

Magnets with Holders

V-Grooved Through Hole / V-Grooved / For Adjustment Screws / Standard / Knurled

V-Grooved Through Hole Type

Part Number	Material	Surface Treatment	Material	Surface Treatment	Heat Resistant Temperature
HXY	12L14 Carbon Steel	Electroless Nickel Plating	Neodymium Magnet	Nickel Plating	80°C

RoHS10

V-Grooved Type

Part Number	Material	Surface Treatment	Material	Surface Treatment	Heat Resistant Temperature
HYM	12L14 Carbon Steel	Electroless Nickel Plating	Neodymium Magnet	Nickel Plating	80°C

RoHS10

For Adjustment Screws

Part Number	Material	Surface Treatment	Material	Surface Treatment	Heat Resistant Temperature
HXAJ	1213 Carbon Steel	Electroless Nickel Plating	Neodymium Magnet	Nickel Plating	80°C

RoHS10

Standard Type

Part Number	Material	Surface Treatment	Material	Surface Treatment	Heat Resistant Temp.	Temp.
MGN	12L14 Carbon Steel	Electroless Nickel Plating	Neodymium Magnet	Nickel Plating	80°C	n
MGNH	416 Stainless Steel	—	Heat-resistant Neodymium Magnets	—	150°C	s

For MGNH, heat-resistant adhesive is applied.

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Knurled Type

Part Number	Material	Surface Treatment	Material	Surface Treatment	Heat Resistant Temperature
MGR	12L14 Carbon Steel	Electroless Nickel Plating	Neodymium Magnet	Nickel Plating	80°C

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Part Number	Type	D	L	Attraction Force N (kgf)	Surface Magnetic Flux Density Gauss [G]	d	d ₁	A	B	H
HXY	10	6	6	8.8 (0.9)	1000-1500	8	4	2	1.5	1.5
	13	8	8	18.6 (1.9)	1800-2600	11	6	3	2.5	1.5
	16	8	10	39.2 (4.0)	2100-3100	14	8	3	2.5	1.5
	20	10	10	78.4 (8.0)	2100-3100	18	10	4	3	2.0

Attraction force and surface magnetic flux density are for reference only.

Application Example

Part Number	Type	D	L	Attraction Force N (kgf)	Surface Magnetic Flux Density Gauss [G]	d	A	B	H	d ₁
HYM	8	6	6	3.9 (0.4)	3200-3500	4.0	3	2	1.5	2
	10	6	8	9.8 (1.0)		6.0				
	13	8	8	14.7 (1.5)	7.0	1.5	2			
	16	8	10	29.4 (3.0)	3300-3700	9.5	4	2	2.0	3
	20	10	10	49.0 (5.0)	3400-3700	12.5	4	2	2.0	3
	25	13	13	98.0 (10.0)	3400-3800	16.5	5	3	2.5	3

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Application Example

Part Number	Type	D	L	M x P	Attraction Force N (kgf)	Surface Magnetic Flux Density Gauss [G]	d ₁	d ₂	B	H	T	S	V
HXAJ	8	6	6	3 x 0.5	5.9 (0.6)	2000-2200	6.0	6.5	1.5	0.7	2.5	6.0	3.5
	10	6	8	4 x 0.7	17.6 (1.8)	2000-2400	8.0	8.5	2.0	1.0	3.0	8.0	4.5
	13	8	8	4 x 0.7	29.4 (3)	2200-2600	10.0	10.5	2.0	1.0	3.0	10.0	5.0
	16	8	10	5 x 0.8	78.4 (8)	3000-3300	13.0	13.5	2.0	1.0	3.0	13.0	6.0
	16	8	10	5 x 0.8	78.4 (8)	3000-3300	13.0	13.5	2.0	1.0	3.0	13.0	6.0

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Application Example

Part Number	Type	D	L	M x P	Attraction Force N (kgf)	Surface Magnetic Flux Density Gauss [G]	d ₁	B	C	ℓ
Neodymium Magnet MGN	6	10	10	3 x 0.5	2.9 (0.3)	3000-3200	4.0	2.0	0.3	6
	8	10	10	3 x 0.5	5.8 (0.6)	3500-3700	5.0			
	10	15	15	5 x 0.8	9.8 (1.0)	3400-3600	6.0			
	13	15	15	5 x 0.8	15.6 (1.6)	3200-3400	7.0			
Heat-Resistant Neodymium Magnet MGNH	16	20	20	6 x 1.0	36.2 (3.7)	3500-3700	9.5	2.0	1.0	12
	20	25	25	6 x 1.0	58.8 (6.0)	3100-3300	12.5			
	25	30	30	8 x 1.25	112.7 (11.5)	3500-3700	16.5			
	28	30	30	8 x 1.25	196.1 (20.0)	3300-3500	18.5			

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Part Number	Type	D	L	M x P	Attraction Force N (kgf)	Surface Magnetic Flux Density Gauss [G]	d	D ₁	B	C	H	E
MGR	10	15	15	5 x 0.8	9.8 (1.0)	3400-3600	6.0	9	2.0	0.5	5	10
	13	15	15	5 x 0.8	15.7 (1.6)	3500-3700	7.0	11	1.5	0.5	5	10
	16	20	20	6 x 1.0	36.3 (3.7)	3400-3700	9.5	14	2.0	1.0	6	14
	20	25	25	6 x 1.0	58.8 (6.0)	3400-3700	12.5	18	2.0	1.0	7	18
MGR	25	30	30	8 x 1.25	117.7 (12.0)	3500-3900	16.5	23	3.0	1.5	8	22
	28	30	30	8 x 1.25	196.1 (20.0)	3500-3900	18.5	26	3.0	1.5	8	22

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Hex Head Bolts with Magnets

Standard / Cap / Hardened / Low-Head Hex Socket

Type	Type							① ④		②		③		Heat Resistant Temp.								
	Standard	Cap	Hardened	Low Head	Low Head Hex Socket	Low Small Head	Low Small Head Hex Socket	Material	Surface Treatment	Material	Surface Treatment	Material	Surface Treatment									
Standard Type								12L14 Carbon Steel	Electroless Nickel Plating	Samarium-Cobalt Magnet	Neodymium Magnet	Heat-resistant Neodymium Magnets	Nickel Plating	* Brass (C36000 Brass BD (JIS))	80°C							
Cap Type																						
Hardened Type																1045 Carbon Steel Equivalent		Neodymium Magnet				80°C
Low Head / Low Small Head																						

*Brass is not included in Cap, Low Head and Low Small Head Type. Included in Standard and Hardened Type.

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Part Number	Type	M (Coarse)	L	B	T	ℓ	d ₁	d ₂	t	E	H	h	Attraction Force		Surface Flux Density Gauss [G]		
													Samarium-Cobalt Magnet	Neodymium Magnet Heat-Resistant Neodymium Magnets	Samarium-Cobalt Magnet	Neodymium Magnet Heat-Resistant Neodymium Magnets	
HXUB	HXUBN	3	10	7	5	1.2	4	5	2	—	—	—	—	2.9 (0.3)	3.9 (0.4)	2100-2600	2700-3000
		4	10	8	6	1.5	5	6	3	2	—	—	—	3.9 (0.4)	6.8 (0.7)	2500-2900	3000-3500
		5	10	10	7	2	7	8	3	—	—	—	—	10.8 (1.1)	16.7 (1.7)	2700-2900	3600-3900
		6	15	13	7	2	9.5	11	4	3	—	—	—	27.5 (2.8)	39.2 (4.0)	2800-3100	3800-4200
		8	15	17	9	3	12.5	14	4	3	—	—	—	47.1 (4.8)	83.4 (8.5)	2900-3300	—
HXUBNH	4	10	8	6	1.5	5	6	2	2	—	—	—	6.8 (0.7)	—	—	3000-3500	
	5	10	10	7	2	7	8	3	—	—	—	—	16.7 (1.7)	—	—	3600-3900	
	6	20	13	7	2	9.5	11	4	3	—	—	—	39.2 (4.0)	—	—	3800-4200	
Cap Type HXUBNK	4	10	8	6	1.5	5	6	2	2	—	—	—	4.0 (0.4)	—	—	3000-3200	
	5	10	10	7	2	7	8	3	—	—	—	—	10.0 (1.0)	—	—	3100-3300	
	6	20	13	7	2	9.5	11	4	3	—	—	—	23.5 (2.4)	—	—	3100-3300	
Hardened Type HXBY	4	10	8	6	1.5	5	6	2	2	—	—	—	6.8 (0.7)	—	—	3000-3500	
	5	10	10	7	2	7	8	3	—	—	—	—	16.7 (1.7)	—	—	3600-3900	
	6	15	13	7	2	9.5	11	4	3	—	—	—	39.2 (4.0)	—	—	3800-4200	
Low Head Type HXSUBN	Hex Socket Low Head Type RHXSUBN	4	10	14	3	1	10	—	1	—	2	2.2	—	32.1 (3.3)	—	—	1700-1900
		5	10	17	3	2	12.5	—	1	—	2.5	2.8	—	49.0 (5.0)	—	—	2400-2600
		6	15	19	3.5	2	14.5	—	1.5	—	3	3	—	78.4 (8.0)	—	—	2600-2800
		8	15	21	4	3	16.5	—	1.5	—	4	4	—	117.7 (12.0)	—	—	2800-3100
		10	20	24	5	3	18.5	—	2	—	5	5	—	176.5 (18.0)	—	—	2800-3100
Low Small Head Type KHUBN	Hex Socket Low Small Head Type RKHUBN	4	10	8	3	1	5	—	1	—	2	2.2	—	3.6 (0.4)	—	—	2000-2200
		5	10	10	3	1.5	7	—	1.5	—	2.5	2.8	—	10.2 (1.1)	—	—	2500-2700
		6	15	13	3.5	2	9.5	—	1.5	—	3	3	—	25.6 (2.6)	—	—	2300-2500

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Part Number Example: HXUB5 - 15

Part Number Alterations: HXUB5 - 15 - NC

Application Example: Nut KNTR (P.2429) with KHUBN magnet on Workpiece.

Alteration: Relief (NC) - Adds a relief to under head portion. Applicable for only Standard Type HXUB, HXUBN and HXUBNH. Ordering Code: NC.

Best for use in limited spaces.