

# 3 Knuckle

## **Concealed Bearing Hinges**

dormakaba 🚧

Trusted experts. Proven reliability. Simply STANLEY.

## TABLE OF CONTENTS

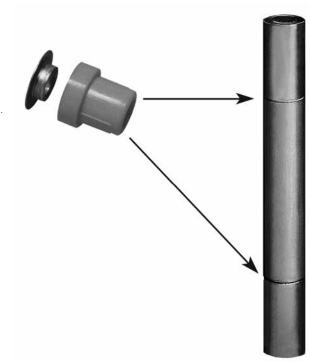
3 Knuckle Design Philosophy2	
Full Mortise Hinges	4
Half Surface Hinges5-6	6
Half Mortise Hinges7-8	8
Full Surface Hinges	0

Slip-In Hinges	11
Pivot Reinforced Hinges	12
Swing Clear Hinges	13-14
Plain Bearing Full Mortise Hinges	
Conversion Tips And Pins	

### Patented Two Piece Bearing System

Our patented bearing system 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 metalto-metal contact between the pin and barrel, resulting in a smooth, quiet operation superior to that of a ball bearing assembly.

- Vertical wear performance exceeds ANSI/BHMA Grade 1 standards by 50%.
- Lateral wear performance exceeds ANSI/BHMA Grade 1 standards by 90%.
- Fewer horizontal barrel lines provide an aesthetically pleasing appearance.
- CB1900R and 1900R series 3 knuckle hinge barrels are identical for consistent design appeal.
- Patented bearing system carries a 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.**
- Available with exposed tips (ET).



## **3 Knuckle Full Mortise Hinges**

Standard Weight Concealed Bearing

CB1900R – (ANSI A8112) Steel – polished and plated or phosphated and prime coated for painting

CB1960R – (ANSI A2112) Brass or bronze – polished and plated or painted

CB1960R (32) – (ANSI A5112) Stainless steel – highly polished

CB1960R (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 bearing for trouble-free, long life no oil, no grease, no maintenance
- Pins in nonferrous hinges are stainless steel
- Hole in bottom tip for easy pin removal
- Reversible flush tips and pins
- 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 exposed tips (ET)
  - with decorative tips
  - with security studs
  - with non-removable pins (NRP)



Size	Open	Gauge	of Metal	Flat Head Per Pi		Quantity Per Box	Quantity Per Case		Case	Weight	
								Br	onze		iteel
Inches	(mm)	Inches	(mm)	Machine	Wood			Lbs.	(Kg)	Lbs.	(Kg)
3 1/2 x 3 1/2	(89 x 89)	.123	(3.1)	6 - 10-24 x 1/2	6 - 10 x 1	3 еа.	90 ea.	61	(28)	58	(26)
4 x 4	(102 x 102)	.130	(3.3)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 еа.	48 ea.	45	(20)	43	(20)
4 1/2 x 4	(114 x 102)	.134	(3.4)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 еа.	48 ea.	52	(24)	47	(21)
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 еа.	48 ea.	56	(25)	52	(24)
5 x 4	(127 x 102)	.146	(3.7)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 еа.	30 ea.	39	(18)	37	(17)
5 x 4 1/2	(127 x 114)	.146	(3.7)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 еа.	30 ea.	43	(20)	38	(17)
5 x 5	(127 x 127)	.146	(3.7)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 еа.	30 ea.	48	(22)	44	(20)
*бхб	(152 x 152)	.160	(4.1)	10 -1/4 -20 x 1/2	10 -14 x 1 1/2	3 еа.	24 ea.	66	(30)	60	(27)

\* Available in Steel only

Consult factory for other sizes not listed

## **3 Knuckle Full Mortise Hinges**

#### **Heavy Weight Concealed Bearing**

CB1901R – (ANSI A8111) Steel – polished and plated or phosphated and prime coated for painting CB1961R – (ANSI A2111) Brass or bronze – polished and plated or painted CB1961R (32) - (ANSI A5111) Stainless steel - highly polished CB1961R (32D) - (ANSI A5111) Stainless steel - satin finish





- For heavy doors, or doors of high frequency, 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 bearing for trouble-free, long life no oil, no grease, no maintenance
- Pins in nonferrous hinges are stainless steel
- Hole in bottom tip for easy pin removal
- Reversible flush tips and pins
- 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 exposed tips (ET)
  - with decorative tips
  - with security studs
  - with non-removable pins (NRP)



Size	Open	Gauge	of Metal	Flat Head Per Pi		Quantity Per Box	Quantity Per Case		Case	Weight	
								Ві	onze	9	Steel
Inches	(mm)	Inches	(mm)	Machine	Wood			Lbs.	(Kg)	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	З еа.	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 еа.	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 еа.	24 ea.	49	(22)	46	(21)
6 x 4 1/2	(152 x 114)	.203	(5.2)	10 - 1/4 -20 x 1/2	10 -14 x 1 1/2	З еа.	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	З еа.	24 ea.	62	(28)	55	(25)
бхб	(152 x 152)	.203	(5.2)	10 - 1/4 -20 x 1/2	10 -14 x 1 1/2	З еа.	24 ea.	72	(28)	64	(29)
8×6*	(203 x 152)	.203	(5.2)	16 - 1/4 -20 x 1/2	16 -14 x 1 1/2	З еа.	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

## **3 Knuckle Half Surface Hinges**

**Standard Weight Concealed Bearing** 

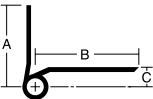
CB1910R – (ANSI A8412) Steel – polished and plated or phosphated and prime coated for painting CB1970R – (ANSI A2412) Brass or bronze – polished and plated or painted CB1970R (32) - (ANSI A5412) Stainless steel - highly polished CB1970R (32D) - (ANSI A5412) Stainless steel - satin finish





- 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 bearing for trouble-free, long life no oil, no grease, no maintenance
- Pins in nonferrous 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
- Limited lifetime warranty
- Available with exposed tips (ET)
- Packed with machine screws and grommet nuts for 1 3/4" doors





Measurements below

	iize 1 of Joint		Wie	dth		Of	fset		ge of etal	Flat Head Per F		Quantity Per Box	Quantity Per Case			ase ight	
		Frame (A			r Leaf B)		C)			Frame Leaf	Door Leaf			Br	onze	s	teel
Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)					Lbs.	(Kg)	Lbs.	(Kg)
4	(102)	11 3/16	(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 еа.	48 ea.	56	(25)	47	(21)
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)

## **3 Knuckle Half Surface Hinges**

#### **Heavy Weight Concealed Bearing**

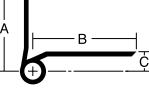
CB1911R – (ANSI A8411) Steel – polished and plated or phosphated and prime coated for painting CB1971R – (ANSI A2411) Brass or bronze – polished and plated or painted CB1971R (32) – (ANSI A5411) Stainless steel – highly polished CB1971R (32D) - (ANSI A5411) Stainless steel - satin finish





- For heavy, or high frequency wood, or mineral core doors with edge rails that won't hold screws, hung on hollow metal frames
- Size 6" (152mm) also recommended for lead lined doors not exceeding 250lbs. (113Kg)
- Concealed bearing for trouble-free, long life no oil, no grease, no maintenance
- Heavy weight gauges increase available bearing surface area for maximum friction reduction
- Pins in nonferrous 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
- Limited lifetime warranty
- Available with exposed tips (ET)
- Packed with machine screws and grommet nuts for 1 3/4" doors





Measurements below

	ize 1 of Joint		Wi	dth		Of	fset		ge of etal	Flat Head Per P		Quantity Per Box	Quantity Per Case			ase ight	
			e Leaf A)		r Leaf B)		(C)			Frame Leaf	Door Leaf			Bro	onze	S	teel
Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)					Lbs.	(Kg)	Lbs.	(Kg)
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 еа.	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)

## **3 Knuckle Half Mortise Hinges**

Standard Weight Concealed Bearing

CB1920R – (ANSI A8212) Steel – polished and plated or phosphated and prime coated for painting

CB1980R – (ANSI A2212) Brass or bronze – polished and plated or painted

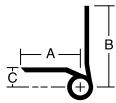
CB1980R (32) – (ANSI A5212) Stainless steel – highly polished

CB1980R (32D) - (ANSI A5212) Stainless steel - satin finish



- For medium weight hollow metal, or wood doors of average frequency, hung on channel iron frames
- Concealed bearing for trouble-free, long life no oil, no grease, no maintenance
- Pins in nonferrous hinges are stainless steel
- Reversible flush tips and pins
- Hinges can be furnished with hospital tips (HT)
- Limited lifetime warranty
- Available with exposed tips (ET)





Measurements below

	iize n of Joint		Wi	dth		Of	fset	Gaug Me	ge of etal		d Screws Piece	Quantity Per Box	Quantity Per Case			ase ight	
			e Leaf A)		r Leaf B)		C)			Frame Leaf	Door Leaf			Bro	onze		teel
Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)					Lbs.	(Kg)	Lbs.	(Kg)
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 еа.	30 ea.	30	(14)	24	(11)
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 еа.	24 ea.	37	(17)	31	(14)

## **3 Knuckle Half Mortise Hinges**

#### **Heavy Weight Concealed Bearing**

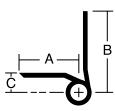
CB1921R – (ANSI A8211) Steel – polished and plated or phosphated and prime coated for painting CB1981R – (ANSI A2211) Brass or bronze – polished and plated or painted CB1981R (32) - (ANSI A5211) Stainless steel - highly polished CB1981R (32D) - (ANSI A5211) Stainless steel - satin finish





- For heavy, or high frequency hollow metal, or wood doors, hung on channel iron frames
- Concealed bearing for trouble-free, long life no oil, no grease, no maintenance
- Pins in nonferrous hinges are stainless steel
- Reversible flush tips and pins
- Hinges can be furnished with hospital tips (HT)
- Limited lifetime warranty
- Available with exposed tips (ET)





Measurements below

	ize 1 of Joint		Wi	dth		Of	fset	Gaug Me	ge of etal		d Screws Piece	Quantity Per Box	Quantity Per Case		Ca Wei	se ght	
			e Leaf A)		r Leaf B)		(C)			Frame Leaf	Door Leaf			Br	onze	St	teel
Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)					Lbs.	(Kg)	Lbs.	(Kg)
4 1/2	(114)	1 1/2	(38.1)	21/8	(54)	1/2	(12.7)	.180	(4.6)	3-12-24 x 1/2	4-12-24 X1/2	3 ea.	30 ea.	36	(17)	36	(17)
5	(127)	1 1/2	(38.1)	21/8	(54)	1/2	(12.7)	.190	(4.8)	4-12-24 x 1/2	4-12-24 x 1/2	3 еа.	24 ea.	36	(17)	36	(17)
6	(152)	1 1/2	(38.1)	21/8	(54)	1/2	(12.7)	.203	(5.2)	4-1/4-20 x 1/2	5-1/4-20 x 1/2	3 ea.	24 ea.	48	(22)	48	(22)

## **3 Knuckle Full Surface Hinges**

#### **Standard Weight Concealed Bearing**

CB1930R – (ANSI A8312) Steel – polished and plated or phosphated and prime coated for painting

CB1990R – (ANSI A2312) Brass or bronze – polished and plated or painted

CB1990R (32) – (ANSI A5312) Stainless steel – highly polished

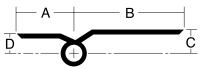
CB1990R (32D) - (ANSI A5312) Stainless steel - satin finish





- For medium weight mineral core, kalamein, or wood doors of average frequency, hung on channel iron frames
- Concealed bearing for trouble-free, long life no oil, no grease, no maintenance
- Pins in nonferrous 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
- Limited lifetime warranty
- Available with exposed tips (ET)
- Packed with machine screws and grommet nuts for 1 3/4" doors





Measurements below

Lei	ize ngth Joint		Wie	dth		Off	set	Off	set	Gaug Me			d Screws Piece	Quantity Per Box	Quantity Per Case		Ca Wei		
			e Leaf A)		<sup>.</sup> Leaf 3)	Door ((			e Leaf D)			Frame Leaf	Door Leaf			Bro	onze	St	teel
Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)					Lbs.	(Kg)	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 еа.	30 ea.	40	(18)	38	(17)
5	(127)	1 1/2	(38.1)	2 7/18	(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 еа.	24 ea.	43	(20)	39	(18)

## **3 Knuckle Full Surface Hinges**

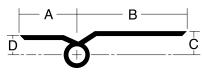
#### Heavy Weight Concealed Bearing

CB1931R – (ANSI A8311) Steel – polished and plated or phosphated and prime coated for painting
CB1991R – (ANSI A2311) Brass or bronze – polished and plated or painted
CB1991R (32) – (ANSI A5311) Stainless steel – highly polished
CB1991R (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
- Size 6" (152mm) also recommended for lead lined doors not exceeding 250 lbs (113 Kg)
- Concealed bearing for trouble-free, long life no oil, no grease, no maintenance
- Pins in nonferrous 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
- Limited lifetime warranty
- Available with an inline hole pattern for tubular steel doors
- Available with exposed tips (ET)
- Packed with machine screws and grommet nuts for 1 3/4" doors





Measurements below

Ler	ize ngth Ioint		Wi	dth		Of	fset	Off	fset		ge of etal	Flat Hea Per F		Quantity Per Box	Quantity Per Case			ise ght	
		Fram (/	e Leaf A)	Door (E			r Leaf C)	Fram (I	e Leaf D)			Frame Leaf	Door Leaf			Bro	onze	St	teel
Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)					Lbs.	(Kg)	Lbs.	(Kg)
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	4-12-24 X1/2	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	4-12-24 x 1/2	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 1/2	3 ea.	24 ea.	80	(36)	74	(34)

\* Available in Steel only

Consult factory for other sizes not listed

## **3 Knuckle Slip-In Hinges**

#### Standard Weight Concealed Bearing – Application "A"

CB1900R – (ANSI A8152) Slip-in application "A", Steel – polished and plated or painted **CB1960R** – (ANSI A2152) Slip-in application "A", Brass or bronze – polished and plated or painted CB1960R (32) - (ANSI A5152) Slip-in application "A", Stainless steel - highly polished CB1960R (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.
- Other types and sizes available on request
- Pins in nonferrous hinges are stainless steel
- Available with exposed tips (ET)
- Limited lifetime warranty

Size	e Open	Gauge	of Metal	Flat Head Machine Screws/Per Piece*	Quantity Per Box	Quantity Per Case		Case \	Weight	
							9	Steel	Bro	onze
Inches	(mm)	Inches	(mm)				Lbs.	(Kg)	Lbs.	(Kg)
4 x 4	(102 x 102)	.130	(3.3)	8 - 12-24 x 1/2	3 еа.	48 ea.	44	(20)	45	(21)
4 1/2 x 4	(114 x 102)	.134	(3.4)	8 - 12-24 x 1/2	3 еа.	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 еа.	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"

CB1900R – (ANSI A8142) Slip-in application "B", Steel – polished and plated or painted CB1960R - (ANSI A2142) Slip-in application "B", Brass or bronze - polished and plated or painted CB1960R (32) – (ANSI A5142) Slip-in application "B", Stainless steel – highly polished CB1960R (32D) – (ANSI A5142) Slip-in application "B", Stainless steel – satin finish

For aluminum doors with aluminum frames

<u>BHMA</u>

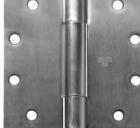
ANSI

- "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.
- Other types and sizes available on request
- Pins in nonferrous hinges are stainless steel
- Not handed
- Available with exposed tips (ET)
- Limited lifetime warranty

Size	e Open	Gauge	of Metal	Flat Head Machine Screws/Per Piece*	Quantity Per Box	Quantity Per Case		Case	Neight	
							S	iteel	Br	
Inches	(mm)	Inches	(mm)				Lbs.	(Kg)	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)

**STANLEY** 





## **3 Knuckle Pivot Reinforced Hinges**

Heavy Weight Concealed Bearing Shock Proof!

Steel – polished and plated or phosphated and prime coated CB1907R – (ANSI A8541) CB1908R – (ANSI A8541) CB1909R – (ANSI A8541)

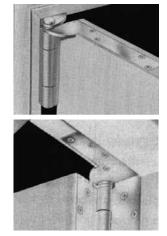


- Ideal for any door that is subject to jarring or abusive handling
- The purpose of this two-in-one combination is to anchor and reinforce doors and frames exposed to damage from abuse in such installations, stresses are transferred to the top hinge
- A pivot and butt hinge are combined in one compact interlocked unit and share the same pin to assure perfect alignment. Interlocked corners prevent sidewise motion of pivot or butt leaves

Bronze – polished and plated or painted CB1967R – (ANSI A2541) CB1968R – (ANSI A2541) CB1969R – (ANSI A2541)

- 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
- Limited lifetime warranty

Stainless steel – satin finish CB1967R (32D) – (ANSI A5541) CB1968R (32D) – (ANSI A5541) CB1969R (32D) – (ANSI A5541)



**Right Hand Shown** 

Class Number	Door Edge	Metal	Contents of Set						
			Top Hinge*	Intermediate	Intermediate and Bottom Hing				
				Number**	ze				
					Inches	(mm)			
CB1907R	Square or beveled 1/8" in 2" (3.2 in 51mm)	Steel	1–Type of CB1901R NRP x Frame plate ONLY	2-CB1901R-NRP	5 x 4 1/2	(127 x 114)			
CB1908R	Square	Steel	1–Type of CB1901R NRP x Frame and door plate	2-CB1901R-NRP	5 x 4 1/2	(127 x 114)			
CB1909R	Beveled 1/8" IN 2" (3.2 in 51 mm)	Steel	1–Type of CB1901R NRP x Frame and door plate	2-CB1901R-NRP	5 x 4 1/2	(127 x 114)			
CB1967R	Square or beveled (3.2 in 51 mm)	Bronze or Stainless Steel	1–Type of CB1961R NRP x Frame plate ONLY	2-CB1961R-NRP	5 x 4 1/2	(127 x 114)			
CB1968R	Square	Bronze or Stainless Steel	1–Type of CB1961R NRP x Frame and door plate	2-CB1961R-NRP	5 x 4 1/2	(127 x 114)			
CB1969R	Beveled 1/8" in 2" (3.2 in 51mm)	Bronze or Stainless Steel	1–Type of CB1961R NRP x Frame and door plate	2-CB1961R-NRP	5 x 4 1/2	(127 x 114)			

Class	Gauge of							Door Plate				Flat Head Screws/Set			se
Number	Me	etal	Len	gth	Wi	dth	Ler	ngth	w	idth			Per Case	Weight	
	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Inches	(mm)	Wood	Machine		Lbs.	(Kg)
CB1970R	.190	(4.8)	5	1.25	1.25	(31.8)					28-12- x 1 1/2	28-12-24 x 1/2	1	6	(3)
CB1908R	.190	(4.8)	5	1.25	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)
CB1909R	.190	(4.8)	5	1.25	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)
CB1967R	.190	(4.8)	5	1.25	1.25	(31.8)					12-12- x 1 1/2	28-12-24 x 1/2	1	6	(3)
CB1968R	.190	(4.8)	5	1.25	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)
CB1968R (32D)	.190	(4.8)	5	1.25	1.25	(31.8)	7.78	(198)	1.25	(31.8)	16-12-x11/2	32-12-24 x 1/2	1	7	(3)
CB1969R	.190	(4.8)	5	1.25	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)
.CB1969R (32D)	.190	(4.8)	5	1.25	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

## **3 Knuckle Swing Clear Hinges**

Standard Weight Concealed Bearing "Swing Clear" Full Mortise

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

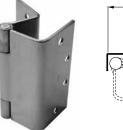
**CB1946R** – (ANSI A8122) **CB1947R** – (ANSI A8122)

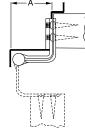
ANSI



Stainless steel – highly polished or satin finish STSCB1946R – (ANSI A5122) STSCB1947R – (ANSI A5122)

- Reversible flush tips and pins
- Ideal for remodeling or new construction
- Specify CB1947R and STSCB1947R for full mortise application on square edge doors
- Specify CB1946R and STSCB1946R for full mortise application on bevel edge doors
- Designed to swing doors completely clear of the opening when door is opened 90°
- Concealed bearing for trouble-free, long life no oil, no grease, no maintenance
- Hinges can be furnished with hospital tips (HT)
- Limited lifetime warranty
- Available with exposed tips (ET)





CB1947R (Shown) and STSCB1947R {For square edge doors}

CB1946R and STSCB1946R {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	
								Frame Leaf Machine	Door Leaf Wood				
		Inches	(mm)	Inches	(mm)	Inches	(mm)					Lbs.	(Kg)
CB1946R	STSCB1946R	4 1/2	(114)	2 1/8	(54)	.134	(3.4)	4-12-24 x 1/2	4-12 x 1 1/4	3 еа.	24 ea.	36	(17)
CB1947R	STSCB1947R	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" Hinges

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

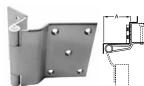
**CB1948R** – (ANSI A8121) **CB1949R**<sup>+</sup> – (ANSI A8121) **CB1959R** – (ANSI A8421) **CB1941R** – (ANSI A8221) **CB1942Rt** – (ANSI A8221) **CB1951R** – (ANSI A8321





- For corridor doors to patients' rooms, operating rooms, emergency rooms, or wherever conditions require a completely clear opening in hospitals, institutions or public buildings
- Designed to swing doors completely clear of the opening when door is opened 95°
- Consult factory for hinges available to clear 90°
- Concealed bearing for trouble-free, long life no oil, no grease, no maintenance
- Pins in nonferrous hinges are stainless steel
- Heavy weight gauges increase available bearing surface area for maximum friction reduction





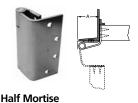
**Full Mortise** CB1948R and STSCB1948R {For square edge doors} (shown)

CB1949Rt and STSCB1949Rt {For doors beveled 1/8" in 2" (3.2 in 51mm)}

Half Surface CB1959R and STSCB1959R

Stainless steel - highly polished or satin finish **STSCB1948R** – (ANSI A5121) **STSCB1949R†** – (ANSI A5121) **STSCB1959R** – (ANSI A5421) **STSCB1941R** – (ANSI A5221) **STSCB1942Rt** – (ANSI A5221) **STSCB1951R** – (ANSI A5321)

- Hinges are polished and buffed then plated or phospated and prime coated
- 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" (44mm)
- Consider using a back plate with full surface and half surface hinges
- For half mortise hinges and full surface hinges to fit narrow metal frames, consult factory
- Limited lifetime warranty
- Reversible flush tips and pins



{For square edge doors} (shown)

CB1942Rt and STSCB1942Rt

{For doors beveled 1/8" in 2"

For channel iron frames CB1941Rt and STSCB1941Rt

(3.2 in 51mm)}



Full Surface CB1951R and STSCB1951R For channel iron frames

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		ase eight
								Frame Leaf Machine	Door Leaf Wood				
		Inches	(mm)	Inches	(mm)	Inches	(mm)					Lbs.	(Kg)
CB1948R	STSCB1948R	4 1/2	(114)	2 1/8	(54)	.180	(4.6)	4-12-24 x 1/2	4-12 x 11/4 W.S	3 еа.	15 ea.	31	(14)
CB1948R	STSCB1948R	5	(127)	2 1/8	(54)	.190	(4.8)	4-12-24 x 1/2	4-12 x 11/4 W.S	3 ea.	15 ea.	35	(16)
CB1949R†	STSCB1949R†	4 1/2	(114)	2 1/8	(54)	.190	(4.8)	4-12-24 x 1/2	4-12 x 11/4 W.S	3 ea.	15 ea.	31	(14)
CB1949R†	STSCB1949R†	5	(127)	2 1/8	(54)	.190	(4.8)	4-12-24 x 1/2	4-12 x 11/4 W.S	3 ea.	15 ea.	35	(16)
CB1959R	STSCB1959R	5	(127)	2 1/8	(54)	.190	(4.8)	4-12-24 x 1/2	5-1/4-20 x 11/4 M.S.*		3 еа.	9	(4)
CB1941R	STSCB1941R	5	(127)	2 1/8	(54)	.190	(4.8)	4-12-24 x 1/2	4-12 x 11/4 W.S	3 ea.	15 ea.	35	(16)
CB1942R†	STSCB1942R	5	(127)	2 1/8	(54)	.190	(4.8)	4-12-24 x 1/2	4-12 x 11/4 W.S	3 ea.	15 ea.	35	(16)
CB1951R	STSCB1951R	5	(127)	2 1/8	(54)	.190	(4.8)	4-12-24 x 1/2	5-1/4-20 x 11/4 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

## **3 Knuckle Full Mortise Hinges**

#### **Standard Weight Plain Bearing**

1900R – (ANSI A8133) Steel – polished and plated or phosphated and prime coated for painting 1960R – (ANSI A2133) Brass or bronze – polished and plated or painted

1960R (32) - (ANSI A5133) Stainless Steel - polished

1960R (32D) – (ANSI A5133) Stainless Steel – satin finish



#### BHMA

- For use on interior or exterior 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
- Equipped with easily seated, non-rising pins
- Hole in bottom tip for easy pin removal
- Reversible flush tips and pins
- 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)
- Available with exposed tips (ET)
- Available with non-removable pins (NRP)



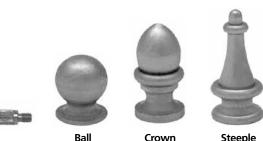
Size Open		Gauge of Metal		Flat Head Per Pi		Quantity Per Box	Quantity Per Case	Case		Weight		
								Bronze		Steel		
Inches	(mm)	Inches	(mm)	Machine	Wood			Lbs.	(Kg)	Lbs.	(Kg)	
3 1/2 x 3	(89 x 76)	.123	(3.1)	6 - 10-24 x 1/2	6 - 10 x 1	2 ea.	100 ea.	60	(27)	64	(29)	
3 1/2 x 3 1/2	(89 x 89)	.123	(3.1)	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 еа.	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 еа.	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 еа.	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 еа.	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 127)	.146	(3.7)	8 - 12-24 x 1/2	8 - 12 x 1 1/4	3 еа.	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 еа.	30 ea.	46	(21)	51	(23)	

Pin

\* Not Available in Stainless Steel

## **Conversion Tips and Pins**

- Converts standard flush tip "CB1900R" and "1900R"
- Available in three styles, Ball Crown 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 and Pins** 

Ball

Steeple



6161 East 75th Street Indianapolis, IN 46250 USA

Phone 855-365-2407

stanleyhardwarefordoors.com

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