

# 5 Knuckle Full Mortise Hinges

## Heavy Weight Concealed Bearing

**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 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
- 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)
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)	10 - 1/4 -20 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

# General Hinge Information

## Special Situation Products

- “CE” Concealed electric hinges conduct current regardless of door position to electric locks, exit devices, or hold open devices where tamper-proof hinge is required. Also to transmit signals from code readers on doors to remote computers for access control
- No electrical parts are exposed when hinge is installed
- Permanent fast pin
- Hinges should be installed in the center hinge location
- Not available as swing clear or raised barrel
- Hinges may be equipped with both concealed wires and concealed switches. When both are desired on the same hinge use prefix “CECS”
- Packed one per box with all machine screws and installation instructions
- When ordering specify class number, size, finish and number of wires  
Suffix -54 for 4 wires, 56 for 6 wires -66 for 6 wires (2@24AWG, 4@28AWG), 58 for 8 wires or 10 for 10 wires
- Should be used along with a junction box
- Can be furnished with hospital tips



Electrical Ratings				
Suffix	# Wires	Wire Gage	Volts (AC or DC)	
			6, 12, 24	48
<b>Current</b>				
-54	4	28AWG	1 amp/wire	5 milli-amp/wire
-56	6	28AWG	.7 amp/wire	5 milli-amp/wire
-58	8	28AWG	.5 amp/wire	5 milli-amp/wire
-10	10	28AWG	.4 amp/wire	5 milli-amp/wire
-66*	6	2@24AWG	2 amp/wire	5 milli-amp/wire
		4@28AWG	1 amp/wire	5 milli-amp/wire
18**	8	2@18AWG	10amp/wire	5 milli-amp/wire
		6@28AWG	.7amp/wire	5 milli-amp/wire

Class Number				Sizes Available	
CB179,	FBB179,	CB1900R			
CB168,	FBB168,	CB1901R	4 1/2" x 4"	(114mm x 102mm)	
CB191,	FBB191,	CB1960R	4 1/2" x 4 1/2"	(114mm x 114mm)	
CB199,	FBB199,	CB1961R	5" x 4"	(127mm x 102mm)	
			5" x 4 1/2"	(127mm x 114mm)	
			5" x 5"	(127mm x 127mm)	
			6" x 4 1/2"	(152mm x 114mm)	
			6" x 5" *	(152mm x 127mm)	
			6" x 6" *	(152mm x 152mm)	

\* Not available in CB191, FBB191, CB1900R and CB1960R

Inrush 15A for .05 second/wire

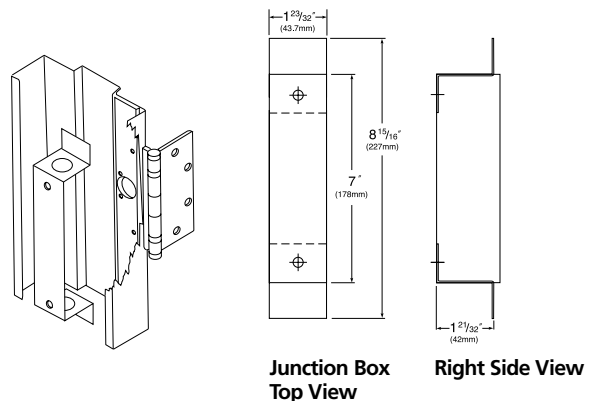
“CE” hinges are listed by UL at these ratings

\* Not available in FBB168 and FBB199

\*\* -18 and -12C are only available on models CB168, CB179, CB191 & CB-199.

## JB2R – Junction Box

- Note: Install in middle hinge location
- Can be shop welded or field installed — before frames are set
- Fits either 4 1/2" (114mm) or 5" (127mm) size hinges



## General Hinge Information

### Special Situation Products

- "CS" (Concealed Switch) Allows opening monitoring, switch operates when door is either open or closed. Used to activate alarms, monitoring devices, or other security equipment when a tamper-proof hinge is required
- Single pole double throw switch
- Packed one per box with screws and installation instructions
- No electrical parts are exposed when hinge is installed
- Hinges should be installed in the center hinge location
- When ordering specify class number, size, finish and hand of door
- Hinges are available as follows:
  - with Non-Removable Pins (NRP)
  - with hospital tips (HT)

**CSCB179**  
**CSCB168**  
**CSCB191**  
**CSCB199**  
5-Knuckle  
Concealed  
Bearings



**CSFBB179**  
**CSFBB168**  
**CSFBB191**  
**CSFBB199**  
5-Knuckle  
Exposed  
Bearings



**CSCB1900R**  
**CSCB1901R**  
**CSCB1960R**  
**CSCB1961R**  
3-Knuckle  
Concealed  
Bearings



Electrical Ratings		
Volts	Current Rating	
AC or DC	Resistive	Inductive
6	.30amp	.30amp
12	.25amp	.25amp
24	.20amp	.15amp
48	.15amp	.12amp

Class Number			Sizes Available	
CB179,	FBB179,	CB1900R		
CB168,	FBB168,	CB1901R	4 1/2" x 4"	(114mm x 102mm)
CB191,	FBB191,	CB1960R	4 1/2" x 4 1/2"	(114mm x 114mm)
CB199,	FBB199,	CB1961R	5" x 4"	(127mm x 102mm)
			5" x 4 1/2"	(127mm x 114mm)
			5" x 5"	(127mm x 127mm)
			6" x 4 1/2"	(152mm x 114mm)
			6" x 5" *	(152mm x 127mm)
			6" x 6" *	(152mm x 152mm)

Hinges may be equipped with both concealed wires and concealed switch. When both are desired use prefix CECS. Specify hand.



**5-Knuckle  
Concealed Bearings**



**5-Knuckle  
Ball Bearings**



**3-Knuckle  
Concealed Bearings**