



Welding



Plain Bearing - Heavy Weight

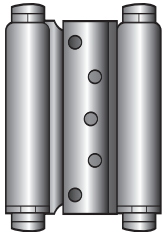
Manufactured with no holes and can easily be welded onto gates, Dumpsters, and industrial applications such as bins or warehouse doors

1850 Steel with Steel pin
- ANSI K81081F

- Flat surface with no swage
- No holes
- Square corners
- Fast riveted pin

Hinge Size		Gauge of Metal	Pin Diameter
Inches	mm		
4 x 4	102 x 102	0.179	0.312
4 1/2 x 4 1/2	114 x 114	0.179	0.322
5 x 5	127 x 127	0.179	0.322
6 x 6	152 x 152	0.203	0.500

Spring



Double Acting

1303 Steel
Adjustable

Hinge Size		Hinges Per Door	Max. Door Weight	Door Thickness	Door Width
Inches	mm				
3	76	3	50 lbs.	1" door	2' 0" (61 cm)
3	76	3	50 lbs.	7/8" max. door	2' 1" (63.5 cm)
3	76	3	50 lbs.	3/4" min. door	2' 2" (66 cm)
4	102	3	75 lbs.	1 1/4" door	2' 0" (61 cm)
4	102	3	75 lbs.	1 1/8" max. door	2' 1" (63.5 cm)
4	102	3	75 lbs.	7/8" min. door	2' 2" (66 cm)
5	127	3	100 lbs.	1 1/2" door	2' 2" (66 cm)
5	127	3	100 lbs.	1 3/8" max. door	2' 3" (68.6 cm)
5	127	3	100 lbs.	1 1/8" min. door	2' 4" (71.1 cm)
6	152	3	125 lbs.	2" door	2' 4" (71.1 cm)
6	152	3	125 lbs.	1 3/4" max. door	2' 5" (73.7 cm)
6	152	3	125 lbs.	1 1/4" min. door	2' 6" (76.2 cm)

Three Knuckle



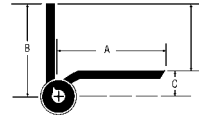
Concealed Anti-Friction Bearing - Standard Weight

For use on medium weight hollow metal or wood composite doors with hollow metal frames requiring medium frequency service

AB703 Steel with Steel pin
- ANSI A8412

AB803 Brass with Stainless Steel pin
- ANSI A2412
Stainless Steel with Stainless Steel pin
- ANSI A5412

- Non-rising removable pin with flush pin and plug
- Beveled surface leaf
- Thru-bolts and grommets for wood door applications
- Reversible



Hinge Size		Gauge of Metal	Hole Count	Machine Screw Size	
Inches	mm			Door Leaf	Jamb Leaf
4 1/2	114	0.134	7	2 x 1/4-20 OH	1/2 x 12-24 FH
5	127	0.145	8	2 x 1/4-20 OH	1/2 x 12-24 FH

Hinge Size		Door Leaf Width "A"		Jamb Leaf Width "B"		Door Leaf Offset "C"		Application "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4 1/2	114	2 9/16	65	2	51	1/2	12.5	1 1/2	38
5	127	2 7/8	73	2	51	1/2	12.5	1 1/2	38

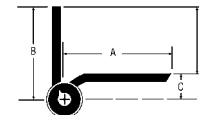
Concealed Anti-Friction Bearing - Heavy Weight

For use on heavy weight hollow metal or wood composite doors with hollow metal frames requiring high frequency service

AB753 Steel with Steel pin
- ANSI A8411

AB853 Brass with Stainless Steel pin
- ANSI A2411
Stainless Steel with Stainless Steel pin
- ANSI A5411

- Non-rising removable pin with flush pin and plug
- Beveled surface leaf
- Thru-bolts and grommets for wood door applications
- Reversible



Hinge Size		Gauge of Metal	Hole Count	Machine Screw Size	
Inches	mm			Door Leaf	Jamb Leaf
4 1/2	114	0.180	7	2 x 1/4-20 OH	1/2 x 12-24 FH
5	127	0.190	8	2 x 1/4-20 OH	1/2 x 12-24 FH
6†	152	0.203 Brass & Steel; 0.190 SS	10	2 x 1/4-20 OH	1/2 x 1/4-20 FH

Hinge Size		Door Leaf Width "A"		Jamb Leaf Width "B"		Door Leaf Offset "C"		Application "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4 1/2	114	2 9/16	65	2 1/16	52	9/16	14	1 1/2	38
5	127	2 7/8	73	2 1/16	52	9/16	14	1 1/2	38
6†	152	3 1/4	83	2 1/8 or 2 1/2	54 or 64	5/8	16	1 1/2 or 1 7/8	38 or 48

† Door thickness must be specified



Architectural Hinges

Half Surface

Five Knuckle

Plain Bearing - Standard Weight

For use on regular weight hollow metal or wood composite doors with hollow metal frames requiring low frequency service

1173 Steel with Steel pin
- ANSI A8433

- Non-rising removable pin with button tip and plug
- Beveled surface leaf
- Thru-bolts and grommets for wood door applications
- Reversible



Hinge Size		Gauge of Metal	Hole Count	Machine Screw Size	
Inches	mm			Door Leaf	Jamb Leaf
3 1/2*	89	0.119	6	1 3/4 x 10-24 OH	1/2 x 10-24 FH
4*	102	0.129	7	2 x 1/4-20 OH	1/2 x 12-24 FH
4 1/2	114	0.134	7	2 x 1/4-20 OH	1/2 x 12-24 FH

Hinge Size		Door Leaf Width "A"		Jamb Leaf Width "B"		Door Leaf Offset "C"		Application "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
3 1/2*	89	1 5/8	41	1 9/16	31	7/16	11.5	1 1/16	27
4*	102	2 5/16	59	1 13/16	46	1/2	13	1 5/16	33
4 1/2	114	2 9/16	65	2	51	1/2	12.5	1 1/2	38

* For 1 3/8" door

Ball Bearing - Standard Weight

For use on regular weight hollow metal or wood composite doors with hollow metal frames requiring medium frequency service

BB1173 Steel with Steel pin
- ANSI A8412

BB2112 Brass with Stainless Steel pin
- ANSI A2412
Stainless Steel with Stainless Steel pin
- ANSI A5412

- Two ball bearings
- Non-rising removable pin with button tip and plug
- Beveled surface leaf
- Thru-bolts and grommets for wood door applications
- Reversible



Hinge Size		Gauge of Metal	Hole Count	Machine Screw Size	
Inches	mm			Door Leaf	Jamb Leaf
4*	102	0.129	7	2 x 1/4-20 OH	1/2 x 12-24 FH
4 1/2	114	0.134	7	2 x 1/4-20 OH	1/2 x 12-24 FH
5	127	0.145	8	2 x 1/4-20 OH	1/2 x 12-20 FH

Hinge Size		Door Leaf Width "A"		Jamb Leaf Width "B"		Door Leaf Offset "C"		Application "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4*	102	2 5/16	59	1 13/16	46	1/2	13	1 5/16	33
4 1/2	114	2 9/16	65	2	51	1/2	12.5	1 1/2	38
5	127	2 7/8	73	2	51	1/2	12.5	1 1/2	38

* For 1 3/8" door

Five Knuckle

Ball Bearing - Heavy Weight

For use on heavy weight hollow metal or wood composite doors with hollow metal frames requiring high frequency service

BB1163 Steel with Steel pin
- ANSI A8411

BB2113 Brass with Stainless Steel pin
- ANSI A2411
Stainless Steel with Stainless Steel pin
- ANSI A5411

- Four ball bearings
- Non-rising removable pin with button tip and plug
- Beveled surface leaf
- Thru-bolts and grommets for wood door applications
- Reversible



Hinge Size		Gauge of Metal	Hole Count	Machine Screw Size	
Inches	mm			Door Leaf	Jamb Leaf
4 1/2	114	0.180	7	2 x 1/4-20 OH	1/2 x 12-24 FH
5	127	0.190	8	2 x 1/4-20 OH	1/2 x 12-24 FH
6†	152	0.203 Brass & Steel; 0.190 SS	10	2 x 1/4-20 OH	1/2 x 1/4-20 FH

Hinge Size		Door Leaf Width "A"		Jamb Leaf Width "B"		Door Leaf Offset "C"		Application "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4 1/2	114	2 9/16	65	2 1/16	38	9/16	14	7/16	11
5	127	2 7/8	73	2 1/16	38	9/16	14	7/16	11
6†	152	3 1/4	83	2 1/8 or 2 1/2	54 or 64	5/8	16	1 1/2 or 1 7/8	38 or 48

† Door thickness must be specified

Spring

Single Acting

For automatic closing of door. Meets codes for hotels, motels, institutions and commercial buildings

1253 Steel
- ANSI K81081F

- For maximum versatility use all spring hinges or a combination of spring and ball bearing hinges. Do not use plain bearing hinges.
- Full spring tension may not be required on all hinges
- Strong wind conditions, drafts, carpeting drag, twisted/misaligned frames, or weatherstripping on doors may require additional spring hinges
- Thru-bolts and grommets for wood door applications



Hinge Size		Gauge of Metal	Hole Count	Machine Screw Size	
Inches	mm			Door Leaf	Jamb Leaf
4 1/2	114	0.134	7	2 x 1/4-20 with grommet nuts	1/2 x 12-24

Hinge Size		Door Leaf Width "A"		Jamb Leaf Width "B"		Door Leaf Offset "C"		Application "D"	
Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
4 1/2	114	2 9/16	65	2 1/16	52	9/16	14	1 1/2	38

Hinge Size	Recommended Max Door Weight (Lbs.)	Spring Hinge	Ball Bearing Hinge	Spring Hinge Location
4 1/2 (114 mm)	70 (32 kg)	1	2	Center
4 1/2 (114 mm)	115 (52 kg)	2	1	Top or Bottom
4 1/2 (114 mm)	150 (68 kg)	3	—	All