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

ANSI American National Standards Institute   **BHMA** CERTIFIED

- 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 Screws Per Piece		Quantity Per Box	Quantity Per Case	Case Weight			
				Machine	Wood			Bronze		Steel	
Inches	(mm)	Inches	(mm)					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 ea.	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 ea.	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 ea.	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 ea.	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 ea.	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 ea.	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 ea.	30 ea.	48	(22)	44	(20)
*6 x 6	(152 x 152)	.160	(4.1)	10 -1/4 -20 x 1/2	10 -14 x 1 1/2	3 ea.	24 ea.	66	(30)	60	(27)

* 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 installlation 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

CECB179-12C**
Electrified Quick
Connect Hinge

CECB179
CECB168
CECB191
CECB199
5-Knuckle
Concealed
Bearings

CEFBB179
CEFBB168
CEFBB191
CEFBB199
5-Knuckle
Exposed
Bearings

CECB1900R
CECB1901R
CECB1960R
CECB1961R
3-Knuckle
Concealed
Bearings
(Handed - Specify RH
or LH)

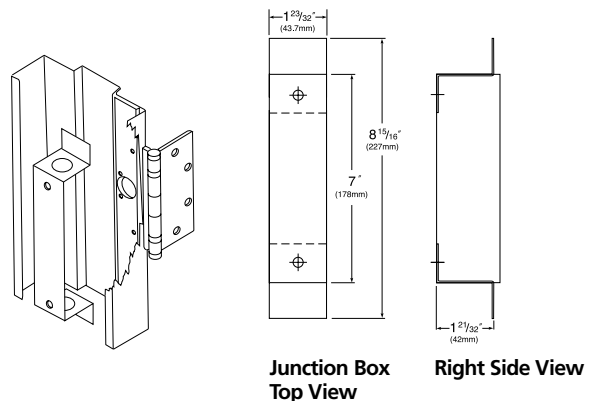| Electrical Ratings				
Suffix	# Wires	Wire Gage	Volts (AC or DC)	
			6, 12, 24	48
		Current		
-54	4	28AWG	1 amp/wire	5 milli-amp/wire
-56	6	28AWG	.7 amp/wire	5 milli-amp/wire
-58	8	28AWG	.5 amp/wire	5 milli-amp/wire
-10	10	28AWG	.4 amp/wire	5 milli-amp/wire
-66*	6	2@24AWG	2 amp/wire	5 milli-amp/wire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

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.

Class Number				
CB179,	FBB179,	CB1900R	**Sizes Available**	
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

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

1 23/32"
(43.7mm)

8 15/16"
(227mm)

7"
(178mm)

1 21/32"
(42mm)

Junction Box
Top View

Right Side View

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				
CB179,	FBB179,	CB1900R	**Sizes Available**	
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