

5 KNUCKLE HINGES

Full Mortise Standard Weight Plain Bearing

F179 – (ANSI A8133 except for 3" x 3") Steel – polished and plated or phosphated and prime coated for painting

F191 – (ANSI A2133) Brass or bronze – polished and plated or painted

F191 (32) – (ANSI A5133) Stainless steel – highly polished

F191 (32D) – (ANSI A5133) Stainless steel – satin finish

- For use on internal or external doors without door closers in hospitals, churches, schools, airports, hotels, malls, apartment houses, office buildings, etc.
- All hinges have template screw hole location for use on either wood or hollow metal doors and frames
- Use anti-friction bearing hinges on high and average frequency doors and all doors equipped with door closers
- Hinges can be furnished with hospital tips (HT)



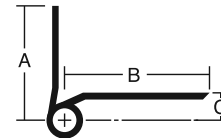
Size Open		Gauge of Metal		Flat Head Screws/ Per Piece		Quantity		Case Weight	
Inches	(mm)	Inches	(mm)	Machine	Wood	Per Box	Per Case	Steel	Brass
								Lbs. (Kg)	Lbs. (Kg)
3 x 3*	(76 x 76)	.080	(2)		6 - 9 x 3/4	2 EA.	100 EA.	32 (15)	
3 1/2 x 3	(89 x 76)	.123	(3.1)	6 - 10-24 x 1/2	6 - 10 x 1	2 EA.	100 EA.	60 (27)	64 (29)
3 1/2 x 3 1/2	(89 x 89)	.123	(3.1)	6 - 10-24 x 1/2	6 - 10 x 1	2 EA.	100 EA.	66 (30)	72 (33)
4 x 3 1/2	(102 x 89)	.130	(3.3)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 EA.	48 EA.	38 (17)	44 (20)
4 x 4	(102 x 102)	.130	(3.3)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 EA.	48 EA.	43 (20)	46 (21)
4 1/2 x 4	(114 x 102)	.134	(3.4)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 EA.	48 EA.	51 (23)	54 (25)
4 1/2 x 4 1/2	(114 x 114)	.134	(3.4)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 EA.	48 EA.	55 (25)	60 (27)
5 x 4	(127 x 102)	.146	(3.7)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 EA.	30 EA.	40 (18)	43 (20)
5 x 4 1/2	(127 x 114)	.146	(3.7)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 EA.	30 EA.	43 (20)	46 (21)
5 x 5*	(127 x 127)	.146	(3.7)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 EA.	30 EA.	46 (21)	51 (23)

*Steel only – for other substrates consult factory

Half Surface Standard Weight Plain Bearing

F173 – (ANSI A8433) Steel – polished and plated or phosphated and prime coated for painting

- For low frequency kalamein or wood doors with hollow metal frames (use ball bearing hinges on all doors equipped with door closers)
- Easily applied as only jamb leaf is mortised
- Packed with machine screws and grommet nuts



Measurements below

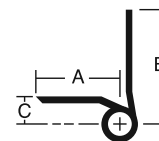


Size Length of Joint	Width		Offset (C)	Gauge of Metal	Flat head Machine Screws/Per Piece		Quantity Per Box	Quantity Per Case	Case Weight
	Frame Leaf (A)	Door Leaf (B)			Frame Leaf	Door Leaf			
Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)					Lbs. (Kg)
4 1/2 (114)	2 1/16 (52.4)	2 9/16 (65.1)	9/16 (14.3)	.134 (3.4)	4-12-24 X 1/2	3-1/4-20 X 2	3 EA.	30 EA.	37 (17)

Half Mortise Standard Weight Plain Bearing

F167 – (ANSI A8233) Steel – polished and plated or phosphated and prime coated for painting

- For low frequency hollow metal or wood doors with channel iron frames (use ball bearing hinges on all doors equipped with door closers)
- Easily applied as only door leaf is mortised



Measurements below



Size Length of Joint	Width		Offset (C)	Gauge of Metal	Quantity & Size of Screws/Per Piece		Quantity Per Box	Quantity Per Case	Case Weight
	Frame Leaf (A)	Door Leaf (B)			Frame Leaf	Door Leaf			
Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)					Lbs. (Kg)
4 1/2 (114)	1 1/2 (38.1)	2 1/16 (52.4)	7/16 (11.1)	.134 (3.4)	4-12-24 X 1/2	3-12-24 X 1/2	3 EA.	30 EA.	28 (13)

Conversion Tips and Pins

- Converts standard flush tip hinges
- Available in three styles, Ball • Crown • Steeple
- Same tips fit "CB", "1900R" and "F" line hinges
- Conversion pins are stainless
- Conversion pins accept NRP screw
- Knurl eliminates pin rotation
- For heavy weight consult factory

Standard weight Tips and Pins



Pin



Ball



Crown



Steeple