

STANLEY[®]
Security Solutions



5 KNUCKLE

CONCEALED BEARING HINGES

STANLEY[®]

TABLE OF CONTENTS		Page	Page
Table of contents.....	2	Full surface hinges.....	10-11
Company history.....	2	Slip-in hinges	12
5 knuckle concealed bearing design	3	Pivot reinforced hinges	13
Full mortise hinges	4-5	Swing clear hinges	14-15
Half surface hinges	6-7	Plain bearing hinges	16
Half mortise hinges	8-9	Conversion tips	16

COMPANY HISTORY



**The Stanley Works
New Britain, CT in 1843**

As a young man in 1843, Frederick T. Stanley founded The Stanley Works – a small company located in New Britain, Connecticut that manufactured hinges, bolts and other door hardware in a one-story wooden building.

Mr. Stanley’s vision was to create a hardware company with unsurpassed customer service, product innovation and integrity – and to offer products that would become the first choice among professionals around the world.

With the early success of this mission and an increasing demand for his high-quality goods, Mr. Stanley began exporting his products in the 1870s.

Today, Stanley is a global organization supplying hardware and tools for the architectural, consumer, industrial and residential markets worldwide. Utilizing state-of-the-art research, manufacturing and quality-control capabilities, Stanley continues to deliver the innovative, high quality products that have made the Stanley name synonymous with the highest craftsmanship and dependability for more than 160 years.

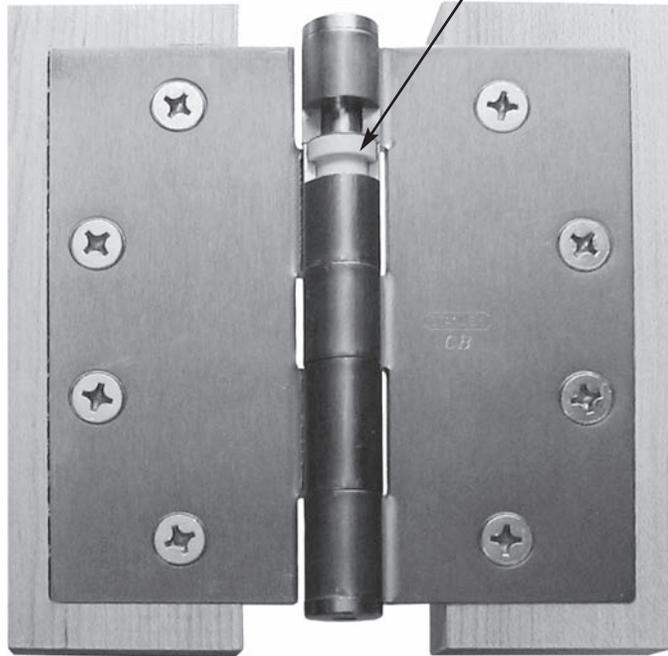
To our valued customers, we appreciate your loyalty over the years and proudly present our Architectural Hardware offering.

Commercial Customer Service: 1-800-337-4393
www.stanleyhardware.com



5 KNUCKLE CONCEALED BEARING HINGES

LifeSpan[®] Patented Two Piece Bearing System



CB5K

- LifeSpan[®] bearing system is a revolutionary concept in bearing construction and materials developed by The Stanley Works. It eliminates metal to metal contact between knuckles by creating its own bearing surface between the washer and sleeve. As the stainless steel washer extends into the sleeve it eliminates metal to metal contact between the pin and barrel, resulting in a smooth, quiet operation superior to that of a ball bearing assembly.
- Innovative design.
- Vertical and Lateral wear performance exceeds ANSI/BHMA Grade 1 standard.
- LifeSpan[®] limited lifetime warranty for the life of the building.
- Approved for use on all types of fire doors up to 4' x 10' (1219mm x 3048mm); 8' x 10' (2438mm x 3048mm) pairs, to maintain the integrity of fire rated openings and walls.
Refer to NFPA80.
- Bearing is maintenance free – no oil, no grease
- CB barrel matches the appearance of “F” line plain bearing hinges for uniform appearance throughout the building.
- Equipped with easily seated non-rising pins.

5 KNUCKLE FULL MORTISE HINGES

Standard Weight Concealed Bearing LifeSpan®

CB179 – (ANSI A8112) Steel – polished and plated or phosphated and prime coated for painting

CB191 – (ANSI A2112) Brass or bronze – polished and plated or painted

CB191 (32) – (ANSI A5112) Stainless steel – highly polished

CB191 (32D) – (ANSI A5112) Stainless steel – satin finish

- For medium weight doors of average frequency
- All hinges have template screw hole location for use on either wood or hollow metal doors and frames
- Concealed LifeSpan® bearing is maintenance free – no oil, no grease
- Pins in non-ferrous hinges are stainless steel
- Hole in bottom tip for easy pin removal
- Reversible flush tips and pins
- LifeSpan® limited lifetime warranty
- Hinges can be furnished as follows:
 - with raised barrel (RB)
 - with electric wires and/or switches (CE and/or CS)
 - with hospital tips (HT)
 - with decorative tips
 - with security studs
 - with non-removable pins (NRP)



Size Open		Gauge of Metal		Flat Head Screws Per Piece		Quantity Per Box	Quantity Per case	Case Weight			
Inches	(mm)	Inches	(mm)	Machine	Wood			Bronze		Steel	
							Lbs.	(Kg)	Lbs.	(Kg)	
3 1/2 x 3	(89 x 76)	.123	(3.1)	6 - 10-24 x 1/2	6 -10 x 1	3 EA.	90 EA.	58	(26)	54	(24)
3 1/2 x 3 1/2	(89 x 89)	.123	(3.1)	6 - 10-24 x 1/2	6 -10 x 1	3 EA.	90 EA.	65	(29)	59	(27)
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.	43	(19)	39	(18)
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.	45	(20)	42	(19)
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.	55	(25)	52	(24)
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.	59	(27)	55	(25)
5 x 4	(127 x 102)	.146	(3.7)	8 - 12-24 x 1/2	4 -12 x 1 1/4	3 EA.	30 EA.	41	(19)	39	(18)
5 x 4 1/2	(127 x 114)	.146	(3.7)	8 - 12-24 x 1/2	4 -12 x 1 1/4	3 EA.	30 EA.	45	(20)	43	(19)
5 x 5	(127 x 127)	.146	(3.7)	8 - 12-24 x 1/2	4 -12 x 1 1/4	3 EA.	30 EA.	50	(23)	46	(21)
*6 x 4 1/2	(152 x 114)	.160	(4.1)	10 -1/4-20 x 1/2	5 -14 x 1 1/2	3 EA.	24 EA.	43	(19)	36	(16)
*6 x 5	(152 x 127)	.160	(4.1)	10 -1/4-20 x 1/2	5 -14 x 1 1/2	3 EA.	24 EA.	47	(21)	40	(18)
*6 x 6	(152 x 152)	.160	(4.1)	10 -1/4-20 x 1/2	5 -14 x 1 1/2	3 EA.	24 EA.	67	(30)	61	(28)

*Available in Steel only

Consult factory for other sizes not listed

Heavy Weight Concealed Bearing LifeSpan®

CB168 – (ANSI A8111) Steel – polished and plated or phosphated and prime coated for painting

CB199 – (ANSI A2111) Brass or bronze – polished and plated or painted

CB199 (32) – (ANSI A5111) Stainless steel – highly polished

CB199 (32D) – (ANSI A5111) Stainless steel – satin finish

- For use on heavy weight doors or doors where high frequency is expected such as entrance doors to office buildings, stores, public buildings and corridor entrance doors to offices.
- All hinges have template screw hole location for use on either wood or hollow metal doors and frames
- Concealed LifeSpan® bearing is maintenance free – no oil, no grease
- Pins in non-ferrous hinges are stainless steel
- Hole in bottom tip for easy pin removal
- Reversible flush tips and pins
- LifeSpan® limited lifetime warranty
- Hinges can be furnished as follows:
 - with raised barrel (RB)
 - with electric wires and/or switches (CE and/or CS)
 - with hospital tips (HT)
 - with decorative tips
 - with security studs
 - with non-removable pins (NRP)



Size Open		Gauge of Metal		Flat Head Screws Per Piece		Quantity Per Box	Quantity Per Case	Case Weight			
Inches	(mm)	Inches	(mm)	Machine	Wood			Bronze Lbs.	(Kg)	Steel Lbs.	(Kg)
4 1/2 x 4 1/2	(114 x 114)	.180	(4.6)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 EA.	30 EA.	49	(22)	42	(19)
5 x 4 1/2	(127 x 114)	.190	(4.8)	8 - 12-24 x 1/2	8 - 12 x 1 1/2	3 EA.	24 EA.	46	(21)	40	(18)
5 x 5	(127 x 127)	.190	(4.8)	8 - 12-24 x 1/2	8 - 12 x 1 1/2	3 EA.	24 EA.	49	(22)	46	(21)
6 x 4 1/2	(152 x 114)	.203	(5.2)	8 - 12-24 x 1/2	10 - 14 x 1 1/2	3 EA.	24 EA.	60	(27)	53	(24)
6 x 5	(152 x 127)	.203	(5.2)	10 - 1/4-20 x 1/2	10 - 14 x 1 1/2	3 EA.	24 EA.	62	(28)	55	(25)
6 x 6	(152 x 152)	.203	(5.2)	10 - 1/4-20 x 1/2	10 - 14 x 1 1/2	3 EA.	24 EA.	72	(28)	61	(28)
8 x 6*	(203 x 152)	.203	(5.2)	16 - 1/4-20 x 1/2	16 - 14 x 1 1/2	3 EA.	12 EA.			51	(23)
8 x 8*	(203 x 203)	.203	(5.2)	16 - 1/4-20 x 1/2	16 - 14 x 1 1/2	3 EA.	12 EA.			61	(28)

*Available in Steel only

Consult factory for other sizes not listed

5 KNUCKLE HALF SURFACE HINGES

Standard Weight Concealed Bearing **LifeSpan®**

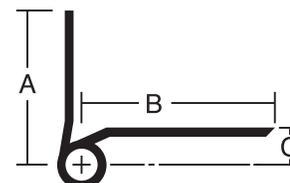
CB173 (ANSI A8412) Steel – polished and plated or phosphated and prime coated for painting

CB112 (ANSI A2412) Brass or bronze – polished and painted or plated

CB112 (32) (ANSI A5412) Stainless steel – highly polished

CB112 (32D) (ANSI A5412) Stainless steel – satin finish

- For medium weight wood, kalamein, or mineral core doors with edge rails that won't hold screws, hung on hollow metal frames, of average frequency
- Concealed LifeSpan® bearing is maintenance free – no oil, no grease
- Pins in non-ferrous hinges are stainless steel
- Reversible flush tips and pins
- Hinges can be furnished with hospital tips (HT)
- Consider using a back plate with these hinges
- LifeSpan® limited lifetime warranty
- Packed with machine screws and grommet nuts for 1 3/4" doors



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			Bronze Lbs. (Kg)	Steel Lbs. (Kg)
4 (102)	1 13/16 (46)	2 1/4 (57.2)	1/2 (12.7)	.130 (3.3)	4-12-24 X 1/2	3-1/4-20 X 2	3 EA.	48 EA.	56 (26)	47 (22)
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.	44 (20)	37 (17)
5 (127)	2 1/16 (52.4)	2 7/8 (73)	9/16 (14.3)	.146 (3.7)	4-12-24 X 1/2	4-1/4-20 X 2	3 EA.	24 EA.	48 (22)	39 (18)

Heavy Weight Concealed Bearing **LifeSpan®**

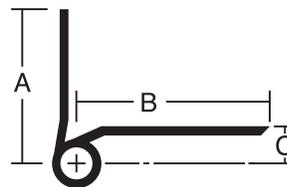
CB163 (ANSI A8411) Steel – polished and plated or phosphated and prime coated for painting

CB113 (ANSI A2411) Brass or bronze – polished and plated or painted

CB113 (32) (ANSI A5411) Stainless steel – highly polished

CB113 (32D) (ANSI A5411) Stainless steel – satin finish

- For heavy or high frequency wood, or mineral core doors with edge rails that won't hold screws hung on hollow metal frames
- Heavy weight gauge increases available bearing surface
- Concealed LifeSpan® bearing is maintenance free – no oil, no grease
- Pins in non-ferrous hinges are stainless steel
- Reversible flush tips and pins
- Hinges can be furnished with hospital tips (HT)
- Consider using a back plate with these hinges
- LifeSpan® limited lifetime warranty
- Packed with machine screws and grommet nuts for 1 3/4" doors



Measurements below

Size Length of Joint	Width				Offset		Gauge of Metal		Flat Head Machine Screws/Per Piece		Quantity Per Box	Quantity Per Case	Case Weight		
	Frame Leaf (A)		Door Leaf (B)		(C)		Inches (mm)	Inches (mm)	Frame Leaf	Door Leaf			Bronze Lbs. (Kg)	Steel Lbs. (Kg)	
	Inches	(mm)	Inches	(mm)	Inches	(mm)									
4 1/2	(114)	2 1/8	(54)	2 9/16	(65)	5/8	(15.9)	.180	(4.6)	4-12-24 X 1/2	3 -1/4-20 X 2	3 EA.	30 EA.	59 (27)	47 (21)
5	(127)	2 1/8	(54)	2 7/8	(73)	5/8	(15.9)	.190	(4.8)	4-12-24 X 1/2	4 -1/4-20 X 2	3 EA.	24 EA.	58 (26)	48 (22)
6	(152)	2 1/8	(54)	3 1/4	(82.6)	5/8	(15.9)	.203	(5.2)	5-1/4-20 X 1/2	5 -1/4-20 X 2	3 EA.	24 EA.	90 (41)	82 (37)

5 KNUCKLE HALF MORTISE HINGES

Standard Weight Concealed Bearing **LifeSpan**[®]

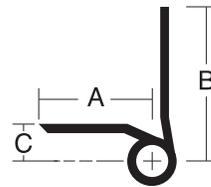
CB167 (ANSI A8212) Steel – polished and plated or phosphated and prime coated for painting

CB108 (ANSI A2212) Brass or Bronze – polished and plated or painted

CB108 (32) (ANSI A5212) Stainless steel – highly polished

CB108 (32D) (ANSI A5212) Stainless steel – satin finish

- For medium weight hollow metal or wood doors of average frequency, hung on channel iron frames
- Concealed LifeSpan[®] bearing is maintenance free – no oil, no grease
- Pins in non-ferrous hinges are stainless steel
- Reversible flush tips and pins
- Hinges can be furnished with hospital tips (HT)
- LifeSpan[®] limited lifetime warranty



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			Bronze Lbs. (Kg)	Steel Lbs. (Kg)
Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)							
4 1/2 (114)	1 1/2 (38.1)	2 1/16 (52.4)	7/16 (11.1)	.134 (3.4)	3-12-24 X 1/2	4-12-24 X 1/2	3 EA.	30 EA.	30 (14)	29 (13)		
5 (127)	1 1/2 (38.1)	2 1/16 (52.4)	7/16 (11.1)	.146 (3.7)	4-12-24 X 1/2	4-12-24 X 1/2	3 EA.	24 EA.	37 (17)	33 (15)		

Heavy Weight Concealed Bearing **LifeSpan**®

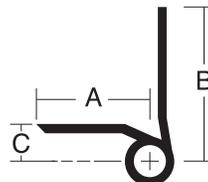
CB138 (ANSI A8211) Steel – polished and plated or phosphated and prime coated for painting

CB98 (ANSI A2211) Brass or bronze – polished and plated or painted

CB98 (32) (ANSI A5211) Stainless steel – highly polished

CB98 (32D) (ANSI A5211) Stainless steel – satin finish

- For heavy or high frequency hollow metal or wood doors hung on channel iron frames
- Concealed LifeSpan® bearing is maintenance free – no oil, no grease
- Pins in non-ferrous hinges are stainless steel
- Reversible flush tips and pins
- Hinges can be furnished with hospital tips (HT)
- LifeSpan® limited lifetime warranty



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			Bronze Lbs. (Kg)	Steel Lbs. (Kg)			
	Inches	(mm)	Inches	(mm)									Inches	(mm)	
4 1/2	(114)	1 1/2	(38.1)	2 1/8	(54)	1/2	(12.7)	.180	(4.6)	3-12-24 X 1/2	4-12-24 X 1/2	3 EA.	30 EA.	36 (17)	36 (17)
5	(127)	1 1/2	(38.1)	2 1/8	(54)	1/2	(12.7)	.190	(4.8)	4-12-24 X 1/2	4-12-24 X 1/2	3 EA.	24 EA.	36 (17)	36 (17)
6	(152)	1 1/2	(38.1)	2 1/8	(54)	1/2	(12.7)	.203	(5.2)	4-1/4-20 X 1/2	5-1/4-20 X 2	3 EA.	24 EA.	48 (22)	48 (22)

5 KNUCKLE FULL SURFACE HINGES

Standard Weight Concealed Bearing LifeSpan®

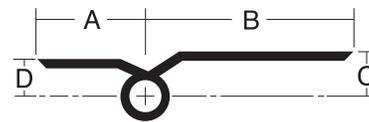
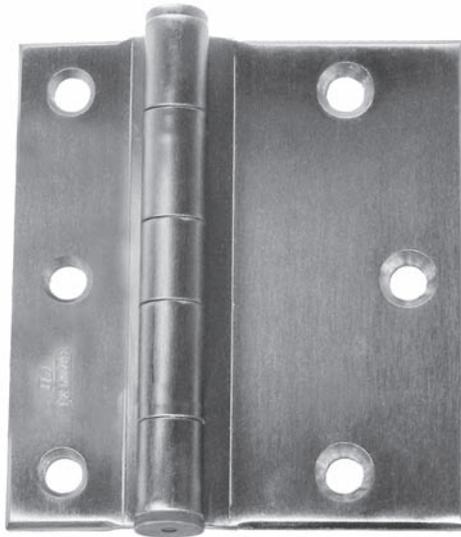
CB171 (ANSI A8312) Steel – polished and plated or phosphated and prime coated for painting

CB110 (ANSI A2312) Brass or bronze – polished and plated or painted

CB110 (32) (ANSI A5312) Stainless steel – highly polished

CB110 (32D) (ANSI A5312) Stainless steel – satin finish

- For medium weight kalamein, mineral core, or wood doors with edge rails that won't hold screws of average frequency hung on channel iron frames
- Concealed LifeSpan® bearing is maintenance free – no oil, no grease
- Pins in non-ferrous hinges are stainless steel
- Reversible flush tips and pins
- Hinges can be furnished with hospital tips (HT)
- Consider using a back plate with these hinges
- LifeSpan® limited lifetime warranty
- Packed with machine screws and grommet nuts for 1 3/4" doors



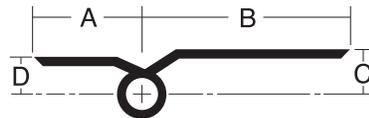
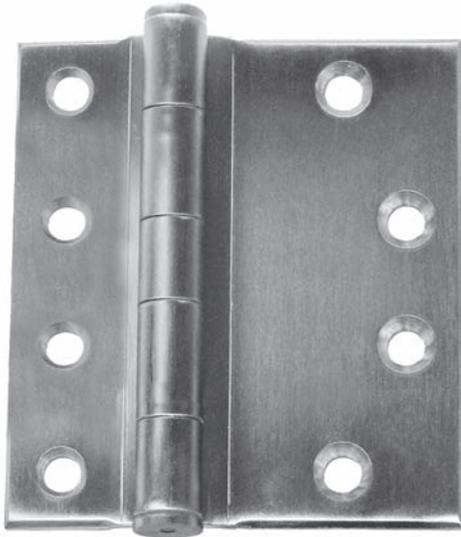
Measurements below

Size Length of Joint	Width		Offset		Gauge of Metal	Flat Head Machine Screws/Per Piece		Quantity Per Box	Quantity Per Case	Case Weight	
	Frame Leaf (A)	Door Leaf (B)	Door Leaf (C)	Frame Leaf (D)		Frame Leaf	Door Leaf			Bronze Lbs. (Kg)	Steel Lbs. (Kg)
4 1/2 (114)	1 1/2 (38.1)	2 9/16 (65)	9/16 (14.3)	7/16 (11.1)	.134 (3.4)	3-12-24 X 1/2	3-1/4-20 X 2	3 EA.	30 EA.	40 (18)	38 (17)
5 (127)	1 1/2 (38.1)	2 7/8 (73)	9/16 (14.3)	7/16 (11.1)	.146 (3.7)	4-12-24 X 1/2	4-1/4-20 X 2	3 EA.	24 EA.	43 (20)	39 (18)

Heavy Weight Concealed Bearing **LifeSpan**[®]

- CB169** (ANSI A8311) Steel – polished and plated or phosphated and prime coated for painting
- CB109** (ANSI A2311) Brass or bronze – polished and plated or painted
- CB109 (32)** (ANSI A5311) Stainless steel – highly polished
- CB109 (32D)** (ANSI A5311) Stainless steel – satin finish

- For heavy or high frequency mineral core or wood doors with edge rails that won't hold screws, hung on channel iron frames
- Heavy weight gauges increase available bearing surface area for maximum friction reduction
- Concealed LifeSpan[®] bearing is maintenance free – no oil, no grease
- Pins in non-ferrous hinges are stainless steel
- Reversible flush tips and pins
- Hinges can be furnished with hospital tips (HT)
- Consider using a back plate with these hinges
- LifeSpan[®] limited lifetime warranty
- Available with an inline hole pattern for tubular doors
- Packed with machine screws and grommet nuts for 1 3/4" doors



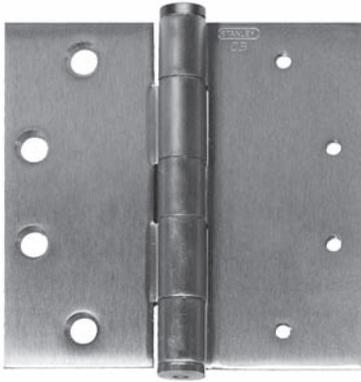
Measurements below

Size Length of Joint	Width		Offset		Gauge of Metal	Flat Head Machine Screws/Per Piece		Quantity Per Box	Quantity Per Case	Case Weight	
	Frame Leaf (A)	Door Leaf (B)	Door Leaf (C)	Frame Leaf (D)		Frame Leaf	Door Leaf			Bronze Lbs. (Kg)	Steel Lbs. (Kg)
Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)						
4 1/2 (114)	1 1/2 (38.1)	2 9/16 (65)	5/8 (15.9)	1/2 (12.7)	.180 (4.6)	3-12-24 X 1/2	3-1/4 -20 X 2	3 EA.	30 EA.	56 (26)	44 (20)
5 (127)	1 1/2 (38.1)	2 7/8 (73)	5/8 (15.9)	1/2 (12.7)	.190 (4.8)	4-12-24 X 1/2	4-1/4 -20 X 2	3 EA.	24 EA.	57 (26)	51 (23)
6 (152)	1 1/2 (38.1)	3 1/4 (82.6)	5/8 (15.9)	1/2 (12.7)	.203 (5.2)	4-1/4-20 X 1/2	5-1/4 -20 X 2	3 EA.	24 EA.	80 (36)	74 (34)

5 KNUCKLE SLIP-IN HINGES

Standard Weight Concealed Bearing – Application “A” **LifeSpan**[®]

- CB179 – (ANSI A8152) Slip-in application “A”, steel – polished and plated or painted
- CB191 – (ANSI A2152) Slip-in application “A”, brass or bronze – polished and plated or painted
- CB191 (32) – (ANSI A5152) Slip-in application “A”, stainless steel – highly polished
- CB191 (32D) – (ANSI A5152) Slip-in application “A”, stainless steel – satin finish



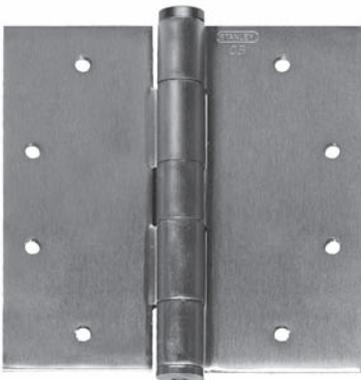
- For aluminum doors with aluminum frames
- “Slip-in” application where one leaf of hinge is inserted through a slot in door or frame, and the other leaf mortised
- Application A – specify “swaged to provide 3/16” (4.8mm) clearance between leaves when parallel and one leaf with standard punching and countersinking and other leaf drilled and tapped.” Specify hand desired.
- Round corners – use prefix “RD” and specify radius desired.
1/4” (6.4mm) radius available on all sizes
- Other types and sizes available on request
- Pins in non-ferrous hinges are stainless steel

Size Open		Gauge of Metal		Flat Head Machine Screws/Per Piece	Quantity Per Box	Quantity Per Case	Case Weight			
Inches	(mm)	Inches	(mm)				Steel Lbs.	(Kg)	Bronze Lbs.	(Kg)
4 x 4	(102 x 102)	.130	(3.3)	8 - 12-24 x 1/2	3 EA.	48 EA.	44	(20)	45	(21)
4 1/2 x 4	(114 x 102)	.134	(3.4)	8 - 12-24 x 1/2	3 EA.	48 EA.	52	(24)	55	(25)
4 1/2 x 4 1/2	(114 x 114)	.134	(3.4)	8 - 12-24 x 1/2	3 EA.	48 EA.	55	(25)	59	(27)

For application A when used on wood doors, specify wood screws for door leaf

Standard Weight Concealed Bearing – Application “B” **LifeSpan**[®]

- CB179 – (ANSI A8142) Slip-in application “B”, steel – polished and plated or painted
- CB191 – (ANSI A2142) Slip-in application “B”, brass or bronze – polished and plated or painted
- CB191 (32) – (ANSI A5142) Slip-in application “B”, stainless steel – highly polished
- CB191 (32D) – (ANSI A5142) Slip-in application “B”, stainless steel – satin finish



- For aluminum doors with aluminum frames
- “Slip-in” application where both leaves of hinge are inserted through slots in door and frame
- Application B – specify “both leaves swaged to provide 5/16” (7.9mm) clearance between leaves when parallel and both leaves drilled and tapped”
- Round corners – use prefix “RD” and specify radius desired.
1/4” (6.4mm) radius available on all sizes
- Other types and sizes available on request
- Pins in nonferrous hinges are stainless steel
- Not handed

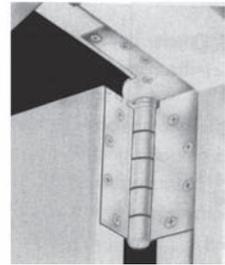
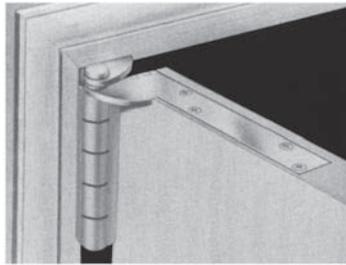
Size Open		Gauge of Metal		Flat Head Machine Screws/Per Piece	Quantity Per Box	Quantity Per Case	Case Weight			
Inches	(mm)	Inches	(mm)				Steel Lbs.	(Kg)	Bronze Lbs.	(Kg)
4 x 4	(102 x 102)	.130	(3.3)	8 - 12-24 x 1/2	3 EA.	48 EA.	44	(20)	45	(21)
4 1/2 x 4	(114 x 102)	.134	(3.4)	8 - 12-24 x 1/2	3 EA.	48 EA.	52	(24)	55	(25)
4 1/2 x 4 1/2	(114 x 114)	.134	(3.4)	8 - 12-24 x 1/2	3 EA.	48 EA.	55	(25)	59	(27)

Heavy Weight Concealed Bearing **LifeSpan®**

Shock Proof!

- CB211 – (ANSI A8541) } Steel – polished and plated or phosphated and prime coated for painting
- CB212 – (ANSI A8541) }
- CB213 – (ANSI A8541) }
- CB221 – (ANSI A2541) } Bronze – polished and plated or painted
- CB222 – (ANSI A2541) }
- CB223 – (ANSI A2541) }
- CB221 (32D) – (ANSI A5541) } Stainless steel – satin finish
- CB222 (32D) – (ANSI A5541) }
- CB223 (32D) – (ANSI A5541) }

- Ideal for any door that is subject to jarring or abusive handling
- The purpose of this two-in-one combination is to anchor and reinforce doors and frames exposed to damage from abuse. In such installations, stresses are transferred to the top hinge
- A pivot and butt hinge are combined in one compact interlocked unit and share the same pin to assure perfect alignment. Interlocked corners prevent sidewise motion of pivot or butt leaves
- Heavy weight gauges increase available bearing surface area for maximum friction reduction
- Beveled edge doors require a different door plate than square edge doors
- Short door plate [4" (102mm) min.] available for use with most concealed holders and closers – specify on order
- Handed left or right
- LifeSpan® limited lifetime warranty



Right Hand Shown

Class Number	Door Edge	Metal	Top Hinge	Contents of Set		
				Intermediate and Bottom Hinge		
				Number**	Inches	Size (mm)
CB211	Square or beveled 1/8" in 2" (3.2 in 51mm)	Steel	1-Type of CB168 NRP X Frame plate ONLY	2-CB168-NRP	5 X 4 1/2	(127 X 114)
CB212	Square	Steel	1-Type of CB168 NRP X Frame and door plate	2-CB168-NRP	5 X 4 1/2	(127 X 114)
CB213	Beveled 1/8" IN 2" (3.2 in 51 mm)	Steel	1-Type of CB168 NRP X Frame and door plate	2-CB168-NRP	5 X 4 1/2	(127 X 114)
CB221	Square or beveled 1/8" in 2" (3.2 in 51mm)	Bronze or Stainless Steel	1-Type of CB199 NRP X Frame plate ONLY	2-CB199-NRP	5 X 4 1/2	(127 X 114)
CB222	Square	Bronze or Stainless Steel	1-Type of CB199 NRP X Frame and door plate	2-CB199-NRP	5 X 4 1/2	(127 X 114)
CB223	Beveled 1/8" in 2" (3.2 in 51mm)	Bronze Stainless Steel	1-Type of CB199 NRP X Frame and door plate	2-CB199-NRP	5 X 4 1/2	(127 X 114)

Class Number	Gauge of Metal		Frame Plate			Door Plate			Flat Head Screws/Set		Sets Per Case	Case Weight Lbs. (Kg)
	Inches	(mm)	Length Inches (mm)	Width Inches (mm)	Length Inches (mm)	Width Inches (mm)	Length Inches (mm)	Width Inches (mm)	Wood	Machine		
CB211	.190	(4.8)	5 (127)	1.25 (31.8)	...	...	...	...	28-12- X 1 1/2	28-12-24 X 1/2	1	6 (3)
CB212	.190	(4.8)	5 (127)	1.25 (31.8)	7.78 (198)	1.25 (31.8)	7.78 (198)	1.25 (31.8)	32-12- X 1 1/2	32-12-24 X 1/2	1	7 (3)
CB213	.190	(4.8)	5 (127)	1.25 (31.8)	7.64 (194)	1.25 (31.8)	7.64 (194)	1.25 (31.8)	32-12- X 1 1/2	32-12-24 X 1/2	1	7 (3)
CB221	.190	(4.8)	5 (127)	1.25 (31.8)	...	...	...	...	12-12- X 1 1/2	28-12-24 X 1/2	1	6 (3)
CB222	.190	(4.8)	5 (127)	1.25 (31.8)	7.78 (198)	1.25 (31.8)	7.78 (198)	1.25 (31.8)	16-12- X 1 1/2	32-12-24 X 1/2	1	7 (3)
CB222 (32D)	.190	(4.8)	5 (127)	1.25 (31.8)	7.78 (198)	1.25 (31.8)	7.78 (198)	1.25 (31.8)	16-12- X 1 1/2	32-12-24 X 1/2	1	7 (3)
CB223	.190	(4.8)	5 (127)	1.25 (31.8)	7.64 (194)	1.25 (31.8)	7.64 (194)	1.25 (31.8)	16-12- X 1 1/2	32-12-24 X 1/2	1	7 (3)
CB223 (32D)	.190	(4.8)	5 (127)	1.25 (31.8)	7.64 (194)	1.25 (31.8)	7.64 (194)	1.25 (31.8)	16-12- X 1 1/2	32-12-24 X 1/2	1	7 (3)

Hinges supplied with set screw in barrel, non-removable pin

For doors over 7' 6" in height, specify additional hinges to order: specify catalog number, finish and hand



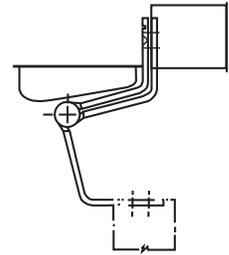
5 KNUCKLE SWING CLEAR HINGES

Standard Weight Plain Bearing “Swing Clear” Full Mortise



F248 – (ANSI A8123) Steel – polished and plated or phosphated and prime coated for painting

- Equipped with easily seated non-rising pins
- Reversible flush tips and pins
- Ideal for remodeling or new construction
- Available for full mortise application on square edge doors only
- Designed to replace existing 3 1/2" (89mm) or 4" (102mm) hinges for Swing Clear openings (some preparation modification typically required for residential use)
- Designed to swing doors completely clear of the opening when door is opened 95°



Class Number	Size Length of Joint		Gauge of Metal		Flat Head Wood Screws/ Per Piece	Quantity Per Box	Quantity Per Case	Case Weight	
	Inches	(mm)	Inches	(mm)				Lbs.	(Kg)
F248	3 1/2	(89)	.123	(3.1)	6-10 X 1	2 EA.	20 EA.	16	(7)
	4	(102)	.130	(3.3)	8-12 X 1 1/4	2 EA.	20 EA.	24	(11)

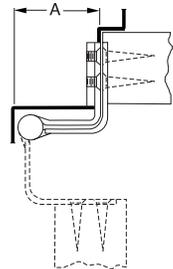
Standard Weight Concealed Bearing “Swing Clear” Full Mortise



CB248 – (ANSI A8122) } Steel –
CB258 – (ANSI A8122) } polished and plated or
 phosphated and prime
 coated for painting

STSCB248 – (ANSI A5122) } Stainless Steel –
STSCB258 – (ANSI A5122) } highly polished or
 satin finish

- Reversible flush tips and pins
- Ideal for remodeling or new construction
- Specify CB248 and STSCB248 for full mortise application on square edge doors
- Specify CB258 and STSCB258 for full mortise application on bevel edge doors
- Designed to swing doors completely clear of the opening when door is opened 90°
- Concealed LifeSpan® bearing is maintenance-free – no oil, no grease
- Hinges can be furnished with hospital tips (HT)
- LifeSpan® limited lifetime warranty



CB248 (Shown) and STSCB248
 {For square edge doors}

CB258 and STSCB258
 {For doors beveled 1/8" in 2" (3.2 in 51mm)}

Class Number	Size Length of Joint		Minimum Clearance Required Dimensions "A"		Gauge of Metal		Flat Head Screws/ Per Piece		Quantity Per Box	Quantity Per Case	Case Weight	
	inches	(mm)	inches	(mm)	inches	(mm)	Frame Leaf-Machine	Door Leaf-Wood			Lbs.	(Kg)
CB248, STSCB248	4 1/2	(114)	2 1/8	(54)	.134	(3.4)	4-12-24 X 1/2	4-12 X 1 1/4	3 EA.	24 EA.	36	(17)
CB258, STSCB258	4 1/2	(114)	2 1/8	(54)	.134	(3.4)	4-12-24 X 1/2	4-12 X 1 1/4	3 EA.	24 EA.	36	(17)

Heavy Weight Concealed Bearings "Swing Clear" LifeSpan® 

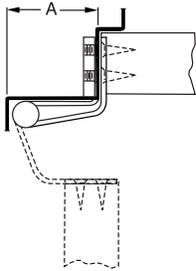
CB268 – (ANSI A8121)
CB278† – (ANSI A8121)
CB269 – (ANSI A8421)
CB264 – (ANSI A8221)
CB274† – (ANSI A8221)
CB266 – (ANSI A8321)

Steel –
 polished and plated or
 phosphated and prime
 coated for painting

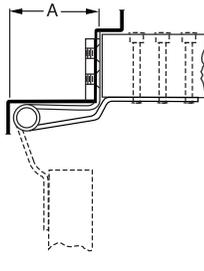
STSCB268 – (ANSI A5121)
STSCB278† – (ANSI A5121)
STSCB269 – (ANSI A5421)
STSCB264 – (ANSI A5221)
STSCB274† – (ANSI A5221)
STSCB266 – (ANSI A5321)

Stainless Steel –
 highly polished
 or satin finish

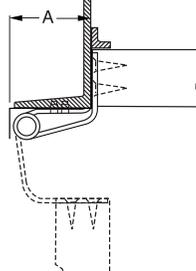
- For corridor doors to patient's rooms, operating rooms, emergency rooms or wherever conditions require a completely clear opening
- Designed to swing door in hospitals, institutions or public buildings completely clear of the opening when door is opened 95°
- Consult factory for hinges available to clear 90°
- Concealed LifeSpan® bearing is maintenance free – no oil, no grease
- Pins in nonferrous hinges are stainless steel
- Hinges can be furnished with hospital tips (HT)
- Full surface and half surface hinges packed with flat head machine screws and grommet nuts for door leaf, specify door thickness if other than 1 3/4"
- Consider using a back plate with full surface and half surface hinges
- For half mortise and full surface hinges to fit narrow metal frames, consult factory
- LifeSpan® limited lifetime warranty
- Reversible flush tips and pins



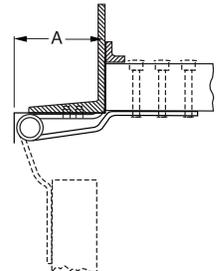
Full Mortise
CB268 and STSCB268
 {For square edge doors} (shown)



Half Surface
CB269 and STSCB269



Half Mortise
 For channel iron frames
CB264 and STSCB264
 {For square edge doors} (shown)



Full Surface
 For channel iron frames
CB266 and STSCB266

CB278† and STSCB278†
 {For doors beveled 1/8" in 2" (3.2 in 51mm)}

CB274† and STSCB274†
 {For doors beveled 1/8" in 2" (3.2 in 51mm)}

Class Number	Size Length of Joint	Minimum Clearance Required Dimensions "A"		Gauge of Metal		Flat Head Screws/ Per Piece		Quantity Per Box	Quantity Per Case	Case Weight	
		inches	(mm)	inches	(mm)	Frame Leaf-Machine	Door Leaf-Wood				
CB268, STSCB268	4 1/2	(114)	2 1/8	(54)	.180	(4.6)	4-12-24 X 1/2	4-12 X 1 1/4 W.S	3 EA.	15 EA.	31 (14)
CB268, STSCB268	5	(127)	2 1/8	(54)	.190	(4.8)	4-12-24 X 1/2	4-12 X 1 1/4 W.S	3 EA.	15 EA.	35 (16)
CB278†, STSCB278†	4 1/2	(114)	2 1/8	(54)	.190	(4.8)	4-12-24 X 1/2	4-12 X 1 1/4 W.S	3 EA.	15 EA.	31 (14)
CB278†, STSCB278†	5	(127)	2 1/8	(54)	.190	(4.8)	4-12-24 X 1/2	4-12 X 1 1/4 W.S	3 EA.	15 EA.	35 (16)
CB269, STSCB269	5	(127)	2 1/8	(54)	.190	(4.8)	4-12-24 X 1/2	5-1/4-20 X 1 1/4 M.S.*	....	3 EA.	9 (4)
CB264, STSCB264	5	(127)	2 1/8	(54)	.190	(4.8)	4-12-24 X 1/2	4-12 X 1 1/4 W.S	3 EA.	15 EA.	35 (16)
CB274†, STSCB274	5	(127)	2 1/8	(54)	.190	(4.8)	4-12-24 X 1/2	4-12 X 1 1/4 W.S	3 EA.	15 EA.	35 (16)
CB266, STSCB266	5	(127)	2 1/8	(54)	.190	(4.8)	4-12-24 X 1/2	5-1/4-20 X 1 1/4 M.S.*	3 EA.	15 EA.	35 (16)

* Furnished with through-bolts and grommet nuts.

† For doors beveled 1/8" IN 2" (3.2MM IN 51 MM) on hinge side.

For frame and door leaf dimensions refer to template furnished on request. If door closers, friction or overhead door holders are to be used in conjunction with these hinges, consult manufacturer of the device to be used for application details

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 – 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)



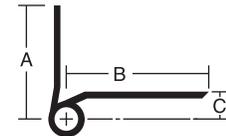
Size Open*		Gauge of Metal		Flat Head Screws/Per Piece		Quantity		Case Weight	
Inches	(mm)	Inches	(mm)	Machine	Wood	Per Box	Per Case	Steel	Brass
								Lbs. (Kg)	Lbs. (Kg)
3 x 3*	(76 x 76)	.080	(2)	6 - 10-24 x 1/2	6 - 9 x 3/4	2 EA.	100 EA.	32 (15)	
3 1/2 x 3	(89 x 76)	.123	(3.1)	6 - 10-24 x 1/2	6 - 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 – plated finishes or phosphated and prime coated for painting

- For low frequency kalamein or wood doors
- 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

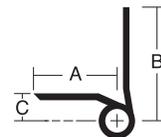


Size Length of Joint	Width		Offset (C)	Gauge of Metal	Flat head Machine Screws/Per Piece		Quantity Per Box	Quantity Per Case	Case Weight
	Frame Leaf (A)	Door Leaf (B)			Frame Leaf	Door Leaf			
Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)	Inches (mm)					Lbs. (Kg)
4 1/2 (114)	2 1/16 (52.4)	2 9/16 (65.1)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

Half Mortise Standard Weight Plain Bearing

F167 – (ANSI A8233) Steel – polished and plated finishes 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	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)	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 hinges to decorative tips
- Available in three styles, Ball, Crown and Steeple
- Same tips fit "CB", "1900R" and "F" line hinge
- Conversion pins are stainless
- Conversion pins accept NRP screw
- Knurl eliminates pin rotation
- For heavy weight consult factory

Standard weight tips & pins



Pin



Ball



Crown



Steeple