



FULL MORTISE - CONCEALED ELECTRIC

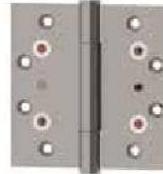
EXPOSED ELECTRIC MODIFICATIONS

The following exposed electric modifications are available on our architectural grade ball bearing and anti-friction bearing hinges. To order a hinge with exposed electric modification, please add the modification code to the product number (for example, BB1279 E2).



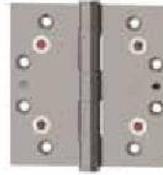
E2 Electric Contact

- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Two contacts minimum required to transfer electrical current
- Design includes insulated copper contacts
- Furnished with non-removable pins



E2/E1S Electric Contact/Switch

- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Single pole, double throw switch
- Design includes insulated copper contacts
- Furnished with non-removable pins



| Hinge Size | | Contacts |
|---------------|-----------|------------|
| Inches | mm | |
| 4 x 4 | 102 x 102 | 2 or 3 |
| 4-1/2 x 4-1/2 | 114 x 114 | 2, 3, or 4 |
| 5 x 5 | 127 x 127 | 2, 3, or 4 |

| Contact Maximum Electrical Rating | | |
|-----------------------------------|-----------|------------|
| Volts | Amperes | |
| 48 VDC | 3.5 amps | CONTINUOUS |
| | 16.0 amps | PULSE |

| Hinge Size | | Contacts |
|---------------|-----------|------------|
| Inches | mm | |
| 4 x 4 | 102 x 102 | 2 or 3 |
| 4-1/2 x 4-1/2 | 114 x 114 | 2, 3, or 4 |
| 5 x 5 | 127 x 127 | 2, 3, or 4 |

| Contact Maximum Electrical Rating | | |
|-----------------------------------|-----------|------------|
| Volts | Amperes | |
| 48 VDC | 3.5 amps | CONTINUOUS |
| | 16.0 amps | PULSE |
| Switch Maximum Electrical Rating | | |
| 24 VDC @ .250 amps | | |



E1S Electric Switch

- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Single pole, double throw switch
- Furnished with non-removable pins



| Hinge Size | |
|---------------|-----------|
| Inches | mm |
| 4 x 4 | 102 x 102 |
| 4-1/2 x 4-1/2 | 114 x 114 |
| 5 x 5 | 127 x 127 |

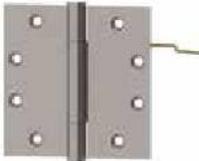
| Switch Maximum Electrical Rating |
|----------------------------------|
| 24 VDC @ .250 amps |



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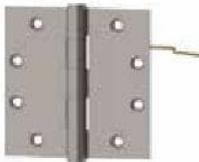
CONCEALED ELECTRIC MODIFICATIONS

The following concealed electric modifications are available on our architectural grade ball bearing and anti-friction bearing hinges. To order a hinge with concealed electric modification, please add the modification code to the product number (for example, BB1279 EMN).



**EMN
Electric Monitor Only**

- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Available in steel, brass, or stainless steel
- 28 gauge wire standard
- Standard size available 4" (102 mm) through 8" (203 mm)
- Hinge pins are not field removable - NRP variation is not available
- Monitoring capability only
- Concealed subminiature snap action, SPDT switch
- Adjustment feature for a wide range of switch sensitivity
- Preset switching circuit
- For open loop secure, closed loop secure or single pole double throw (SPDT)



**ETM
Electric Through-Wire with Monitoring**

- Three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Available in steel, brass, or stainless steel
- 18 and 28 gauge wire
- Standard size available 4" (102 mm) through 8" (203 mm)
- Hinge pins are not field removable - NRP variation is not available
- Both continuous electric conductors and monitoring capability
- Concealed monitor switch and 4, 8 or 10 continuous electrical conductors
- Adjustment feature for a wide range of switch sensitivity
- For open loop secure, closed loop secure or single pole double throw (SPDT)



| Switch Maximum Electrical Rating | |
|----------------------------------|--|
| 30 VDC @ .500 amps | |



***ETW
Electric Through-Wire Only**

- Two, three or five knuckle
- Available on architectural grade ball bearing and anti-friction bearing
- Available in steel, brass, or stainless steel
- 18 and 28 gauge wire
- Standard size available 4" (102 mm) through 8" (203 mm)
- Hinge pins are not field removable - NRP variation is not available
- Low voltage electric current transfer capability only
- 4, 8, or 12 continuous electrical conductors
- For 6 wire, use 8
- For 10 wire, use 12



| Contact Maximum Electrical Rating | | |
|-----------------------------------|-----------|------------|
| Volts | Amperes | |
| 48 VDC | 3.5 amps | CONTINUOUS |
| | 16.0 amps | PULSE |
| Switch Maximum Electrical Rating | | |
| 30 VDC @ .500 amps | | |

| Wire Maximum Electrical Rating | | |
|--------------------------------|-----------|------------|
| Volts | Amperes | |
| 48 VDC | 3.5 amps | CONTINUOUS |
| | 16.0 amps | PULSE |

***Quick Connect Option (QC) available with all ETW and ETM hinges - must specify.**





FULL MORTISE - CONCEALED ELECTRIC

CONCEALED AIR TRANSFER

The following hinges are available with a concealed air transfer (ATH) modification. They are available on architectural grade ball bearing and anti-friction bearing full mortise. Please note:

- ATH modification is for doors that require the transfer of compressed air.
- The hinges with ATH modification available use 5/32" (4 mm) plastic air tubing, have quick-connect fittings, and are capable of transferring 80-100 PSI through the air tubing.
- Steel or stainless steel hinges are acceptable for use on labeled or fire-rated doors.
- Hinge pins are not field removable.
- NRP and safety stud are not available.



AB700
Standard Weight
Steel



AB800
Standard Weight
Stainless steel, brass



AB750
Heavy Weight
Steel



AB850
Heavy Weight
Stainless steel, brass

BB1191
Standard Weight
Stainless steel, brass

BB1279
Standard Weight
Steel

BB1168
Heavy Weight
Steel

BB1199
Heavy Weight
Stainless steel, brass



430 Mortar Box

- Galvanized steel 0.040 (1 mm)
- Dimensions - 9" (2.29 mm) length with tabs, 7" (1.78 mm) inside, 1-3/4" x 1-3/4" (45 mm x 45 mm) inside dimension
- Removable back for servicing
- Serves as mortar shield
- Top and bottom knockouts for standard conduit fittings
- Fits hinge reinforcements for 4-1/2" (114 mm) or 5" (127 mm) architectural grade hinges

| Hinge Size | |
|---------------|-----------|
| Inches | mm |
| 4-1/2 x 4 | 112 x 102 |
| 4-1/2 x 4-1/2 | 114 x 114 |
| 5 x 4 | 127 x 102 |
| 5 x 4-1/2 | 127 x 114 |
| 5 x 5 | 127 x 127 |