ON/OFF Permanent Lifting Magnets
Designed for Your Lifting Application

FX Universal
Flats & Rounds

FXR Mostly
Rounds & Flats

FXP Thin Sheets
& Pipe

FXV Beams, Angle Iron (90°)
& Hot Parts
### FX UNIVERSAL PERMANENT LIFTING MAGNETS for Flats and Round

The FX universal, On/Off permanent lift magnets are ideal for a variety of manufacturing applications where you’re mostly lifting flat material, but occasionally need to lift rounds.

- On/off, Rare-Earth Permanent Magnet
- On/off handle only requires 90° rotation and locks at both on/off positions
- Durable, recessed metal name plates, not stickers
- Corrosion resistant, plated-magnet surface
- Heat resistant up to 180°F (82°C)
- 3:1 Design Factor
- 2018 ASME B30.20 BTH-1 Design Category B, Service Class 3

#### Working Load Limit (WLL) in lbs (kg) & *Max sheet Length Due To Sag For Material Thickness

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Overall LBS</th>
<th>Length (in)</th>
<th>Height (in)</th>
<th>Thickness (in)</th>
<th>Weight (lbs)</th>
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<tbody>
<tr>
<td>FX0330</td>
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<td>3000</td>
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</tbody>
</table>

### FXP PERMANENT LIFTING MAGNETS for Thin Sheets and Pipe

Ideal for thin sheets or parts, tanks/containers and thin-walled pipe that normally can’t be lifted with a permanent, On/Off magnet. The magnetic field on the FXP is concentrated and shallow to drive the strength into thin material.

- On/off Rare Earth Permanent Magnet
- On/off handle only requires 90° rotation and locks at both on/off positions
- Recessed metal name plates, not stickers
- Corrosion resistant, plated-magnet surface
- Heat resistant up to 180°F (82°C)
- 3:1 Design Factor
- 2018 ASME B30.20 BTH-1 Design Category B, Service Class 3

#### Working Load Limit (WLL) in lbs (kg) & *Max sheet Length Due To Sag For Material Thickness

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Overall LBS</th>
<th>Length (in)</th>
<th>Height (in)</th>
<th>Thickness (in)</th>
<th>Weight (lbs)</th>
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<td>FXP1450</td>
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<td>650</td>
<td>8</td>
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</table>

### Industrial Magnetics, Inc. • www.magnetics.com
We recommend the FXR for when you’re mostly lifting round/curved surfaces such as shafts, thick walled pipe, or billet, but occasionally need to lift flat material. Specially designed pole shoes provide a deep penetrating magnetic field and part stability.

- On/off, Rare-Earth Permanent Magnet
- On/off handle only requires 90° rotation and locks at both on/off positions
- Durable, recessed metal name plates, not stickers
- Corrosion resistant, plated-magnet surface
- Heat resistant up to 180°F (82°C)
- 3:1 Design Factor
- 2018 ASME B30.20 BTH-1 Design Category B, Service Class 3

### FXR PERMANENT LIFTING MAGNETS for Round Material

<table>
<thead>
<tr>
<th>Model No.</th>
<th>LBS</th>
<th>KG</th>
<th>Height (in)</th>
<th>Overall Length (in)</th>
<th>Magnet Length (in)</th>
<th>Handle Length (in)</th>
<th>Bail Length (in)</th>
<th>Thickness (in)</th>
<th>Height (in)</th>
<th>Width (in)</th>
<th>Weight (lbs)</th>
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<td>10.2</td>
<td>9</td>
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<td>14.2</td>
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<td>24.1</td>
<td>21</td>
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<td>3.5</td>
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### Working Load Limit (WLL) in lbs (kg) & *Max sheet Length Due To Sag For Material Thickness

- **Model No.** 1/4 (6') 3/8 (8') 1/2 (8') 3/4 (8') 1 (10') 2 (10') 3 (10')  WLL RD  Min/Max Dia  Min Thk
- **FXR0220** 154 (70) 220 (100) 220 (100) 220 (100) 220 (100) 220 (100) 220 (100) 220 (100) 220 (100) 1 - 6 5/16
- **FXR0500** 310 (141) 500 (227) 500 (227) 500 (227) 500 (227) 500 (227) 500 (227) 500 (227) 500 (225) 2 - 8 3/8
- **FXR1000** 331 (150) 661 (300) 780 (354) 1000 (454) 1000 (454) 1000 (454) 1000 (454) 1000 (454) 1000 (450) 2 - 11 3/4
- **FXR1650** NA 882 (400) 1200 (544) 1650 (748) 1650 (748) 1650 (748) 1650 (748) 1650 (748) 1650 (750) 3 - 15 3/4
- **FXR2650** NA 450 (204) 900 (408) 1764 (800) 2205 (1000) 2650 (1202) 2650 (1202) 2650 (1202) 2650 (1200) 5 - 22 1-1/2
- **FXR4000** NA NA 1250 (567) 2646 (1200) 3307 (1500) 4000 (1814) 4000 (1814) 4000 (1800) 4000 (1800) 5 - 22 1-1/2

### FXV PERMANENT LIFTING MAGNETS for Beams, Angle Iron (90°) and Hot Parts

The FXV On/Off permanent lift magnets are ideal for handling 90° shapes like angle iron, square tubing, and hot parts. Also works extremely well for inside webbing of I-beams where you need higher handle rotation. The on/off handle only requires 90° rotation and locks at both on/off positions. Durable construction with recessed metal name plates and corrosion-resistant plated magnet surface. Features a 3:1 design factor and meets 2018 ASME B30.20 BTH-1 Design Category B, Service Class 3.

**Hot part Handling: contact time and cooling times**

- 302°F (150°C) = 100%
- 392°F (200°C) = 50%, Max. 4 minutes contact, 4 minutes cooling time
- 482°F (250°C) = 33%, Max. 4 minutes contact, 8 minutes cooling time

(Note: WLL reduces as temperature raises)

<table>
<thead>
<tr>
<th>Model No.</th>
<th>LBS</th>
<th>KG</th>
<th>Height (in)</th>
<th>Overall Length (in)</th>
<th>Magnet Length (in)</th>
<th>Handle Length (in)</th>
<th>Bail Length (in)</th>
<th>Thickness (in)</th>
<th>Height (in)</th>
<th>Width (in)</th>
<th>Weight (lbs)</th>
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<td>9</td>
<td>0.6</td>
<td>2.4</td>
<td>2</td>
</tr>
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### Working Load Limit (WLL) in lbs (kg) & *Max sheet Length Due To Sag For Material Thickness

- **Model No.** 1/4 (6') 3/8 (8') 1/2 (8') 3/4 (8') 1 (10') 2 (10') 3 (10')  WLL RD  Min/Max Dia  Min Thk
- **FXV0440** 243 (110) 440 (200) 440 (200) 440 (200) 440 (200) 440 (200) 440 (200) 440 (200) 440 (200) 1 - 2 5/16
- **FXV0880** 330 (150) 772 (350) 835 (379) 880 (399) 880 (399) 880 (399) 880 (399) 880 (399) 880 (399) 1 - 2-3/8 1/2
- **FXV1775** 400 (200) 1050 (476) 1250 (567) 1775 (805) 1775 (805) 1775 (805) 1775 (805) 1775 (805) 1775 (805) 1-3/8 - 3 5/8
**FXC PERMANENT LIFTING MAGNETS** for Rounds, Rings, and Flange Plates

The FXC lift magnets have a round, multi-pole magnetic field designed for lifting rings, sleeves, bearing housings, flange plates and end of billet/pipe/shaft pieces. The on/off handle only requires 90° rotation and locks at both on/off positions. Durable construction with metal name plates and corrosion-resistant plated magnet surface. Features a 3:1 design factor and meets 2018 ASME B30.20 BTH-1 Design Category B, Service Class 3.

<table>
<thead>
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<td>3</td>
<td>2.3</td>
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</tbody>
</table>

**FXE ELECTRO-PERMANENT LIFTING MAGNETS** On-Board or Remote Control

- Smooth Surfaces, Cutting Tables
- Flame Cut, Hot Rolled Ship Yards
- Rough Surfaces, Casting, Forging, Slabs

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