General Hinge Information

SELECTION OF THE PROPER WEIGHT AND BEARING TYPE
Standard Weight ….. Plain Bearing
Standard Weight ….. Ball Bearing, Concealed Bearing
Heavy Weight……….. Ball Bearing, Concealed Bearing

CONSIDERATIONS TO DETERMINE WEIGHT AND BEARING TYPE:
- Weight of Door
- Frequency of use
- Frame
- Door Hardware
Always use ball bearing or concealed bearing hinges for doors with door closers and in all fire rated openings. Heavy weight doors and high frequency doors should use heavy weight ball bearing or concealed bearing hinges.

GUIDELINES FOR HINGE METAL
- Interior door or non-corrosive area use: Plated or painted Steel
- Interior labeled door use: Plated or Painted Steel, Stainless Steel
- Interior door in corrosive area use: Stainless Steel, Brass, Bronze
- Exterior doors use: Stainless Steel, Brass, Bronze
Standard pin material are Brass Hinge – Steel Pin, Stainless Steel Hinge – Stainless Steel Pin, Steel Hinge – Steel Pin

GUIDELINES FOR FREQUENCY OF DOOR USAGE:

<table>
<thead>
<tr>
<th>Build Type</th>
<th>Daily Usage</th>
<th>Hinge Type</th>
<th>Height (inches)</th>
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</thead>
<tbody>
<tr>
<td>High Frequency/ Heavy Weight Door</td>
<td>5,000</td>
<td>Heavy Weight</td>
<td>3-1/2</td>
</tr>
<tr>
<td>Large Department Store Entrance</td>
<td>5,000</td>
<td>Heavy Weight</td>
<td>3-1/2</td>
</tr>
<tr>
<td>Hospital Corridor and Surgical Doors</td>
<td>5,000</td>
<td>Heavy Weight</td>
<td>3-1/2</td>
</tr>
<tr>
<td>Large Office Building Entrance</td>
<td>4,000</td>
<td>Heavy Weight</td>
<td>3-1/2</td>
</tr>
<tr>
<td>School Entrance</td>
<td>1,250</td>
<td>Heavy Weight</td>
<td>3-1/2</td>
</tr>
<tr>
<td>School Toilet Door</td>
<td>1,250</td>
<td>Heavy Weight</td>
<td>3-1/2</td>
</tr>
<tr>
<td>Office Stairwell</td>
<td>500</td>
<td>Heavy Weight</td>
<td>3-1/2</td>
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<tr>
<td>Office Building Toilet Door</td>
<td>400</td>
<td>Heavy Weight</td>
<td>3-1/2</td>
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</table>

GUIDELINES FOR NUMBER OF HINGES
- Doors under 7'6" …….. 3 hinges
- Doors over 7'6" …….. 4 hinges

LOCATION OF HINGES
Top hinge 5" from jamb rabbet to top of barrel
Bottom hinge 10" from bottom edge of barrel to finished floor
Third hinge centered between top and bottom hinges
Note: Some western states use a standard 7" from top and 11" from the bottom

Top hinge 5" from jamb rabbet to top of barrel
Bottom hinge 10" from bottom edge of barrel to finished floor
Third hinge centered between top and bottom hinges
Note: Some western states use a standard 7" from top and 11" from the bottom
Ives Hinge Number System

Please note: For availability of specific models, please refer to the item’s catalog page or consult Customer Service.

How to Order:

```
5 - BB - 1 - HW - 4.5x4.5 - 652 - NRP
```

**Number of Knuckles:**
- 3 - 3 Knuckle
- 5 - 5 Knuckle

**Function:**
- PB - Plain Bearing
- BB - Ball Bearing
- CB - Concealed Bearing
- SP - Spring Hinge

**Type:**
- 1 - Full Mortise
- 2 - Half Mortise
- 3 - Full Surface
- 4 - Half Surface

**Weight/Options:**
- Blank - Standard Weight
- HW - Heavy Weight
- SC - Swing Clear
- SH - Security Stud
- WT - Wide Throw
- HT - Hospital Tip
- RC - Round Corners, 1/4" or 5/8" Radius

**Size Examples:**
- 3.5 x 3.5
- 4 x 4
- 4.5 x 4
- 4.5 x 4.5
- Larger sizes, up to 6 x 8 are available. Consult factory.

**Finish (Some models require extended lead times):**
- 600 - USP - Steel
- 605 - US3 - Brass
- 606 - US4 - Brass
- 612 - US10 - Brass
- 613 - US10B - Brass
- 619 - US15 - Brass
- 625 - US26 - Brass
- 626 - US26D - Brass
- 630 - US32D - Stainless
- 632 - US3 - Steel
- 633 - US4 - Steel
- 639 - US10 - Steel
- 640 - US10B - Steel
- 641 - US10A - Steel
- 643 - US11 - Steel
- 646 - US15 - Steel
- 651 - US26 - Steel
- 652 - US26D - Steel

**Special Pins Applications:**
- NRP - Non-Removable Pin
- TW4 - Four Wire
- TW8 - Eight Wire
- MON - Monitor
- TW4M - Four Wire with Monitor
- TW8M - Eight Wire with Monitor
ANSI Hinge Identification Reference

A = ANSI

First number indicates material
1 – Cast, forged or extruded brass or bronze
2 – Wrought brass or bronze
5 – Stainless steel
8 – Wrought or forged steel, or malleable iron

Second number indicates product type
1 – Full mortise
2 – Half mortise
3 – Full surface
4 – Half surface
5 – Anchor, pivot reinforced or thrust pivot unit or hinge sets
6 – Olive knuckle hinges
7 – Pivot hinge
8 – Rescue hardware

Third number indicates function
1 – Anti-friction bearing
2 – Anti-friction bearing, swing clear
3 – Plain bearing
4 – 4 to 0, special conditions

Fourth number indicates grade
1 – Grade 1, 4BB Extra Heavy Duty
2 – Grade 2, 2BB Standard Duty
3 – Grade 3, Plain Bearing

Example:
A8111 – Steel, Full Mortise, Anti-friction, Grade 1
A5112 – Stainless, Full Mortise, Anti Friction Bearing, Grade 2
5PB1  5 Knuckle, Plain Bearing Full Mortise Hinge

- For standard weight doors
- Low frequency usage
- Packed with wood and metal screws

Not for use with a door closer.

Options
- NRP, Non-Removable Pin
- SH, Security Stud
- HT, Hospital Tip
- RC, Round Corners - 1/4" or 5/8" Radius
- SEC, Security Fastners - Pin-in-Socket

Dimensions

<table>
<thead>
<tr>
<th>Size (Inches)</th>
<th>Size (mm)</th>
<th>Gauge</th>
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<td>3.5 x 3.5</td>
<td>89 x 89</td>
<td>0.123</td>
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<tr>
<td>4 x 4</td>
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<td>0.134</td>
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<tr>
<td>4.5 x 4.5</td>
<td>114 x 114</td>
<td>0.134</td>
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5BB1  5 Knuckle, Ball Bearing Full Mortise Hinge

- For standard weight doors
- Medium frequency usage
- 2 ball bearing
- Packed with wood and metal screws

Not for use with a door closer.

Options
- NRP, Non-Removable Pin
- SH, Security Stud
- HT, Hospital Tip
- RC, Round Corners - 1/4" or 5/8" Radius
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Finishes  brass

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Finishes  steel

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Finishes  stainless steel

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Architectural Hinges

5BB1HW  5 Knuckle, Ball Bearing, Heavy Weight Full Mortise Hinge
- For heavy weight doors
- High frequency usage
- 4 ball bearing
- Packed with wood and metal screws

Options
- NRP, Non-Removable Pin
- SH, Security Stud
- HT, Hospital Tip
- RC, Round Corners - 1/4" or 5/8" Radius
- SEC, Security Fastners - Pin-in-Socket

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<td>4.5 x 4</td>
<td>114 x 102</td>
<td>0.180</td>
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<tr>
<td>4.5 x 4.5</td>
<td>114 x 114</td>
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5BB1WT  5 Knuckle, Ball Bearing, Wide Throw Full Mortise Hinge
- For medium weight doors
- Medium frequency usage
- 2 ball bearing
- Packed with wood and metal screws

Options
- NRP, Non-Removable Pin
- SH, Security Stud
- HT, Hospital Tip
- RC, Round Corners - 1/4" or 5/8" Radius
- SEC, Security Fastners - Pin-in-Socket

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<td>114 x 127</td>
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<td>4.5 x 6</td>
<td>114 x 152</td>
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<td>5 x 6</td>
<td>127 x 152</td>
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<td>5 x 7</td>
<td>127 x 178</td>
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<td>5 x 8</td>
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5BB4  5 Knuckle, Ball Bearing, Half Surface Hinge
- For standard weight doors
- Medium frequency usage
- 2 ball bearing
- Packed with through bolts, grommets and sheet metal screws

**Options**
- NRP, Non-Removable Pin
- HT, Hospital Tip
- RC, Round Corners - 1/4" or 5/8" Radius
- SEC, Security Fastners - Pin-in-Socket

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5BB4HW  5 Knuckle, Ball Bearing, Half Surface Heavy Weight Hinge
- For heavy weight doors
- High frequency usage
- 4 ball bearing
- Packed with through bolts, grommets and sheet metal screws

**Options**
- NRP, Non-Removable Pin
- HT, Hospital Tip
- RC, Round Corners - 1/4" or 5/8" Radius
- SEC, Security Fastners - Pin-in-Socket

**Dimensions**

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**Finishes**

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</table>
5BB1SC  5 Knuckle, Ball Bearing, Swing Clear Full Mortise Hinge

- For standard weight doors
- Square edge standard
- Medium frequency usage
- 2 ball bearing
- Packed with flat head wood and metal screws

Designed to completely clear the opening when door is opened 92 degrees.

Options
- NRP, Non-Removable Pin
- B, beveled edge door
- HT, Hospital Tip
- RC, Round Corners - 1/4" or 5/8" Radius
- SEC, Security Fastners - Pin-in-Socket

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5BB1SCHW  5 Knuckle, Ball Bearing, Swing Clear Heavy Weight Full Mortise Hinge

- For heavy weight doors
- High frequency usage
- 2 ball bearing
- Packed with flat head wood and metal screws

Designed to completely clear the opening when door is opened 92 degrees.

Options
- NRP, Non-Removable Pin
- B, beveled edge door
- HT, Hospital Tip
- RC, Round Corners - 1/4" or 5/8" Radius
- SEC, Security Fastners - Pin-in-Socket

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