

# ROTON CONTINUOUS GEARED HINGES



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## ROTON CONTINUOUS GEARED HINGES

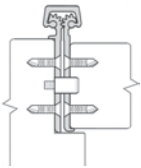
### FIRE RATINGS - UNDERWRITERS LABORATORY FIRE RATING FILE #A14627



780 Series Roton Continuous Geared Hinges with stainless steel studs are approved for use on 4'x10' metal or wood swing type door. 780 Series Roton Continuous Geared Hinges without stainless steel studs are approved for use on 4'x8' single swing metal doors and 4'x10' single swing wood doors.

- Hollow metal, tin-clad, sheet-metal and steel covered composite type rated up to and including 3 hours
- Wood composite doors rated up to and including 1-1/2 hours
- Wood core doors rated up to 20 minutes without hose stream, non-studded
- 780 Series Roton Continuous Geared Hinges meet requirements for positive pressure UL10C, UL10B and UBC7-2 Part 1

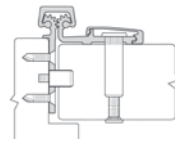
#### FULLY CONCEALED WITH STUD



##### Fully Concealed

These models are concealed between the frame and the hinge edge of the door. Models available include 780-041, 780-041HD, 780-041LL, 780-110, 780-110HD, 780-111, 780-111HD, 780-111LL, 780-112, 780-112HD, 780-112LL, 780-224, 780-224HD, 780-224LL, 780-226, 780-226HD, 780-226LL, and 780-235HD.

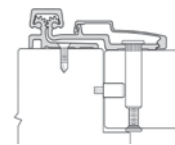
#### HALF SURFACE WITH STUD



##### Half Surface

These models have the frame leaf concealed between the frame and the edge of the door. The door leaf is mounted to the door with thru-bolts or screws. Models available include 780-045, 780-045HD, 780-046, 780-046HD, 780-053, 780-053HD, 780-054, 780-054HD, and 780-211HD.

#### FULL SURFACE WITH STUD



##### Full Surface

These models have the frame leaf mounted to the face of the frame and the face of the door. The door leaf is mounted to the face of the door with thru-bolts. Models available include 780-057, 780-057HD, 780-157, 780-157HD, 780-210, 780-210HD, and 780-257HD.

#### ANSI STANDARDS

- 780 Series Roton Continuous Geared Hinges are approved for ANSI A156.26 Grade 1 for 150 lb. doors
- 780 Series Roton heavy duty hinges are approved for ANSI A156.26 Grade 1 for 300 lb. doors
- 780-112 Roton Continuous Geared Hinge is Warnock-Hersey certified in accordance with ANSI A250.13 2003 Standard Severe Windstorm Resistant Components

UL10C Fire Rated Roton	Fully Concealed	Half Surface	Full Surface
20 Minute Fire Rated Wood Core Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
20 Minute Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
30 Minute Fire Rated Wood Composite Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
30 Minute Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
45 Minute Fire Rated Wood Composite Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
45 Minute Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
60 Minute Fire Rated Wood Door x Hollow Metal Frame	UL — FF	UL — FF	UL — FF
60 Minute Fire Rated Metal Door x Hollow Metal Frame	UL — FF	UL — FF	UL — FF
90 Minute Fire Rated Wood Composite Door x Fire Rated Hollow Metal Frame	UL — Stud	UL — Stud	UL — Stud
90 Minute Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — FF	UL — FF	UL — FF
3 Hour Fire Rated Metal Door x Fire Rated Hollow Metal Frame	UL — Stud	UL — Stud	UL — Stud

#### NOTES:

1. Models for which studs are not required (UL-FF) are no extra charge.

#### 2. Please specify if UL stamp is required. For example:

780-112LL 83" Clear U/L — FF  
780-211HD 95" DB U/L — Stud

3. Models for which studs are required have an extra charge. Four studs are required for UL stud hinges. Add to the hinge list price before applying buying group discount - **\$53.90**.



## ROTON CONTINUOUS GEARED HINGES



### ROTON HINGE ADDITIONS/ MODIFICATIONS

#### CANCELLATION NOTIFICATION

Cancellation for made to order items must be completed within 48 hours of order placement.

#### SPECIAL PRODUCTS

A special product is any product not listed in the price book in regard to length, finish, standard hole preparation or leaf combinations not illustrated. Orders for special products are encouraged, but any changes or cancellations on special orders may result in charges related to work performed and/or material loss. Under no circumstance will non-stock or make-to-order products be accepted for return unless due to Hager error.

#### STANDARD LENGTHS

Roton hinges are listed and priced as actual lengths 79" (6'8" opening), 83" (7'0" opening), 85" (7'2" opening), 95" (8'0" opening), and 119" (10'0" opening), for convenience in application to nominal sized doors. Actual length provides for threshold clearance, head clearance and door height allowances for carpeting. Other lengths may be ordered as non-standard items.

#### SPECIAL LENGTHS

Actual net door heights may be specified at no additional charge. Changes in special length orders or cancellations to such orders will be subject to charges made for work in process.

#### LENGTH SPECIFICATIONS

If special lengths to match the actual net door heights are required, please indicate this clearly on your order. A special length should be specified from the net door height, not the nominal height of the opening. To order specify: "Actual Length", or "Net Door Height".

Use pricing for the next longer standard length from which the special length can be manufactured. For example, hinges 86-3/4" long will be invoiced at the 95" price.

#### EXTRA LONG HINGES

Hinges over 119" are manufactured as two separate lengths with a staggered joint for on-site connection. Hinge segments are taken from standard sizes for best economics in relation to the quantity required. Handing specifications are required to position the cuts inconspicuously and to finish symmetrical pairs in double door applications. Add to the hinge list price before applying buying group discount:  
Splicing Charge **\$90.90** List per hinge

#### SHORT HINGES

Hinges shorter than 79" will be invoiced at the 79" price. Where two or more short hinges can be obtained from a standard length, pricing is based on the number of standard lengths utilized plus an assembly charge for each hinge. Add to the hinge list price before applying buying group discount:  
Assembly Charge **\$20.80** List per hinge

#### FIELD MODIFICATIONS

While Roton hinges can be cut in the field, any product modifications may void all warranties. Should in-the-field modifications be required, cut only from bottom of hinge. Do not cut through bearings or screw holes. When cutting electric hinges it is extremely important to clamp both hinge leaves securely to prevent hinge "chatter" which can damage the hinge's internal wiring. Consult the St. Louis sales office before proceeding.

#### TEMPLATE HINGES

Hager has developed templated hole patterns for Roton hinge models in standard lengths. Drawings are available upon request by contacting Hager Customer Service or accessing the Hager website at [www.hagerco.com](http://www.hagerco.com).

Due to normal variances inherent in the manufacturing process, Roton custom length hinges are deemed by Hager to be non-templated.





## ROTON CONTINUOUS GEARED HINGES

### STANDARD FINISHES

Roton hinges are available in either satin etched, clear anodized aluminum (similar to US28) or in dark bronze exterior anodized coating.

### SPECIAL ANODIZING

Hager Companies can supply unfinished materials to select finishers for special projects that require unusual colors, but will require that final assembly be completed by Hager Companies. Because of special non-removable metal coatings applied to all hinges during assembly, users are cautioned against attempting to refinish any Roton product.

Roton hinges are available in various special colors including Black, Gold, and other special anodized finishes with fasteners to match. Example, specify "Black Anodized" or "Gold Anodized". All hinges ordered in special colors should be ordered at the same time to guarantee finish uniformity. Add 15% to the Dark Bronze Anodized hinge list price (for Black and Gold only) before applying buying group discount.

Other anodized colors by quotation only. Supply color chip for best match.

### SPECIAL PAINTED HINGES

Call for quote.

### PAINTED COVER CHANNELS

Painted Roton Cover Channels in Bone White are offered as a standard stock color option. This is only available on the standard Roton cover channel and should be ordered as Bone White Paint # UC43350. The painted cover channels are priced by adding the following to the hinge list price before applying discounts:

<u>Size</u>	<u>List</u>
79"	\$56.75
83"	\$56.75
85"	\$56.75
95"	\$77.50
119"	\$115.30

### POLISHED COVER CHANNELS

Any hinge may be ordered with a polished clear cover channel (similar to US26) to complement clear anodized hinge leaves or a polished gold cover channel (similar to US3) to complement satin gold hinge leaves. Add to the hinge list price before applying buying group discount:

<u>Size</u>	<u>List (Clear)</u>	<u>List (Bronze)</u>
79"	\$56.75	\$77.50
83"	\$56.75	\$77.50
85"	\$56.75	\$77.50
95"	\$77.50	\$96.40
119"	\$114.35	\$132.30



# ROTON CONTINUOUS GEARED HINGES



## ROTON HINGE ADDITIONS/ MODIFICATIONS (CONTINUED)

### SPECIAL COVER CHANNELS

Special covers for decorative, fluted or rounded effects may be ordered. Availability for hinges with electrical modifications vary. Please consult the St. Louis sales office for confirmation. Add to the hinge list price before applying buying group discount:

### Decorative Back Cover Channels

#### Clear Anodized

79", 83", 85" \$23.65  
95" \$29.30  
119" \$37.80

#### Bronze Anodized

79", 83", 85" \$47.25  
95" \$52.95  
119" \$60.50

### Fluted Back Cover Channels

#### Clear Anodized

79", 83", 85" \$23.65  
95" \$29.30  
119" \$37.80

#### Bronze Anodized

79", 83", 85" \$47.25  
95" \$52.95  
119" \$60.50

### Round Back Cover Channels

#### Clear Anodized

79", 83", 85" \$23.65  
95" \$29.30  
119" \$37.80

#### Bronze Anodized

79", 83", 85" \$47.25  
95" \$52.95  
119" \$60.50

Note: Available only in clear and dark bronze.

Roton Cover Channel Compatibility				
Hinge Model	Flat FBCC	Round RBCC	Flutee FLCC	Decorative DBCC
750-134	•	•	•	•
750-138	•	•	•	•
780-041	•	•		
780-045	•	•		
780-046	•	•		
780-053	•	•		
780-054	•	•		
780-057	•	•		
780-110	•	•	•	•
780-111	•	•	•	•
780-112	•	•	•	•
780-113	•	•	•	•
780-114	•	•		
780-155	•	•		
780-157	•			
780-208	•		•	•
780-210	•	•		
780-211	•	•		
780-213	•	•		
780-224	•	•	•	•
780-226	•	•	•	•
780-235	•	•	•	•
780-257	•			
780-259	•	•		
780-300	•			

1/2" wide insert



**Decorative Back**  
Not available through Hager.



**Fluted Back**



**Round Back**



04/01/2011  
800-325-9995  
www.hagerco.com



## ROTON CONTINUOUS GEARED HINGES

### ROTON HINGE ADDITIONS/ MODIFICATIONS (CONTINUED)

#### BEARING AT TOP

This application allows for the bearing to be set at the very top of the cover channel. The cover channel is flush with the top of the geared hinge, preventing any obstructions or debris from being inserted in the top of the channel. Add to the hinge list price before applying buying group discount: **\$38.75** List per hinge

#### BEARING ON TOP

This application allows for the bearing to be set at the very top of the extended cover channel. The cover channel is extended the depth of the bearing and projects beyond the top edge of the hinge by the thickness of the bearing. This modification prevents any obstructions or debris from being inserted in the top of the channel. Add to the hinge list price before applying buying group discount: **\$38.75** List per hinge

#### HOSPITAL TIP

Concealed models only can be prepared with a cover channel tapered at 45° angle at the top of the hinge. These are ideal for use in hospitals and correctional facilities to help provide a clean and safe environment. Please consult the sales office for available concealed models. Add to the hinge list price before applying buying group discount: **\$114.35** List per hinge

#### TAMPER RESISTANT HINGE

This application is intended for use in hospital psychiatric areas and places of high security. The hinge is prepared with a hospital tip (concealed models only) and every other bearing is supplied with a set screw to lock against the inside of the cover channel for additional security. Add to the hinge list price before applying buying group discount: **\$134.20** List per hinge

#### DUTCH DOOR HINGES

The frame leaf is furnished as a continuous extrusion and the door leaf is cut to fit the Dutch Door heights specified. Upper and lower door leaves are prepped for extra screws. Hanging, overall net door height, amount of clearance between the top and bottom doors, their individual heights, door, and frame materials should be clearly specified. Add to the hinge list price before applying buying group discount: **\$79.40** List per hinge

#### SPECIAL HOLES

Any hinge may be ordered with special hole locations for unusual frame or door conditions. Please provide specifications for each leaf. Add to the hinge list price before applying buying group discount: Call for quote

#### BEARING REPLACEMENT KIT

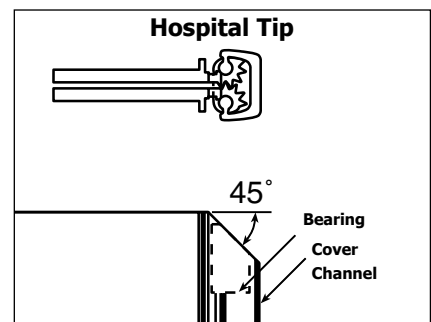
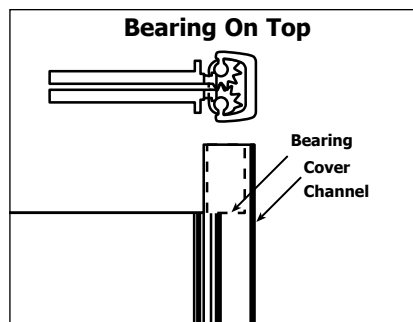
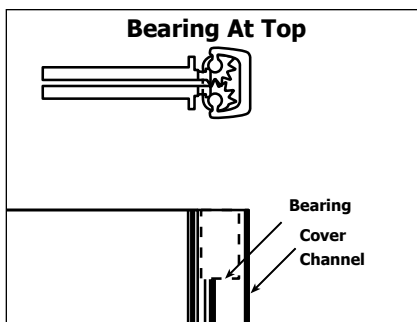
Finish	List
<b>Standard Duty for 780 Series</b>	
Clear Anodized	\$40.65
Dark Bronze Anodized	\$40.65

#### Heavy Duty for 780 Series

Clear Anodized	\$77.50
Dark Bronze Anodized	\$77.50

#### Extra Heavy Duty for 1200 Series

Clear Anodized	\$154.05
Dark Bronze Anodized	\$154.05

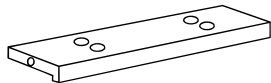


## ROTON CONTINUOUS GEARED HINGES



### ROTON HINGE ADDITIONS/ MODIFICATIONS (CONTINUED)

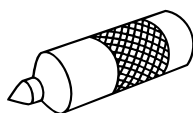
#### MARKING JIGS



Marking jigs are available to locate the centers of the top end frame screws. These jigs must be ordered at the same time as the hinges to insure fabrication accuracy.

**\$190.90** List each

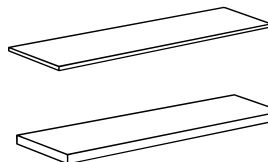
#### CENTER PUNCHES



Self-Centering center punches are available for #12 countersunk screws supplied. To make sure screw heads seat properly, accurate center punching is required.

**\$8.55** List each

#### SHIM STOCK



For clearance between the door and frame which may be excessive, a continuous shim is helpful (applied behind the frame leaf only). Anodized aluminum extrusions are supplied with no holes.

<u>Item</u>	<u>List</u>
1/16" x 1-1/2" Wide x 7' Long	\$29.80 each
1/8" x 1-1/2" Wide x 7' Long	\$41.60 each
1/16" x 1-1/2" Wide x 10' Long	\$62.90 each
1/8" x 1-1/2" Wide x 10' Long	\$88.40 each

Pictures shown in this price book are for general product identification only and are not intended to be used as templates.

#### SHIPPING CARTONS

Extra shipping cartons are available for reshipping hinges in quantities of 2 or less.

**\$20.80** List each





# ROTON CONTINUOUS GEARED HINGES

## REPLACEMENT MOLDINGS

### 780-210M

Replacement door leaf molding

780-210, 780-210HD, 780-211, 780-211HD, 780-213, 780-213HD, 780-045, 780-045HD, 780-046, 780-046HD

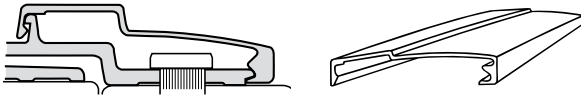
Furnished with Allen head set screw and wrench. Shipped in stock lengths for trimming in the field.

#### Clear Anodized

Size	List
79", 83", 85"	\$37.85
95"	\$46.80
119"	\$54.85

#### Dark Bronze Anodized

Size	List
79", 83", 85"	\$46.80
95"	\$54.85
119"	\$61.95



### 780-247M

Replacement frame leaf molding

780-157, 780-157HD, 780-257, 780-257HD

Shipped in stock lengths for trimming in the field.

#### Clear Anodized

Size	List
79", 83", 85"	\$32.15
95"	\$37.85
119"	\$46.80

#### Dark Bronze Anodized

Size	List
79", 83", 85"	\$37.85
95"	\$46.80
119"	\$54.85



### 780-052M

Replacement door leaf molding

780-053, 780-053HD, 780-054, 780-054HD, 780-155, 780-155HD, 780-057, 780-057HD, 780-157, 780-157HD, 780-257, 780-257HD, 780-259, 780-259HD

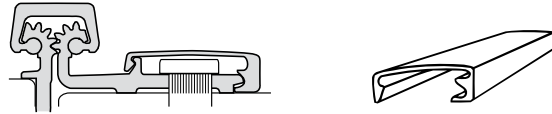
Furnished with Allen head set screw and wrench. Shipped in stock lengths for trimming in the field.

#### Clear Anodized

Size	List
79", 83", 85"	\$35.95
95"	\$41.60
119"	\$49.65

#### Dark Bronze Anodized

Size	List
79", 83", 85"	\$41.60
95"	\$49.65
119"	\$57.65



## FASTENERS

All hinges are shipped with appropriate fasteners for metal doors and frames except where noted. **If wood screws are required, please specify on order, and wood screws will be substituted at no extra charge.** Bulk screws are packed separately.

Additional fasteners may be ordered as follows (add to the hinge list price before applying buying group discount):

#12 x 1-1/2" Flat Head Wood Screw (Clear or Bronze)  
 List: \$230.75/box of 500  
 Part Numbers: 7-080-0050 (Clear) 7-080-0051 (Bronze)

#12-24 x 11/16" Self-Drilling Flat Head Screw (Clear or Bronze)  
 List: \$206.30/box of 500  
 Part Numbers: 7-080-0070 (Clear) 7-080-0072 (Bronze)

#12-24 x 1/2" Spanner Head Machine Screw  
 List: \$1.75 ea

#12-24 x 11/16" Drill Quick Torx Screw  
 List: \$1.75 ea

#12-24 x 13/32" Self-Threading Screw (Clear or Bronze)  
 List: \$0.70 ea

#12-24 x 11/16" Self-Drilling Flat Head Screw (Clear or Bronze)  
 List: \$1.00 ea

#12-24 x 11/16" Self-Drilling Pan Head Screw (Clear)  
 List: \$0.90 ea

#12 x 1-1/2" Flat Head Wood Screw (Clear or Bronze)  
 List: \$1.10 ea

Sexbolts  
 List: \$2.70 ea





## ELECTRICAL MODIFICATIONS

### EXPOSED ELECTRIC CONTACTS

- Transfers power to door in closed position
- Must have at least two (2) contacts to transfer power
- Specify handing and the dimension from the top edge of the door to the centerline of the electric contact location
- Templates regarding location of contacts available upon request
- To order, use symbol "E" plus the number of contacts required as a suffix
- Example: 780-112HD 85" Clear E4
- Add to the hinge list price before applying buying group discount: **\$87.45** List per contact

### EXPOSED ELECTRIC SWITCHES

- Miniature push button switch is incorporated in the hinge frame leaf to monitor position of the door
- Three 12" wire leads
- Each monitoring hinge only needs one E1S switch
- Specify handing and the dimension from the top edge of the door to the centerline of the electric switch location
- Templates regarding location of contact switch available upon request
- To order, use symbol "E1S" as a suffix
- Example: 780-112HD 85" Clear E1S
- Add to the hinge list price before applying buying group discount: **\$87.45** List per switch

### CONCEALED ELECTRIC THROUGH-WIRE

- Transfers power discreetly from building to door hardware
- Special Electric Modifications and EPT locations may require additional charges if screw holes have to be moved. Contact Hager Customer Service for charges. Please feel free to contact the Hager technical team for further information pertaining to electric modifications.
- Four, Six, Eight or Ten 28-gauge wire continuous electric conductors
- Specify handing and the dimension from the top edge of the door to the centerline of the electric through-wire location
- Templates regarding location of through-wires available upon request
- Cut out for prep - 1/2"
- To order, use symbol "ETW" plus the number of wire leads, 12" per side required as a suffix
- Example: 780-112HD 85" Clear ETW - 4
- Add to the hinge list price before applying buying group discount:

### REMOVABLE ELECTRIC THROUGH-WIRE

- Transfers power discreetly from building to door hardware
- Removable ETW ten 24-gauge 4" wire module can be easily removed for adjustment or service
- Available on heavy duty models only
- Specify handing and the dimension from the top edge of the door to the centerline of the electric through-wire location
- Templates regarding location of module available upon request
- Prep locations are limited. Please call for locations.
- To order, use symbol "RETW". To order removable module only, use component #7-102-1860 Clear and 7-112-7870 Dark Bronze.
- Example: 780-112HD 85" Clear RETW
- Add to the hinge list price before applying buying group discount: **\$515.20** List; Module only **\$206.55** List

### CONCEALED ELECTRIC MONITORING

- Miniature switch is incorporated into the frame leaf
- Three 12" wire leads
- Specify handing and the dimension from the top edge of the door to the centerline of the electric monitoring location
- Templates regarding location of monitoring switch available upon request
- Special Electric Modifications and EPT locations may require additional charges if screw holes have to be moved. Contact Hager Customer Service for charges. Please feel free to contact the Hager technical team for further information pertaining to electric modifications.
- To order, use symbol "EMN", as a suffix
- Example: 780-224HD 119" Bronze EMN
- Add to the hinge list price before applying buying group discount: **\$250.45**

<u>Electrical Preparation</u>	<u>List</u>
ETW-4	\$250.45
ETW-6	\$291.10
ETW-8	\$326.05
ETW-10	\$371.40





## ROTON CONTINUOUS GEARED HINGES

### ELECTRICAL MODIFICATIONS (CONTINUED)

#### CONCEALED ELECTRIC THROUGH-WIRE AND MONITORING

- Miniature switch is incorporated into the frame leaf
- This combines the continuous electric conductors and the miniature switch to provide both power transfer and monitoring
- Four, Six, Eight or Ten 28-gauge continuous electric conductors
- Specify handing and the dimension from the top edge of the door to the centerline of each electric modification location
- Special Electric Modifications and EPT locations may require additional charges if screw holes have to be moved. Contact Hager Customer Service for charges. Please feel free to contact the Hager technical team for further information pertaining to electric modifications.
- Templates regarding location of monitoring switch, available upon request
- To order, use symbol "ETM" plus the number of wires required as a suffix
- Example: 780-224LL 85" Bronze ETM - 4
- Add to the hinge list price before applying buying group discount:

<u>Electric Preparation</u>	<u>List</u>
ETM-4	\$499.95
ETM-6	\$545.30
ETM-8	\$580.25
ETM-10	\$618.05

#### LEAD WIRE FOR CONCEALED ELECTRIC HINGES

- Standard wire leads are 12" per side
- Additional wire leads are available
- Add to the hinge list price before applying buying group discount:

<u>Electric Preparation</u>	<u>List</u>
4-wire hinge	\$8.55 per foot
6-wire hinge	\$12.55 per foot
8-wire hinge	\$15.65 per foot
10-wire hinge	\$17.75 per foot

#### VON DUPRIN EPT 2 OR EPT 10 ELECTRIC POWER TRANSFER PREPARATION

- Hinge leaf cutout to accommodate power transfer device
- Special Electric Modifications and EPT locations may require additional charges if screw holes have to be moved. Contact Hager Customer Service for charges. Please feel free to contact the Hager technical team for further information pertaining to electric modifications.
- Specify handing and the dimension from the top edge of the door to the centerline of the power transfer location
- Add to the hinge list price before applying buying group discount:  
**\$97.35** List per hinge - Concealed Leaf  
**\$58.60** List per hinge - Half Surface

#### MORTAR BOX - 430

- Serves as a mortar shield
- Overall dimensions: 9" (229 mm) length with tabs, 7" (178 mm) inside, 13/4" x 13/4" (45 x 45 mm) inside dimension
- Galvanized steel 0.040" (1 mm)
- Top and bottom knockouts for standard conduit fittings
- Add **\$34.65** to the hinge list price before applying buying group discount.

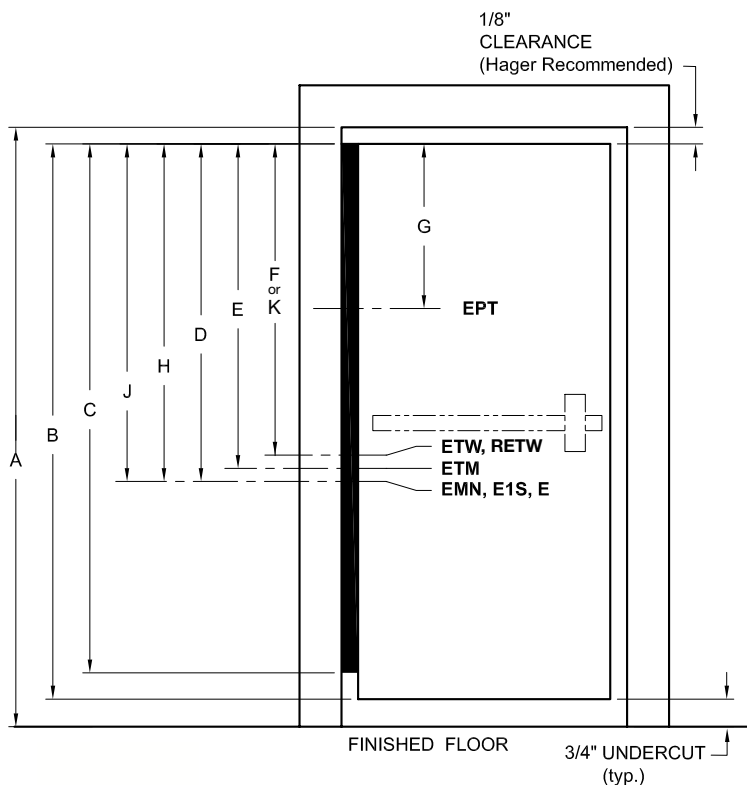
#### MOLEX QUICK CONNECT

Available for ETM, EMN, ETW, and RETW options. Add **\$33.10** to the hinge list price before applying buying group discount.

# ROTON CONTINUOUS GEARED HINGES



## ELECTRICAL MODIFICATIONS (CONTINUED)



- A = Opening
- B = Door height
- C = Actual hinge length
- D = C.L. of EMN (electric monitor)
- E = C.L. of ETM (electric through-wires & monitor)
- F = C.L. of ETW (electric through-wires)
- G = C.L. of EPT (electric power transfer)
- H = C.L. of E1S (exposed switch)
- J = C.L. of E (exposed contact)
- K = C.L. of RETW (removable electric through-wires)

For ease of ordering, Hager Companies has established standard locations for power transfer cutouts. All standard location dimensions are referenced from the top edge of the door to the centerline of the power transfer cutout. Please specify handing.

NOTE: Full surface hinges are not available with preps.

	A	B	C	D	E	F	G	H	J	K
79 SD	80"	79-1/8"	78-11/16"	42-12"	41-1/4"	40"	24-1/2"	42-1/2"	42-1/2"	-
79 HD	80"	79-1/8"	78-11/16"	42-1/2"	40-5/8"	38-3/4"	24-1/2"	42-1/2"	42-1/2"	41-7/8"
83 SD	84"	83-18"	83"	46-1/2"	44-5/8"	42-3/4"	28-7/16"	46-1/2"	46-1/2"	-
83 HD	84"	83-1/8"	83"	46-1/2"	45-1/4"	44"	28-7/16"	46-1/2"	46-1/2"	44-1/16"
85 SD	86"	85-1/8"	85"	48-1/2"	47-1/4"	46"	30-7/16"	48-1/2"	48-1/2"	-
85 HD	86"	85-1/8"	85"	48-1/2"	46-5/8"	44-3/4"	30-7/16"	48-1/2"	48-1/2"	45-1/16"
95 SD	96"	95-1/8"	95-1/16"	59-3/4"	57-7/8"	56"	40-1/2"	59-3/4"	59-3/4"	-
95 HD	96"	95-1/8"	95-1/16"	59-3/4"	57-7/8"	56"	40-1/2"	59-3/4"	59-3/4"	56-1/2"
119 SD	120"	119-1/8"	119"	83-3/4"	81-7/8"	80"	64-3/8"	83-3/4"	83-3/4"	-
119 HD	120"	119-1/8"	119"	83-3/4"	81-7/8"	80"	64-3/8"	83-3/4"	83-3/4"	80"

SD = Standard Duty      HD = Heavy Duty



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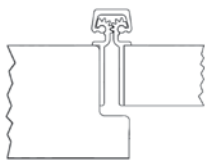
## ROTON CONTINUOUS GEARED HINGES

### ELECTRICAL MODIFICATIONS (CONTINUED)

PART NUMBER	VON DUPRIN EPT 2 OR EPT 10 POWER TRANSFER PREPARATION	EXPOSED ELECTRIC CONTACTS	EXPOSED ELECTRIC SWITCHES	CONCEALED ELECTRIC THROUGH-WIRE	CONCEALED ELECTRIC MONITORING	CONCEALED ELECTRIC THROUGH-WIRE AND MONITORING	REMOVABLE ELECTRIC THROUGH-WIRE
	EPT	E	E1S	ETW	EMN	ETM	RETW
750-134							
750-138							
780-041							
780-041HD							
780-041LL							
780-045	•						
780-045HD	•						
780-046	•						
780-046HD	•						
780-053	•						
780-053HD	•						
780-054	•						
780-054HD	•						
780-110	•		•	•			
780-110HD	•		•	•			
780-111	•	•	•	•	•	•	
780-111HD	•	•	•	•	•	•	•
780-111LL	•	•	•	•	•	•	
780-112	•	•	•	•	•	•	
780-112HD	•	•	•	•	•	•	•
780-112LL	•	•	•	•	•	•	
780-155							
780-155HD							
780-211HD							
780-224	•	•	•	•	•	•	
780-224HD	•	•	•	•	•	•	•
780-224LL	•	•	•	•	•	•	
780-226	•	•	•	•	•	•	
780-226HD	•	•	•	•	•	•	•
780-226LL	•	•	•	•	•	•	
780-235HD		•	•	•	•		
1200-600	•			•			
1200-650	•			•			

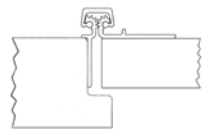


# ROTON CONTINUOUS GEARED HINGES



**500-048**

DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Concealed Leaf With Sheet Metal Screws	24" (610 mm)	Clear	68.20	1
	24" (610 mm)	Dark Bronze	90.90	1
1-1/16" Nominal Leaf Thickness	36" (914 mm)	Clear	79.60	1
	36" (914 mm)	Dark Bronze	102.30	1
	48" (1219 mm)	Clear	90.90	1
	48" (1219 mm)	Dark Bronze	113.65	1
	72" (1829 mm)	Clear	113.65	1
	72" (1829 mm)	Dark Bronze	136.35	1



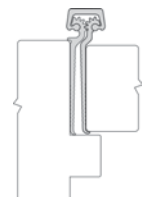
**500-200**

DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Half Surface With Sheet Metal Screws	24" (610 mm)	Clear	68.20	1
	24" (610 mm)	Dark Bronze	90.90	1
1-1/16" Nominal Leaf Thickness	36" (914 mm)	Clear	79.60	1
	36" (914 mm)	Dark Bronze	102.30	1
	48" (1219 mm)	Clear	90.90	1
	48" (1219 mm)	Dark Bronze	113.65	1
	72" (1829 mm)	Clear	113.65	1
	72" (1829 mm)	Dark Bronze	136.35	1



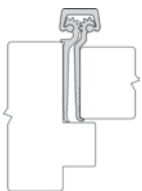
**500-220**

DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Full Surface With Sheet Metal Screws	24" (610 mm)	Clear	68.20	1
	24" (610 mm)	Dark Bronze	90.90	1
1-1/16" Nominal Leaf Thickness	36" (914 mm)	Clear	79.60	1
	36" (914 mm)	Dark Bronze	102.30	1
	48" (1219 mm)	Clear	90.90	1
	48" (1219 mm)	Dark Bronze	113.65	1
	72" (1829 mm)	Clear	113.65	1
	72" (1829 mm)	Dark Bronze	136.35	1



**750-134**

DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Concealed Leaf With Half Drill Quick and Half Wood Screws	79" (2007 mm)	Clear	147.05	8
	79" (2007 mm)	Dark Bronze	203.70	8
1-3/4" Interior Wood Door	83" (2108 mm)	Clear	147.05	8
	83" (2108 mm)	Dark Bronze	203.70	8
	85" (2159 mm)	Clear	147.05	8
	85" (2159 mm)	Dark Bronze	203.70	8
	95" (2413 mm)	Clear	186.95	8
	95" (2413 mm)	Dark Bronze	247.45	8
	119" (3023 mm)	Clear	289.40	6
	119" (3023 mm)	Dark Bronze	369.90	6



**750-138**

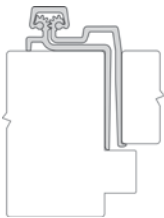
DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Concealed Leaf With Half Drill Quick and Half Wood Screws	79" (2007 mm)	Clear	149.60	8
	79" (2007 mm)	Dark Bronze	197.30	8
1-3/8" Interior Wood Door	83" (2108 mm)	Clear	149.60	8
	83" (2108 mm)	Dark Bronze	197.30	8
	85" (2159 mm)	Clear	149.60	8
	85" (2159 mm)	Dark Bronze	197.30	8
	95" (2413 mm)	Clear	183.05	8
	95" (2413 mm)	Dark Bronze	235.20	8
	119" (3023 mm)	Clear	282.30	8
	119" (3023 mm)	Dark Bronze	353.75	8



Refer to page 2 for fire ratings.  
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# ROTON CONTINUOUS GEARED HINGES

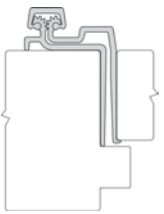


**780-041**  
**780-041HD**



DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Concealed Leaf 1-3/4" Door	79" (2007 mm)	Clear	238.60	6	351.80	6
	79" (2007 mm)	Dark Bronze	310.70	6	462.35	6
Swing Clear Action	83" (2108 mm)	Clear	238.60	6	351.80	6
	83" (2108 mm)	Dark Bronze	310.70	6	462.35	6
	85" (2159 mm)	Clear	238.60	6	351.80	6
	85" (2159 mm)	Dark Bronze	310.70	6	462.35	6
	95" (2413 mm)	Clear	305.45	6	431.80	6
	95" (2413 mm)	Dark Bronze	381.25	6	568.70	6
	119" (3023 mm)	Clear	438.15	4	644.50	2
	119" (3023 mm)	Dark Bronze	569.75	4	847.75	2

Note: Please specify if UL stamp is required.

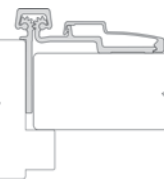


**780-041LL**



DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Concealed Leaf With Half Drill Quick and Half Wood Screws 1-3/4" Door	79" (2007 mm)	Clear	362.30	6
	79" (2007 mm)	Dark Bronze	473.90	6
Lead Lined Heavy Duty Profile Only Swing Clear Action	83" (2108 mm)	Clear	362.30	6
	83" (2108 mm)	Dark Bronze	473.90	6
	85" (2159 mm)	Clear	362.30	6
	85" (2159 mm)	Dark Bronze	473.90	6
	95" (2413 mm)	Clear	443.40	6
	95" (2413 mm)	Dark Bronze	580.30	6
	119" (3023 mm)	Clear	655.05	2
	119" (3023 mm)	Dark Bronze	859.30	2

Note: Please specify if UL stamp is required.

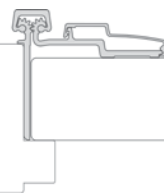


**780-045**  
**780-045HD**



DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Half Surface	79" (2007 mm)	Clear	332.55	4	413.05	4
	79" (2007 mm)	Dark Bronze	426.60	4	552.15	4
	83" (2108 mm)	Clear	332.55	4	413.05	4
	83" (2108 mm)	Dark Bronze	426.60	4	552.15	4
	85" (2159 mm)	Clear	332.55	4	413.05	4
	85" (2159 mm)	Dark Bronze	426.60	4	552.15	4
	95" (2413 mm)	Clear	409.80	4	507.75	4
	95" (2413 mm)	Dark Bronze	524.50	4	679.10	4
	119" (3023 mm)	Clear	609.60	2	756.45	2
	119" (3023 mm)	Dark Bronze	780.95	2	1010.25	2

Note: Please specify if UL stamp is required.



**780-046**  
**780-046HD**



DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Half Surface	79" (2007 mm)	Clear	358.95	4	444.60	4
	79" (2007 mm)	Dark Bronze	471.10	4	583.15	4
	83" (2108 mm)	Clear	358.95	4	444.60	4
	83" (2108 mm)	Dark Bronze	471.10	4	583.15	4
	85" (2159 mm)	Clear	358.95	4	444.60	4
	85" (2159 mm)	Dark Bronze	471.10	4	583.15	4
	95" (2413 mm)	Clear	442.10	4	545.10	4
	95" (2413 mm)	Dark Bronze	578.70	4	724.90	4
	119" (3023 mm)	Clear	658.50	2	814.40	2
	119" (3023 mm)	Dark Bronze	862.10	2	1079.15	2

Note: Please specify if UL stamp is required.

Refer to page 2 for fire ratings.  
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# ROTON CONTINUOUS GEARED HINGES




DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Half Surface	79" (2007 mm)	Clear	216.05	5	273.75	5
	79" (2007 mm)	Dark Bronze	297.05	5	340.00	5
	83" (2108 mm)	Clear	216.05	5	273.75	5
	83" (2108 mm)	Dark Bronze	297.05	5	340.00	5
	85" (2159 mm)	Clear	216.05	5	273.75	5
	85" (2159 mm)	Dark Bronze	297.05	5	340.00	5
	95" (2413 mm)	Clear	267.65	5	336.35	5
	95" (2413 mm)	Dark Bronze	362.10	5	407.50	5
119" (3023 mm)	Clear	408.75	3	514.85	3	
119" (3023 mm)	Dark Bronze	554.70	3	687.30	3	

**780-053**  
**780-053HD**



Note: Please specify if UL stamp is required.



DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Half Surface	79" (2007 mm)	Clear	239.80	5	299.00	5
	79" (2007 mm)	Dark Bronze	353.75	5	364.10	5
	83" (2108 mm)	Clear	239.80	5	299.00	5
	83" (2108 mm)	Dark Bronze	353.75	5	364.10	5
	85" (2159 mm)	Clear	239.80	5	299.00	5
	85" (2159 mm)	Dark Bronze	353.75	5	364.10	5
	95" (2413 mm)	Clear	295.15	5	366.05	5
	95" (2413 mm)	Dark Bronze	385.35	5	433.00	5
119" (3023 mm)	Clear	440.75	3	563.10	3	
119" (3023 mm)	Dark Bronze	594.70	3	726.75	3	

**780-054**  
**780-054HD**



Note: Please specify if UL stamp is required.



DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Full Surface Bi-Fold Applications	79" (2007 mm)	Clear	266.15	5	320.25	5
	79" (2007 mm)	Dark Bronze	359.65	5	446.60	5
	83" (2108 mm)	Clear	266.15	5	320.25	5
	83" (2108 mm)	Dark Bronze	359.65	5	446.60	5
	85" (2159 mm)	Clear	266.15	5	320.25	5
	85" (2159 mm)	Dark Bronze	359.65	5	446.60	5
	95" (2413 mm)	Clear	328.05	5	402.05	5
	95" (2413 mm)	Dark Bronze	442.70	5	552.90	5
119" (3023 mm)	Clear	487.15	4	599.30	4	
119" (3023 mm)	Dark Bronze	660.45	4	823.45	4	

**780-057**  
**780-057HD**



Note: Please specify if UL stamp is required.



DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Concealed Leaf	79" (2007 mm)	Clear	162.45	8	201.10	8
	79" (2007 mm)	Dark Bronze	210.10	8	259.80	8
	83" (2108 mm)	Clear	162.45	8	201.10	8
	83" (2108 mm)	Dark Bronze	210.10	8	259.80	8
	85" (2159 mm)	Clear	162.45	8	201.10	8
	85" (2159 mm)	Dark Bronze	210.10	8	259.80	8
	95" (2413 mm)	Clear	195.95	8	241.65	8
	95" (2413 mm)	Dark Bronze	255.20	8	313.20	8
	119" (3023 mm)	Clear	311.30	7	382.75	7
	119" (3023 mm)	Dark Bronze	389.25	7	502.60	7

**780-110**  
**780-110HD**



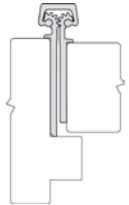
Note: Please specify if UL stamp is required.



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# ROTON CONTINUOUS GEARED HINGES

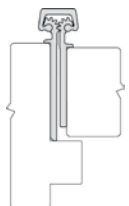


**780-111**  
**780-111HD**



DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Concealed Leaf	79" (2007 mm)	Clear	158.60	8	197.30	8
	79" (2007 mm)	Dark Bronze	204.95	8	255.20	8
	83" (2108 mm)	Clear	158.60	8	197.30	8
	83" (2108 mm)	Dark Bronze	204.95	8	255.20	8
	85" (2159 mm)	Clear	158.60	8	197.30	8
	85" (2159 mm)	Dark Bronze	204.95	8	255.20	8
	95" (2413 mm)	Clear	191.40	8	237.20	8
	95" (2413 mm)	Dark Bronze	248.80	8	306.80	8
	119" (3023 mm)	Clear	303.60	7	379.05	7
	119" (3023 mm)	Dark Bronze	380.20	7	493.65	7

Note: Please specify if UL stamp is required.

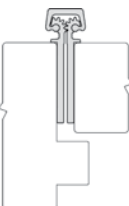


**780-111LL**



DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Concealed Leaf	79" (2007 mm)	Clear	211.45	8
With Half Drill Quick and Half Wood Screws	79" (2007 mm)	Dark Bronze	268.75	8
Lead Lined Heavy Duty Profile Only	83" (2108 mm)	Clear	211.45	8
	83" (2108 mm)	Dark Bronze	268.75	8
	85" (2159 mm)	Clear	211.45	8
	85" (2159 mm)	Dark Bronze	268.75	8
	95" (2413 mm)	Clear	251.35	8
	95" (2413 mm)	Dark Bronze	320.25	8
	119" (3023 mm)	Clear	389.25	7
	119" (3023 mm)	Dark Bronze	507.75	7

Note: Please specify if UL stamp is required.

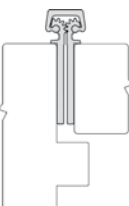


**780-112**  
**780-112HD**



DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Concealed Leaf Case Pack w/ Drill Quick Screws <b>Must Order Case Quantity</b>	83" (2108 mm)	Clear	133.50	8	165.85	8
	83" (2108 mm)	Dark Bronze	172.50	8	214.35	8
Concealed Leaf Single Pack w/ Drill Quick Screws	79" (2007 mm)	Clear	133.50	8	165.85	8
	79" (2007 mm)	Dark Bronze	172.50	8	214.35	8
	83" (2108 mm)	Clear	133.50	8	165.85	8
	83" (2108 mm)	Dark Bronze	172.50	8	214.35	8
	85" (2159 mm)	Clear	133.50	8	165.85	8
	85" (2159 mm)	Dark Bronze	172.50	8	214.35	8
	95" (2413 mm)	Clear	163.55	8	199.85	8
	95" (2413 mm)	Dark Bronze	213.30	8	263.50	8
	119" (3023 mm)	Clear	261.25	7	321.50	7
	119" (3023 mm)	Dark Bronze	325.95	7	423.65	7

Note: Please specify if UL stamp is required.



**780-112LL**



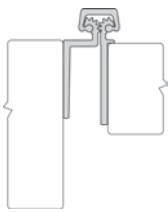
DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Concealed Leaf With Half Drill Quick and Half Wood Screws	79" (2007 mm)	Clear	182.95	8
	79" (2007 mm)	Dark Bronze	236.85	8
Lead Lined Heavy Duty Profile Only	83" (2108 mm)	Clear	182.95	8
	83" (2108 mm)	Dark Bronze	236.85	8
	85" (2159 mm)	Clear	182.95	8
	85" (2159 mm)	Dark Bronze	236.85	8
	95" (2413 mm)	Clear	220.40	8
	95" (2413 mm)	Dark Bronze	282.55	8
	119" (3023 mm)	Clear	351.60	7
	119" (3023 mm)	Dark Bronze	459.50	7

Note: Please specify if UL stamp is required.

Refer to page 2 for fire ratings.  
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# ROTON CONTINUOUS GEARED HINGES



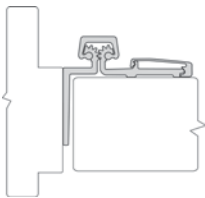
**780-113**  
**780-113HD**

DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Concealed Leaf "Safety Hinge"	79" (2007 mm)	Clear	199.15	6	332.55	6
	79" (2007 mm)	Dark Bronze	266.80	6	447.15	6
When Used Without Frame Stop	83" (2108 mm)	Clear	199.15	6	332.55	6
	83" (2108 mm)	Dark Bronze	266.80	6	447.15	6
	85" (2159 mm)	Clear	199.15	6	332.55	6
	85" (2159 mm)	Dark Bronze	266.80	6	447.15	6
	95" (2413 mm)	Clear	244.85	6	545.10	6
	95" (2413 mm)	Dark Bronze	328.05	6	612.10	6
	119" (3023 mm)	Clear	366.05	4	676.55	4
	119" (3023 mm)	Dark Bronze	489.10	4	799.65	4



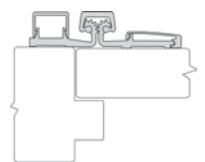
**780-114**  
**780-114HD**

DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Concealed Leaf Center Hung Applications	79" (2007 mm)	Clear	210.10	5	329.90	5
	79" (2007 mm)	Dark Bronze	278.40	5	436.95	5
	83" (2108 mm)	Clear	210.10	5	329.90	5
	83" (2108 mm)	Dark Bronze	278.40	5	436.95	5
	85" (2159 mm)	Clear	210.10	5	329.90	5
	85" (2159 mm)	Dark Bronze	278.40	5	436.95	5
	95" (2413 mm)	Clear	257.80	5	405.95	5
	95" (2413 mm)	Dark Bronze	344.10	5	536.10	5
	119" (3023 mm)	Clear	383.40	3	604.40	3
	119" (3023 mm)	Dark Bronze	513.00	3	799.00	3



**780-155**  
**780-155HD**

DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Half Surface Center Hung and Egress Conversions	79" (2007 mm)	Clear	277.15	5	349.30	5
	79" (2007 mm)	Dark Bronze	369.85	5	470.35	5
	83" (2108 mm)	Clear	277.15	5	349.30	5
	83" (2108 mm)	Dark Bronze	369.85	5	470.35	5
	85" (2159 mm)	Clear	277.15	5	349.30	5
	85" (2159 mm)	Dark Bronze	369.85	5	470.35	5
	95" (2413 mm)	Clear	340.85	5	428.55	5
	95" (2413 mm)	Dark Bronze	455.55	5	579.90	5
	119" (3023 mm)	Clear	507.75	2	637.90	2
	119" (3023 mm)	Dark Bronze	680.40	2	862.10	2



**780-157**  
**780-157HD**

DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Full Surface Frame Face Dimension Limitations	79" (2007 mm)	Clear	205.40	5	254.55	5
	79" (2007 mm)	Dark Bronze	277.45	5	310.35	5
	83" (2108 mm)	Clear	205.40	5	254.55	5
	83" (2108 mm)	Dark Bronze	277.45	5	310.35	5
	85" (2159 mm)	Clear	205.40	5	254.55	5
	85" (2159 mm)	Dark Bronze	277.45	5	310.35	5
	95" (2413 mm)	Clear	251.15	5	305.35	5
	95" (2413 mm)	Dark Bronze	338.85	5	372.85	5
	119" (3023 mm)	Clear	406.35	2	501.20	2
	119" (3023 mm)	Dark Bronze	533.55	2	652.45	2



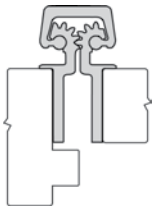
Note: Please specify if UL stamp is required.



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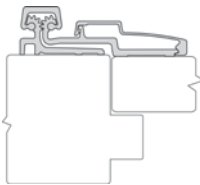


## ROTON CONTINUOUS GEARED HINGES



**780-208**  
**780-208HD**

DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Concealed Leaf Bi-Fold Applications	79" (2007 mm)	Clear	186.30	7	239.80	7
	79" (2007 mm)	Dark Bronze	226.85	7	307.35	7
	83" (2108 mm)	Clear	186.30	7	239.80	7
	83" (2108 mm)	Dark Bronze	226.85	7	307.35	7
	85" (2159 mm)	Clear	186.30	7	239.80	7
	85" (2159 mm)	Dark Bronze	226.85	7	307.35	7
	95" (2413 mm)	Clear	203.70	7	262.90	7
	95" (2413 mm)	Dark Bronze	279.65	7	377.65	7
119" (3023 mm)	Clear	295.15	5	392.40	5	
119" (3023 mm)	Dark Bronze	416.25	5	563.10	5	

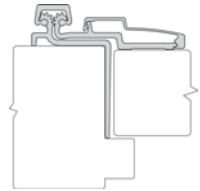


**780-210**  
**780-210HD**



DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Full Surface	79" (2007 mm)	Clear	205.40	6	250.65	6
	79" (2007 mm)	Dark Bronze	277.45	6	304.75	6
	83" (2108 mm)	Clear	205.40	6	250.65	6
	83" (2108 mm)	Dark Bronze	277.45	6	304.75	6
	85" (2159 mm)	Clear	205.40	6	250.65	6
	85" (2159 mm)	Dark Bronze	277.45	6	304.75	6
	95" (2413 mm)	Clear	246.75	6	295.85	6
	95" (2413 mm)	Dark Bronze	334.85	6	364.00	6
	119" (3023 mm)	Clear	403.50	2	490.05	2
	119" (3023 mm)	Dark Bronze	527.95	2	549.20	2

Note: Please specify if UL stamp is required.

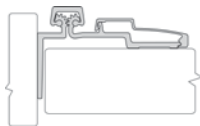


**780-211HD**



DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Half Surface	79" (2007 mm)	Clear	488.45	4
Frame Leaf Wrap-Around	79" (2007 mm)	Dark Bronze	641.80	4
Reinforcement for Damaged Frames	83" (2108 mm)	Clear	488.45	4
	83" (2108 mm)	Dark Bronze	641.80	4
Heavy Duty	85" (2159 mm)	Clear	488.45	4
	85" (2159 mm)	Dark Bronze	641.80	4
	95" (2413 mm)	Clear	601.20	4
	95" (2413 mm)	Dark Bronze	789.95	4
	119" (3023 mm)	Clear	895.60	2
	119" (3023 mm)	Dark Bronze	1177.10	2

Note: Please specify if UL stamp is required.



**780-213**  
**780-213HD**

DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Half Surface Center Hung Doors	79" (2007 mm)	Clear	311.30	4	462.65	4
	79" (2007 mm)	Dark Bronze	407.90	4	610.85	4
	83" (2108 mm)	Clear	311.30	4	462.65	4
	83" (2108 mm)	Dark Bronze	407.90	4	610.85	4
	85" (2159 mm)	Clear	311.30	4	462.65	4
	85" (2159 mm)	Dark Bronze	407.90	4	610.85	4
	95" (2413 mm)	Clear	383.40	4	567.70	4
	95" (2413 mm)	Dark Bronze	500.65	4	751.30	4
	119" (3023 mm)	Clear	570.95	2	846.00	2
	119" (3023 mm)	Dark Bronze	746.15	2	1119.75	2

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# ROTON CONTINUOUS GEARED HINGES



	DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
				LIST	CASE QTY.	LIST	CASE QTY.
				 <b>780-224</b> <b>780-224HD</b> 	Concealed Leaf 1-3/4" Doors Case Pack w/ Drill Quick Screws <b>Must Order</b> <b>Case Quantity</b>	83" (2108 mm)	Clear
83" (2108 mm)	Dark Bronze	176.40	7	219.40	7		
	Concealed Leaf	79" (2007 mm)	Clear	135.15	7	168.65	7
	1-3/4" Doors	79" (2007 mm)	Dark Bronze	176.40	7	219.40	7
	Single Pack w/ Drill Quick Screws	83" (2108 mm)	Clear	135.15	7	168.65	7
		83" (2108 mm)	Dark Bronze	176.40	7	219.40	7
		85" (2159 mm)	Clear	135.15	7	168.65	7
		85" (2159 mm)	Dark Bronze	176.40	7	219.40	7
		95" (2413 mm)	Clear	169.80	7	204.30	7
		95" (2413 mm)	Dark Bronze	219.40	7	269.10	7
119" (3023 mm)	Clear	267.95	5	334.85	5		
119" (3023 mm)	Dark Bronze	338.25	5	435.90	5		

Note: Please specify if UL stamp is required.

	DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
 <b>780-224LL</b> 	Concealed Leaf	79" (2007 mm)	Clear	192.90	7
	1-3/4" Doors	79" (2007 mm)	Dark Bronze	246.20	7
	With Half Drill Quick and Half Wood Screws	83" (2108 mm)	Clear	192.90	7
		83" (2108 mm)	Dark Bronze	246.20	7
	Lead Lined	85" (2159 mm)	Clear	192.90	7
	Heavy Duty Profile Only	85" (2159 mm)	Dark Bronze	246.20	7
		95" (2413 mm)	Clear	233.25	7
		95" (2413 mm)	Dark Bronze	287.15	7
		119" (3023 mm)	Clear	366.85	5
	119" (3023 mm)	Dark Bronze	472.95	5	

Note: Please specify if UL stamp is required.

	DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
				LIST	CASE QTY.	LIST	CASE QTY.
				 <b>780-226</b> <b>780-226HD</b> 	Concealed Leaf	79" (2007 mm)	Clear
For Doors 2" or Thicker	79" (2007 mm)	Dark Bronze	212.05	7	263.55	7	
	83" (2108 mm)	Clear	162.45	7	201.75	7	
		Dark Bronze	212.05	7	263.55	7	
	85" (2159 mm)	Clear	162.45	7	201.75	7	
		Dark Bronze	212.05	7	263.55	7	
	95" (2413 mm)	Clear	199.15	7	245.55	7	
		Dark Bronze	257.80	7	315.80	7	
	119" (3023 mm)	Clear	314.55	5	395.00	5	
		Dark Bronze	397.55	5	513.00	5	

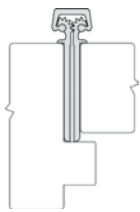
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# ROTON CONTINUOUS GEARED HINGES

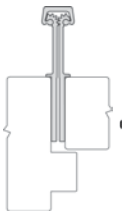


**780-226LL**



DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Concealed Leaf For Doors 2" or Thicker With Half Drill Quick and Half Wood Screws Lead Lined Heavy Duty Profile Only	79" (2007 mm)	Clear	216.55	7
	79" (2007 mm)	Dark Bronze	275.85	7
	83" (2108 mm)	Clear	216.55	7
	83" (2108 mm)	Dark Bronze	275.85	7
	85" (2159 mm)	Clear	216.55	7
	85" (2159 mm)	Dark Bronze	275.85	7
	95" (2413 mm)	Clear	261.70	7
	95" (2413 mm)	Dark Bronze	314.55	7
	119" (3023 mm)	Clear	411.15	5
	119" (3023 mm)	Dark Bronze	529.65	5

Note: Please specify if UL stamp is required.



**780-235HD**



DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Concealed Leaf Wide Throw Heavy Duty	83" (2108 mm)	Clear	464.65	1
	83" (2108 mm)	Dark Bronze	608.25	1
	95" (2413 mm)	Clear	573.45	1
	95" (2413 mm)	Dark Bronze	730.65	1

Note: Please specify if UL stamp is required.

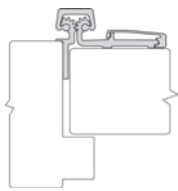


**780-257HD**



DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Full Surface Double Hinge for Hanging Two Doors from a Fixed Mullion Heavy Duty	79" (2007 mm)	Clear	485.85	2
	79" (2007 mm)	Dark Bronze	667.55	2
	83" (2108 mm)	Clear	485.85	2
	83" (2108 mm)	Dark Bronze	667.55	2
	85" (2159 mm)	Clear	485.85	2
	85" (2159 mm)	Dark Bronze	667.55	2
	95" (2413 mm)	Clear	597.95	2
	95" (2413 mm)	Dark Bronze	820.85	2
	119" (3023 mm)	Clear	891.65	2
	119" (3023 mm)	Dark Bronze	1223.50	2

Note: Please specify if UL stamp is required.



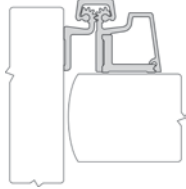
**780-259**  
**780-259HD**

DESCRIPTION	SIZE	FINISH	STANDARD		HEAVY DUTY	
			LIST	CASE QTY.	LIST	CASE QTY.
Half Surface Millwork Applications	79" (2007 mm)	Clear	238.45	5	300.35	5
	79" (2007 mm)	Dark Bronze	325.40	5	417.60	5
	83" (2108 mm)	Clear	238.45	5	300.35	5
	83" (2108 mm)	Dark Bronze	325.40	5	417.60	5
	85" (2159 mm)	Clear	238.45	5	300.35	5
	85" (2159 mm)	Dark Bronze	325.40	5	417.60	5
	95" (2413 mm)	Clear	293.25	5	359.65	5
	95" (2413 mm)	Dark Bronze	399.60	5	513.50	5
	119" (3023 mm)	Clear	436.95	3	552.15	3
	119" (3023 mm)	Dark Bronze	594.70	3	764.80	3

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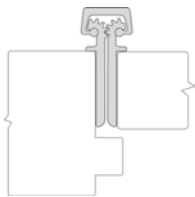


# ROTON CONTINUOUS GEARED HINGES



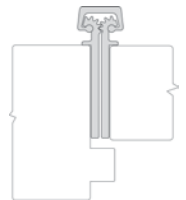
**780-300HD**

DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Half Surface Center Hung Applications Heavy Duty	79" (2007 mm)	Clear	346.75	4
	79" (2007 mm)	Dark Bronze	471.10	4
	83" (2108 mm)	Clear	346.75	4
	83" (2108 mm)	Dark Bronze	471.10	4
	85" (2159 mm)	Clear	346.75	4
	85" (2159 mm)	Dark Bronze	471.10	4
	95" (2413 mm)	Clear	426.60	4
	95" (2413 mm)	Dark Bronze	578.70	4
	119" (3023 mm)	Clear	635.35	2
	119" (3023 mm)	Dark Bronze	863.40	2



**1200-600XHD**

DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Concealed Leaf For Doors from 1-3/4" - 2-3/8" Thick Extra Heavy Duty	83" (2108 mm)	Clear	967.45	1
	83" (2108 mm)	Dark Bronze	1354.00	1
	95" (2413 mm)	Clear	1096.25	1
	95" (2413 mm)	Dark Bronze	1482.75	1
	119" (3023 mm)	Clear	1225.15	1
	119" (3023 mm)	Dark Bronze	1611.65	1



**1200-650XHD**

DESCRIPTION	SIZE	FINISH	LIST	CASE QTY.
Concealed Leaf For Doors from 2-3/8" or Thicker Extra Heavy Duty	83" (2108 mm)	Clear	1289.55	1
	83" (2108 mm)	Dark Bronze	1676.10	1
	95" (2413 mm)	Clear	1418.40	1
	95" (2413 mm)	Dark Bronze	1804.90	1
	119" (3023 mm)	Clear	1547.25	1
	119" (3023 mm)	Dark Bronze	1933.80	1



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