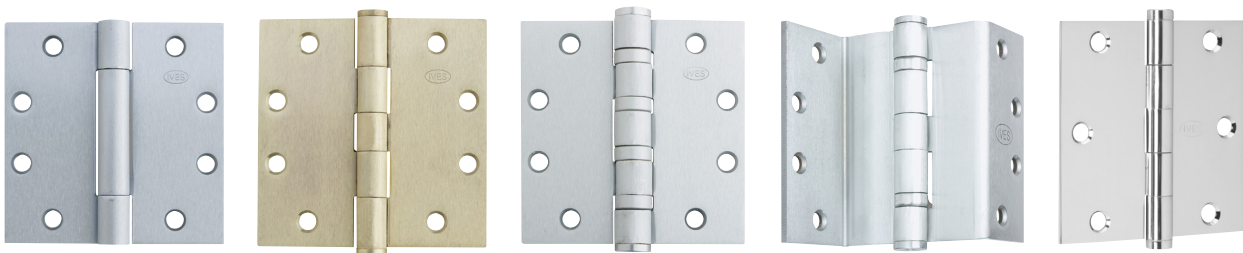


Architectural hinges

Ives offers a variety of architectural hinges, also known as butt hinges, that will cover any need in residential and commercial applications while also exceeding code requirements. Choose from high-quality hinges offered in a variety of substrates, knuckles, bearings, and styles. Use our selection guide in the general information section to better understand the right hinge for your application.



General information

Selection of the proper weight and bearing type

Standard weight	Plain bearing
Standard weight	Ball bearing, concealed bearing
Heavy weight	Ball bearing, concealed bearing

Considerations to determine weight and bearing type

- Weight of door
- Frequency of use
- Frame
- Door hardware

Always use ball bearing or concealed bearing hinges for doors with door closers and in all fire rated openings. Heavy weight doors and high frequency doors should use heavy weight ball bearing or concealed bearing hinges.

Guidelines for hinge metal

- Interior door or non-corrosive area use: plated or painted steel
- Interior labeled door use: plated or painted steel, stainless steel
- Interior door in corrosive area use: stainless steel, brass, bronze
- Exterior doors use: Stainless steel, brass, bronze

Standard pin material are brass hinge – steel pin, Stainless steel hinge – stainless steel pin, steel hinge – steel pin

Guidelines for frequency of door usage

Build type	Daily usage	Hinge type
High frequency/heavy weight door		
Large department store entrance	5,000	Heavy weight
Hospital corridor and surgical doors	5,000	Heavy weight
Large office building entrance	4,000	Heavy weight
School entrance	1,250	Heavy weight
School toilet door	1,250	Heavy weight
Office stairwell	500	Heavy weight
Office building toilet door	400	Heavy weight
Medium frequency/medium weight door		
School corridor door	100	Standard weight
Hospital consultation rooms	100	Standard weight
Office building corridor door	80	Standard weight
Store toilet door	60	Standard weight
Storage room	50	Standard weight
Low frequency/light door		
Residential entrance	30	Plain bearing
Interior residential	20	Plain bearing

ANSI/BHMA Grade/minimum cycle requirements

- Grade 1: 2,500,000 Heavy weight ball and concealed bearing
- Grade 2: 1,500,000 Standard weight ball and concealed bearing
- Grade 3: 350,000 Light weight plain bearing

Considerations to determine hinge size

- Door width
- Door thickness
- Weight
- Clearance

Guidelines for hinge height

Door thickness In inches	Door width In inches	Hinge height In inches
1 3/8"	Up to 32"	3 1/2"
1 3/8"	32" to 37"	4"
1 3/4"	Up to 36"	4 1/2"
1 3/4"	36" to 48"	5"
1 3/4"	Over 48"	6"
2" - 2 1/2"	Up to 42"	5" heavy weight
2" - 2 1/2"	Over 42"	6" heavy weight

Clearance requirement*

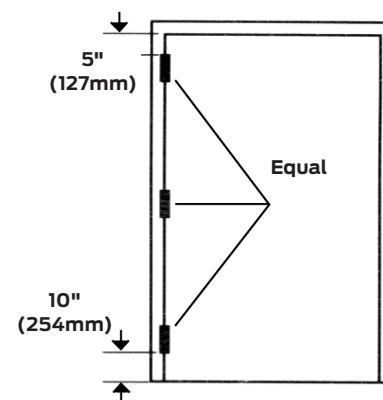
Door thickness	Clearance needed	Hinge open width
1 3/8"	1 3/4"	4"
1 3/4"	1"	4"
1 3/4"	1 1/2"	4 1/2"
1 3/4"	2"	5"
1 3/4"	3"	6"
2"	1"	4 1/2"
2"	1 1/2"	5"
2"	2 1/2"	6"
2 1/4"	1"	5"
2 1/4"	2"	6"
2 1/2"	1 1/2"	5"
2 1/2"	1 1/2"	6"
3"	3/4"	6"
3"	2 3/4"	8"

*Distance needed between wall and door at 180° to allow for any projections from wall; trim, decorative molding, etc. Consult factory technical service for engineered special applications

Guidelines for number of hinges

- Doors under 7'6" - 3 hinges
- Doors over 7'6" - 4 hinges

Location of hinges



Top hinge 5" from jamb rabbet to top of barrel

Bottom hinge 10" from bottom edge of barrel to finished floor

Third hinge centered between top and bottom hinges

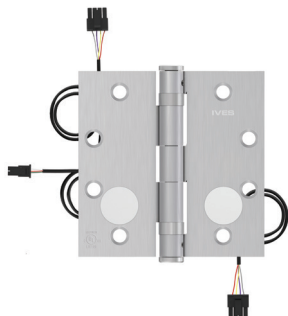
Note: Consult door manufacturer for other hinge locations

Hinges and pivots

Architectural hinges

General information

Electrification options



Electrical through-wire (TW4, TW8 and TW12)

Provides electric power transfer from the frame to the door in order to supply power to an electrified mortise or cylindrical locks, exit devices with electric latch retraction, and/or electric strikes (pairs of doors). Each wire is 28 AWG and rated 50 volts AC/DC at 3.5 amp continuous and 16 amp pulse. Maximum pulse 400 milliseconds. Ives through-wire hinges are fully compatible with 4 wire (TW4), 8 wire (TW8) installations and 12 wire (TW12) installations. All TW4, TW8 and TW12 3 knuckle and 5 knuckle hinges are standard with the Allegion Connect 8-pin Connector which makes it easy to connect to other electrical consumption devices.

- UL634 Listed
- Not available 3PB1, 3SP1, and 5PB1 models
- Not available on 3.5 x 3.5 size hinges
- Not available with security stud (SH) option
- Packaged one hinge per box with standard wood and machine screws
- Hinge is NRP as a standard
- High quality brass ferrules and plastic tubing protect the wires
- Through-wire hinges cycle tested to ensure durability
- Special wire gauge, number, and color configurations available, contact factory

Electrical Monitor (MON, TW4M, TW8M)

Provides door position monitoring. Monitor is rated 30 volts AC/DC at 0.25 amp. Fully compatible with through-wire hinges with 4 wire (TW4M) and 8 wire (TW8M) installations. Supplied standard with CON, option comes with the Allegion Connect 8-pin Connector which makes it easy to connect to other electrical consumption devices.

- UL634 Listed
- Not available 3PB1, 3SP1, and 5PB1 models
- Not available on 3.5 x 3.5 and 4X4 size hinges
- Not available with security stud (SH) option
- Packaged one hinge per box with standard wood and machine screws
- Hinge is NRP as a standard
- High quality brass ferrules and plastic tubing protect the wires
- Through-wire hinges cycle tested to ensure durability
- Special wire gauge, number, and color configurations available, contact factory

How to order

Number of knuckles	Function	Type	Weight/type	Options	Height x Width	Finish	Options 2							
1	2	3	4	5	6	7	8							
5	-	BB	-	1	-	HW	-	SH	-	4.5x4.5	-	652	-	NRP

Detail

1 Number of knuckles

3	3 Knuckle
5	5 Knuckle

2 Function

PB	Plain bearing
BB	Ball bearing
CB	Concealed bearing
SP	Spring hinge

3 Type

1	Full mortise
2	Half mortise
3	Full surface
4	Half surface

4 Weight/type

Blank	Standard weight (BHMA Grade 2)
HW	Heavy weight (BHMA Grade 1)
SC	Swing clear
BSC	Beveled swing clear
SCHW	Swing clear, heavy weight
BSCHW	Beveled swing clear, heavy weight
WT	Wide throw

5 Options

HT	Hospital tip
SH	Security stud (includes NRP as a standard offering)

6 Height x Width

3.5	x	3.5
4	x	4
4.5	x	4, 4.5, 5, 6
5	x	4.5, 5, 6, 7, 8

Consult model page for availability.

7 Finish

BHMA	Description	Substrate	Finish
600	Primer Paint	Brass	USP
605	Bright Brass	Brass	US3
606	Satin Brass	Brass	US4
612	Satin Bronze	Brass	US10
613	Oil Rubbed Bronze	Brass	US10B
614	Oxidized Bronze	Brass	US10A
619	Satin Nickel	Brass	US15
622	Matte Black	Brass	B-BLK
625	Bright Chrome	Brass	US26
626	Satin Chrome	Brass	US26D

7 Finish

BHMA	Description	Substrate	Finish
695	Dark Bronze Painted	Stainless steel	B-695/US10BE
629	Bright Stainless	Stainless steel	US32
630	Satin Stainless	Steel	US32D
631	Matte Black	Steel	F-BLK
632	Bright Brass	Steel	US3
633	Satin Brass	Steel	US4
639	Satin Bronze	Steel	US10
640	Oil Rubbed Bronze	Steel	US10B
641	Oxidized Bronze	Steel	US10A
646	Satin Nickel	Steel	US15
651	Bright Chrome	Steel	US26
652	Satin Chrome	Steel	US26D
643e/716	Aged Bronze	Steel	F-643E/716
695	Dark Bronze Painted	Steel	F-695/US10BE

8 Options 2

CON	Allegation connect (standard for TW4, TW8, and TW12)
MON	Monitor
NRP	Non-removable pin
RC-1/4	Rounded corners 1/4"
RC-5/8	Rounded corners 5/8"
SEC	Security screws (hollow metal - hex head pin in socket)
TW4	Through-wire - four wire
TW8	Through-wire - eight wire
TW12	Through-wire - twelve wire
TW4M	Through-wire - four wire with monitor
TW8M	Through-wire - eight wire with monitor

Hinges and pivots

Architectural hinges

3PB1

3 Knuckle, plain bearing full mortise hinge

- Recommended for standard weight doors
- Recommended for low frequency usage
- Not recommended for use with a door closer
- Packed with fasteners for hollow metal and wood doors
 - 12-24 x 1½ UFPHMS, 12 x 1¼ FPHWS
 - 10-24 x 1½ UFPHMS, 10 x 1 FPHWS (3.5x3.5 hinge size only)

Specifications

Material substrate	Made from brass, 1040 steel or 304 series stainless steel
Certifications	<ul style="list-style-type: none"> ▪ Certified ANSI/BHMA A156.1 for performance standards ▪ Meets ANSI/BHMA 156.7 for template hinge dimensions

Dimensions

Height x width	Size (mm)	Gauge
3.5 x 3.5	89 x 89	0.123
4 x 4	102 x 102	0.130
4.5 x 4	114 x 102	0.134
4.5 x 4.5	114 x 114	0.134
5 x 4.5	127 x 114	0.146

Refer to General Hinge Information page to determine proper hinge for application

Options

NRP	Non-removable pin
HT	Hospital tip
SH	Security stud - comes standard with NRP
RC^{-1/4}, RC^{-5/8}	Rounded corners
SEC	Security fasteners - pin-in-socket

Finishes

BHMA	Description	Substrate	Finish
600	Primer Paint	Steel	USP
605	Bright Brass	Brass	US3
606	Satin Brass	Brass	US4
612	Satin Bronze	Brass	US10
613	Oil Rubbed Bronze	Brass	US10B
614	Oxidized Bronze	Brass	US10A
619	Satin Nickel	Brass	US15
622	Matte Black	Brass	B-BLK
625	Bright Chrome	Brass	US26
626	Satin Chrome	Brass	US26D
643e/716	Aged Bronze	Brass	B-643e/716
695	Dark Bronze Painted	Brass	B-695/US10BE
629	Bright Stainless	Stainless steel	US32
630	Satin Stainless	Stainless steel	US32D
631	Matte Black	Steel	F-BLK
632	Bright Brass	Steel	US3
633	Satin Brass	Steel	US4
639	Satin Bronze	Steel	US10
640	Oil Rubbed Bronze	Steel	US10B
641	Oxidized Bronze	Steel	US10A
646	Satin Nickel	Steel	US15
651	Bright Chrome	Steel	US26
652	Satin Chrome	Steel	US26D
643e/716	Aged Bronze	Steel	F-643e/716
695	Dark Bronze Painted	Steel	F-695/US10BE

For other colors, consult factory.



3CBI

3 Knuckle, concealed bearing full mortise hinge

- Recommended for medium weight doors (<150 lbs)
- Recommended for medium frequency usage (<400 cycles per day)
- Made with two concealed nylon bearings
- Recommended for use with a door closer
- Packed with fasteners for hollow metal and wood doors
 - 12-24 x 1/2 UFPHMS, 12 x 1 1/4 FPHWS
 - 10-24 x 1/2 UFPHMS, 10 x 1 FPHWS (3.5x3.5 hinge size only)



Specifications

Material substrate	Made from brass, 1040 steel or 304 series stainless steel
Certifications	<ul style="list-style-type: none"> ▪ Certified ANSI/BHMA A156.1 for performance standards ▪ Meets ANSI/BHMA 156.7 for template hinge dimensions ▪ UL Classified for windstorm rated assemblies - R37965 ▪ UL 10C Listed (3 hour)

Dimensions

Height x width	Size (mm)	Gauge
3.5 x 3.5	89 x 89	0.123
4 x 4	102 x 102	0.130
4.5 x 4	114 x 102	0.134
4.5 x 4.5	114 x 114	0.134
5 x 4.5	127 x 114	0.146
5 x 5	127 x 127	0.146

Refer to General Hinge Information page to determine proper hinge for application

Options

NRP	Non-removable pin	TW4	Four wire
HT	Hospital tip	TW4M*	Four wire with monitor
SH	Security stud - comes standard with NRP	TW8	Eight wire
RC^{-1/4}, RC^{-5/8}	Rounded corners	TW8M*	Eight wire with monitor
SEC	Security fasteners - pin-in-socket	TW12	Twelve wire
		MON*	Monitor (not available on 4x4)

*TW and MON options are not available on 3.5 x 3.5.

Finishes

BHMA	Description	Substrate	Finish
600	Primer Paint	Steel	USP
605	Bright Brass	Brass	US3
606	Satin Brass	Brass	US4
612	Satin Bronze	Brass	US10
613	Oil Rubbed Bronze	Brass	US10B
614	Oxidized Bronze	Brass	US10A
619	Satin Nickel	Brass	US15
622	Matte Black	Brass	B-BLK
625	Bright Chrome	Brass	US26
626	Satin Chrome	Brass	US26D
643e/716	Aged Bronze	Brass	B-643e/716
629	Bright Stainless	Stainless steel	US32
630	Satin Stainless	Stainless steel	US32D
631	Matte Black	Steel	F-BLK
632	Bright Brass	Steel	US3
633	Satin Brass	Steel	US4
639	Satin Bronze	Steel	US10
640	Oil Rubbed Bronze	Steel	US10B
641	Oxidized Bronze	Steel	US10A
646	Satin Nickel	Steel	US15
651	Bright Chrome	Steel	US26
652	Satin Chrome	Steel	US26D
643e/716	Aged Bronze	Steel	F-643e/716
695	Dark Bronze Painted	Steel	F-695/US10BE

For other colors, consult factory.

Hinges and pivots

Architectural hinges

3CB1HW

3 Knuckle, concealed bearing, heavy weight full mortise hinge

- Recommended for heavier weight doors (>150 lbs)
- Recommended for high frequency usage (400 cycles per day)
- Made with two heavy duty concealed nylon bearings
- Recommended for use with a door closer
- Packed with fasteners for hollow metal and wood doors
 - 12-24 x 1/2 UFPHMS, 12 x 1 1/4 FPHWS



Specifications

Material substrate	Made from brass, 1040 steel or 304 series stainless steel
Certifications	<ul style="list-style-type: none"> ▪ Certified to ANSI/BHMA A156.1 for performance standards ▪ Meets ANSI/BHMA 156.7 for template hinge dimensions ▪ UL Classified for windstorm rated assemblies - R37965 ▪ UL10C Listed (3 hour)

Dimensions

Height x width	Size (mm)	Gauge
4.5 x 4	114 x 102	0.180
4.5 x 4.5	114 x 114	0.180
5 x 4.5	127 x 114	0.190
5 x 5	127 x 127	0.190

Refer to General Hinge Information page to determine proper hinge for application

Options

NRP	Non-removable pin	TW4	Four wire
HT	Hospital tip	TW4M	Four wire with monitor
SH	Security stud - comes standard with NRP	TW8	Eight wire
RC^{-1/4}, RC^{-5/8}	Rounded corners	TW8M	Eight wire with monitor
SEC	Security fasteners - pin-in-socket	TW12	Twelve wire
		MON	Monitor

Finishes

BHMA	Description	Substrate	Finish
600	Primer Paint	Steel	USP
605	Bright Brass	Brass	US3
606	Satin Brass	Brass	US4
612	Satin Bronze	Brass	US10
613	Oil Rubbed Bronze	Brass	US10B
614	Oxidized Bronze	Brass	US10A
619	Satin Nickel	Brass	US15
622	Matte Black	Brass	B-BLK
625	Bright Chrome	Brass	US26
626	Satin Chrome	Brass	US26D
643e/716	Aged Bronze	Brass	B-643e/716
629	Bright Stainless	Stainless steel	US32
630	Satin Stainless	Stainless steel	US32D
631	Matte Black	Steel	F-BLK
632	Bright Brass	Steel	US3
633	Satin Brass	Steel	US4
639	Satin Bronze	Steel	US10
640	Oil Rubbed Bronze	Steel	US10B
641	Oxidized Bronze	Steel	US10A
646	Satin Nickel	Steel	US15
651	Bright Chrome	Steel	US26
652	Satin Chrome	Steel	US26D
643e/716	Aged Bronze	Steel	F-643e/716
695	Dark Bronze Painted	Steel	F-695/US10BE

For other colors, consult factory.

3CBIWT

3 Knuckle, concealed bearing, wide throw full mortise hinge

- Recommended for medium weight doors (<150 lbs)
- Recommended for medium frequency usage (<400 cycles per day)
- Made with two concealed nylon bearings
- Recommended for use with a door closer
- Packed with fasteners for hollow metal and wood doors
 - 12-24 x 1½ UFPHMS, 12 x 1¼ FPHWS

Specifications

Material substrate	1040 steel
Certifications	<ul style="list-style-type: none"> ▪ Certified ANSI/BHMA A156.1 for performance standards ▪ Meets ANSI/BHMA 156.7 for template hinge dimensions

Dimensions

Height x Width	Size (mm)	Gauge
4.5 x 5	114 x 127	0.134
4.5 x 6	114 x 152	0.134
5 x 6	127 x 152	0.146
5 x 7	127 x 178	0.146
5 x 8	127 x 203	0.146

Refer to General Hinge Information page to determine proper hinge for application

Options

NRP	Non-removable pin	TW4	Four wire
HT	Hospital tip	TW4M	Four wire with monitor
SH	Security stud - comes standard with NRP	TW8	Eight wire
RC^{-1/4} , RC^{-5/8}	Rounded corners	TW8M	Eight wire with monitor
SEC	Security fasteners - pin-in-socket	TW12	Twelve wire
		MON	Monitor

Finishes

BHMA	Description	Substrate	Finish
600	Primer Paint	Steel	USP
631	Matte Black	Steel	F-BLK
632	Bright Brass	Steel	US3
633	Satin Brass	Steel	US4
639	Satin Bronze	Steel	US10
640	Oil Rubbed Bronze	Steel	US10B
641	Oxidized Bronze	Steel	US10A
646	Satin Nickel	Steel	US15
651	Bright Chrome	Steel	US26
652	Satin Chrome	Steel	US26D
643e/716	Aged Bronze	Steel	F-643e/716
695	Dark Bronze Painted	Steel	F-695/US10BE

For other colors, consult factory.

Hinges and pivots

Architectural hinges

3SP1

3 Knuckle, spring full mortise hinge

- For use with doors where self-closing is required
- Maximum door weight 120 lbs, max door width 36"
- Maximum labeled door size - 3'0" wide x 7'0" x 1 3/4" thick as set in NFPA #80
- Packed with fasteners for hollow metal and half metal/half wood applications
 - 12-24 x 1/2 UFPHMS, 12 x 1 1/4 FPHWS
 - Pin for setting spring tension
 - Adjusting wrench

Specifications

Material substrate	Made from brass, 1040 steel or 304 series stainless steel
Certifications	<ul style="list-style-type: none"> ▪ Certified to ANSI/BHMA A156.17 for performance standards ▪ Meets ANSI/BHMA 156.7 for template hinge dimensions ▪ UL Listed for use with fire rated doors

Dimensions

Height x Width	Size (mm)	Gauge
4 x 4	102 x 102	0.130
4.5 x 4	114 x 102	0.134
4.5 x 4.5	114 x 114	0.134

Refer to General Hinge Information page to determine proper hinge for application.

Options

RC-1/4, RC-5/8	Rounded corners
SEC	Security fasteners - pin-in-socket

Finishes

BHMA	Description	Substrate	Finish
600	Primer Paint	Steel	USP
629	Bright Stainless	Stainless steel	US32
630	Satin Stainless	Stainless steel	US32D
631	Matte Black	Steel	F-BLK
632	Bright Brass	Steel	US3
633	Satin Brass	Steel	US4
639	Satin Bronze	Steel	US10
640	Oil Rubbed Bronze	Steel	US10B
641	Oxidized Bronze	Steel	US10A
646	Satin Nickel	Steel	US15
651	Bright Chrome	Steel	US26
652	Satin Chrome	Steel	US26D
643e/716	Aged Bronze	Steel	F-643e/716
695	Dark Bronze Painted	Steel	F-695/US10BE

For other colors, consult factory.

Hinge selection guide

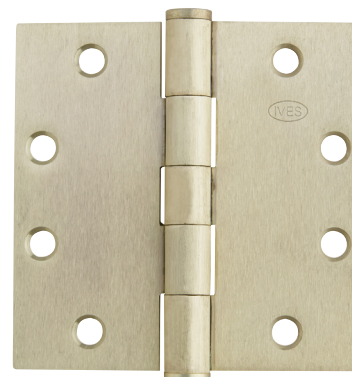
Door size and weight	Number of spring hinges	Number of anti-friction template butt hinges	Spring hinge location
Door up to 70 lbs (32 kg) and not exceeding 1 3/4" (44 mm) thickness, 36" (914 mm) width and 90" (2286 mm) height	1	2	Center
Door up to 90 lbs (41 kg) and not exceeding 1 3/4" (44 mm) thickness, 36" (914 mm) width and 90" (2286 mm) height	2	1	Center and bottom
Door up to 120 lbs (54 kg) and not exceeding 1 3/4" (44 mm) thickness, 36" (914 mm) width and 96" (2438 mm) height	3	0	All



5PB1

5 Knuckle, plain bearing full mortise hinge

- Recommended for standard weight doors
- Recommended for low frequency usage
- Not recommended for use with a door closer
- Packed with fasteners for hollow metal and wood doors
 - 12-24 x 1/2 UFPHMS, 12 x 1 1/4 FPHWS
 - 10-24 x 1/2 UFPHMS, 10 x 1 FPHWS (3.5x3.5 hinge size only)



Specifications

Material substrate	Made from brass, 1040 steel or 304 series stainless steel
Certifications	<ul style="list-style-type: none"> ▪ Certified ANSI/BHMA A156.1 for performance standards ▪ Meets ANSI/BHMA 156.7 for template hinge dimensions

Dimensions

Height x Width	Size (mm)	Gauge
3.5 x 3.5	89 x 89	0.123
4 x 4	102 x 102	0.130
4.5 x 4	114 x 102	0.134
4.5 x 4.5	114 x 114	0.134
5 x 4.5	127 x 114	0.146

Refer to General Hinge Information page to determine proper hinge for application

Options

NRP	Non-removable pin
HT	Hospital tip
SH	Security stud - comes standard with NRP
RC^{-1/4}, RC^{-5/8}	Rounded corners
SEC	Security fasteners - pin-in-socket

Finishes

BHMA	Description	Substrate	Finish
600	Primer Paint	Steel	USP
605	Bright Brass	Brass	US3
606	Satin Brass	Brass	US4
612	Satin Bronze	Brass	US10
613	Oil Rubbed Bronze	Brass	US10B
614	Oxidized Bronze	Brass	US10A
619	Satin Nickel	Brass	US15
622	Matte Black	Brass	B-BLK
625	Bright Chrome	Brass	US26
626	Satin Chrome	Brass	US26D
643e/716	Aged Bronze	Brass	B-643e/716
629	Bright Stainless	Stainless steel	US32
630	Satin Stainless	Stainless steel	US32D
631	Matte Black	Steel	F-BLK
632	Bright Brass	Steel	US3
633	Satin Brass	Steel	US4
639	Satin Bronze	Steel	US10
640	Oil Rubbed Bronze	Steel	US10B
641	Oxidized Bronze	Steel	US10A
646	Satin Nickel	Steel	US15
651	Bright Chrome	Steel	US26
652	Satin Chrome	Steel	US26D
643e/716	Aged Bronze	Steel	F-643e/716
695	Dark Bronze Painted	Steel	F-695/US10BE

For other colors, consult factory.

Hinges and pivots

Architectural hinges

5BB1

5 Knuckle, ball bearing full mortise hinge

- Recommended for medium weight doors (<150 lbs)
- Recommended for medium frequency usage (<400 cycles per day)
- Made with two ball bearing assemblies
- Recommended for use with a door closer
- Packed with fasteners for hollow metal and wood doors
 - 12-24 x 1/2 UFPHMS, 12 x 1 1/4 FPHWS
 - 10-24 x 1/2 UFPHMS, 10 x 1 FPHWS (3.5x3.5 hinge size only)

Specifications

Material substrate	Made from brass, 1040 steel or 304 series stainless steel
Certifications	<ul style="list-style-type: none"> ▪ Certified to ANSI/BHMA A156.1 for performance standards ▪ Meets ANSI/BHMA 156.7 for template hinge dimensions ▪ UL Classified for windstorm rated assemblies - R37965 ▪ UL10C Listed (3 hour)

Dimensions

Height x Width	Size (mm)	Gauge
3.5 x 3.5	89 x 89	0.123
4 x 4	102 x 102	0.130
4.5 x 4	114 x 102	0.134
4.5 x 4.5	114 x 114	0.134
5 x 4.5	127 x 114	0.146
5 x 5	127 x 127	0.146

Refer to General Hinge Information page to determine proper hinge for application

Options

NRP	Non-removable pin	TW4	Four wire
HT	Hospital tip	TW4M*	Four wire with monitor
SH	Security stud - comes standard with NRP	TW8	Eight wire
RC-1/4, RC-5/8	Rounded corners	TW8M*	Eight wire with monitor
SEC	Security fasteners - pin-in-socket	TW12	Twelve wire
		MON*	Monitor (not available on 4x4)

*TW and MON options are not available on 3.5 x 3.5.

Finishes

BHMA	Description	Substrate	Finish
600	Primer Paint	Steel	USP
605	Bright Brass	Brass	US3
606	Satin Brass	Brass	US4
612	Satin Bronze	Brass	US10
613	Oil Rubbed Bronze	Brass	US10B
614	Oxidized Bronze	Brass	US10A
619	Satin Nickel	Brass	US15
622	Matte Black	Brass	B-BLK
625	Bright Chrome	Brass	US26
626	Satin Chrome	Brass	US26D
643e/716	Aged Bronze	Brass	B-643e/716
629	Bright Stainless	Stainless steel	US32
630	Satin Stainless	Stainless steel	US32D
631	Matte Black	Steel	F-BLK
632	Bright Brass	Steel	US3
633	Satin Brass	Steel	US4
639	Satin Bronze	Steel	US10
640	Oil Rubbed Bronze	Steel	US10B
641	Oxidized Bronze	Steel	US10A
646	Satin Nickel	Steel	US15
651	Bright Chrome	Steel	US26
652	Satin Chrome	Steel	US26D
643e/716	Aged Bronze	Steel	F-643e/716
695	Dark Bronze Painted	Steel	F-695/US10BE

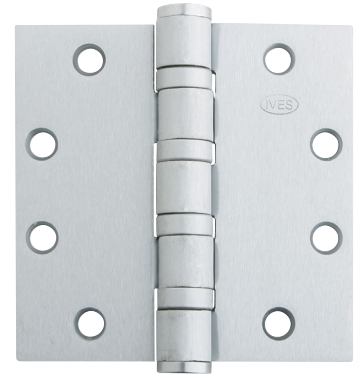
For other colors, consult factory.



5BB1HW

5 Knuckle, ball bearing, heavy weight full mortise hinge

- Recommended for heavier weight doors (>150 lbs)
- Recommended for high frequency usage (400 cycles per day)
- Made with four ball bearing assemblies
- Recommended for use with a door closer
- Packed with fasteners for hollow metal and wood doors
 - 12-24 x 1 1/2 UFPHMS, 12 x 1 1/4 FPHWS



Specifications

Material substrate	Made from brass, 1040 steel or 304 series stainless steel
Certifications	<ul style="list-style-type: none"> ▪ Certified ANSI/BHMA A156.1 for performance standards ▪ Meets ANSI/BHMA 156.7 for template hinge dimensions ▪ UL Classified for windstorm rated assemblies - R37965 ▪ UL10C Listed (3 hour)

Dimensions

Height x Width	Size (mm)	Gauge
4.5 x 4	114 x 102	0.180
4.5 x 4.5	114 x 114	0.180
5 x 4.5	127 x 114	0.190
5 x 5	127 x 127	0.190

Refer to General Hinge Information page to determine proper hinge for application

Options

NRP	Non-removable pin	TW4	Four wire
HT	Hospital tip	TW4M	Four wire with monitor
SH	Security stud - comes standard with NRP	TW8	Eight wire
RC-1/4, RC-5/8	Rounded corners	TW8M	Eight wire with monitor
SEC	Security fasteners - pin-in-socket	TW12	Twelve wire
		MON	Monitor

Finishes

BHMA	Description	Substrate	Finish
600	Primer Paint	Steel	USP
605	Bright Brass	Brass	US3
606	Satin Brass	Brass	US4
612	Satin Bronze	Brass	US10
613	Oil Rubbed Bronze	Brass	US10B
614	Oxidized Bronze	Brass	US10A
619	Satin Nickel	Brass	US15
622	Matte Black	Brass	B-BLK
625	Bright Chrome	Brass	US26
626	Satin Chrome	Brass	US26D
643e/716	Aged Bronze	Brass	B-643e/716
629	Bright Stainless	Stainless steel	US32
630	Satin Stainless	Stainless steel	US32D
631	Matte Black	Steel	F-BLK
632	Bright Brass	Steel	US3
633	Satin Brass	Steel	US4
639	Satin Bronze	Steel	US10
640	Oil Rubbed Bronze	Steel	US10B
641	Oxidized Bronze	Steel	US10A
646	Satin Nickel	Steel	US15
651	Bright Chrome	Steel	US26
652	Satin Chrome	Steel	US26D
643e/716	Aged Bronze	Steel	F-643e/716
695	Dark Bronze Painted	Steel	F-695/US10BE

For other colors, consult factory.

Hinges and pivots

Architectural hinges

5BBIWT

5 Knuckle, ball bearing, wide throw full mortise hinge

- Recommended for medium weight doors (<150 lbs)
- Recommended for medium frequency usage (<400 cycles per day)
- Made with two ball bearing assemblies
- Recommended for use with a door closer
- Packed with fasteners for hollow metal and wood doors
 - 12-24 x 1/2 UFPHMS, 12 x 1 1/4 FPHWS



Specifications

Material substrate	1040 steel
Certifications	<ul style="list-style-type: none"> ▪ Certified ANSI/BHMA A156.1 for performance standards ▪ Meets ANSI/BHMA 156.7 for template hinge dimensions

Dimensions

Height x Width	Size (mm)	Gauge
4.5 x 5	114 x 127	0.134
4.5 x 6	114 x 152	0.134
5 x 6	127 x 152	0.146
5 x 7	127 x 178	0.146
5 x 8	127 x 203	0.146

Refer to General Hinge Information page to determine proper hinge for application

Options

NRP	Non-removable pin	TW4	Four wire
HT	Hospital tip	TW4M	Four wire with monitor
SH	Security stud - comes standard with NRP	TW8	Eight wire
RC-1/4, RC-5/8	Rounded corners	TW8M	Eight wire with monitor
SEC	Security fasteners - pin-in-socket	TW12	Twelve wire
		MON	Monitor

Finishes

BHMA	Description	Substrate	Finish
600	Primer Paint	Steel	USP
631	Matte Black	Steel	F-BLK
632	Bright Brass	Steel	US3
633	Satin Brass	Steel	US4
639	Satin Bronze	Steel	US10
640	Oil Rubbed Bronze	Steel	US10B
641	Oxidized Bronze	Steel	US10A
646	Satin Nickel	Steel	US15
651	Bright Chrome	Steel	US26
652	Satin Chrome	Steel	US26D
643e/716	Aged Bronze	Steel	F-643e/716
695	Dark Bronze Painted	Steel	F-695/US10BE

For other colors, consult factory.

5BB1SC / 5BB1BSC

5 Knuckle, ball bearing, swing clear, full mortise hinges (square and beveled)

- Designed to completely clear the opening when door is opened 92°
- Recommended for use in ADA door opening applications
- 5BB1SC made for square edge doors
- 5BB1BSC made for beveled edge doors
- Recommended for medium weight doors (<150 lbs)
- Recommended for medium frequency usage (<400 cycles per day)
- Made with two ball bearing assemblies
- Packed with fasteners for hollow metal and wood doors
 - 12-24 x 1½ UFPHMS, 12 x 1¼ FPHWS



Meets ANSI/BHMA A156.1
A8122 – Steel
A5122 – Stainless Steel
A2122 – Brass

Specifications

Material substrate	Made from brass, 1040 steel or 304 series stainless steel
Certifications	<ul style="list-style-type: none"> ▪ Certified to ANSI/BHMA A156.1 for performance standards ▪ Meets ANSI/BHMA 156.7 for template hinge dimensions

Dimensions

Height x Width	Size (mm)	Gauge
4.5	114	0.134
5	127	0.146

Refer to General Hinge Information page to determine proper hinge for application

Options

NRP	Non-removable pin	TW4	Four wire
HT	Hospital tip	TW4M	Four wire with monitor
RC-1/4, RC-5/8	Rounded corners	TW8	Eight wire
SEC	Security fasteners - pin-in-socket	TW8M	Eight wire with monitor
		TW12	Twelve wire
		MON	Monitor

Finishes

BHMA	Description	Substrate	Finish
600	Primer Paint	Steel	USP
629	Bright Stainless	Stainless steel	US32
630	Satin Stainless	Stainless steel	US32D
631	Matte Black	Steel	F-BLK
632	Bright Brass	Steel	US3
633	Satin Brass	Steel	US4
639	Satin Bronze	Steel	US10
640	Oil Rubbed Bronze	Steel	US10B
641	Oxidized Bronze	Steel	US10A
646	Satin Nickel	Steel	US15
651	Bright Chrome	Steel	US26
652	Satin Chrome	Steel	US26D
643e/716	Aged Bronze	Steel	F-643e/716
695	Dark Bronze Painted	Steel	F-695/US10BE

For other colors, consult factory.

Hinges and pivots

Architectural hinges

5BB1HWSC / 5BB1HWBSC

5 Knuckle, ball bearing, heavy weight, swing clear, full mortise hinges (square and beveled)

- Designed to completely clear the opening when door is opened 92°
- Recommended for use in ADA door opening applications
- 5BB1SCHW made for square edge doors
- 5BB1BSCHW made for beveled edge doors
- Recommended for heavier weight doors (>150 lbs)
- Recommended for high frequency usage (400 cycles per day)
- Made with four ball bearing assemblies
- Packed with fasteners for hollow metal and wood doors
 - 12-24 x 1/2 UFPHMS, 12 x 1/4 FPHWS



Specifications

Material substrate	Made from brass, 1040 steel or 304 series stainless steel
Certifications	<ul style="list-style-type: none"> ▪ Certified to ANSI/BHMA A156.1 for performance standards ▪ Meets ANSI/BHMA 156.7 for template hinge dimensions

Dimensions

Height x Width	Size (mm)	Gauge
4.5	114	0.180
5	127	0.190

Refer to General Hinge Information page to determine proper hinge for application

Options

NRP	Non-removable pin	TW4	Four wire
HT	Hospital tip	TW4M	Four wire with monitor
RC-1/4, RC-5/8	Rounded corners	TW8	Eight wire
SEC	Security fasteners - pin-in-socket	TW8M	Eight wire with monitor
		TW12	Twelve wire
		MON	Monitor

Finishes

BHMA	Description	Substrate	Finish
600	Primer Paint	Steel	USP
629	Bright Stainless	Stainless steel	US32
630	Satin Stainless	Stainless steel	US32D
631	Matte Black	Steel	F-BLK
632	Bright Brass	Steel	US3
633	Satin Brass	Steel	US4
639	Satin Bronze	Steel	US10
640	Oil Rubbed Bronze	Steel	US10B
641	Oxidized Bronze	Steel	US10A
646	Satin Nickel	Steel	US15
651	Bright Chrome	Steel	US26
652	Satin Chrome	Steel	US26D
643e/716	Aged Bronze	Steel	F-643e/716
695	Dark Bronze Painted	Steel	F-695/US10BE

For other colors, consult factory.

1000 Series

Residential hinges

- 3.5 x 3.5 or 4 x 4 plain bearing hinges
- Recommended for doors weighing less than 70 lbs and not exceeding 3'0" x 7'0"
- Recommended for low frequency, residential applications
- Features removable pin and cap
- Now compatible with Ives hinge pin door stops, models 69, 70, 72, 73
- Not recommended for use with a door closer
- For metal door applications see 3PB1 and 5PB1 models
- Available with rounded ($\frac{1}{4}$ " or $\frac{5}{8}$ ") or square corners
- Packed with fasteners for wood doors
 - #9 x 1 FPHWS

Specifications

Material substrate	1040 steel
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Dimensions

Model	Height x Width (in)	Corner
1010RP	3.5 x 3.5	Square
1011RP	3.5 x 3.5	$\frac{5}{8}$ " Radius
1012RP	3.5 x 3.5	$\frac{1}{4}$ " Radius
1020RP	4 x 4	Square
1021RP	4 x 4	$\frac{5}{8}$ " Radius

Finishes

BHMA	Description	Substrate	Finish
631	Matte Black	Steel	F-622E
632*	Bright Brass	Steel	F-605E
646	Satin Nickel	Steel	F-619E
651	Bright Chrome	Steel	F-625E
652	Satin Chrome	Steel	F-626E
643e/716	Aged Bronze	Steel	F-716E

* Only available on 1011 model. For other colors, consult factory.



1010



1011



1012



1020



1021