

Installation Instructions for all *ETH/ETM* Models



Applications:

The ETH and ETM hinges are used to pass low voltage power and/or signalling from a door frame to the door in order to power locksets, exit devices and door monitoring devices such as door position switches, request-to-exit switches, etc. **ETM (Energy Transfer Monitor) hinges** additionally provide a door position sensor in the hinge itself. The quantity and required gauge of wire depends on the hardware being used and the general purpose of the application.

Door Preparation:

The wire chase should be drilled with a 3/8" drill bit at the point noted on the hinge template. The ETH/ETM hinge should always be positioned as one of the center hinges on the door, since the modified hinge no longer meets manufacturers load bearing specifications. A starter hole of 3/4" Diameter x 1- 1/2" deep is recommended for positioning the hinge wire (see note #1).

Frame Preparation:

Mark and drill hole to receive the wires from the ETH hinge (see note #1).

Warnings:

1. Be careful not to pinch wires when securing the hinge.
2. Do not allow the hinge to dangle by the wire during installation.

Notes:

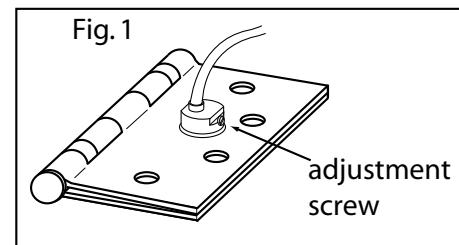
1. In fire rated conditions be sure to confirm the maximum starter hole diameter and depth with the appropriate testing agency.
2. Steel based hinges are for interior use only. Use stainless steel or brass based hinges for exterior installations

Monitor Adjustment and Specifications (if applicable):

Clockwise wider gap, Counterclockwise narrow gap. (Fig. 1)

Hinge is adjusted with a 1/4" gap from factory which equates to the door opening 1-1/2" for a 3' door and 2" for a 4' door before triggering the monitor switch.

Note: Monitor Wire Template is the same as standard template on pg. 2



ETM Wiring Code:

Mechanical Switch	Magnetic Switch	
Yellow/Black :	White:	Common (C)
Blue/White:	Blue:	Normally Open (NO)
Red/White:	Black:	Normally Closed (NC)

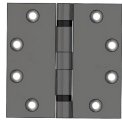
Switch Ratings:

Electrical:	50-100 mA, 30VDC
In-rush Current:	NC & NO: 0.5 A max

Electrical Specifications (Maximum Continuous rating):

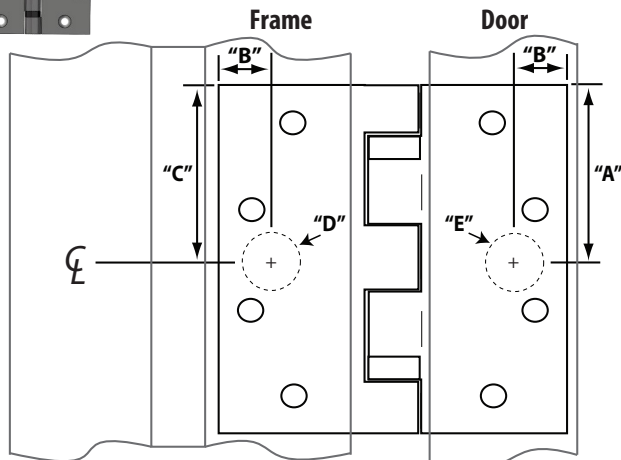
Command Access Model	Wire Quantity	Wire Gauge	Continuous Amps @24VDC	Surge/Pair (5 Sec) Amps @24VDC	Command Access Monitor Model	Wire Quantity	Wire Gauge	Continuous Amps @24VDC	Surge/Pair (5 Sec) Amps @24VDC
ETH2W	2	20	4.0	16.0	ETM	-	-	-	-
ETH4W - ETH6W	4-6	26	1.0	N/A	ETM2W	2	20	4.0	16.0
ETH8W - ETH12W	8-12	28	1.0	N/A	ETM4W - ETM6W	4-6	26	1.0	N/A
ETH2WH	2	18	5.0	16.0	ETM8W - ETM12W	8-12	28	1.0	N/A
ETH4WH - ETH6WH	2	18	5.0	16.0	ETM2WH	2	18	5.0	16.0
	2-4	26	1.0	N/A	ETM4WH - ETM6WH	2	18	5.0	16.0
ETH8WH - ETH12WH	2	20	4.0	16.0		2-4	26	1.0	N/A
	6-10	28	1.0	N/A	ETM8WH	2	20	4.0	16.0
						6	28	1.0	N/A

Hinge Template

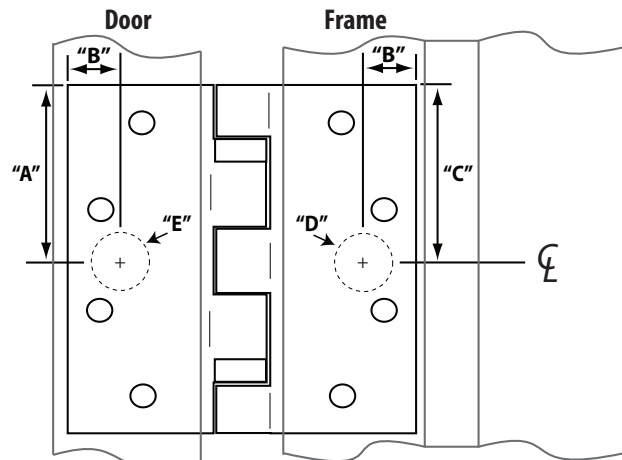


5 Knuckle Standard Weight

Template: HT579-01



LH (Left Hand) / RHR (Right Hand Reverse)



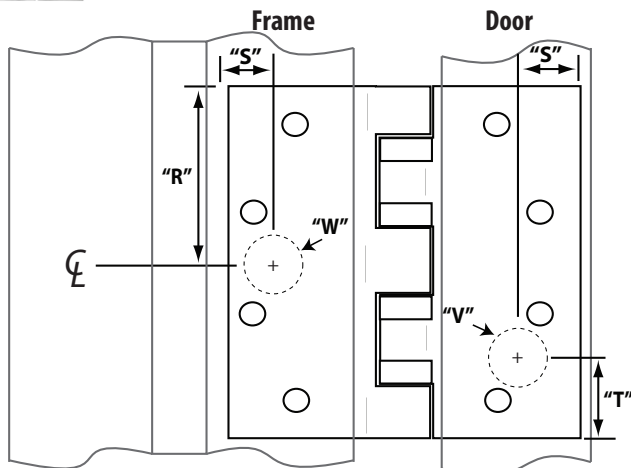
RH (Right Hand) / LHR (Left Hand Reverse)



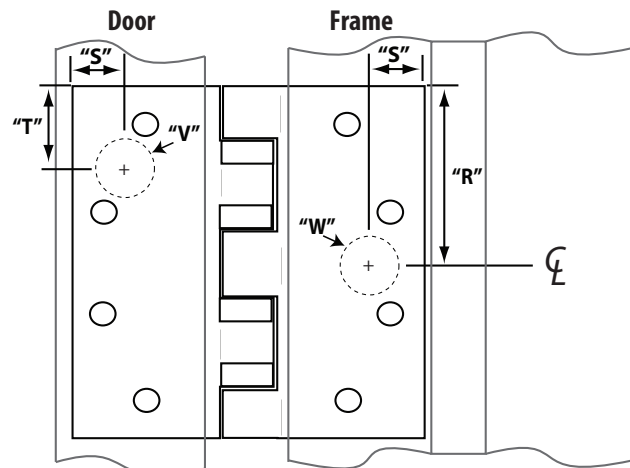
5 Knuckle Heavy Weight

5 Knuckle Swing Clear Standard/Heavy Weight

Template: HT568-01



LH (Left Hand) / RHR (Right Hand Reverse)



RH (Right Hand) / LHR (Left Hand Reverse)

5 Knuckle Standard Weight

Hinge Size

5 Knuckle Heavy Weight All 5 Knuckle Swing Clears

A	B	C	E	D		R	S	T	V	W
2"	5/8"	2"	3/4"	7/8"	4" x 4"	-	-	-	-	-
2-1/4"	5/8"	2-1/4"	3/4"	7/8"	4-1/2" x 4"	2-1/4"	5/8"	1-1/16"	3/4"	7/8"
2-1/4"	5/8"	2-1/4"	3/4"	7/8"	4-1/2" x 4-1/2"	2-1/4"	5/8"	1-1/16"	3/4"	7/8"
2-1/4"	5/8"	2-1/4"	3/4"	7/8"	4-1/2" x 5"	2-1/4"	5/8"	1-1/16"	3/4"	7/8"
2-1/4"	5/8"	2-1/4"	3/4"	7/8"	4-1/2" x 6"	2-1/4"	5/8"	1-1/16"	3/4"	7/8"
2-1/2"	5/8"	2-1/2"	3/4"	7/8"	5" x 4"	2-1/2"	5/8"	1-1/8"	3/4"	7/8"
2-1/2"	5/8"	2-1/2"	3/4"	7/8"	5" x 4-1/2"	2-1/2"	5/8"	1-1/8"	3/4"	7/8"
2-1/2"	5/8"	2-1/2"	3/4"	7/8"	5" x 5"	2-1/2"	5/8"	1-1/8"	3/4"	7/8"
2-1/2"	5/8"	2-1/2"	3/4"	7/8"	5" x 6"	2-1/2"	5/8"	1-1/8"	3/4"	7/8"