

### SOSS Hinges

#### SOSS Hinges & accurate fitting

Fitting your SOSS hinges with a template will ensure that a perfectly routed shape is easily achieved. The aluminium routing jig is designed to act as an almost universal base-plate into which precision templates for most SOSS hinges can be slotted and changed as required saving fitting time while allowing an accurate, professional installation. Alternatively, separate dedicated templates are available.

The spacing of hinges is critical to the correct functioning of the door (see diagram). As with traditional hinges, fitting a doorstep too close to the hinge face can cause excessive leverage and damage may result.

Care should be taken when specifying concealed hinges in general to ensure that the door leaf does NOT engage on any architrave or door frame, thereby creating a fulcrum and so likely damaging not only the hinge but also the door and frame. In addition as concealed hinges have a travelling pivot point advice should be sought from manufacturers regards suitability when being used with door closers as many door closers are designed to perform optimally when used in conjunction with single axis hinges where the pivot point is offset to the door leaf.

#### Selecting the appropriate hinge

The number of SOSS hinges required for a door are simply calculated from the tables (right).

Given the weight, width and thickness of a door, the tables combine to identify the number of hinges required. When used in conjunction with a spring-loaded door closer (Type 218 hinge only), the number of hinges required is reduced by one, replaced with the closer hinge.

#### Step-by-step guide to calculating how many hinges you need:

- Determine the width, thickness and weight of the door.
- Starting with the door width on the left hand side of Table 1, draw a line through the appropriate weight on the right hand side.
- Continue the line up towards Table 2.
- Where the diagonal intersects with Table 2, draw a horizontal line across to the shaded columns, which indicates the door thickness.
- The number of hinges (either 2, 3 or 4) is shown in the shaded areas and, at the foot of the column, the relevant hinge type. At the top is shown the minimum door thickness for each hinge size. Thicker doors are not a problem, the hinge is positioned relative to the door face.

Table 1

Door Width mm	Door Weight kg
100	225
200	180
300	135
500	90
700	70
900	45
1250	35
1750	25
	15
	10
	7
	5

Table 2

	Minimum Door Thickness (mm)			
	28	35	41	48
212				
216			4x	
218		3x		
220	2x			

In this example a 760mm wide door which weighs 90kg and has a thickness of 41mm would require 4 x Type 218 hinges

#### PATHS & CLEARANCES OF DOORS

The diagram on the right shows the typical path of SOSS hinged door. The table shows the door clearance when fully opened for each SOSS hinge.

HINGE No.	A mm	B mm	C mm
212	4.8	4.0	1.2
216	6.4	5.5	1.6
218	6.4	9.5	1.6
220	7.2	12.7	1.6

Please note: Hinge may be offset in mounting but dimension A must not be exceeded.

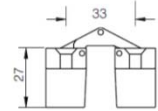
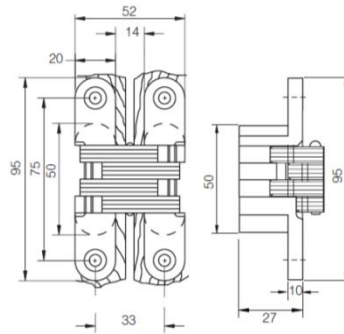
SPECIFICATIONS	MEDIUM DUTY		HEAVY DUTY	
	212	216	218	220
HINGE No.	212	216	218	220
	mm	mm	mm	mm
LENGTH	95.3	117.5	117.5	140
WIDTH	19	25.4	28.6	35
DEPTH OF PLATE	9.5	12	10.3	11.9
MINIMUM THICKNESS OF WOOD METAL SELECTION	28	35	46.5	51
DEPTH OF MORTICE	28	36.5	42	49.5
CLEARANCE WHEN OPEN	13.5	18.3	22.2	27
SIZE OF WOOD SCREWS	4.5 x 30mm	No. 6 x 40mm	4.5 x 40mm	5.5 x 50mm

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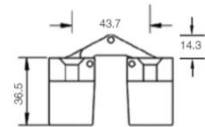
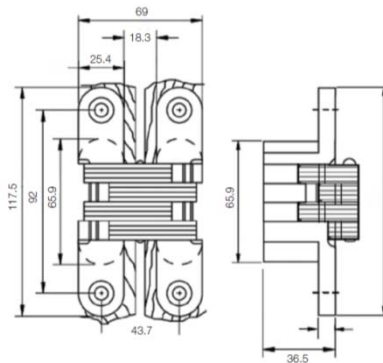
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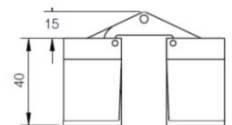
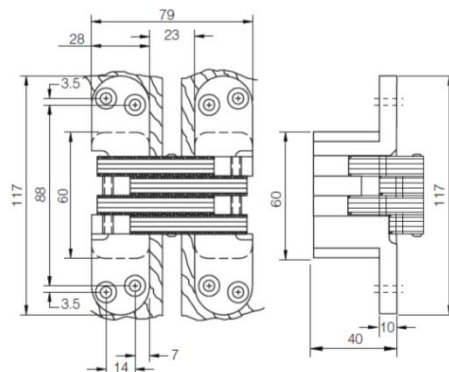
212-STD-BP Standard - Brass Plated  
 212-STD-NP Standard - Nickel Plated  
 95.3 x 19 x 27mm concealed hinge  
 Minimum door thickness 28mm  
 Maximum adjusted door weight (see chart previous)  
 Radiused forends for easier door/frame preparation  
 180° opening  
 Installation jig and template: 212 TEMPLATE & HINGE JIG  
 Available in Satin Brass or Satin Nickel



216-STD-BP Standard - Brass Plated  
 216-STD-NP Standard - Nickel Plated  
 117.5 x 25.4 x 36.5mm concealed hinge  
 Minimum door thickness 40mm  
 Maximum adjusted door weight (see chart previous)  
 Radiused forends for easier door/frame preparation  
 180° opening  
 Installation jig and template: 216 TEMPLATE & HINGE JIG  
 Available in Satin Brass or Satin Nickel



218-FIRE-BP 30 Minute Fire Rated - Brass Plated  
 218-FIRE-NP 30 Minute Fire Rated - Nickel Plated  
 218-FIRE-SS 60 Minute Fire Rated - Stainless Steel  
 218-SSL-NP Stainless Steel Link and Pins Standard  
 Body - Nickel Plated

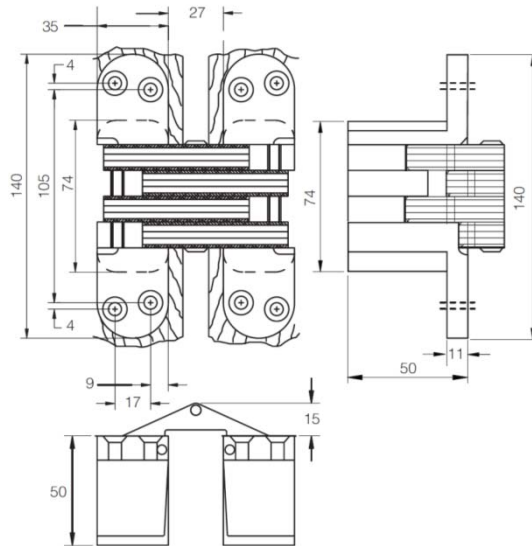


218-STD-BP Standard - Brass Plated  
 218-STD-NP Standard - Nickel Plated  
 117.5 x 28.5 x 42mm concealed hinge  
 Minimum door thickness 44mm  
 Maximum adjusted door weight (see chart previous)  
 FD30/FD60 rated versions  
 Radiused forends for easier door/frame preparation  
 180° opening  
 Installation jig and template: 218 TEMPLATE & HINGE JIG  
 Available in Satin Brass, Satin Nickel or Stainless Steel

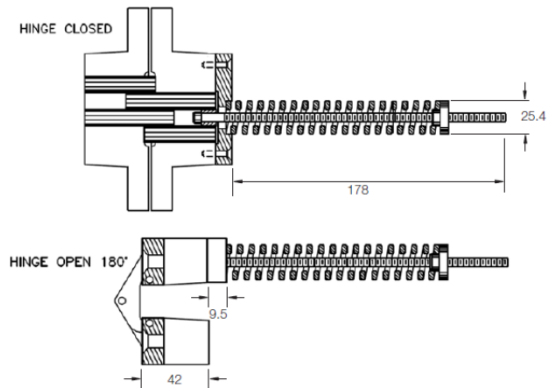
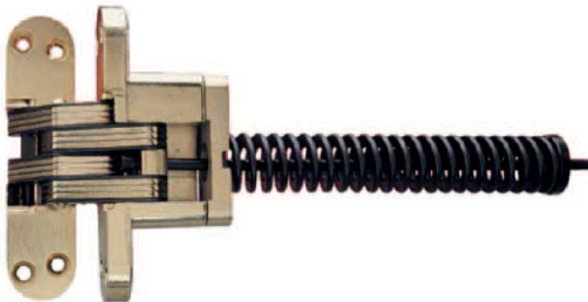
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220-STD-BP Standard - Brass Plated  
 220-STD-NP Standard - Nickel Plated  
 140 x 35 x 50mm concealed hinge  
 Minimum door thickness 54mm  
 Maximum adjusted door weight (see chart previous)  
 Radiused forends for easier door/frame preparation  
 180° opening  
 Installation jig and template: 220 TEMPLATE & HINGE JIG  
 Available in Satin Brass or Satin Nickel



218-CLOSER-BP Integral Closer NON Fire Rated - Brass Plated  
 218-CLOSER-NP Integral Closer NON Fire Rated - Nickel Plated  
 218-FCLOSER-BP Integral Closer 30 Minute Fire Rated - Brass Plated  
 218-FCLOSER-NP Integral Closer 30 Minute Fire Rated - Nickel Plated



### ROUTING JIGS AND TEMPLATES FOR HIRE/PURCHASE

- JIG-TEMPLATE Aluminium Routing Jig
- 212-TEMPLATE 212 Hinge Template
- 216-TEMPLATE 216 Hinge Template
- 218-TEMPLATE 218 Hinge Template
- 220-TEMPLATE 220 Hinge Template

To hire: the purchase price less 15% will be credited on return of jigs and templates in good condition

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