



TWO KNUCKLE HINGES



920
Plain Bearing - Standard Weight
 Steel with steel pin (ANSI A8133)

AB920
Concealed Anti-Friction Bearing - Standard Weight
 Steel with steel pin (ANSI A8112)

AB923
Concealed Anti-Friction Bearing - Standard Weight
 Brass with stainless steel pin (ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)

- Handed
- With door closer use ball bearing hinge
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of Metal	Hole Count	Screw Size	
Inches	mm			Machine	Wood
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12



AB930
Concealed Anti-Friction Bearing - Heavy Weight
 Steel with steel pin (ANSI A8111)

AB933
Concealed Anti-Friction Bearing - Heavy Weight
 Brass with stainless steel pin (ANSI A2111) or stainless steel with stainless steel pin (ANSI A5111)

- Handed
- For use on heavy weight doors or doors requiring high frequency service

Hinge Size		Gauge of Metal	Hole Count	Screw Size	
Inches	mm			Machine	Wood
4-1/2 x 4	114 x 102	0.180	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.180	8	1/2 x 12-24	1-1/4 x 12

THREE KNUCKLE HINGES



700
Plain Bearing - Standard Weight
 Steel with steel pin (ANSI A8133)

800
Plain Bearing - Standard Weight
 Brass with stainless steel pin (ANSI A2133) or stainless steel with stainless steel pin (ANSI A5133)

- Non-rising removable pin with flush pin and plug
- With door closer use ball bearing hinge
- For use on medium weight doors or doors requiring low frequency service



AB700
Concealed Anti-Friction Bearing - Standard Weight
 Steel with steel pin (ANSI A8112)

AB800
Concealed Anti-Friction Bearing - Standard Weight
 Brass with stainless steel pin (ANSI A2112) or stainless steel with stainless steel pin (ANSI A5112)

- Non-rising removable pin with flush pin and plug
- AB800 available with SecureCoat® Lifetime finish (US3SC)
- For use on medium weight doors or doors requiring medium frequency service

Hinge Size		Gauge of Metal	Hole Count	Screw Size	
Inches	mm			Machine	Wood
3-1/2 x 3-1/2	89 x 89	0.119	6	1/2 x 10-24	1 x 9
4 x 4	102 x 102	0.129	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4	114 x 102	0.134	8	1/2 x 12-24	1-1/4 x 12
4-1/2 x 4-1/2	114 x 114	0.134	8	1/2 x 12-24	1-1/4 x 12
5 x 4	127 x 102	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 4-1/2	127 x 114	0.145	8	1/2 x 12-24	1-1/4 x 12
5 x 5	127 x 127	0.145	8	1/2 x 12-24	1-1/4 x 12



ELECTRIC HINGES

The electric hinge provides an easy means to monitor the opening as well as transferring power from the frame into the door.

Electric hinge modifications can be either exposed on the surface of the hinge or concealed in the hinge. When concealed, the modifications are not visible and normally go undetected by personnel using the openings.

All of the Hager Companies electric hinges have been tested through UL in order that our products can be used on fire-rated or labeled openings.

Another important point to remember, an electrically modified hinge is for **low voltage power transfer only (48 volts or under)**. Higher voltages are not allowed because of the potential dangers. Also a consideration is the amperage rating of the power transfer hinges. Hager's 18 gauge wires are rated for 50 volts AC/DC at 10 amps continuous. The maximum inrush is 20 AMPS for 4 seconds per wire. Hager 28 gauge wires include amperage ratings of 3.5 AMPS/continuous duty and 16.0 AMPS/intermittent duty (pulse).

Modifications are made to full mortise hinges. Swing Clear modifications are only available on heavy weight hinges. For other applications, consult Hager Engineering for availability.

It is recommended that the **CENTER HINGE LOCATION** be used with all electrically modified hinges.

Hager Companies recommends the use of a mortar box or jamb box in order to protect the wire terminations on the inside of the frame. If this box is not used, the grout that may be poured into the frame will destroy the wiring and usually void the warranty on the product.



E2



E4



E1S



E2/E1S

Exposed Electric Hinge Modification



EMN



ETW



ETM

Concealed Electric Hinge Modification

