



22 Pot magnets / Gripping systems



80°C – 200°C



200°C – 450°C



80°C



150°C



100°C



***Your enquiry**

Size / shape / material / magnetization / coating /
working temperature / after drawing...

**Material
properties**




Gripping systems with fit tolerance

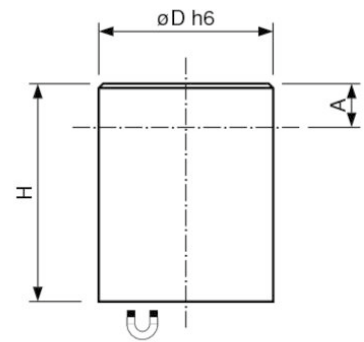
Materials: **SmCo**, Steel case

Values (10 N = ~1kg)

Temperature: max. 200°C

Dimensions mm			Stock no.	Weight g	Lift N
D	H	A			
h6	±0.2				
4	20	15	M416004	1.0	2
5	20	15	M416005	3.0	4
6	20	15	M416006	4.5	6
8	20	15	M416008	8.0	10
10	16	11	M416010	10.0	25

Gripping magnets can be reduced by the dimension A without loss of lift.



M416010



 Your enquiry*

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Size / shape / material / magnetization / coating / working temperature / after drawing...

Material properties



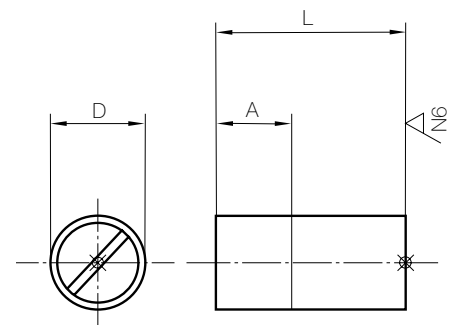
Gripping systems, cylindrical sandwich systems

Materials: **SmCo or NdFeB**, soft iron, brass, plastic materials

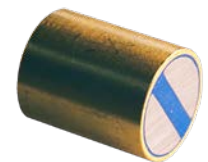
Values (10 N = ~1kg)

Temperature: SmCo max. 200°C, NdFeB max. 80°C

Dimensions mm			Stock no.	Weight	Lift**	Area with no ferro-magnetic material***	Material
D	L	A		g	N	mm	
h6	±0.2	±0.3*					
6	20	10	M440	4.5	8	1.5	SmCo
6	20	10	M438	4	10	1.5	NdFeB
8	20	10	M441	8	22	1.5	SmCo
8	20	10	M439	8	25	1.5	NdFeB
10	20	8	M442	12	40	2.0	SmCo
10	20	8	M452	12	45	2.0	NdFeB
13	20	6	M443	20	60	2.5	SmCo
13	20	6	M453	20	70	2.5	NdFeB
16	20	2	M444	30	125	3.0	SmCo
16	20	2	M454	32	150	3.0	NdFeB
20	25	5	M445	60	250	4.0	SmCo
20	25	5	M455	60	280	4.0	NdFeB
25	35*	7	M446	134	400	5.0	SmCo
25	35*	7	M456	132	450	5.0	NdFeB
32	40*	4.5	M447	251	600	6.0	SmCo
32	40*	5	M457	246	700	6.0	NdFeB



M445



M455

Gripping magnets can be reduced by the dimension A without loss of lift.

** The holding forces have been determined at room temperature on a grinded plate of steel (S235JR according to DIN 10 025) with a thickness at least of 10 mm at vertical pull-off of the magnet (1kg~10N). A deviation of up to -10% from the specified value is possible with a small inclined pull-off. Small air gaps such as coatings strongly reduce the holding force.

*** When the gripping system is installed directly in iron, a reduction in holding force of up to 15% occurs due to magnetic short circuits. To avoid this, certain distances from the brass shell of the bar gripping system to the iron must be maintained. The distances to the iron must also be respected at the bottom, if the bar gripper has been shortened by dimension A. Please refer to the table above for the recommended distances.



Your enquiry*

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Size / shape / material / magnetization / coating / working temperature / after drawing...

Material properties



Gripping systems with fit tolerance and internal thread

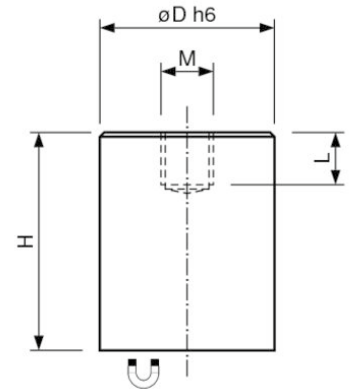
Materials: **NdFeB/N35**

Values (10 N = ~1kg)

Temperature: max. 80°C

Dimensions mm		Stock no.	Weight	Lift**	Area with no ferro-magnetic material***
D	L	M x L	g	N	mm
h6	±0.2 ±0.3*				
6	20	M3x5 M616006	4.0	10	1.5
8	20	M3x5 M616008	7.5	25	1.5
10	20	M4x7 M616010	11.0	45	2.0
13	20	M4x7 M616013	19.5	70	2.5
16	25	M4x8 M616016	38.0	150	3.0
20	25	M6x6 M616020	58.0	280	4.0
25	35*	M6x8 M616025	130.0	450	5.0
32	40*	M6x6 M616032	243.0	700	6.0

** and *** see p. 22-3



M616025



Your enquiry*

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Material properties



Pot magnets with fit tolerance

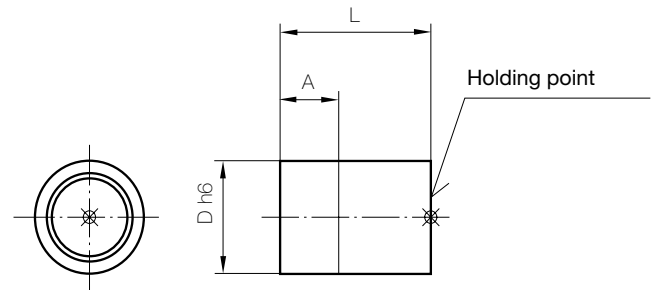
Materials: **AlNiCo**, soft iron, brass

Values (10 N = ~1kg)

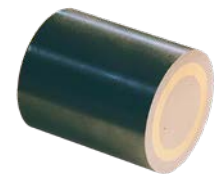
Temperature: max. 450°C

Execution: ground

Pot magnets can be reduced by the dimension A without loss of lift.



Dimensions mm			Stock no.	Weight g	Lift N
D	L	A			
h6	±0.2				
6	10	2	M310	2	2
8	12	3	M311	4	4
10	16	6	M312	9	8
13	18	7	M313	17	12
16	20	5	M314	29	20
20	25	6	M315	57	40
25	30	5	M316	110	60
32	35	3	M317	200	160



M316



***Your enquiry**

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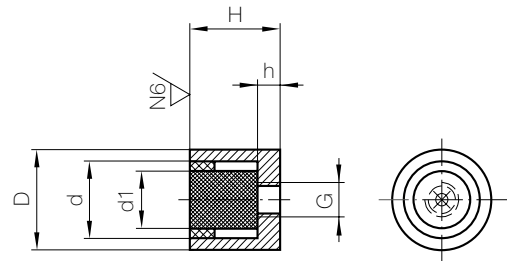


Pot magnets with thread

Materials: **AlNiCo**, soft iron, aluminium

Values (10 N = ~1kg)

Execution: zinc-coated



Delivered with pol plate

Dimensions mm						Stock no.	Temperature	Weight	Lift
D	H	d	d1	h	G		C	g	N
10	15	8.0	6.4	2.5	M3	M011.6	200°	7	10
13	16	9.9	8.1	3.5	M4	M012.6	200°	13	20
17	16	13.5	10.0	4.0	M6	M137.6	200°	24	25
21	19	16.0	12.0	4.5	M6	M138.6	200°	38	40
27	25	21.0	15.0	4.5	M6	M139.6	200°	87	65
35	30	27.7	22.9	8.5	M6	M140.6	200°	189	150
50	60	-	-	12.0	M10	M256090	450°	794	400
63	65	-	-	14.0	M12	M256091	450°	1274	660



M137.6

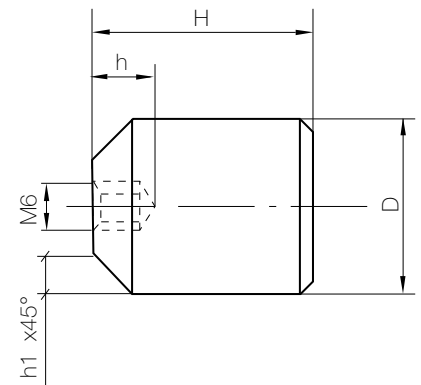
Pot magnets with thread

Materials: **AlNiCo**, soft iron, aluminium

Values (10 N = ~1kg)

Temperature: max. 200°C

Execution: zinc-coated



Dimensions mm				Stock no.	Weight	Lift
D	H	h	h1		g	N
17	20	6	2	*MM1990A	28	20
20	24	7	4	*MM1990B	48	35
24	30	8	5	*MM1990C	90	55

* Discontinued Models



MM1990C



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Material properties




Pot magnets

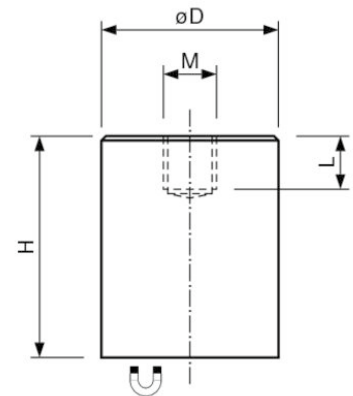
Materials: **NdFeB**, Steel case

Values (10 N = ~1kg)

Temperature: max. 80°C

Execution: Internal thread, zinc-coated

Dimensions mm			Stock no.	Weight g	Lift N
D	H	M x L			
±0.1	±0.2				
6.0	20	M3x5	M616406	4.0	6.0
8.0	20	M3x5	M616408	7.5	12.0
10.0	20	M4x7	M616410	11.0	24.0
13.0	20	M4x7	M616413	20.0	60.0
16.0	20	M4x7	M616416	30.0	90.0
20.0	25	M6x9	M616420	58.0	135.0
25.0	35	M6x9	M616425	131.0	190.0
32.0	40	M8x12	M616432	243.0	340.0
40.0	50	M8x12	M616440	480.0	700.0
50.0	60	M10x12	M616450	900.0	1000.0
63.0	65	M12x14	M616463	1560.0	1700.0



M616420



 Your enquiry*

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Size / shape / material / magnetization / coating / working temperature / after drawing...

Material properties



Pot magnets

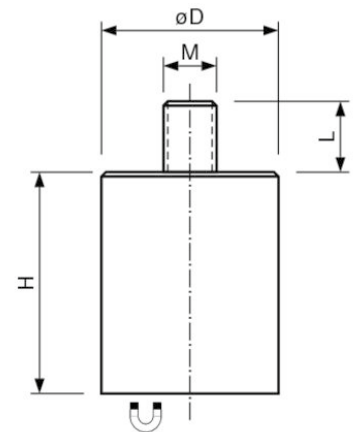
Materials: **NdFeB**, Steel case

Values (10 N = ~1kg)

Temperature: max. 80°C

Execution: Threaded neck, zinc-coated

Dimensions mm		M x L	Stock no.	Weight g	Lift N
D	H				
±0.1	±0.2				
6.0	20	M3x7	M616106	4.0	6.0
8.0	20	M3x7	M616108	7.5	12.0
10.0	20	M4x8	M616110	11.0	24.0
13.0	20	M4x8	M616113	20.0	60.0
16.0	20	M4x10	M616116	30.0	90.0
20.0	25	M6x10	M616120	58.0	135.0
25.0	35	M6x10	M616125	131.0	190.0
32.0	40	M8x12	M616132	243.0	340.0
40.0	50	M8x15	M616140	490.0	700.0
50.0	60	M10x15	M616150	915.0	1000.0
63.0	65	M12x20	M616163	1579.0	1700.0



M616120



Your enquiry*

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Size / shape / material / magnetization / coating / working temperature / after drawing...

Material properties



Pot magnets with thread

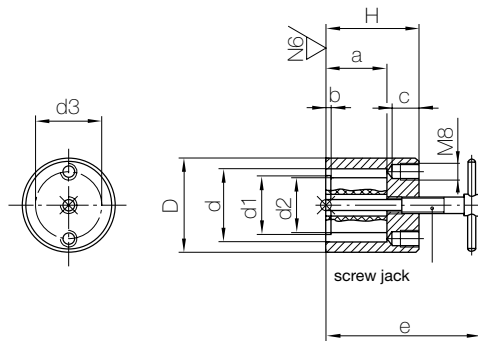
Materials: **AlNiCo**, soft iron, plastic materials

Values (10 N = ~1kg)

Temperature: max. 150°C


Execution: red varnished

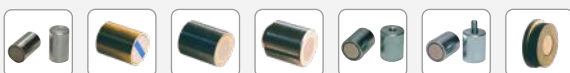
Delivered with shielding plate



M155.6

Dimensions mm

Dimensions mm										Stock no.	Weight	Lift
D	H	a	b	c	d	d1	d2	d3	e		kg	N
45	45	29.5	2.5	13	34.9	28.0	26.2	32	75	M155.6	0.470	200



 Your enquiry*

*Your enquiry

Size / shape / material / magnetization / coating / working temperature / after drawing...

Material properties



Pot magnets with thread

Materials: **AlNiCo**, soft iron, plastic materials

Values (10 N = ~1kg)

Temperature: max. 150°C

Execution: red varnished

Delivered with shielding plate

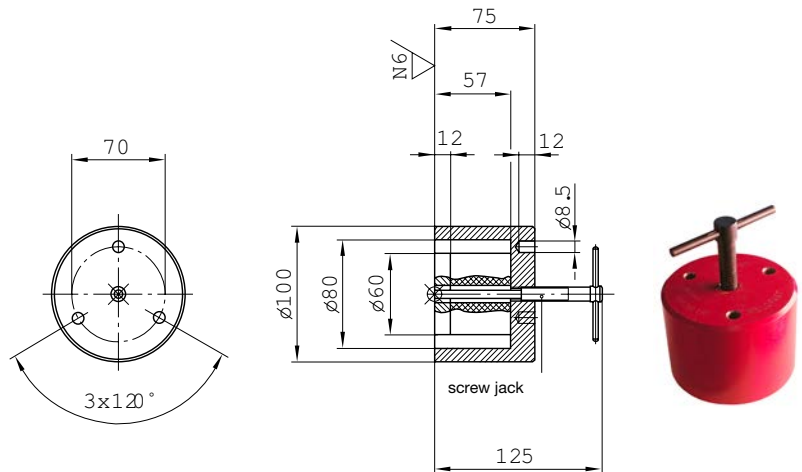
Stock no. Weight Lift



kg

N

M158.6 4.15 1750



Materials: **AlNiCo**, soft iron, plastic materials

Values (10 N = ~1kg)

Temperature: max. 150°C

Execution: red varnished

Delivered with shielding plate

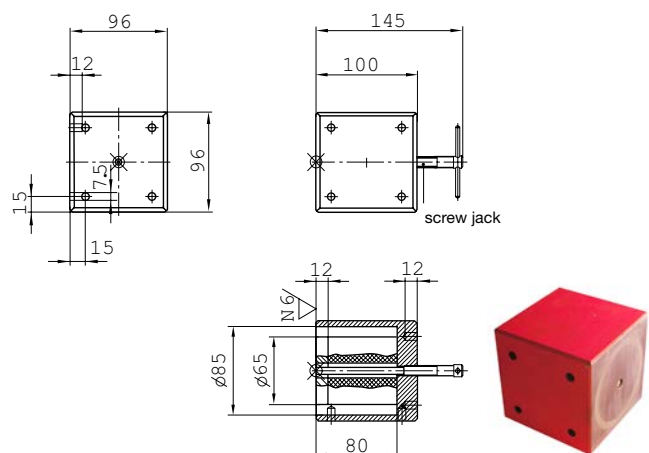
Stock no. Weight Lift



kg

N

M154.6 6.4 2100



 Your enquiry*

*Your enquiry

Size / shape / material / magnetization / coating / working temperature / after drawing...

Material properties

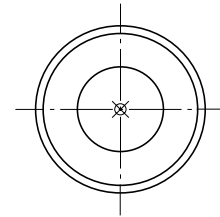
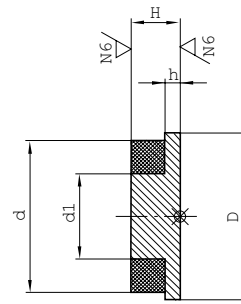


«Centre-Pole» magnets


Materials: **Ferrit**, soft iron, zinc-coated, glue

Values (10 N = ~1kg)

Temperature: max. 100°C



M023

Dimensions mm					Stock no.	Weight	Lift	Material
D	H	d	d1	h		g	N	
30	15.5	28	9.5	3	M021	58	78	HF 24/16
65	13.0	61	23.5	5	*M131	245	300	HF 26/15

* with central hole $\varnothing 7$ mm



 Your enquiry*

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Material properties