
GM16309	40	9	50	10	70	15	520	240
GM16310	50	9	60	12	85	18	925	420
GM16311	63	9	65	10	95	20	1580	660

1) An optimal magnetic force is achieved by placing the pot magnet at right angles to workpieces of soft iron or steel 37. A deviation of approx. 10% from the indicated value is possible by exception. In general, the values are exceeded. Small cracks in the magnetic material have no influence on the magnetic force.

2 This dimension shows the length over which the magnet can be tooled, turned, milled, or drilled without any loss of magnetic force.

Goudsmit uses the latest software for calculating your system.

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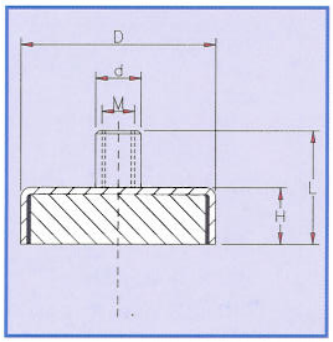
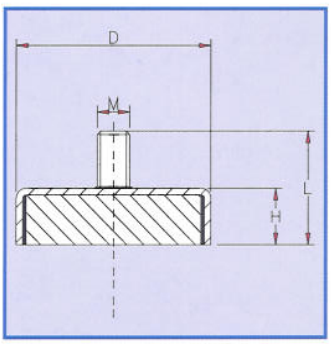
CERAMIC POT MAGNETS



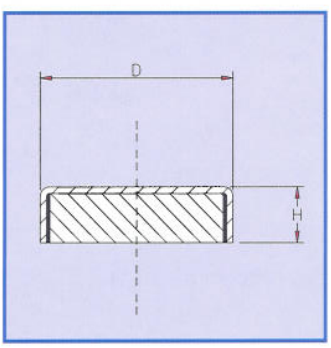
Ceramic pot magnet, anisotropic, with threaded bush, galvanized

Order number	Dimensions in mm					Weight in g	Magnetic force [1] in N
	D [2]	H [2]	L [2]	d	M		
GM16501	10	4.5	11.5	6	3	3	4
GM16502	13	4.5	11.5	6	3	5	10
GM16503	16	4.5	11.5	6	3	6	18
GM16504	20	6	13	6	3	11	30
GM16505	25	7	15	8	4	22	40
GM16506	32	7	15	8	4	32	80
GM16513	36	7.7	16	8	4	45	100
GM16514	40	8	16.5	8	4	60	125
GM16507	40	8	18	10	5	60	125
GM16515	47	9	17	8	4	90	180
GM16516	50	10	18.5	8	4	110	220
GM16508	50	10	22	12	6	110	220
GM16517	57	10.5	18.5	8	4	145	280
GM16509	63	14	30	15	8	240	350
GM16510	80	18	34	20	10	520	600
GM16511	100	22	43	22	12	940	900
GM16512	125	26	50	25	14	1720	1300



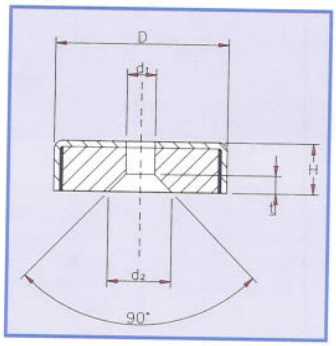
Ceramic pot magnet, anisotropic, with threaded end, galvanized

Order number	Dimensions in mm				Weight in g	Magnetic force [1] in N
	D [2]	H [2]	L [2]	M		
GM16701	10	4.5	11.5	3	3	4
GM16702	13	4.5	11.5	3	5	10
GM16703	16	4.5	11.5	3	6	18
GM16704	20	6	13	3	11	30
GM16705	25	7	15	4	22	40
GM16706	32	7	15	4	32	80
GM16707	47	9	17	6	90	180
GM16708	57	10.5	15.5	6	142	280
GM16709	63	14	29	6	235	350

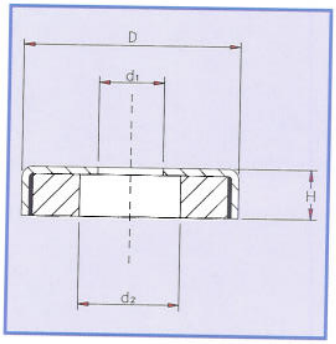


Ceramic pot magnet, anisotropic, flush, galvanized

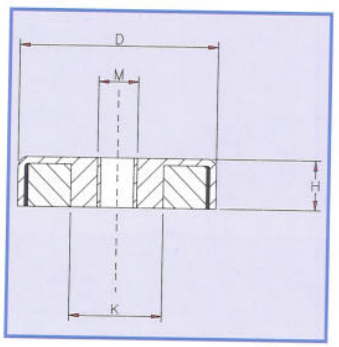
Order number	Dimensions in mm		Weight in g	Magnetic force [1] in N
	D [2]	H [2]		
GM16401	10	4.5	2	4
GM16402	13	4.5	3	10
GM16403	16	4.5	4.5	18
GM16404	20	6	10	30
GM16405	25	7	19	40
GM16406	32	7	30	80
GM16413	36	7.7	40	100
GM16407	40	8	55	125
GM16414	47	9	80	180
GM16408	50	10	100	220
GM16415	57	10.5	140	280
GM16409	63	14	230	350
GM16410	80	18	485	600
GM16411	100	22	900	900
GM16412	125	26	1680	1300



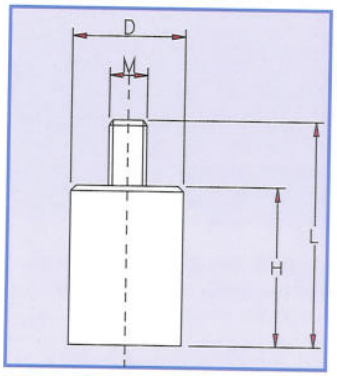
Ceramic pot magnet, anisotropic, countersunk hole, galvanized							
Order number	Dimensions in mm					Weight in g	Magnetic force [1] in N
	D [2]	H [2]	d [1]	d [2]	t		
GM16600	16	4.5	3.5	6.5	1.6	4	14
GM16601	20	6	4.2	8.6	2.1	9	27
GM16607	25	7	5.5	10.4	2.5	16	36
GM16602	32	7	5.5	10.4	2.5	27	72
GM16603	40	8	5.5	10.4	2.5	53	90



Ceramic pot magnet, anisotropic, with through hole, galvanized						
Order number	Dimensions in mm				Weight in g	Magnetic force [1] in N
	D [2]	H [2]	d [1]	d [2]		
GM16604	50	10	8.5	22	90	180
GM16605	63	14	6.5	24	195	290
GM16606	80	18	6.5	11.5	480	540
GM16608	83	18	10.5	32	450	600
GM16609	100	22	10.5	34	820	680



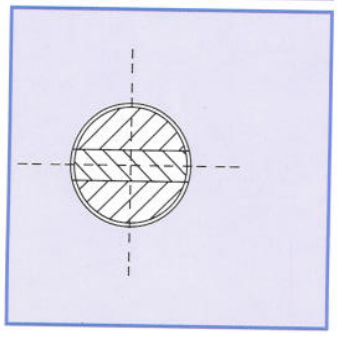
Ceramic pot magnet, anisotropic, with threaded hole, galvanized						
Order number	Dimensions in mm				Weight in g	Magnetic force [1] in N
	D [2]	H [2]	M	K		
GM16654	50	10	6	18	105	170
GM16655	63	14	8	20	235	350
GM16656	80	18	8	15	490	550
GM16657	80	18	10	15	490	550
GM16915	90	13	10	32	350	380
GM16917	90	18	10	32	450	420



Ceramic pot magnet, anisotropic, with threaded end, aluminium						
Order number	Dimensions in mm				Weight in g	Magnetic force [1] in N
	D [2]	H [2]	L	M		
GM16914	25	30	41	8	6	200

1) An optimal magnetic force is achieved by placing the pot magnet at right angles to workpieces of soft iron or steel 37. A deviation of approx. 10% from the indicated value is possible by exception. In general, the values are exceeded. Small cracks in the magnetic material have no influence on the magnetic force.

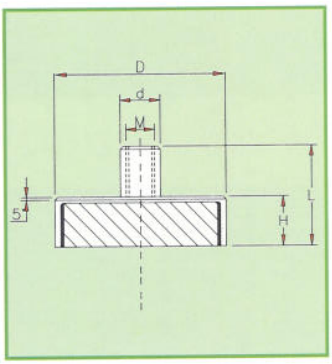
2) Tolerances



Limit D in mm	Tolerance D in mm	Limit L in mm	Tolerance L in mm	Limit H in mm	Tolerance H in mm
10 - 25	0.2	10 - 25	+ 0.3 / - 0.2	4.5 - 6	+ 0.2 / - 0.1
32 - 40	0.3	32 - 40	+ 0.5 / - 0.3	7 - 7.7	+0.3 / - 0.2
47 - 50	+ 0.5 / - 0.3	47 - 50	+ 0.6 / - 0.3	8	+ 0.4 / - 0.2
57 - 125	+ 0.6 / - 0.3	57 - 125	+ 0.7 / - 0.3	9 - 26	+ 0.5 / - 0.2

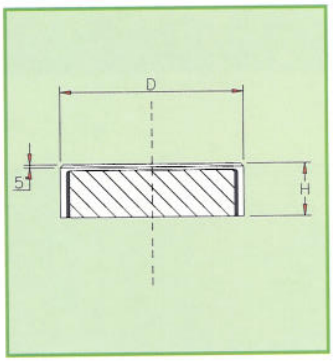
GOUDSMIT magnetic supplies

SAMARIUM-COBALT POT MAGNETS



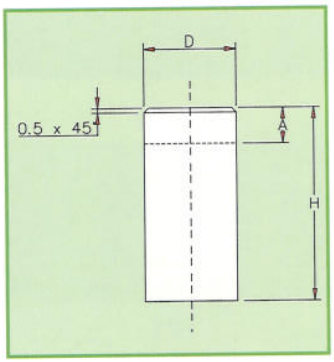
Samarium-Cobalt pot magnet, with threaded bush, galvanized

Order number	Dimensions in mm					Weight in g	Magnetic force [1] in N
	D [4]	H [4]	L [5]	d	M		
GM17201	6	4.5	11.5	6	3	1.5	5
GM17202	8	4.5	11.5	6	3	2.0	11
GM17203	10	4.5	11.5	6	3	3.0	20
GM17204	13	4.5	11.5	6	3	5.0	40
GM17205	16	4.5	11.5	6	4	7.5	60
GM17206	20	6.0	13.0	8	4	16.0	90
GM17207	25	7.0	14.0	8	4	25.0	150
GM17208	32	7.0	15.5	10	5	48.0	220



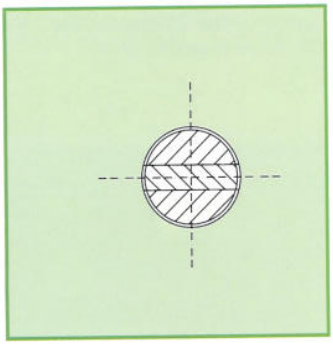
Samarium-Cobalt pot magnet, flat, galvanized

Order number	Dimensions in mm		Weight in g	Magnetic force [1] in N
	D [4]	H [4]		
GM17101	6	4.5	1.0	5
GM17102	8	4.5	1.5	11
GM17103	10	4.5	2.5	20
GM17104	13	4.5	4.5	40
GM17105	16	4.5	6.5	60
GM17106	20	6.0	15.0	90
GM17107	25	7.0	22.0	150
GM17108	32	7.0	40.0	220



Samarium-Cobalt pot magnet, high, flat with press fit tolerance, galvanized

Order number	Dimensions in mm			Weight in g	Magnetic force [1] in N
	D [3]	H [3]	A [2]		
GM17001	6	20	10.0	4.5	8
GM17002	8	20	10.0	8.0	22
GM17003	10	20	8.0	12.5	40
GM17004	13	20	6.0	20.0	60
GM17005	16	20	2.0	32.0	125
GM17006	20	25	5.0	60.0	230
GM17007	25	35	7.0	135.0	400
GM17008	32	40	4.5	250.0	600



1) An optimal magnetic force is achieved by placing the pot magnet at right angles to workpieces of soft iron or steel 37. A deviation of approx. 10% from the indicated value is possible by exception. In general, the values are exceeded. Small cracks in the magnetic material have no influence on the magnetic force.

2) This measurement indicates the length along which the magnet can be tooled, turned, milled or drilled without loss of magnetic force.

3) Tolerance : 0.2 mm

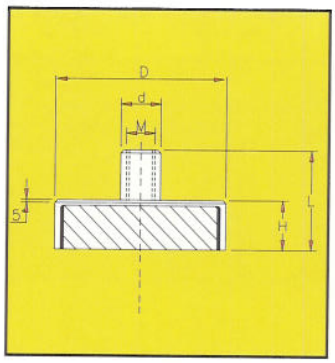
4) Tolerances:

GM17101 to GM17102	0.1 mm
GM17201 to GM17202	0.1 mm
GM17103 to GM17107	0.15mm
GM17203 to GM17207	0.15mm
GM17108 / GM17208	0.2 mm

5) Tolerances:

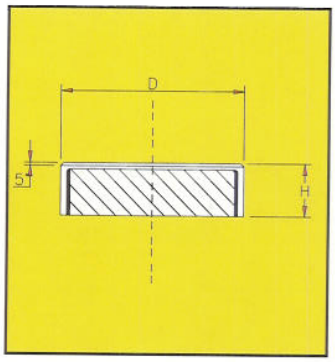
GM17201 to GM17207	0.1 mm
GM17208	0.15mm

NEOFLUX® POT MAGNETS



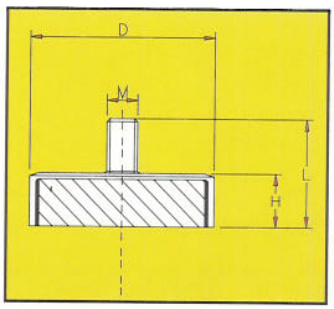
Neoflux® (Nd-Fe-B) pot magnet, with threaded bush, galvanized

Order number	Dimensions in mm					Weight in g	Magnetic force [1] in N
	D [4]	H [4]	L [5]	d	M		
GM17600	6	4.5	11.5	6	3	1.5	5
GM17601	8	4.5	11.5	6	3	2	13
GM17602	10	4.5	11.5	6	3	3	25
GM17603	13	4.5	11.5	6	3	5	60
GM17604	16	4.5	11.5	6	4	7.5	95
GM17605	20	6	13	8	4	16	140
GM17606	25	7	14	8	4	25	200
GM17607	32	7	15.5	10	5	48	350



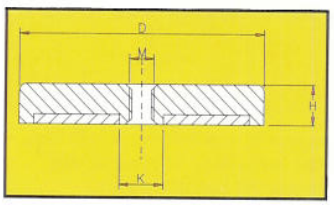
Neoflux® (Nd-Fe-B) pot magnet, flat, galvanized

Order number	Dimensions in mm		Weight in g	Magnetic force [1] in N
	D [4]	H [4]		
GM17401	6	4.5	1.0	5
GM17402	8	4.5	1.5	13
GM17403	10	4.5	2.5	25
GM17404	13	4.5	4.5	60
GM17405	16	4.5	6.5	95
GM17406	20	6.0	15.0	140
GM17407	25	7.0	22.0	200
GM17408	32	7.0	40.0	350



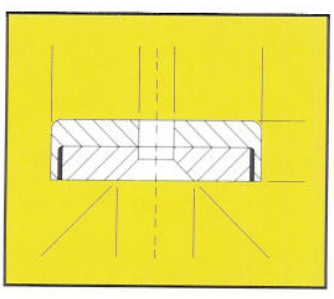
Neoflux® (Nd-Fe-B) pot magnet, with threaded bush, galvanized

Order number	Dimensions in mm				Weight in g	Magnetic force [1] in N
	D [4]	H [4]	L [5]	M		
GM17622	10	4.5	12.5	4	3	25
GM17623	13	4.5	12.5	5	5	60
GM17624	16	4.5	12.5	6	7.5	95
GM17625	20	6	16	6	16	140
GM17626	25	7	17	6	25	200
GM17627	32	7	17	6	48	350



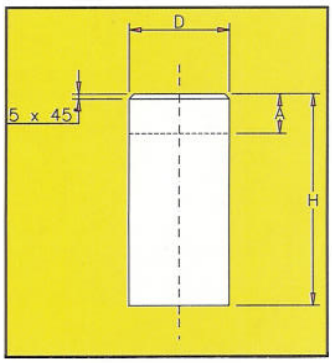
Neoflux® (Nd-Fe-B) pot magnet, with threaded hole, galvanized

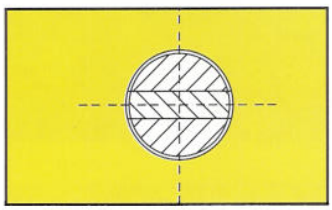
Order number	Dimensions in mm				Weight in g	Magnetic force [1] in N
	D [4]	H [4]	M	K		
GM17516	40	8	5	9	73	500



Neoflux® (Nd-Fe-B) pot magnet, with countersunk hole, galvanized

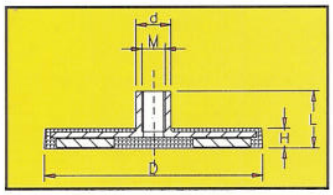
Order number	Dimensions in mm				Weight in g	Magnetic force [1] in N
	D [4]	H [4]	d [1]	d [2]		
GM17425	16	4.5	3.5	6.6	5.7	75
GM17426	20	6	4.5	9.0	12.5	105
GM17427	25	7	4.5	9.0	23.5	160
GM17428	32	7	5.5	11.0	38.5	310

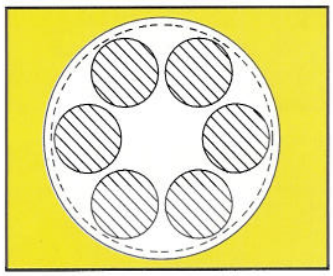




Neolux® (Nd-Fe-B) pot magnet high, flat with press fit tolerance, galvanized

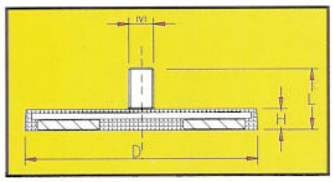
Order number	Dimensions in mm			Weight in g	Magnetic force [1] in N	Distance pot magnet/ iron wall in mm [2]
	D [3]	H [3]	A [2]			
GM17301	6	20	10	4.5	10	1.5
GM17302	8	20	10	8	25	1.5
GM17303	10	20	8	12.5	45	2.0
GM17304	13	20	6	20	70	2.5
GM17305	16	20	2	32	150	3.0
GM17306	20	25	5	60	280	4.0
GM17307	25	35	7	135	450	5.0
GM17308	32	40	4.5	250	700	6.0

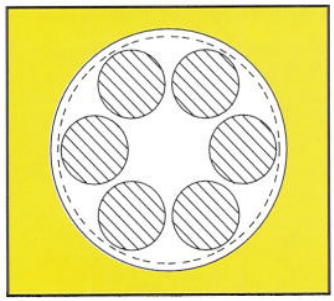




Neolux® (Nd-Fe-B) pot magnet, with threaded bush, rubber coating

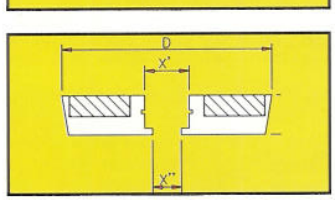
Order number	Dimensions in mm					Weight in g	Magnetic force [1] in N
	D [3]	H [3]	L [3]	d	M		
GM17505	43	6	11.5	8	4	30	77
GM17511	66	8.5	15	10	5	105	180
GM17517	88	8.5	17	12	8	190	420

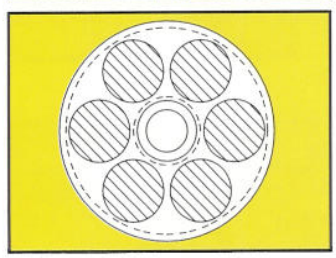




Neoflux® (Nd-Fe-B) pot magnet, with threaded bush, rubber coating

Order number	Dimensions in mm				Weight in g	Magnetic force [1] in N
	D [3]	H [3]	L [3]	M		
GM17518	43	6	21	M6 x 15	30	77
GM17519	66	8.5	23.5	M8 x 15	105	180
GM17520	88	8.5	23.5	M8 x 15	190	420





Neoflux® (Nd-Fe-B) concrete pot magnet with cone recess

Order number	Dimensions in mm				Weight in g	Magnetic force [1] in N
	D [3]	H [3]	X [I]	X [II]		
GM17513	70	12.1	14	9	26	910
GM17514	70	12.1	17	11	26	910
GM17515	70	12.1	19	13	26	910

1) An optimal magnetic force is achieved by placing the pot magnet at right angles to workpieces of soft iron or steel 37. A deviation of approx. 10% from the indicated value is possible by exception. In general, the values are exceeded. Small cracks in the magnetic material have no influence on the magnetic force.

2) This measurement indicates the length along which the magnet can be tooled, turned, milled or drilled without loss of magnetic force.

3) Tolerance : 0.2 mm

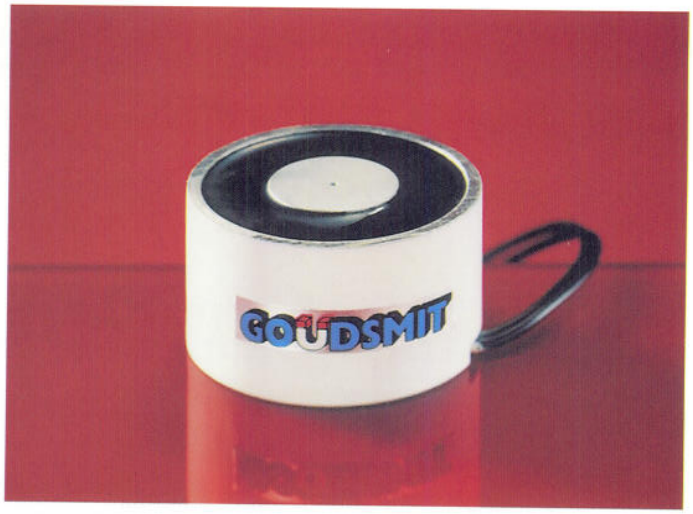
4) Tolerances:

GM17401 to GM17402	0.1 mm
GM17600 to GM17601	0.1 mm
GM17403 to GM17407	0.15 mm
GM17602 to GM17606	0.15 mm
GM17622 to GM17626	0.15 mm
GM17408 / 17607 / 17627 / 17516	0.2 mm

5) Tolerances:

GM17401 to GM17407	0.1 mm
GM17600 to GM17606	0.1 mm
GM17408 / GM17607	0.15 mm

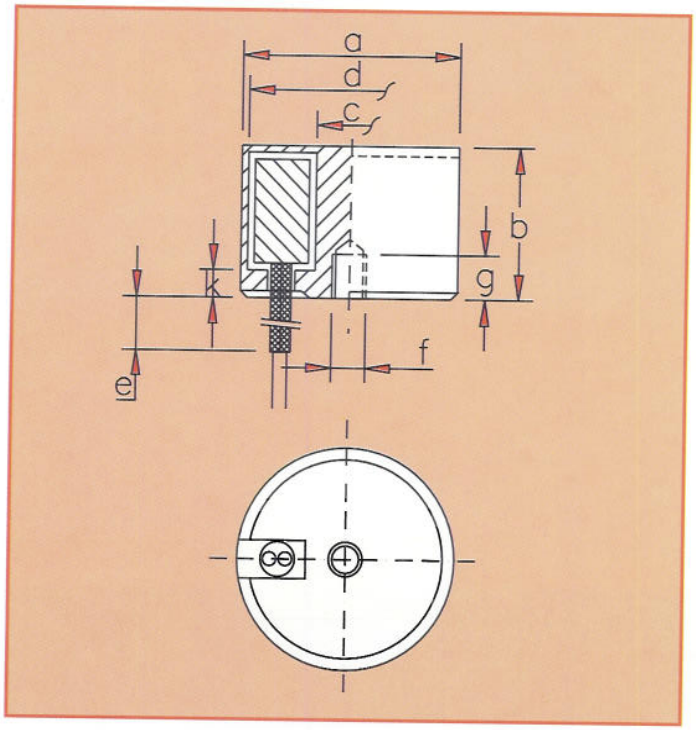
GOUDSMIT magnetic supplies

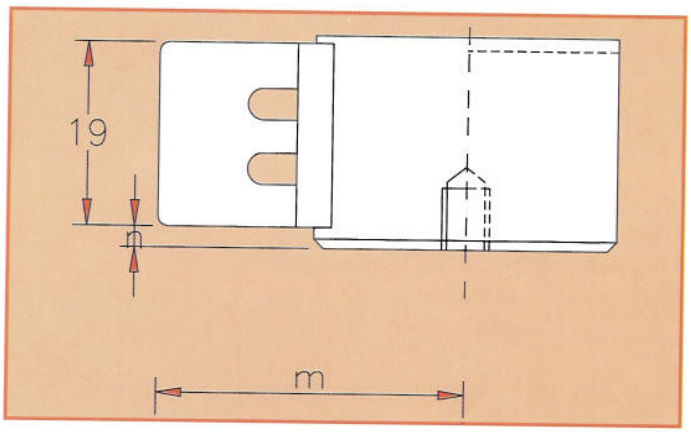


ELECTRO HOLDING MAGNET

Electro holding magnet with loose connecting wires.
Magnet protection IP65, connection IP00

Type	a	b	c	d	e	f	g	k	l	Holding power N	Power consumption W	Weight Kg
GM17801	18	11.0	8.0	16.1	200	M3	5	2.5	1	45	1.4	0.017
GM17802	25	20.0	11.1	22.3	200	M4	6	3.5	1	140	3.2	0.060
GM17803	32	22.0	14.3	28.6	200	M4	6	5.0	3	230	3.6	0.110
GM17804	40	25.5	17.9	35.8	200	M5	8	5.0	3	475	5.2	0.200
GM17805	50	27.0	22.4	44.7	200	M5	8	5.5	3	750	6.5	0.300
GM17806	63	30.0	28.2	56.3	200	M8	12	6.0	3	1000	9.0	0.550
GM17808	80	38.0	34.0	72.8	200	M8	12	8.5	3	2400	15.0	1.200
GM17810	100	43.0	42.8	91.3	300	M10	15	10.0	3	3400	20.5	2.100
GM17815	150	56.0	67.9	134.0	300	M16	24	16.5	3	9300	37.0	6.400
GM17818	180	63.0	84.8	161.0	300	M24	36	20.5	3	15000	50.0	10.500
GM17825	250	80.0	117.5	223.0	300	M24	36	28.5	3	30000	90.0	25.900



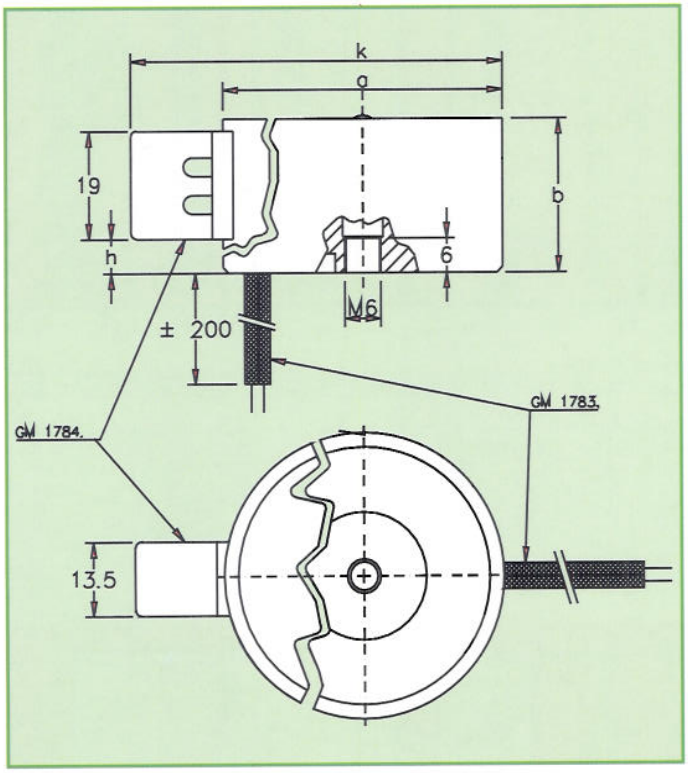


Electro holding magnet with connecting clip
Magnet protection IP 65, connection IP 20

Type	a	b	c	d	f	g	k	l	m	n	Holding power N	Power consumption W	Weight Kg
GM17702	25	20.0	11.1	22.3	M4	6	3.5	1	28.5	0.5	140	3.2	0.060
GM17703	32	22.0	14.3	28.6	M4	6	5.0	3	32.5	0.5	230	3.6	0.110
GM17704	40	25.5	17.9	35.8	M5	8	5.0	3	37.0	0.5	475	5.2	0.200
GM17705	50	27.0	22.4	44.7	M5	8	5.5	3	42.0	4.5	750	6.5	0.300
GM17706	63	30.0	28.2	56.3	M8	12	6.0	3	49.0	6.5	1000	9.0	0.550
GM17708	80	38.0	34.0	72.8	M8	12	8.5	3	57.5	7.5	2400	15.0	1.200

Electro holding magnet with loose connecting wires
Without rest magnetism
Magnet protection: IP 65, connection IP20

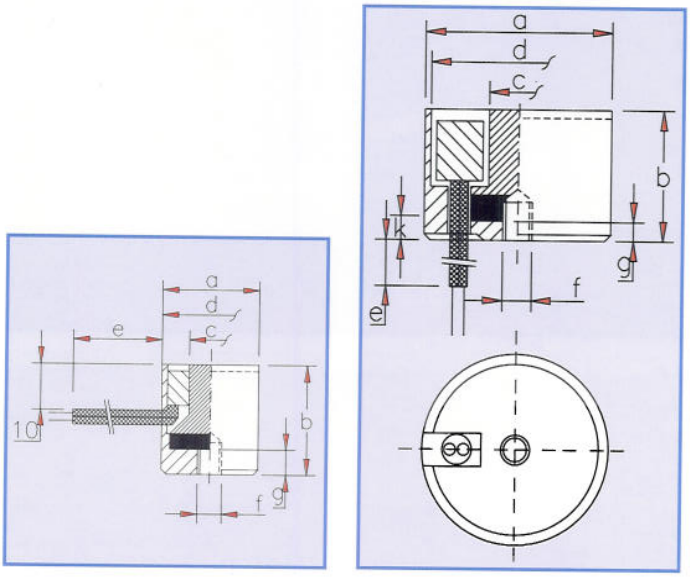
Type	a	b	h	k	Max. holding power N	Power consumption W	Disconnecting time ms	Weight Kg
GM17835	50	27.0	5.5	66.8	500	1.7	1100	0.300
GM17836	63	30.0	7.0	79.8	800	2.0	900	0.520
GM17837	70	35.0	9.5	86.8	1600	5.7	850	0.830



Electro holding magnet with connecting clip
Without rest magnetism
Magnet protection: IP65, connection IP20

Type	a	b	h	k	Max. holding power N	Power consumption W	Disconnecting time ms	Weight Kg
GM17845	50	27.0	5.5	66.8	500	1.7	1100	0.300
GM17846	63	30.0	7.0	79.8	800	2.0	900	0.520
GM17847	70	35.0	9.5	86.8	1600	5.7	850	0.830

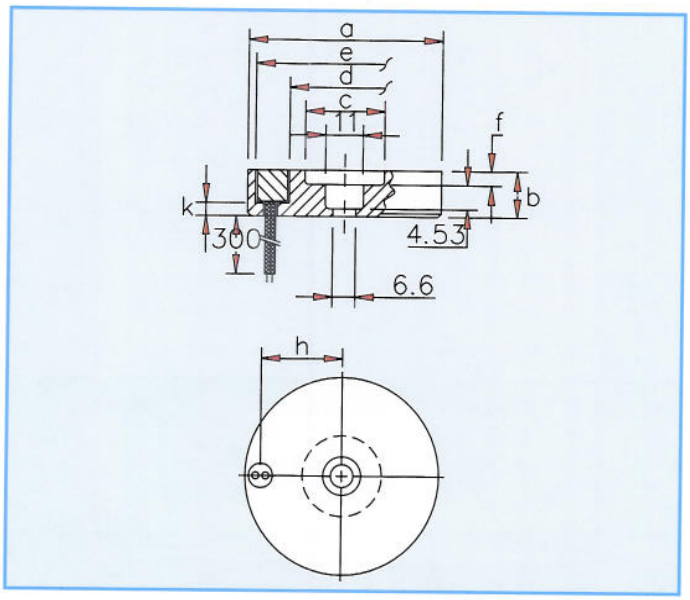
PERMANENT ELECTRO HOLDING MAGNET

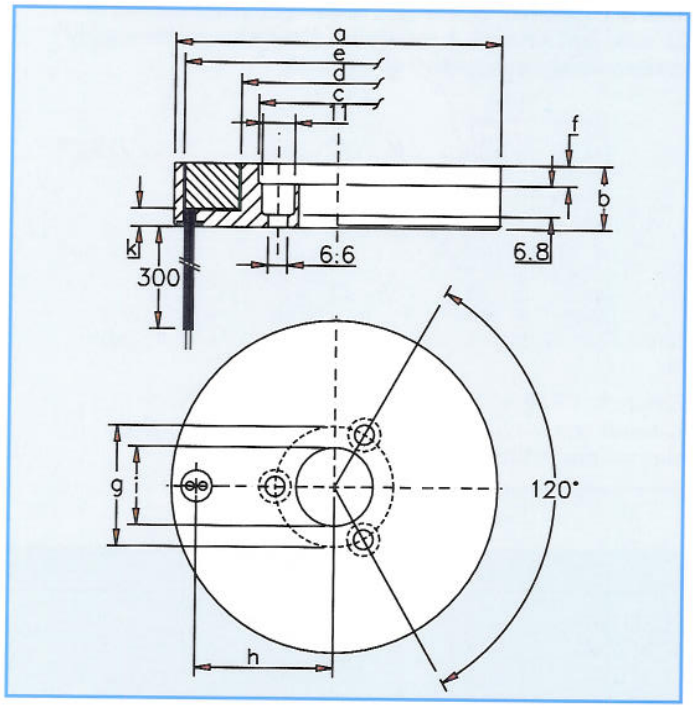


Permanent electro holding magnet with loose connecting wires.

Type	a	b	c	d	e	f	g	i	Holding power N	Power consumption W	Weight Kg
GM17852	20	22.0	9.0	18.0	200	M4	5	1.0	40	3.6	0.037
GM17853	35	28.0	11.2	33.0	200	M4	5	2.0	160	4.6	0.200
GM17855	55	36.0	18.0	52.0	200	M5	6	2.0	420	9.0	0.500
GM17857	70	45.0	24.0	65.6	200	M8	8	2.0	720	13.3	0.900
GM17859	90	48.0	30.0	84.7	200	M8	8	2.0	1200	21.8	1.700
GM17860	105	56.0	37.0	98.0	300	M10	10	3.0	1600	28.0	2.600
GM17865	150	63.0	55.0	140.0	300	M16	16	3.0	3500	44.0	6.400

ULTRA-FLAT ELECTRO HOLDING MAGNET





Ultra-flat electro holding magnet with loose connecting wires
Magnet protection: IP65, connection IP 00

Type	a	b	c	d	e	f	g	h	i	k	Holding power N	Power consumption W	Weight Kg
GM17876	56	13.0	23.0	32.0	51.5	4		23.5		3.7	750	6.0	0.170
GM17881	110	21.0	53.5	65.3	103.5	10	40.0	49.2	26.0	5.5	2050	15.5	0.900
GM17887	170	29.0	90.7	110.3	158	19	76.0	76.4	60.0	9	5000	32.0	3.000

GOUDSMIT magnetic supplies

Type GM1815009 is an unsmoothed power unit of 23 Watts.

POWER SUPPLY

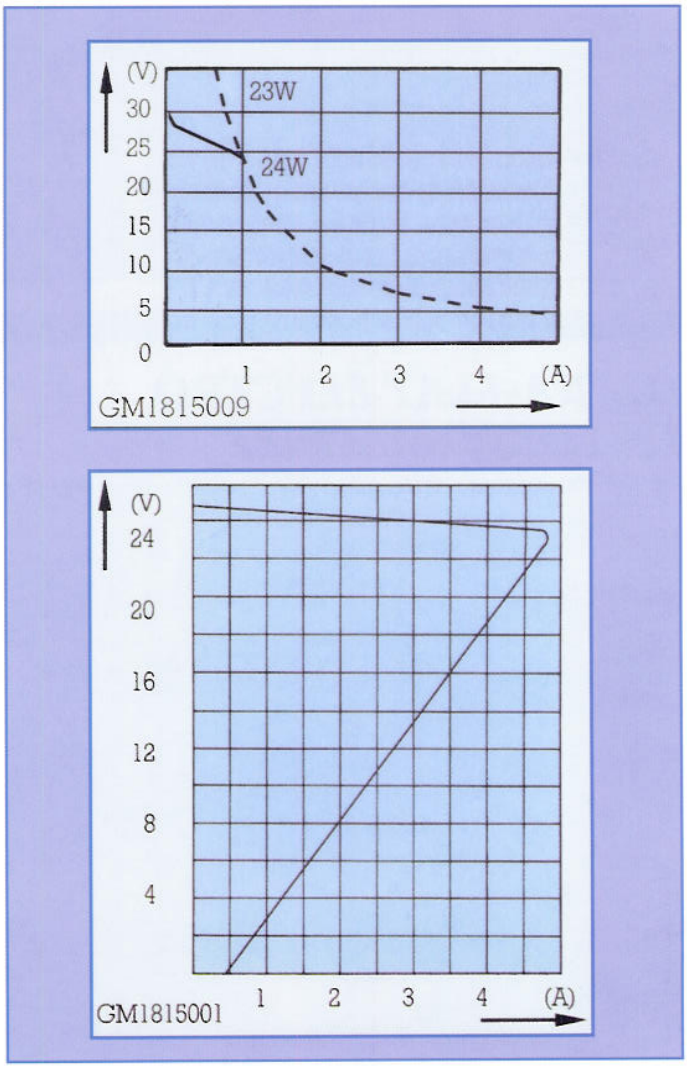
Type	Dimension in mm			Power supply (50/60 Hz) V (AC)	Output voltage V (DC)	Output current A	Maximum output power W	Weight Kg
	a	b	c					
GM1815009	98	108	55	220 10%	24	1	23	0.950
GM1815001	225	152	94	220 10%	24	3	70	3.900

POWER SUPPLY

An electro magnet needs a power supply! Goudsmit Magnetic Supplies delivers the two types illustrated on this page straight from stock. In addition, Goudsmit makes power supply systems to measure for all voltages and currents up to 150A, with or without power failure protection.

Type GM1815009
Current is supplied at 24 volts, 1 Amp direct current. The maximum power is 23 Watts. It is suitable for 220V at 50/60 Hz. The unit is thermally protected against overload.

Type GM1815001
This is a stabilised power unit delivering direct current at 24 Volts and 3 Amps. A stabilising system keeps the supply current steady irrespective of the load.



Type GM1815001 is a smoothed power unit of 70 Watt.

FAX REPLY FORM *(please copy and fax to us):* *+31(0)-40-2220256*

❑ Enquiry for quotation ❑ Order

Company: .....

Enquirer's name: .....

Address: .....

Postcode: ..... Town: .....

Telefoon: .....

Fax.: .....

E-mail: .....

❑ Alnico pot magnets
❑ Ceramic pot magnets
❑ Neoflux® pot magnets
❑ Samarium-Cobalt pot magnets
❑ Electro pot magnets
❑ Permanent electro pot magnets
❑ Ultra-flat electro pot magnets
❑ Power supply
❑ Product range case

Code: GM ..... Dimension: .....

Number: ..... Surrounding temperature: ..... °C

Short description of how you are going to use the magnet : .....

.....

.....

.....

.....

.....

Code: GM ..... Dimension: .....

Number: ..... Surrounding temperature: ..... °C

Short description of how you are going to use the magnet : .....

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VISIT OUR WEBSITE !!
www.goudsmit-magnetics.nl

Please send us information regarding:

❑ your company (general company brochure)
❑ permanent magnets
❑ magnetic tools
❑ magnetic sheet separators
❑ magnetic sheet separators
❑ magnetic business gifts and magnetic office supplies

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Prunellalaan 14 / 5582 HB Aalst-Waalre
telefoon: +31-(0)40-2219015 / fax +31-(0)40-2220256

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Prunellalaan 3 / 5582 HB Aalst-Waalre
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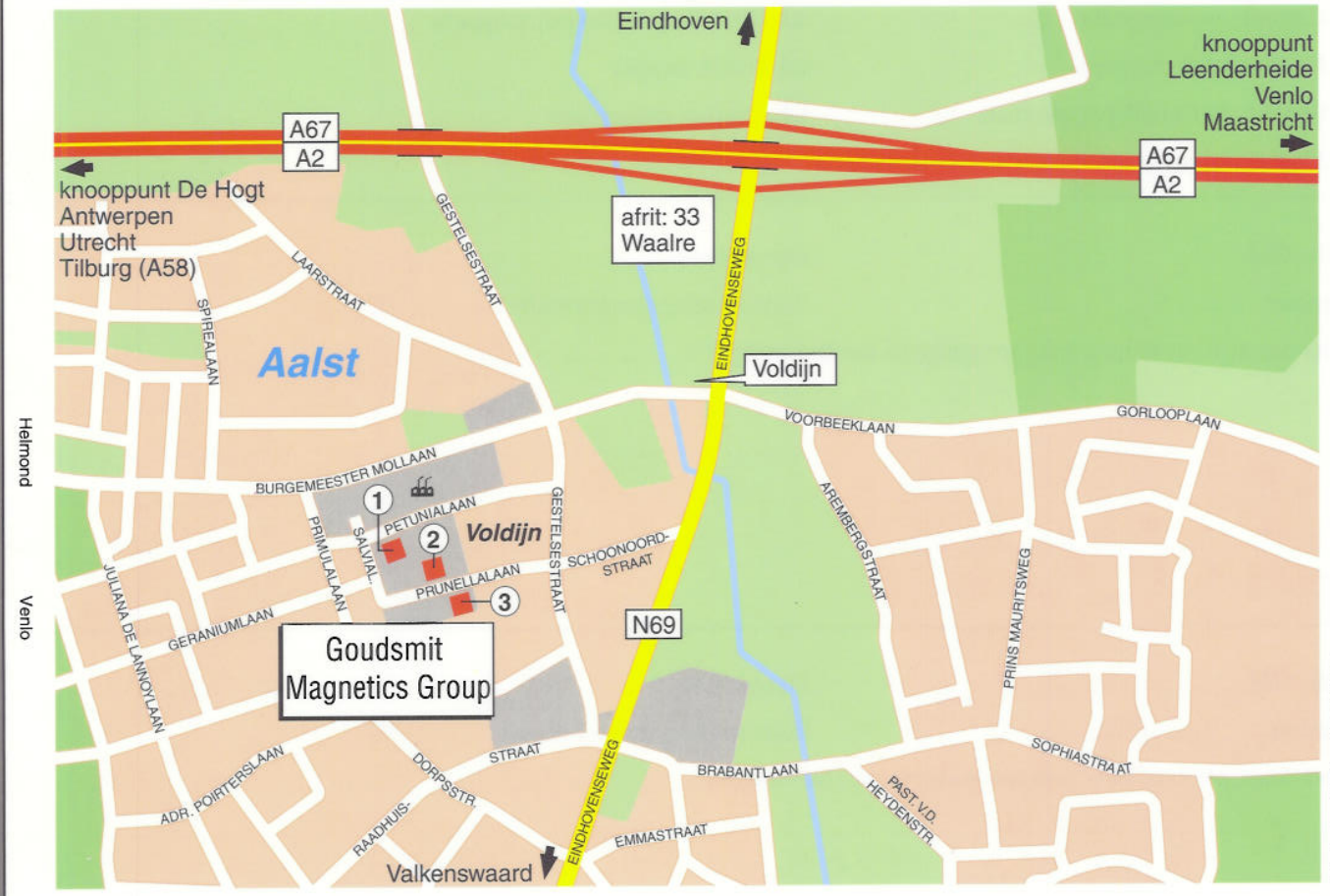

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