

Magnets with Holders

High Strength Flush / High Strength / Thin

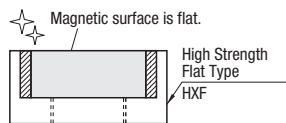
| Part Number | ① | | ② | | Heat Resistant Temperature | ③ | | Temperature |
|-------------|------------------------------|----------------------------|------------------|-------------------|----------------------------|-----------------|-------|-------------|
| | Material | Surface Treatment | Material | Surface Treatment | | Material | Front | |
| HXF | 1215 Carbon Steel Equivalent | Electroless Nickel Plating | Neodymium Magnet | Nickel Plating | 80°C | Brass (C3603BD) | N | S |

| Part Number | D | L | M x P (Coarse) | Attraction Force N (kgf) | Surface Magnetic Flux Density Gauss [G] | d ₁ | d ₂ | B |
|-------------|----|----|----------------|--------------------------|---|----------------|----------------|-----|
| HXF | 4 | 5 | M2 x 0.4 | 1.5 (0.1) | 2400-2800 | 2 | 3 | 2.5 |
| | 5 | 5 | M2 x 0.4 | 2.0 (0.2) | 2600-3000 | 2.5 | 3.5 | 2.5 |
| | 6 | 8 | M3 x 0.5 | 5.9 (0.6) | 2100-3000 | 4 | 5 | 3 |
| | 8 | 8 | M3 x 0.5 | 9.8 (1.0) | 2300-3300 | 6 | 7 | 3 |
| | 10 | 8 | M4 x 0.7 | 20.6 (2.1) | 2500-3600 | 8 | 9 | 3 |
| | 13 | 8 | M4 x 0.7 | 45.1 (4.6) | 2500-3600 | 10 | 11 | 4 |
| HXF | 16 | 10 | M5 x 0.8 | 89.2 (9.1) | 3000-4400 | 12 | 14 | 5 |
| | 20 | 10 | M5 x 0.8 | 128.5 (13.1) | 3200-4600 | 15 | 18 | 5 |
| | 25 | 13 | M6 x 1.0 | 225.5 (23.0) | 3200-4600 | 18 | 23 | 5 |

Part Number Example: HXF10

Features

- Highest attraction force compared with magnets of the same size.
- No grooves or bumps on surfaces to collect dust.



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

| Part Number | ① | | ② | | Heat-Resistant Temperature | ③ | | Temperature |
|-------------|---------------------|----------------------------|----------------------------------|-------------------|----------------------------|-----------------|-------|-------------|
| | Material | Surface Treatment | Material | Surface Treatment | | Material | Front | |
| HXU | 12L14 Carbon Steel | — | Samarium-Cobalt Magnet | — | 80°C | Brass (C3603BD) | N | S |
| HXUM | 12L14 Carbon Steel | Electroless Nickel Plating | — | — | | | | |
| HXUS | 416 Stainless Steel | — | Neodymium Magnet | — | | | | |
| HXUMN | 12L14 Carbon Steel | Electroless Nickel Plating | Neodymium Magnet | Nickel Plating | 150°C | Brass (C3603BD) | N | S |
| HXUSN | 416 Stainless Steel | — | | | | | | |
| HXUMNH | 1213 Carbon Steel | Electroless Nickel Plating | Heat-Resistant Neodymium Magnets | — | — | — | — | — |

| Part Number | Type | D | L | M x P (Coarse) | HXU / HXUM / HXUS | | HXUMN / HXUSN / HXUMNH | | d ₁ | d ₂ | B | H |
|---------------------------------|--------|----|----|----------------|--------------------------|---|--------------------------|---|----------------|----------------|---|-----|
| | | | | | Attraction Force N (kgf) | Surface Magnetic Flux Density Gauss [G] | Attraction Force N (kgf) | Surface Magnetic Flux Density Gauss [G] | | | | |
| Samarium-Cobalt Magnet | HXU | 4 | 5 | M2 x 0.4 | — | — | 0.784 (0.08) | — | 2.5 | 3 | 1 | 0.5 |
| | HXUM | 5 | 5 | M2 x 0.4 | — | — | 1.37 (0.14) | — | 3.5 | 4 | 1 | 0.5 |
| | HXUS | 6 | 8 | M3 x 0.5 | 3.9 (0.4) | 2100-2600 | 4.9 (0.5) | 3100-3300 | 4 | 5 | 2 | 1.6 |
| Neodymium Magnet | HXUMN | 8 | 8 | M3 x 0.5 | 5.9 (0.6) | 2400-2600 | 8.8 (0.9) | 3300-3600 | 5 | 6 | 2 | 1.6 |
| | HXUSN | 10 | 10 | M4 x 0.7 | 14.7 (1.5) | 2700-2900 | 19.6 (2.0) | 3800-4100 | 7 | 8 | 3 | 2.1 |
| | HXUMNH | 13 | 10 | M4 x 0.7 | 34.3 (3.5) | 2800-3100 | 44.1 (4.5) | 4000-4300 | 9.5 | 11 | 4 | 3.1 |
| Heat-Resistant Neodymium Magnet | HXUSNS | 16 | 10 | M5 x 0.8 | 58.8 (6.0) | 2900-3300 | 63.7 (6.5) | — | 12.5 | 14 | — | — |
| | HXUMNH | 20 | 13 | M6 x 1.0 | 98.1 (10.0) | 2900-3400 | 107.9 (11.0) | 4100-4400 | 16.5 | 18 | 6 | 5.1 |
| | HXUMNH | 25 | 15 | M6 x 1.0 | 137.3 (14.0) | 2900-3400 | 176.5 (18.0) | 4500-4800 | 21.5 | 23 | 6 | 5.1 |

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

| Part Number | ① | | ② | | Heat Resistant Temperature | ③ | | Temperature |
|-------------|--------------------|----------------------------|----------------------------------|-------------------|----------------------------|-----------------|-------|-------------|
| | Material | Surface Treatment | Material | Surface Treatment | | Material | Front | |
| HX | 12L14 Carbon Steel | — | Samarium-Cobalt Magnet | — | 80°C | Brass (C3603BD) | N | S |
| HXM | 12L14 Carbon Steel | Electroless Nickel Plating | — | — | | | | |
| HXMN | 12L14 Carbon Steel | Electroless Nickel Plating | Neodymium Magnet | — | | | | |
| HXMN-S | SUS416 | — | Neodymium Magnet | Nickel Plating | 150°C | Brass (C3603BD) | N | S |
| HXSNS | — | — | | | | | | |
| HXMNH | 1213 Carbon Steel | Electroless Nickel Plating | Heat-resistant Neodymium Magnets | — | — | — | — | — |

| Part Number | Type | D | L | M x P (Coarse) | HX / HXM | | HXMN / HXMN-S / HXSNS / HXMNH | | d ₁ | d ₂ | B | H |
|------------------------|--------|----|----|----------------|--------------------------|---|-------------------------------|---|----------------|----------------|-----|-----|
| | | | | | Attraction Force N (kgf) | Surface Magnetic Flux Density Gauss [G] | Attraction Force N (kgf) | Surface Magnetic Flux Density Gauss [G] | | | | |
| Samarium-Cobalt Magnet | HX | 4 | 4 | M2 x 0.4 | — | — | 0.62 (0.06) | — | 2.5 | 3 | 1 | 0.5 |
| | HXM | 5 | 4 | M2 x 0.4 | — | — | 1.27 (0.13) | — | 3.5 | 4 | 1 | 0.5 |
| | HXMN | 6 | 6 | M3 x 0.5 | 2.9 (0.3) | 2100-2600 | 3.9 (0.4) | 2700-3000 | 4 | 5 | 2 | 1.5 |
| Neodymium Magnet | HXMN | 8 | 6 | M3 x 0.5 | 3.9 (0.4) | 2200-2600 | 6.9 (0.7) | — | 5 | 6 | 2 | 1.5 |
| | HXMN-S | 10 | 6 | M3 x 0.5 | 9.8 (1.0) | 2100-2300 | 19.6 (2.0) | — | 7 | 8 | 1.5 | 1 |
| | HXSNS | 13 | 8 | M4 x 0.7 | 29.4 (3.0) | 2200-2400 | 44.1 (4.5) | 3000-3400 | 9.5 | 11 | 2 | 1.5 |
| Neodymium Magnet | HXMNH | 16 | 8 | M5 x 0.8 | 49.0 (5.0) | 2200-2500 | 88.3 (9.0) | — | 12.5 | 14 | — | — |
| | HXMNH | 20 | 10 | M5 x 0.8 | 88.3 (9.0) | — | 127.5 (13.0) | 3300-3500 | 16.5 | 18 | 3 | 2.5 |
| | HXMNH | 25 | 13 | M6 x 1.0 | 127.5 (13.0) | 2300-2600 | 196.1 (20.0) | 3000-3400 | 21.5 | 23 | 3 | 2.5 |

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

Part Number Example: HXMN10, HXMN20, HXMN-S20

Magnets with Holders

H7 Tolerance / Super Thin / Cap / Eccentric Mount

| Part Number | ① | | ② | | Heat Resistant Temperature |
|-------------|--------------------|----------------------------|------------------|-------------------|----------------------------|
| | Material | Surface Treatment | Material | Surface Treatment | |
| HXG | 12L14 Carbon Steel | Electroless Nickel Plating | Neodymium Magnet | Nickel Plating | 80°C |
| HXGS | — | — | — | — | |

| Part Number | Type | D | L | Attraction Force N (kgf) | Surface Magnetic Flux Density Gauss [G] | d ₁ | d ₂ | B | H | W |
|-------------|------|---|---|--------------------------|---|----------------|----------------|---|---|---|
| HXG | 6 | 6 | 6 | 2.9 (0.3) | 680-750 | 4 | 5 | 3 | 5 | 2 |
| | 8 | 6 | 6 | 8.8 (0.9) | 750-820 | 5 | 6 | 3 | 5 | 2 |
| | 10 | 6 | 6 | 9.8 (1.0) | 1000-1500 | 8 | 9 | 3 | 5 | 2 |
| | 13 | 6 | 6 | 44.1 (4.5) | 1000-1500 | 10 | 11 | 3 | 5 | 2 |
| HXGS | 6 | 6 | 6 | 68.6 (7.0) | 1200-1800 | 12 | 13 | 4 | 6 | — |
| | 8 | 6 | 6 | 2.9 (0.3) | 2500-3000 | 4 | 5 | 3 | — | — |
| | 10 | 6 | 6 | 9.8 (1.0) | 3000-3400 | 5 | 6 | 3 | — | — |
| | 13 | 6 | 6 | 15.6 (1.6) | 3500-4000 | 8 | 9 | 3 | — | — |

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

Part Number Example: HXG10

| Part Number | ① | | ② | | Heat Resistant Temp. |
|-------------|---------------------|-------------------|------------------|-------------------|----------------------|
| | Material | Surface Treatment | Material | Surface Treatment | |
| HXD | 416 Stainless Steel | — | Neodymium Magnet | Nickel Plating | 80°C |

Part Number Example: HXD8

Application Example

Best suited for use in limited spaces. (Attaching with adhesives recommended.)



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

| Part Number | Type | D | L | Attraction Force N (kgf) | Surface Magnetic Flux Density Gauss [G] | d ₁ | d ₂ | B | H |
|-------------|------|---|---|--------------------------|---|----------------|----------------|-----|-----|
| HXD | 6 | 3 | 3 | 3.9 (0.4) | 2700-3000 | 4 | 5 | 1.5 | 1.0 |
| | 8 | 3 | 3 | 6.9 (0.7) | 2700-3000 | 5 | 6 | 1.5 | 1.0 |
| | 10 | 3 | 3 | 19.6 (2.0) | 2700-3000 | 7 | 8 | 2.0 | 1.5 |
| | 13 | 3 | 3 | 44.1 (4.5) | 3000-3400 | 9.5 | 11 | 2.0 | 1.5 |

| Part Number | ① | | ② | | Heat Resistant Temperature |
|-------------|--------------------|----------------------------|------------------|-------------------|----------------------------|
| | Material | Surface Treatment | Material | Surface Treatment | |
| HXX | 12L14 Carbon Steel | Electroless Nickel Plating | Neodymium Magnet | Nickel Plating | 80°C |

The cap may come off if strong impacts are applied, or magnets directly come in contact with each other. Attraction force and surface magnetic flux density are for reference only.

| Part Number | Type | D | L | M x P | Attraction Force N (kgf) | Surface Magnetic Flux Density Gauss [G] | d ₁ | d ₂ | B | H |
|-------------|------|---|---|---------|--------------------------|---|----------------|----------------|-----|-----|
| HXX | 8 | 6 | 6 | 3 x 0.5 | 4.1 (0.42) | 1300-1500 | 5 | 6 | 2.0 | 1.5 |
| | 10 | 6 | 6 | 4 x 0.7 | 11.8 (1.2) | 1900-2100 | 7 | 8 | 1.5 | 1.0 |
| | 16 | 6 | 6 | 5 x 0.8 | 26.5 (2.7) | 2300-2500 | 9.5 | 11 | 2.0 | 1.5 |

Part Number Example: HXX10

No direct contact with workpiece.

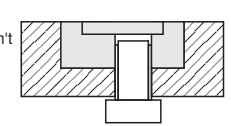


| Part Number | ① | | ② | | Heat Resistant Temperature |
|-------------|-------------------|----------------------------|------------------|-------------------|----------------------------|
| | Material | Surface Treatment | Material | Surface Treatment | |
| HXE | 1213 Carbon Steel | Electroless Nickel Plating | Neodymium Magnet | Nickel Plating | 80°C |

| Part Number | Type | D | L | M x P | Attraction Force N (kgf) | Surface Magnetic Flux Density Gauss [G] | d ₁ | d ₂ | B | H | S |
|-------------|------|---|---|---------|--------------------------|---|----------------|----------------|-----|-----|-----|
| HXE | 8 | 6 | 6 | 3 x 0.5 | 6.9 (0.7) | 2700-3000 | 5 | 6 | 2.0 | 1.5 | 0.5 |
| | 10 | 6 | 6 | 4 x 0.7 | 19.6 (2.0) | — | 7 | 8 | 1.5 | 1.0 | — |
| | 13 | 6 | 6 | 4 x 0.7 | 44.1 (4.5) | 3000-3400 | 9.5 | 11 | 2.0 | 1.5 | 1.0 |
| | 16 | 6 | 6 | 5 x 0.8 | 88.3 (9.0) | — | 12.5 | 14 | 2.0 | 1.5 | — |

Part Number Example: HXE10

The magnet with holder doesn't rotate when tightening.



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