

## E – Exposed Contact

### Door and Frame Preparation

For grout filled frame, install a Mortar Box (HAGER 430). Failure to do so will void the hinge warranty.

Refer to Fig. 1 for your particular ROTON Hinge model.

1. Drill a 7/8" (1" max) diameter access hole in both the frame rabbet and the door edge at the proper location for the wire leads. After drilling, deburr the holes to prevent damage to the wire leads.  
*If a shim is utilized in the installation of the hinge, also drill a corresponding 7/8" diameter access hole in the shim.*

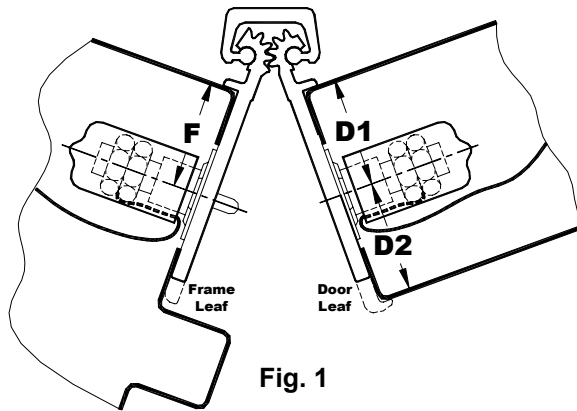


Fig. 1

Hinge Model	F	D1	D2
780-111	1"	7/8"	-
780-112	7/8"	7/8"	-
780-224	15/16"	-	7/8"
780-226	1"	1"	-
780-235	7/8"	7/8"	-

**MAXIMUM ELECTRICAL RATING CONTACT**  
 Volts: 48V AC/DC  
 Amperes: 3.5A CONTINUOUS  
 16.0A PULSE

### Installation

Prepare the door and frame for installation using the standard installation instruction sheet furnished with the hinge, but do not attach the hinge at this time.

1. Remove the red insulation cover from the contacts.
2. Connect the system wire from the door to the contact terminal on the hinge door leaf. Crimp the wire between the two hex nuts located on the contact lug.
3. Reinstall the red insulation cover, making sure the connection is completely insulated.
4. Carefully slide the wire back through the access hole in the door making sure it will not be cut or pinched as installation is completed. Attach the hinge to the door per the standard installation instruction sheet supplied with the hinge.
5. Position the door at 90 degrees to the frame and connect the system wire from the frame to the contact terminal on the hinge frame leaf. Crimp the wire between the two hex nuts located on the contact lug.
6. Reinstall the red insulation cover, making sure the connection is completely insulated.
7. Carefully slide the wire back through the access hole in the frame making sure it will not be cut or pinched as installation is completed. Attach the hinge to the frame per the standard installation instruction sheet supplied with the hinge.

## E1S – Exposed Switch

### Door and Frame Preparation

For grout filled frame, install a Mortar Box (HAGER 430). Failure to do so will void the hinge warranty.

Prepare the door and frame for installation using the standard installation instruction sheet furnished with the hinge, but do not attach the hinge at this time. Refer to Fig. 1 for your particular ROTON Hinge model.

1. Drill a 1/2" (5/8" max) diameter access hole in both the frame rabbet and the door edge at the proper location for both the switch assembly and the adjustable actuator assembly. After drilling, deburr the holes to prevent damage to the wire leads. The wired switch should be mounted to the frame leaf of the hinge. To change handing move the actuator and switch to opposite hinge leaves.

*If a shim is utilized in the installation of the hinge, also drill a corresponding 1/2" diameter access hole in the shim.*

### Installation

1. Attach the hinge to the door per the standard installation instruction sheet supplied with the hinge.
2. Connect the system wiring to the appropriate leads of the switch. See Fig. 2. Insulate the bare end of any unused wires.
3. Carefully slide wires back through the access hole making sure they are placed so they will not be cut or pinched as installation is completed. Attach the hinge to the frame per the standard installation instruction sheet supplied with the hinge.
4. The position of the actuator is preset from the factory to activate switch properly for most typical square-edge door and frame combinations. Certain factors such as door alignment may slightly affect the switch after installation. Check the circuit to make certain the switch is opening/closing as desired. If necessary, the actuator position can be adjusted to possibly compensate for these factors. Loosen the locknut and screw the setscrew in or out. (The door must be removed to adjust the setscrew.)

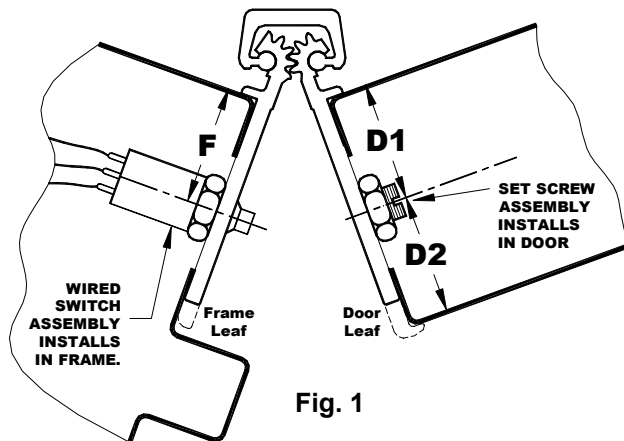


Fig. 1

Hinge Model	F	D1	D2
780-110	7/16"	7/16"	-
780-111	1"	7/8"	-
780-112	7/8"	7/8"	-
780-224	15/16"	-	7/8"
780-226	1"	1"	-
780-235	7/8"	7/8"	-

#### **CLOSED LOOP SECURE**

(Use black and green switch wires.)

Closed Loop Secure hinges are wired so that when the door is closed (secured) the pushbutton switch is closed (passes current). When the door opens, an open circuit is detected as an alarm.

#### **OPEN LOOP SECURE**

(Use black and orange switch wires.)

Open Loop Secure hinges are wired so that when the door is closed (secured) the EMN switch is open (does not pass current). When the door opens, a closed circuit is detected as an alarm.

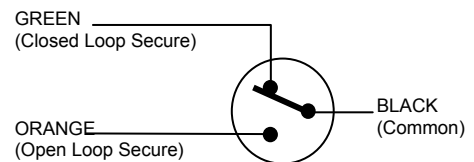


Fig. 2

#### **SWITCH INFORMATION**

Voltage Rating: 120VAC/VDC  
 Current Rating: 250Ma  
 Power Rating: 30W max.  
 Switch Function: SPST-NO