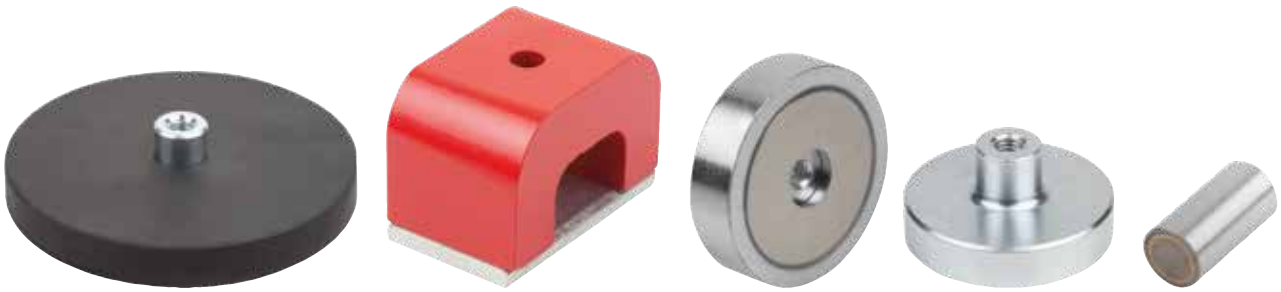
Magnets



Technical data for retaining magnets and raw magnets

Construction:

Pot magnets are magnetic systems that, due to their technical structure have only one magnetic face. Unlike raw magnets, pot magnets only exert a magnetic force on one face. This design enables the spatial effect of the magnetic field to be limited. This prevents unwanted magnetisation of workpieces or machine elements by the pot magnet.

Raw magnets are not magnetic systems, all the faces are magnetic.

Version:

Shallow pot magnet:

The magnetic core is moulded or pressed into a housing. There is a non-magnetic barrier between the magnet and the housing, ensuring a shielded system.

Retaining magnets:

The magnetic core here is enclosed in a plastic sheath. Their construction makes these magnets particularly suitable for use on noticeboards and thin metal sheets.

Button magnets / horseshoe magnets:

These are unshielded systems with a divided magnetic face.

Magnets with protective rubber jacket:

The magnet is encased in rubber, which helps to protect sensitive surfaces.

Raw magnets:

These are always unshielded systems. All of the faces are magnetic.

Deep pot magnets:

These are magnets with a permanent magnetic core which is isolated from the housing by a non-magnetic shield. This ensures a shielded system.

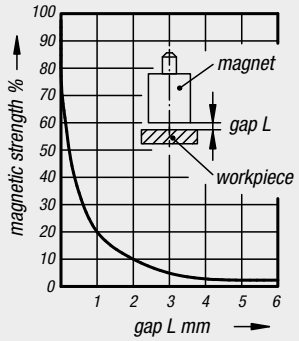
Properties:

Description	Reference to designation	Weak ⟷ Strong			
Magnetic force	Magnetic remanence	Hard ferrite	AlNiCo	SmCo	NdFeB
Repeatable adsorption	Retention force	AlNiCo	Hard ferrite	SmCo	NdFeB
Mechanical strength	-	SmCo	Hard ferrite	NdFeB	AlNiCo
Corrosion resistance	-	NdFeB	AlNiCo	SmCo	Hard ferrite
Temperature stability	Material specific Curie point	NdFeB	SmCo	Hard ferrite	AlNiCo

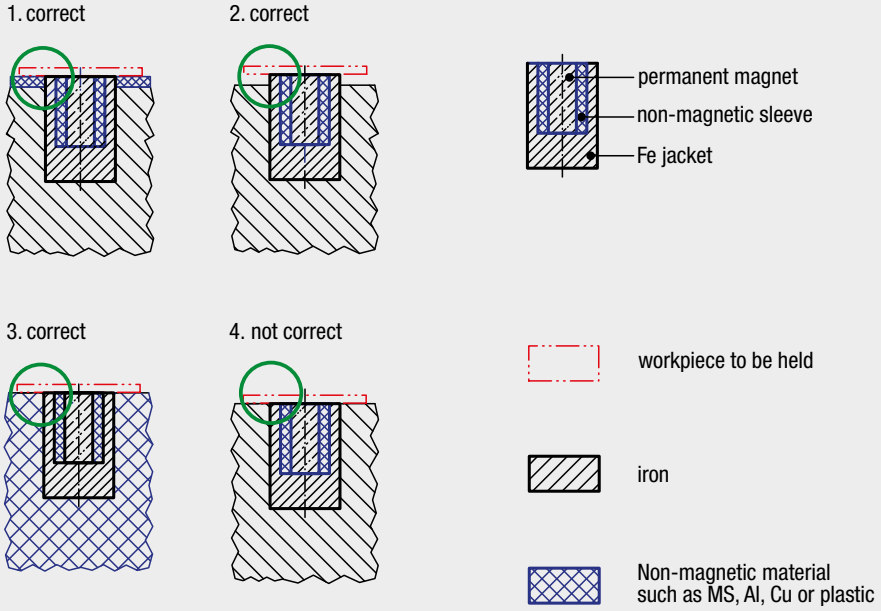
Long-term heating or alternating thermal stresses may lead to mechanical changes in the magnet system. In many cases, however, they have no influence on the function. The same applies to chemical stresses (chemical baths, aggressive gases, etc).

Magnetic strengths:

The indicated magnetic forces are minimum values which are achieved by a vertical pull-off and full face contact. By dirty pole faces or uneven workpieces, air gaps are formed which sharply decrease the magnetic force. In general, the attractive force of a magnet decreases as the air gap increases. It is therefore advisable to always ensure a clean pole face and clean it from time to time. Non-magnetic barriers have the same effect as air gaps.



Mounting instructions for shielded pot magnets without pins

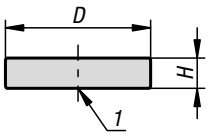


1. Unwanted magnetisation of machine parts and components is prevented through non-magnetisable materials.
2. Sufficiently large air gap between workpiece and magnetisable material.
3. Use of non-magnetisable material for the machine parts or components prevents unwanted magnetisation.
4. Unfavourable because the workpiece is placed on a magnetisable material. This causes unwanted magnetisation of machine parts or components.

K1404

Magnets raw

NdFeB, disc form



Material:
NdFeB N35 (neodymium).

Version:
nickel-plated.

Sample order:
K1404.05

Note:
Unshielded system.

Temperature range:
max. 80°C.

Assembly:
The magnets can be mounted by press-fit or gluing.

Drawing reference:
1) magnetic face

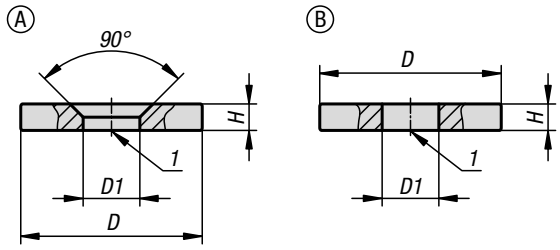
KIPP Magnets raw, NdFeB, disc form

Order No.	D	H	Magnetic force N
K1404.05	5 ±0,1	3 ±0,1	5
K1404.06	6 ±0,1	3 ±0,1	7,5
K1404.08	8 ±0,1	4 ±0,1	13
K1404.10	10 ±0,1	3 ±0,1	15
K1404.12	12 ±0,1	3 ±0,1	20
K1404.15	15 ±0,1	3 ±0,1	25
K1404.18	18 ±0,1	3 ±0,1	33
K1404.24	24 ±0,1	3 ±0,1	39

K1405

Magnets raw with hole

NdFeB, disc form



Material:
NdFeB N35 (neodymium).

Version:
nickel-plated.

Sample order:
K1405.12

Note:
Unshielded system.

Temperature range:
max. 80°C.

Assembly:
The magnets can be mounted by press-fit, screwing-in or gluing.

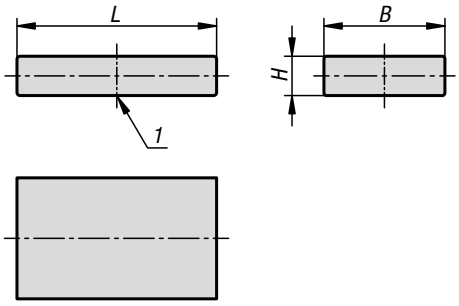
Drawing reference:
1) magnetic face

KIPP Magnets raw with hole, NdFeB, disc form

Order No.	Form	D	D1	H	Tightening torque max. Nm	Magnetic force N
K1405.12	A	12 ±0,1	3,5 ±0,1	3 ±0,1	3	18
K1405.15	A	15 ±0,1	4,5 ±0,1	3,5 ±0,1	3	29
K1405.18	A	18 ±0,1	4,5 ±0,1	4 ±0,1	3	41
K1405.24	A	24 ±0,1	5,5 ±0,1	4 ±0,1	3	66
K1405.32	B	32 ±0,1	10,5 ±0,1	2 ±0,1	3	42
K1405.38	B	38 ±0,1	12 ±0,1	4 ±0,1	3	110
K1405.48	B	48 ±0,2	15 ±0,1	5 ±0,1	3	165
K1405.56	B	56 ±0,2	15 ±0,1	6 ±0,1	3	230

Magnets raw

NdFeB, block form



Material:
NdFeB N35 (neodymium).

Version:
nickel-plated.

Sample order:
K1406.0704

Note:
Unshielded system.

Temperature range:
max. 80°C.

Assembly:
The magnets can be mounted by press-fit or gluing.

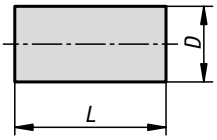
Drawing reference:
1) magnetic face

KIPP Magnets raw, NdFeB, block form

Order No.	B	H	L	Magnetic force N
K1406.0704	4 ±0,1	1,5 ±0,1	7,5 ±0,1	5
K1406.0706	6 ±0,1	2 ±0,1	7,5 ±0,1	8
K1406.1007	7,5 ±0,1	2 ±0,1	10 ±0,1	11
K1406.1209	9,5 ±0,1	2,5 ±0,1	12 ±0,1	17
K1406.1612	12,5 ±0,1	2,5 ±0,1	16 ±0,1	24
K1406.1816	16,5 ±0,1	4 ±0,1	18 ±0,1	50
K1406.2620	20,3 ±0,1	5 ±0,1	26 ±0,1	77
K1406.3326	26 ±0,1	6,5 ±0,1	33 ±0,1	125

Magnets raw

AlNiCo, bar type



Material:
AlNiCo (aluminium, nickel, cobalt).

Version:
Bright.

Sample order:
K1407.0310

Note:
Unshielded system.

Temperature range:
max. 450°C.

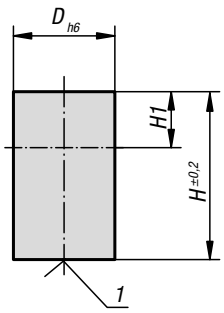
Assembly:
The magnets can be mounted by press-fit or gluing.

KIPP Magnets raw, AlNiCo, bar type

Order No.	D	L	Magnetic force N
K1407.0310	3 +0/-0,2	10 ±0,1	1,1
K1407.0312	3 +0/-0,2	12 ±0,1	1,3
K1407.0416	4 +0/-0,2	16 ±0,1	1,9
K1407.0420	4 +0/-0,2	20 ±0,1	2
K1407.0520	5 +0/-0,2	20 ±0,1	2,3
K1407.0615	6 +0/-0,2	15 ±0,1	2,8
K1407.0624	6 +0/-0,2	24 ±0,1	2,8
K1407.0630	6 +0/-0,2	30 ±0,1	2,8
K1407.0825	8 +0/-0,2	25 ±0,1	3,8
K1407.1020	10 +0/-0,2	20 ±0,1	5
K1407.1040	10 +0/-0,2	40 ±0,1	7
K1407.1240	12 +0/-0,2	40 ±0,1	8
K1407.1530	15 +0/-0,2	30 ±0,2	10
K1407.1560	15 +0/-0,2	60 ±0,2	11
K1407.3480	34 +0/-0,2	80 ±0,2	61

Magnets deep pot

AlNiCo with fitting tolerance



Material:
Housing, steel.
Magnetic core AlNiCo.

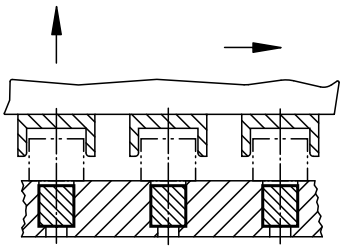
Version:
Housing bright.

Sample order:
K0545.01

Note:
Shielded system. Diameter “D” ground to a h6 tolerance. Fastening possibilities by press-in, shrink-fit or gluing.
Deep pot magnets can be shortened by the dimension “H1” with no loss of magnetic force.

Temperature range:
max. 450°C.

Drawing reference:
1) magnetic face

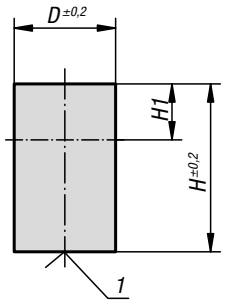


KIPP Magnets deep pot AlNiCo with fitting tolerance

Order No.	D	H	H1	Magnetic force N
K0545.01	6	10	2	1,5
K0545.02	8	12	3	3,5
K0545.03	10	16	6	7
K0545.04	13	18	7	10
K0545.05	16	20	5	18
K0545.06	20	25	6	42
K0545.07	25	30	5	96
K0545.08	32	35	3	180
K0545.09	40	45	5	240
K0545.10	50	50	2	420

Magnets deep pot

AlNiCo without fitting tolerance



Material:
Housing, steel.
Magnetic core AlNiCo.

Version:
Housing, electro zinc-plated.

Sample order:
K0546.01

Note:
Shielded system. Diameter “D” without fitting tolerance. Fastening possibilities are press-in, shrink-fitting or gluing.
Deep pot magnets can be shortened by the dimension “H1” with no loss of magnetic force.

Temperature range:
max. 450°C.

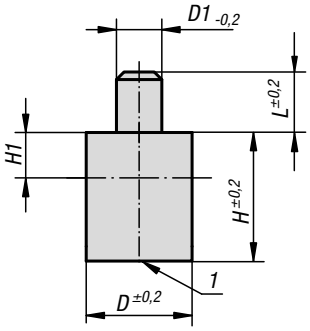
Drawing reference:
1) magnetic face

KIPP Magnets deep pot AlNiCo without fitting tolerance

Order No.	D	H	H1	Magnetic force N
K0546.01	6	20	12	1,5
K0546.02	8	20	11	3,5
K0546.03	10	20	10	7
K0546.04	13	20	9	10
K0546.05	16	20	5	18
K0546.06	20	25	6	42
K0546.07	25	35	10	96
K0546.08	32	40	8	180
K0546.09	40	50	10	240

Magnets deep pot with pin

AlNiCo



Material:
Housing, steel.
Magnetic core AlNiCo.

Version:
Housing, electro zinc-plated.

Sample order:
K0547.01

Note:
Deep pot magnets with smooth pin, shielded system. The magnets can be shortened by the dimension “H1” with no loss of magnetic force.

Temperature range:
max. 450°C.

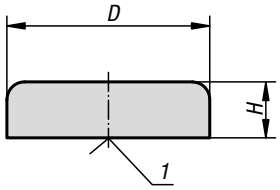
Drawing reference:
1) magnetic face

KIPP Magnets deep pot with pin AlNiCo

Order No.	D	D1	L	H	H1	Magnetic force N
K0547.01	6	3	8	20	2	1,7
K0547.02	8	3	8	20	3	4
K0547.03	10	4	8	20	6	8,5
K0547.04	13	4	8	20	7	12
K0547.05	16	5	8	20	5	20
K0547.06	20	6	8	25	6	50
K0547.07	25	8	10	35	5	115
K0547.08	32	10	10	40	3	200
K0547.09	40	15	20	50	5	240
K0547.10	50	18	25	60	2	420

Magnets shallow pot

hard ferrite



Material:
Housing, steel.
Magnetic core hard ferrite.

Version:
Housing, electro zinc-plated.

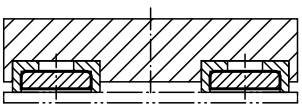
Sample order:
K0548.01

Note:
Shallow pot magnets without threaded bush. These magnets are pressed or glued into the receiving holes.

Hairline cracks in the magnetic material are unavoidable for technical reasons in the D=80 version. They do not impair the attracting function of the magnets in any way.

Temperature range:
max. 200°C.

Drawing reference:
1) magnetic face



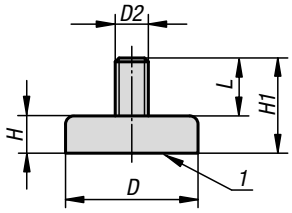
KIPP Magnets shallow pot hard ferrite

Order No.	D	H	Magnetic force N
K0548.01	10 ±0,15	4,5	4
K0548.02	13 ±0,15	4,5	10
K0548.03	16 ±0,15	4,5	18
K0548.04	20 ±0,15	6	30
K0548.05	25 ±0,15	7	40
K0548.06	32 ±0,20	7	80
K0548.07	40 ±0,20	8	125
K0548.08	50 ±0,20	10	220
K0548.09	63 ±0,20	14	350
K0548.10	80 ±0,25	18	600

Magnets shallow pot with thread

hard ferrite

Ⓐ



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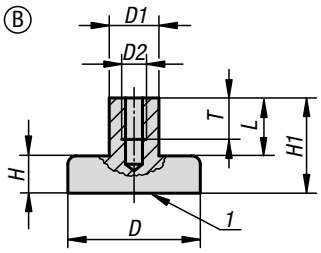


Material:
Housing, steel.
Magnetic core hard ferrite.

Version:
Housing, electro zinc-plated.

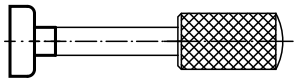
Sample order:
K0549.01

Note:
Shallow pot magnets, shielded system.

Hairline cracks in the magnetic material are unavoidable for technical reasons in D=80, D=100 and D=125 versions. They do not impair the attracting function of the magnets in any way.

Temperature range:
max. 200°C.

Drawing reference:
1) magnetic face

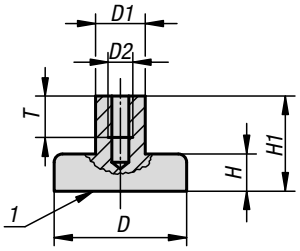


KIPP Magnets shallow pot with thread, hard ferrite

Order No. Form A	Order No. Form B	D	D1	D2	L	H	H1	T	Magnetic force N
K0549.21	**K0549.01**	10 ±0,15	-/6	M3	7	4,5	11,5	-/5	4
K0549.22	**K0549.02**	13 ±0,15	-/6	M3	7	4,5	11,5	-/5	10
K0549.23	**K0549.03**	16 ±0,15	-/6	M3	7	4,5	11,5	-/5	18
K0549.24	**K0549.04**	20 ±0,15	-/6	M3	7	6	13	-/5	30
K0549.25	**K0549.05**	25 ±0,15	-/8	M4	8	7	15	-/6	40
K0549.26	**K0549.06**	32 ±0,20	-/8	M4	8	7	15	-/6	80
-	**K0549.07**	40 ±0,20	10	M5	10	8	18	8	125
-	**K0549.08**	50 ±0,20	12	M6	12	10	22	10	220
-	**K0549.09**	63 ±0,20	15	M8	16	14	30	14	350
-	**K0549.10**	80 ±0,25	20	M10	16	18	34	14	600
-	**K0549.11**	99 ±0,25	22	M12	20	22	42	17	900
-	**K0549.12**	125 ±0,25	25	M14	24	26	50	20	1300

Magnets shallow pot with internal thread

hard ferrite with stainless-steel housing



Material:
Housing stainless steel 1.4016.
Screw stainless steel 1.4305.
Magnetic core hard ferrite.

Version:
Bright.

Sample order:
K1400.125

Note:
Shallow pot magnets, shielded system.

Temperature range:
max. 220°C.

Assembly:
The magnets can be mounted by press-fit, screwing-in or gluing.

Drawing reference:
1) magnetic face

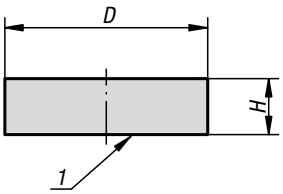
KIPP Magnets shallow pot with internal thread, hard ferrite with stainless-steel housing

Order No.	D	D1	D2	H	H1	T	Magnetic force N
K1400.125	25 ±0,1	8	M5	7	16	10	32
K1400.132	32 ±0,1	8	M5	7	16	10	64
K1400.140	40 +0,2/-0,1	8	M5	8	16,5	10	100
K1400.150	50 +0,2/-0,1	8	M5	10	18,5	10	175
K1400.163	63 +0,3/-0,1	8	M5	14	22	10	280

Magnets shallow pot

SmCo

Ⓐ



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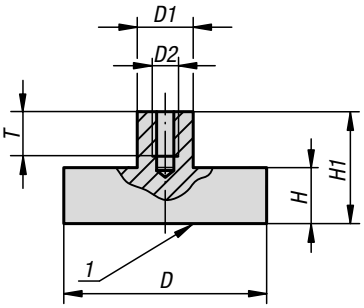


Material:
Housing, steel.
Magnetic core, SmCo.

Version:
Housing, electro zinc-plated.

Sample order:
K0550.01

Note:
Shallow pot magnets, shielded system. Magnets with an SmCo core have three to five times the attracting force of AlNiCo or hard ferrite magnets.

Temperature range:
max. 200°C.

Drawing reference:
1) magnetic face

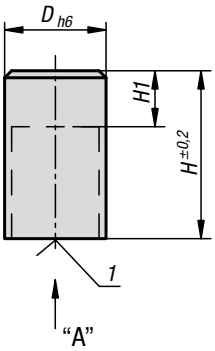
KIPP Magnets shallow pot SmCo

Order No. Form A	Order No. Form B	D	D1	D2	H	H1	T	Magnetic force N
K0550.01	**K0550.11**	6 ±0,15	-/6	-/M3	4,5	-/11,5	-/6	5
K0550.02	**K0550.12**	8 ±0,15	-/6	-/M3	4,5	-/11,5	-/6	11
K0550.03	**K0550.13**	10 ±0,15	-/6	-/M3	4,5	-/11,5	-/6	20
K0550.04	**K0550.14**	13 ±0,15	-/6	-/M3	4,5	-/11,5	-/6	40
K0550.05	**K0550.15**	16 ±0,15	-/6	-/M4	4,5	-/11,5	-/6	60
K0550.06	**K0550.16**	20 ±0,15	-/8	-/M4	6	-/13	-/9	90
K0550.07	**K0550.17**	25 ±0,15	-/8	-/M4	7	-/14	-/9	150
K0550.08	**K0550.18**	32 ±0,20	-/10	-/M5	7	-/15,5	-/10	220

Magnets deep pot

SmCo

Ⓐ



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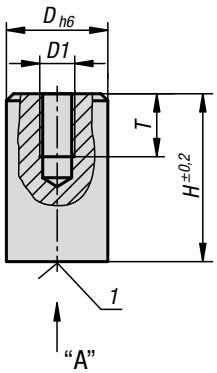
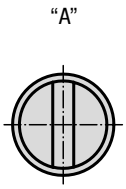




Material:
Housing brass.
Magnetic core SmCo.

Sample order:
K0551.01

Note:
Smooth design, shielded system. Diameter "D" ground with h6 tolerance. Under no circumstances may SmCo magnets be pressed directly into iron, loss of attractive force due to magnetic short circuits occurs. SmCo magnets are especially suitable for direct use in spot-welding machines, as no demagnetisation occurs.

Deep pot magnets Form A can be shortened by the dimension "H1" with no loss of magnetic force.

Temperature range:
max. 200°C.

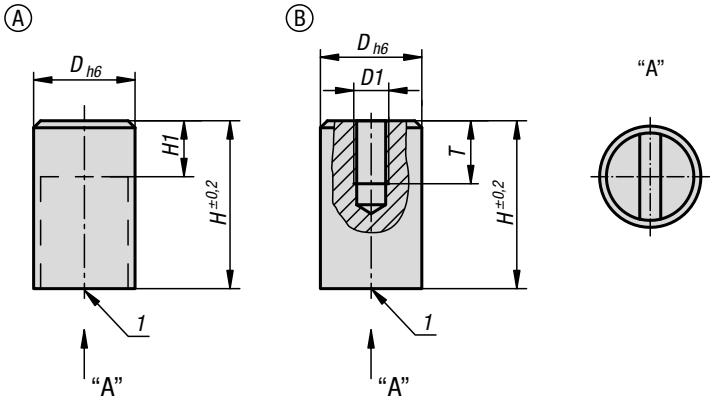
Drawing reference:
1) magnetic face

KIPP Magnets deep pot SmCo

Order No. Form A	Order No. Form B	D	D1	H1	H	T	Magnetic force N	Gap to iron wall mm
K0551.01	**K0551.02**	6	-/M3	10/-	20	-/5	8	1,5
K0551.03	**K0551.04**	8	-/M3	10/-	20	-/5	22	1,5
K0551.05	**K0551.06**	10	-/M4	8/-	20	-/7	40	2
K0551.07	**K0551.08**	13	-/M4	6/-	20	-/7	60	2,5
K0551.09	**K0551.10**	16	-/M4	2/-	20/25	-/8	125	3
K0551.11	**K0551.12**	20	-/M6	5/-	25	-/6	250	4
K0551.13	**K0551.14**	25	-/M6	7/-	35	-/8	400	5
K0551.15	**K0551.16**	32	-/M6	4,5/-	40	-/6	600	6

Magnets deep pot

NdFeB



Material:
Housing brass.
Magnetic core NdFeB (neodymium).

Version:
Housing smooth.

Sample order:
K1395.106

Note:
Smooth design, shielded system.
Under no circumstances may Neodym magnets be pressed directly into iron, loss of attractive force due to magnetic short circuits occurs.

Diameter "D" ground to tolerance h6.

The Form A magnets can be shortened by the dimension "H1" with no loss of magnetic force.

Temperature range:
max. 80°C.

Assembly:
The magnets can be mounted by press-fit, screwing-in or gluing.

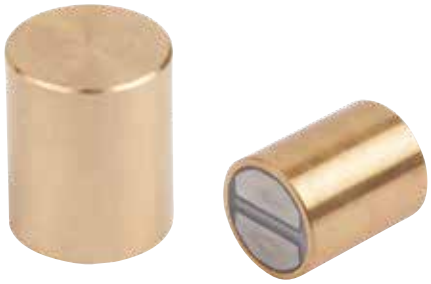
Drawing reference:
1) magnetic face

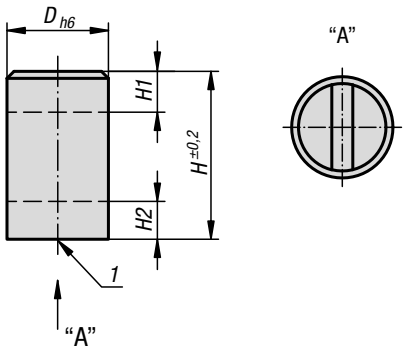
KIPP Magnets deep pot NdFeB

Order No.	Form	D	D1	H	H1	T	Magnetic force N	Gap to iron wall mm
K1395.106	A	6	-	20	10	-	10	1,5
K1395.108	A	8	-	20	10	-	25	1,5
K1395.110	A	10	-	20	8	-	45	2
K1395.113	A	13	-	20	6	-	70	2,5
K1395.116	A	16	-	20	2	-	150	3
K1395.120	A	20	-	25	5	-	280	4
K1395.125	A	25	-	35	7	-	450	5
K1395.132	A	32	-	40	4,5	-	700	6
K1395.206	B	6	M3	20	-	5	10	1,5
K1395.208	B	8	M3	20	-	5	25	1,5
K1395.210	B	10	M4	20	-	7	45	2
K1395.213	B	13	M4	20	-	7	70	2,5
K1395.216	B	16	M4	25	-	8	150	3
K1395.220	B	20	M6	25	-	6	280	4
K1395.225	B	25	M6	35	-	8	450	5
K1395.232	B	32	M6	40	-	6	700	6

Magnets deep pot with machinable magnetic face

NdFeB





Material:
Housing brass.
Magnetic core NdFeB (neodymium).

Sample order:
K1403.06

Note:
Smooth design, shielded system. Under no circumstances may Neodym magnets be pressed directly into iron, loss of attractive force due to magnetic short circuits occurs. Diameter "D" ground to an h6 tolerance.

These magnets can be shortened by the dimensions "H1" and "H2".

Temperature range:
max. 150°C.

Assembly:
The magnets can be mounted by press-fit, screwing-in or gluing.

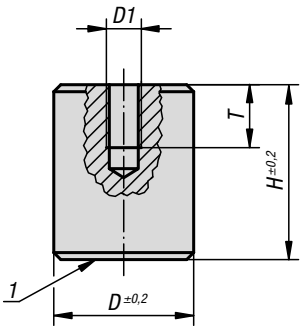
Drawing reference:
1) magnetic face

KIPP Magnets deep pot with machinable magnetic face, NdFeB

Order No.	D	H	H1	H2	Magnetic force N	Magnetic force at H2 max. N	Gap to iron wall mm
K1403.06	6	20	10	3	9	12	1,5
K1403.08	8	20	10	3	22	29	1,5
K1403.10	10	20	8	5	27	38	2
K1403.13	13	20	6	5	49	66	2,5
K1403.16	16	20	2	6	94	108	3
K1403.20	20	25	5	7	173	235	4
K1403.25	25	35	7	8	292	380	5
K1403.32	32	40	4,5	10	529	640	6

Magnets deep pot with internal thread

NdFeB



Material:
Housing, steel.
Magnetic core NdFeB.

Version:
Housing, electro zinc-plated.

Sample order:
K0552.01

Note:
Shielded system. Deep pot magnets are used for mounting in steel and iron. This requirement is principally stipulated in plant and machine construction.
Can also be used in blind holes.

Size D=50 has 4 magnets Ø18 mm.

Temperature range:
max. 80°C.

Drawing reference:
1) magnetic face

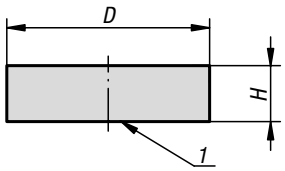
KIPP Magnets deep pot with internal thread NdFeB

Order No.	D	D1	H	T	Can be shortened by (mm)	Magnetic force N
K0552.01	8	M3	12	5	3	12
K0552.02	10	M4	16	7	7	24
K0552.03	13	M4	18	7	3	60
K0552.04	16	M4	20	7	6	90
K0552.05	20	M5	25	9	9	135
K0552.06	25	M6	30	9	10	190
K0552.07	35	M8	40	13	10	300
K0552.08	50	M12	50	13	13	550

Magnets shallow pot

NdFeB

Ⓐ



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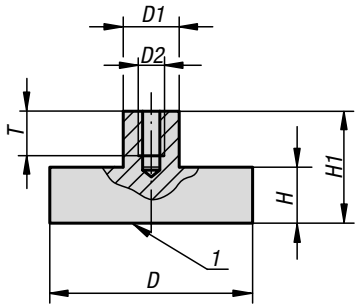

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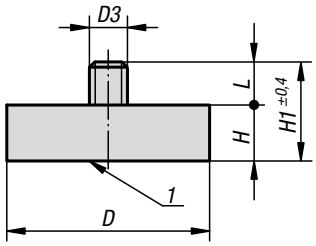


Material:
Housing, steel.
Magnetic core NdFeB.

Version:
Housing, electro zinc-plated.

Sample order:
K0553.01

Note:
Shielded system. With the permanent magnetic material NdFeB the attracive force increases by ca. 10-20 % compared with SmCo.

Temperature range:
max. 80°C.

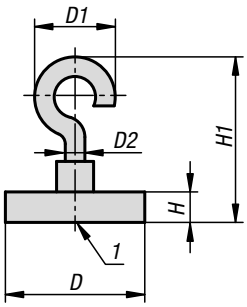
Drawing reference:
1) magnetic face

KIPP Magnets shallow pot NdFeB

Order No.	Form	D	D1	D2	D3	H	H1	L	T	Magnetic force N
K0553.01	A	6 ±0,15	-	-	-	4,5	-	-	-	5
K0553.02	A	8 ±0,15	-	-	-	4,5	-	-	-	13
K0553.03	A	10 ±0,15	-	-	-	4,5	-	-	-	25
K0553.04	A	13 ±0,15	-	-	-	4,5	-	-	-	60
K0553.05	A	16 ±0,15	-	-	-	4,5	-	-	-	95
K0553.06	A	20 ±0,15	-	-	-	6	-	-	-	140
K0553.07	A	25 ±0,15	-	-	-	7	-	-	-	200
K0553.08	A	32 ±0,20	-	-	-	7	-	-	-	350
K0553.11	B	6 ±0,15	6	M3	-	4,5	11,5	-	6	5
K0553.12	B	8 ±0,15	6	M3	-	4,5	11,5	-	7	13
K0553.13	B	10 ±0,15	6	M3	-	4,5	11,5	-	7	25
K0553.14	B	13 ±0,15	6	M3	-	4,5	11,5	-	6	60
K0553.15	B	16 ±0,15	6	M4	-	4,5	11,5	-	7	95
K0553.16	B	20 ±0,15	8	M4	-	6	13	-	9	140
K0553.17	B	25 ±0,15	8	M4	-	7	14	-	9	200
K0553.18	B	32 ±0,20	10	M5	-	7	15,5	-	10	350
K0553.19	B	40 ±0,2	10	M6	-	8	18	-	13	670
K0553.20	B	47 ±0,2	12	M6	-	9,2	20,5	-	13	750
K0553.21	B	50 ±0,2	15	M8	-	10	22	-	13	1000
K0553.23	C	10 ±0,15	-	-	M3	4,5	11,5	7	-	25
K0553.24	C	13 ±0,15	-	-	M5	4,5	12,5	8	-	60
K0553.25	C	16 ±0,15	-	-	M6	4,5	12,5	8	-	95
K0553.26	C	20 ±0,15	-	-	M6	6	16	10	-	140
K0553.27	C	25 ±0,15	-	-	M6	7	17	10	-	200
K0553.28	C	32 ±0,20	-	-	M6	7	17	10	-	350
K0553.29	C	40 ±0,2	-	-	M8	8	20	12	-	670
K0553.30	C	47 ±0,2	-	-	M8	9,2	22,2	13	-	790

Magnets shallow pot with hook

NdFeB



Material:
Housing and hook steel.
Magnetic core NdFeB (neodymium).

Version:
Housing and hook electro zinc-plated.

Sample order:
K1402.10

Note:
Shielded system. With the permanent magnetic material NdFeB the attracive force increases by ca. 10-20 % compared with SmCo.

Temperature range:
max. 80°C.

Drawing reference:
1) magnetic face

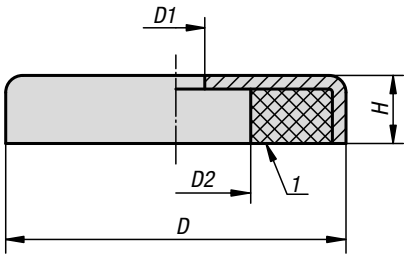
KIPP Magnets shallow pot with hook, NdFeB

Order No.	D	D1	D2	H	H1	Magnetic force N
K1402.10	10	10	3	4,5	24	25
K1402.13	13	10	3	4,5	24	60
K1402.16	16	13	3,5	4,5	27	95
K1402.20	20	13	3,5	6	27,5	140
K1402.25	25	13	3,5	7	28	200
K1402.32	32	18,5	4,5	7	38	350

K0554

Magnets shallow pot with counterbore

hard ferrite



Material:
Housing, steel.
Magnetic core hard ferrite.

Version:
Housing, electro zinc-plated.

Sample order:
K0554.50

Note:
Shielded system.

Temperature range:
max. 200°C.

Drawing reference:
1) magnetic face

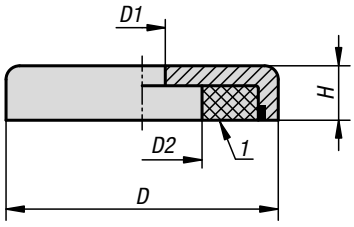
KIPP Magnets shallow pot with counterbore hard ferrite

Order No.	D	D1	D2	H	Magnetic force N
K0554.50	50 ±0,20	8,5	22	10	180
K0554.63	63 ±0,20	6,5	24	14	290
K0554.80	80 ±0,25	6,5	11,5	18	540

K1399

Magnets shallow pot with counterbore

SmCo with stainless-steel housing



Material:
Housing stainless steel 1.4104.
Magnetic core SmCo (samarium cobalt).

Sample order:
K1399.120

Note:
Shielded system.

Temperature range:
max. 350°C.

Assembly:
The magnets can be mounted by press-fit, screwing-in or gluing.

Drawing reference:
1) magnetic face

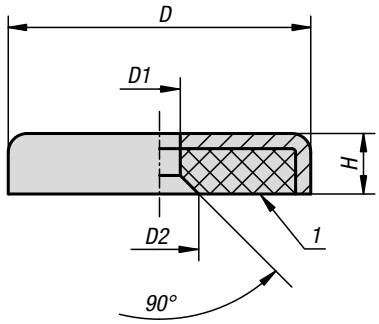
KIPP Magnets shallow pot with counterbore, SmCo with stainless-steel housing

Order No.	D	D1	D2	H	Magnetic force N
K1399.120	20 ±0,15	4,5	8	6	60
K1399.125	25 ±0,15	4,5	8	7	80
K1399.132	32 ±0,2	5,5	11	7	200
K1399.140	40 ±0,2	5,5	10,5	8	420

K0555

Magnets shallow pot with countersink

hard ferrite



Material:
Housing, steel.
Magnetic core hard ferrite.

Version:
Housing, electro zinc-plated.

Sample order:
K0555.01

Note:
Shielded system.

Temperature range:
max. 200°C.

Drawing reference:
1) magnetic face

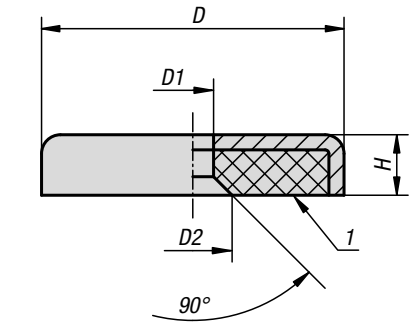
KIPP Magnets shallow pot with countersink hard ferrite

Order No.	D	D1	D2	H	Magnetic force N
K0555.01	16 ±0,15	3,3±0,2	7	4,5	14
K0555.02	20 ±0,15	4,2±0,2	9	6	27
K0555.03	25 ±0,15	5,5±0,2	11	7	36
K0555.04	32 ±0,20	5,5±0,2	11	7	72
K0555.05	40 ±0,20	5,5±0,2	11	8	90

K1408

Magnets shallow pot with countersink

hard ferrite with stainless-steel housing



Material:
Housing stainless steel 1.4016.
Magnetic core hard ferrite.

Version:
Bright.

Sample order:
K1408.120

Note:
Shielded system.

Temperature range:
max. 220°C.

Drawing reference:
1) magnetic face

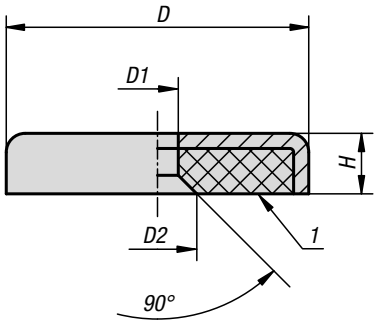
KIPP Magnets shallow pot with countersink, hard ferrite with stainless-steel housing

Order No.	D	D1	D2	H	Magnetic force N
K1408.120	20±0,15	4,2	9	6	22
K1408.125	25±0,15	5,5	11	7	29
K1408.132	32±0,15	5,5	11	7	58
K1408.140	40±0,2	5,5	12,5	8	72

K1401

Magnets shallow pot with countersink

SmCo



Material:
Housing steel.
Magnetic core SmCo (samarium cobalt).

Version:
Housing, electro zinc-plated.

Sample order:
K1401.16

Note:
Shallow pot magnets, shielded system. Magnets with an SmCo core have three to five times the attracting force of AlNiCo or hard ferrite magnets.

Temperature range:
max. 280°C.

Assembly:
The magnets can be mounted by press-fit, screwing-in or gluing.

Drawing reference:
1) magnetic face

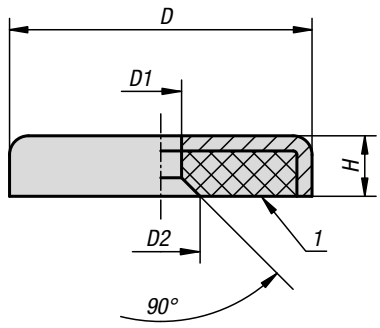
KIPP Magnets shallow pot with countersink, SmCo

Order No.	D	D1	D2	H	Magnetic force N
K1401.16	16 ±0,15	3,5	6,6	4,5	57
K1401.20	20 ±0,15	4,5	9,3	6	81
K1401.25	25 ±0,15	4,5	9,2	7	105
K1401.32	32 ±0,2	5,5	11,5	7	235
K1401.40	40 ±0,2	5,5	11,5	8	540

K1393

Magnets shallow pot with countersink

NdFeB



Material:
Housing, steel.
Magnetic core NdFeB (neodym).

Version:
Housing, electro zinc-plated.

Sample order:
K1393.13

Note:
Shielded system. With the permanent magnetic material NdFeB the attracive force increases by ca. 10-20 % compared with SmCo.

Temperature range:
max. 80°C.

Drawing reference:
1) magnetic face

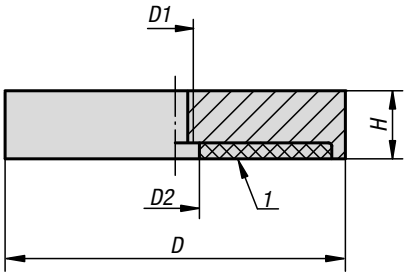
KIPP Magnets shallow pot with countersink, NdFeB

Order No.	D	D1	D2	H	Magnetic force N
K1393.13	13	3,5	6,6	4,5	40
K1393.16	16	3,5	6,6	4,5	75
K1393.20	20	4,5	9	6	105
K1393.25	25	4,5	9	7	160
K1393.32	32	5,5	11	7	310
K1393.40	40	5,5	10,6	8	500

K0556

Magnets shallow pot with internal thread

NdFeB



Material:
Housing, steel.
Magnetic core NdFeB.

Version:
Housing, electro zinc-plated.

Sample order:
K0556.01

Note:
Shielded system

Temperature range:
max. 80°C.

Drawing reference:
1) magnetic face

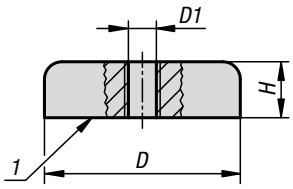
KIPP Magnets shallow pot with internal thread NdFeB

Order No.	D	D1	D2	H	Magnetic force N
K0556.01	32	M5	5,5	7	330
K0556.02	40	M5	10,5	8	550
K0556.03	63	M10	11,7	14	1100
K0556.04	75	M10	13	15	1750

K1394

Magnets shallow pot with internal thread

hard ferrite



Material:
Housing, steel.
Magnetic core hard ferrite.

Version:
Housing, electro zinc-plated.

Sample order:
K1394.2504

Note:
Shielded system.

Temperature range:
max. 200°C.

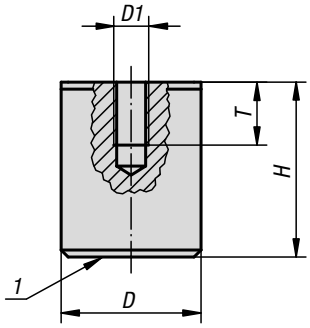
Drawing reference:
1) magnetic face

KIPP Magnets shallow pot with internal thread, hard ferrite

Order No.	D	D1	H	Magnetic force N
K1394.2504	25 ±0,15	M4	7	36
K1394.3204	32 ±0,2	M4	7	75
K1394.4004	40 ±0,2	M4	8	90
K1394.5006	50 ±0,2	M6	10	170
K1394.5008	50 ±0,2	M8	10	170
K1394.6308	63 ±0,20	M8	14	290
K1394.8008	80 ±0,25	M8	18	550
K1394.8010	80 ±0,25	M10	18	550

K0557

Magnets deep pot



Material:
Housing, steel.
Magnetic core AlNiCo.

Version:
Housing painted red.

Sample order:
K0557.01

Note:
Hard magnet in aluminium housing and steel jacket. Shielded system. Pot magnets are used for retaining, lifting and mounting in fixtures.
Due to the painted surface, the diameter D can be up to +0.8 mm.

Temperature range:
max. 450°C.

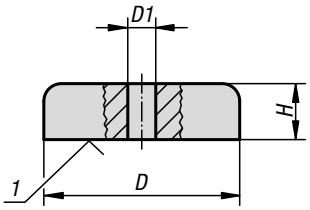
Drawing reference:
1) magnetic face

KIPP Magnets deep pot

Order No.	D	D1	H	T	Magnetic force N
K0557.01	17	M6	16	4	18
K0557.02	21	M6	19	5	28
K0557.03	27	M6	25	6	65
K0557.04	35	M6	30	9	115
K0557.05	65	M12	43	13	400

K0558

Magnets shallow pot



Material:
Housing, steel.
Magnetic core AlNiCo.

Version:
Housing painted red.

Sample order:
K0558.01

Note:
Shielded system. Shallow pot magnets are used in fixtures with minimal space.

Temperature range:
max. 450°C.

On request:
Other colours.

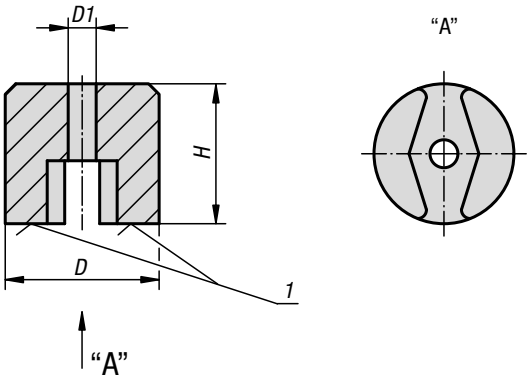
Drawing reference:
1) magnetic face

KIPP Magnets shallow pot

Order No.	D	D1	H	Magnetic force N
K0558.01	19	3,5	8	30
K0558.02	29	5	9	55
K0558.03	38	5	10,5	95

K0559

Magnets button



Material:
Magnetic core AlNiCo.

Version:
painted red.

Sample order:
K0559.01

Note:
Split attractive surface with through hole. Non-shielded system. Button magnets are used in laboratories, inspection rooms and for holding metal objects.

Temperature range:
max. 450°C.

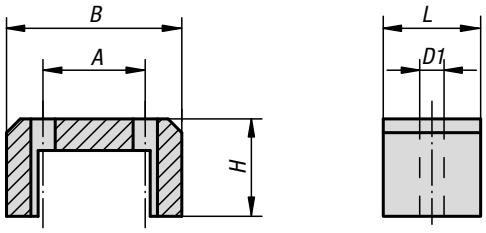
Drawing reference:
1) magnetic face

KIPP Magnets button

Order No.	D	D1	H	Magnetic force N
K0559.01	13	4,5	10	7
K0559.02	19	5,1	13	19
K0559.03	25	5,1	16	29
K0559.04	32	7	25	66

K0560

Magnets strong



Material:
Magnetic core AlNiCo.

Version:
painted red.

Sample order:
K0560.01

Note:
Horseshoe magnets with high attractive force. Non-shielded system. The magnets are supplied with a electro zinc-plated protective plate and are used for holding, sorting and lifting.
Sizes 1, 2 and 3 have only one attachment hole in the centre.

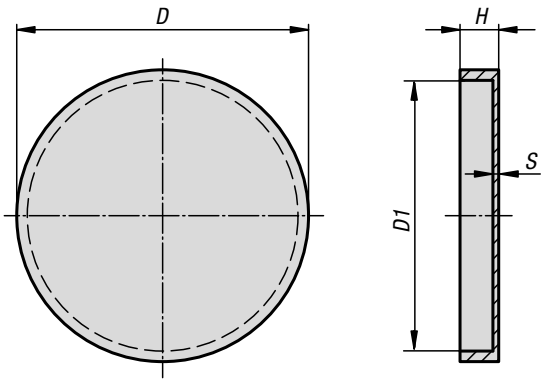
Temperature range:
max. 450°C.

KIPP Magnets strong

Order No.	Size	A	B	D1	H	L	Magnetic force N
K0560.01	1	-	30	5	20	20	45
K0560.02	2	-	40	5	25	25	90
K0560.03	3	-	45	5	30	29	120
K0560.04	4	32	57	8	35	45	230
K0560.05	5	38	70	8	41	57	320

Protective rubber caps

for shallow pot magnets



Material:
Synthetic rubber.

Version:
Black.

Sample order:
K0561.50

Note:
To protect sensitive surfaces. The protective rubber cap slips over the magnetic face of shallow pot magnets. The shear force required to move the magnet is doubled and achieves almost the original holding force of the magnet.
The protective rubber caps fit all shallow pot magnets with diameter 50, 63 and 80 mm.

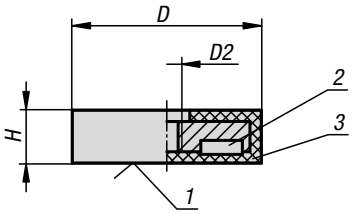
Temperature range:
max. 60°C.

KIPP Protective rubber caps for shallow pot magnets

Order No.	D	D1	H	S
K0561.50	52	50	6	0,5
K0561.63	65	63	8	0,5
K0561.80	83	80	11	0,5

Magnets shallow pot with internal thread

NdFeB, with rubber protective jacket



Material:
Housing, steel.
Magnetic core NdFeB (neodym).
Protective rubber jacket, synthetic rubber.

Version:
Housing, electro zinc-plated.
Black protective rubber jacket.

Sample order:
K0562.01

Note:
Magnet with internal thread. Shielded system. With rubber protective jacket for protecting sensitive surfaces. The coefficient of friction is increased by the rubber jacket so that high lateral friction is achieved.

Temperature range:
max. 60°C.

Drawing reference:
1) magnetic face
2) magnet
3) rubber

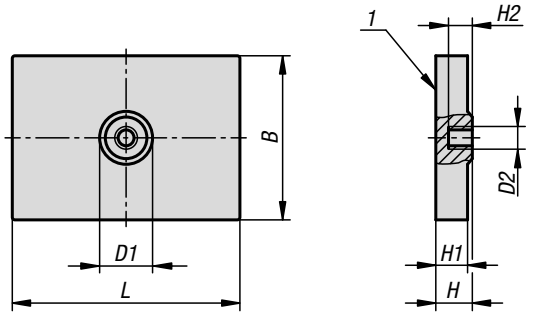
KIPP Magnets shallow pot with internal thread NdFeB, with rubber protective jacket

Order No.	D	D2	H	Magnetic force N
K0562.00	18	M4	6	25
K0562.01	22	M4	6	35
K0562.02	31	M5	6	75
K0562.03	43	M4	6	85
K0562.04	66	M6	8,5	180
K0562.05	88	M6	8	420

Magnets with internal thread

NdFeB, rectangular, with rubber protective jacket

Ⓐ



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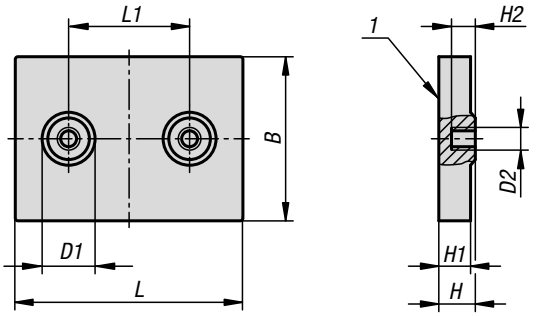


Material:
Housing steel.
Magnetic core NdFeB (neodymium).
Rubber protective jacket TPE.

Version:
Housing, electro zinc-plated.
Black protective rubber jacket.

Sample order:
K1396.14331

Note:
Magnet with internal thread. Shielded system. With rubber protective jacket for protecting sensitive surfaces. The coefficient of friction is increased by the rubber jacket so that high lateral friction is achieved.

Temperature range:
max. 60°C.

Assembly:
Optimum hold on thin plate with sensitive surfaces.

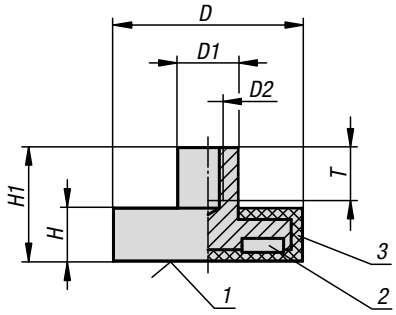
Drawing reference:
1) magnetic face

KIPP Magnets with internal thread, NdFeB, rectangular, with rubber protective jacket

Order No.	Form	B	D1	D2	H	H1	H2	L	L1	Magnetic force N
K1396.14331	A	31	10	M4	6,9	6	4,5	43	-	105
K1396.24331	B	31	10	M4	6,9	6	4,5	43	25	146

Magnets shallow pot with tapped pin

NdFeB, with rubber protective jacket



Material:
Housing, steel.
Magnetic core NdFeB (neodym).
Protective rubber jacket, synthetic rubber.

Version:
Housing, electro zinc-plated.
Black protective rubber jacket.

Sample order:
K0563.01

Note:
Shallow pot magnets with tapped pin, shielded system. With rubber protective jacket for protecting sensitive surfaces. The coefficient of friction is increased by the rubber jacket so that high lateral friction is achieved.

Temperature range:
max. 60°C.

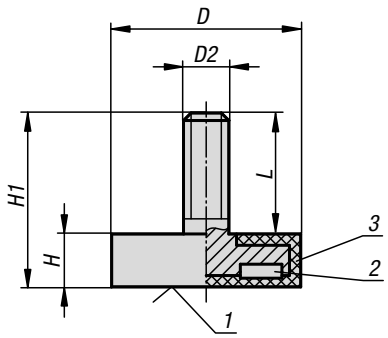
Drawing reference:
1) magnetic face
2) magnet
3) rubber

KIPP Magnets shallow pot with tapped pin NdFeB, with rubber protective jacket

Order No.	D	D1	D2	H	H1	T	Magnetic force N
K0563.01	12	8	M4	7	14,8	6	10
K0563.07	18	8	M4	6	11,5	6	37
K0563.02	22	8	M4	6	11,5	6	50
K0563.03	31	8	M4	6	11,5	5	75
K0563.04	43	8	M4	6	10,5	5	85
K0563.05	66	10	M5	8,2	15	8	180
K0563.06	88	12	M8	8,2	17	11	420

Magnets shallow pot with threaded pin

NdFeB, with rubber protective jacket



Material:
Housing, steel.
Magnetic core NdFeB (neodym).
Protective rubber jacket, synthetic rubber.

Version:
Housing, electro zinc-plated.
Black protective rubber jacket.

Sample order:
K0564.01

Note:
Shallow pot magnets with threaded pin, shielded system. With rubber protective jacket for protecting sensitive surfaces. The coefficient of friction is increased by the rubber jacket, so that high lateral friction is achieved.

Temperature range:
max. 60°C.

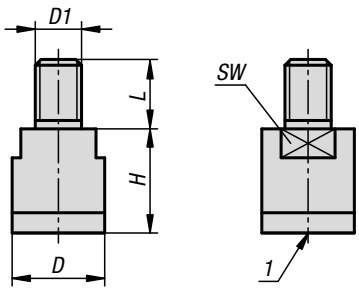
Drawing reference:
1) magnetic face
2) magnet
3) rubber

KIPP Magnets shallow pot with threaded pin NdFeB, with rubber protective jacket

Order No.	D	D2	H	H1	L	Magnetic force N
K0564.05	12	M4	7	15,5	8,5	13
K0564.06	18	M4	6	12	6	37
K0564.01	22	M4	6	12,5	6,5	50
K0564.07	31	M6	6	17	11	89
K0564.02	43	M6	6	21	15	85
K0564.03	66	M8	8,2	23	14,8	180
K0564.04	88	M8	8,2	23,5	15,3	420

Magnets deep pot with threaded pin

NdFeB, rubber magnetic face



Material:
Housing stainless steel 1.4104.
Magnetic core NdFeB (neodymium).
Magnetic face rubberised (TPE).

Sample order:
K1397.1306

Note:
Deep pot magnet with external thread, shielded system. With rubber magnetic face to protect sensitive surfaces. The rubber face increases the coefficient of friction resulting in high lateral frictional forces.

Temperature range:
max. 80°C.

Assembly:
The deep pot magnets with rubberised magnetic face can be used as a magnetic stop system.

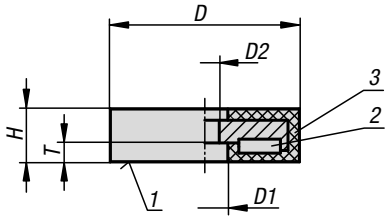
Drawing reference:
1) magnetic face

KIPP Magnets deep pot with threaded pin, NdFeB, rubber magnetic face

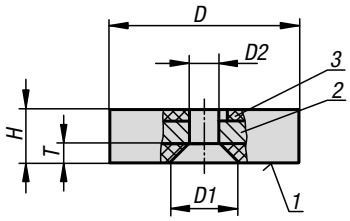
Order No.	D	D1	H	L	SW	Magnetic force N
K1397.1306	13	M6	16	10	11	15
K1397.1608	16	M8	18	12	13	23
K1397.2010	20	M10	20	14	17	46

Magnets shallow pot with through hole

NdFeB, with rubber protective jacket



K0565.03



Material:
Housing, steel.
Magnetic core NdFeB (neodym).
Protective rubber jacket, synthetic rubber.

Version:
Housing, electro zinc-plated.
Black protective rubber jacket.

Sample order:
K0565.01

Note:
Shallow pot magnets, shielded system. With rubber protective jacket for protecting sensitive surfaces. The coefficient of friction is increased by the rubber jacket so that high lateral friction is achieved.

Temperature range:
max. 60°C.

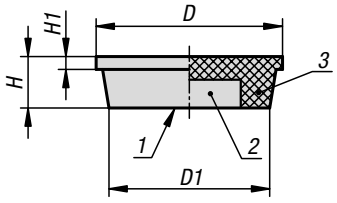
Drawing reference:
1) magnetic face
2) magnet
3) rubber

KIPP Magnets shallow pot with through hole NdFeB, with rubber protective jacket

Order No.	D	D1	D2	H	T	Magnetic force N
K0565.01	22	8,2	4	6	3,5	35
K0565.02	31	9	6	6	3,5	75
K0565.03	43	12,8	7,5	6	4,2	85
K0565.04	57	25,3	8	7,6	3,3	175
K0565.05	66	22	5,5	8,5	3,2	210

Retaining magnets

hard ferrite



Material:
Housing plastic (ABS).
Magnetic core hard ferrite.

Sample order:
K1398.101

Note:
These magnets are often used on notice boards, whiteboards and magnetic boards.

Temperature range:
max. 100°C.

On request:
Magnetic core NdFeB (neodymium).

Drawing reference:
1) Magnetic face
2) Magnet
3) Housing

KIPP Retaining magnets, hard ferrite

Order No. white	Order No. blue	Order No. red	Order No. black	D	D1	H	H1	Magnetic force N
K1398.101	K1398.102	K1398.103	K1398.104	10,5	9,5	7	1,5	0,7
K1398.161	K1398.162	K1398.163	K1398.164	16	14,5	7	1,1	1,3
K1398.201	K1398.202	K1398.203	K1398.204	20	16	7	2,1	1,5
K1398.251	K1398.252	K1398.253	K1398.254	25	22	8	2,2	10
K1398.301	K1398.302	K1398.303	K1398.304	30	28	8	2	14
K1398.361	K1398.362	K1398.363	K1398.364	36	32,5	9	2,2	9,5