

# HINGE TECHNOLOGY



### **HINGE TECHONOLGY**

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### **HINGE TECHNOLOGY**

	Handman	Edge Dull		Downd Flat Dosign
56	Hardware	Edge Pull		Round Flat Design
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58				Round Angle Design
59		Door Stop	Brass	Concealed Fix
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62			Aluminium	Concealed Fix
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63		Floor Stop	Stainless Steel	Round Floor Stop
64				Hold Open Device
67		Letter Plate	Aluminium	Outward Opening
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#### **TECHNICAL INFORMATION**

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## SIMONSWERK UK

SIMONSWERK UK Ltd, has been producing high quality brass and aluminium hinges since 1977 and is a wholly owned subsidiary of SIMONSWERK GmbH. The Group is now Europe's leading supplier of door and window hinge systems to the Architectural Ironmongery and Builders Hardware industry. The company is a member of the Guild of Architectural Ironmongers.

This catalogue illustrates our UK recommended selection of high performance hinges and hardware for doors, windows, cabinets and conservatories, together with a concise guide to design and use. Our experience enables us to provide in the following pages, specification information to assist with the selection of that important "correct hinge for the right application". Further technical information and tables can be found at the end of this catalogue.







The solid brass hinges are manufactured from extruded sections to precise standards and accurately machined to achieve close tolerances, fitted with different bearings for demanding applications. Due to the high copper content of brass this naturally offers anti-bacterial qualities. Certain brass hinges within our range use a special bearing technology and are capable of carrying door weights up to 160 kilos, independently fire tested and CE marked these hinges are suitable for use on both 30 and 60 minute fire resistant door sets.

Brass hinges can be highly decorative, we can apply a wide variety of finishes to match many different requirements, combine this with finial tips to create the perfect aesthetics for any environment.

#### THE ADVANTAGES AT A GLANCE

- > with load capacities up to 160 kg
- ) fire tested and CE marked
- ) wide variety of finishes and finials
- ) anti-bacterial qualities





for heavy weight flush doors maintenance-free concealed bearings 25 year performance guarantee load capacities up to 160 kg



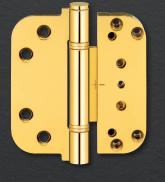
#### SAMSON

for heavy weight flush doors maintenance-free bearings 25 year performance guarantee load capacities up to 100 kg



#### **BRASS HINGES**

unwashered brass hinges for cabinets and lightweight doors washered brass hinges for medium to heavy weight flush doors ball race for medium to heavy weight flush doors load capacities up to 80 kg



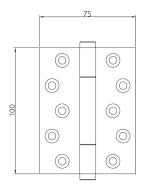
**COLUMBUS 3D** 3D adjustable easy door adjustment load capacities up to 70 kg

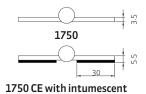


ULTIMATE 2D 2D adjustable easy door adjustment 2 guide and 1 set hinge load capacities up to 70 kg



1750





### **Butt hinge**

Suitable for heavy weight flush doors tested to BS EN 1935 Grade 14 - 160 kg

#### **Product Features**

- Solid brass high performance concealed bearing hinge
- Weight carrying capacity to 160 kg
- Suitable for heavy weight flush doors tested to BS EN 1935 Grade 14
- CE marked FD30 and FD60 fire rated options
- Maintenance free, 25 year performance guarantee

- Security bolt and radius corner options available

1750	1750 CE
160.0	160.0 kg
100.0	100.0 mm
75.0	75.0 mm
13.0	13.0 mm
3.5	3.5 mm
10.0	10.0 g
1780	1780 CE
160.0	160.0 kg
100.0	100.0 mm
88.0	88.0 mm
13.0	13.0 mm
3.5	3.5 mm
10.0	10.0 g
	160.0 100.0 75.0 13.0 3.5 10.0 <b>1780</b> 160.0 100.0 88.0 13.0 3.5

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

PVD Finishes: PVD Brass (UK 517), PVD Copper Rose (UK 518), PVD Matt Black (UK 519), PVD Rainbow (UK 520), PVD Stainless Steel Effect (UK 521) Salt spray tested to over 1,000 hours

#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.

#### **Classification key**

4	7	7	1	1	4	0	14
RS EN102E-2002 Eight Digit Code (page 72 for details)							

BS EN1935:2002 Eight Digit Code (page 72 for details)



## **Projection hinge**

Suitable for heavy weight flush doors tested to BS EN 1935 Grade 14 – 160 kg

Hinge	up to 160 kg

#### **Product Features**

- Solid brass high performance concealed bearing projection hinge
- Weight carrying capacity to 160 kg
- Suitable for heavy weight flush doors tested to BS EN 1935 Grade 14
- CE marked FD30 and FD60 fire rated options
- Maintenance free, 25 year performance guarantee
- Security bolt and radius corner options available

Technical Data	P1760	P1760 CE
Load Capacity (3 Hinges)	160.0	160.0 kg
Height	100.0	100.0 mm
Width	101.6	101.6 mm
Knuckle Diameter	13.0	13.0 mm
Leaf Thickness	3.5	3.5 mm
Screw Size	10.0	10.0 g
Amount of Projection	50.0	50.0 mm

#### Finishes

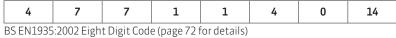
Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

PVD Finishes: PVD Brass (UK 517), PVD Copper Rose (UK 518), PVD Matt Black (UK 519), PVD Rainbow (UK 520), PVD Stainless Steel Effect (UK 521) Salt spray tested to over 1,000 hours

#### Note

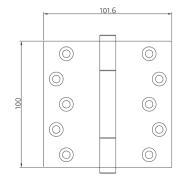
Supplied complete with Pozi/Slotted Head Brass Woodscrews if required. Find out more about projection hinges on page 71.

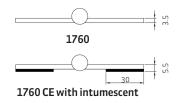
#### **Classification key**







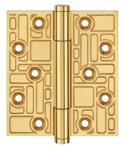




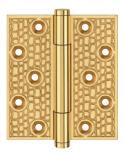




**Flowing Bark** 



**Recurring Rectangles** 



**Gator Reflections** 



Skateline Note: Please see website for more designs.

### **Decorative hinge**

Suitable for heavy weight flush doors tested to BS EN 1935 Grade 14 - 160 kg

Hinge	up to 160 kg
0	1 0

#### **Product Features**

- Solid brass high performance concealed bearing hinge
- Weight carrying capacity to 160 kg
- Suitable for heavy weight flush doors tested to BS EN 1935 Grade 14
- Maintenance free, 25 year performance guarantee

Technical Data	1950
Load Capacity (3 Hinges)	160.0 kg
Height	100.0 mm
Width	75.0 mm
Knuckle Diameter	13.0 mm
Leaf Thickness	3.5 mm
Screw Size	10.0 g

Technical Data	1980	1960
Load Capacity (3 Hinges)	160.0	160.0 kg
Height	100.0	100.0 mm
Width	88.0	101.6 mm
Knuckle Diameter	13.0	13.0 mm
Leaf Thickness	3.5	3.5 mm
Screw Size	10.0	10.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

PVD Finishes: PVD Brass (UK 517), PVD Copper Rose (UK 518), PVD Matt Black (UK 519), PVD Rainbow (UK 520), PVD Stainless Steel Effect (UK 521) Salt spray tested to over 1,000 hours

#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.





## SAMSON

### **Butt hinge**

Suitable for heavy weight flush doors tested to BS EN 1935 Grade 12 – 100 kg

Hinge	up to 100 kg

#### **Product Features**

- Solid brass high performance hinge
- Weight carrying capacity to 100 kg
- Suitable for heavy weight flush doors tested to BS EN 1935 Grade 12
- CE marked FD30 and FD60 fire rated options
- Maintenance free, 25 year performance guarantee
- Security bolt and radius corner options available

Technical Data	1850	1850 CE
Load Capacity (3 Hinges)	100.0	100.0 kg
Height	100.0	100.0 mm
Width	75.0	75.0 mm
Knuckle Diameter	13.0	13.0 mm
Leaf Thickness	3.5	3.5 mm
Screw Size	10.0	10.0 g

Technical Data	1880	1880 CE
Load Capacity (3 Hinges)	100.0	100.0 kg
Height	100.0	100.0 mm
Width	88.0	88.0 mm
Knuckle Diameter	13.0	13.0 mm
Leaf Thickness	3.5	3.5 mm
Screw Size	10.0	10.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

PVD Finishes: PVD Brass (UK 517), PVD Copper Rose (UK 518), PVD Matt Black (UK 519), PVD Rainbow (UK 520), PVD Stainless Steel Effect (UK 521) Salt spray tested to over 1,000 hours

#### Note

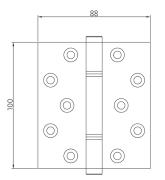
Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.

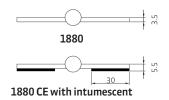
#### **Classification key**

4	7	5	1	1	4	0	12
BS EN1935	3S EN1935:2002 Eight Digit Code (page 72 for details)						
Finial opti	inial options						
ACORN	ADAM	APOLLO	D BAS		ROSS	DECO	ORB
PLANET	REGAL	SATURI	N SOL		STAR	ТОР	URN
	25 yrs yrs	€					



1880 CE

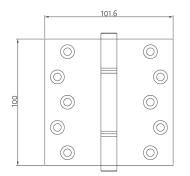


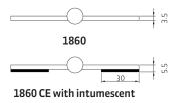


## SAMSON



P1860





### **Projection hinge**

Suitable for heavy weight flush doors tested to BS EN 1935 Grade 12 – 100 kg

Hinge	up to 100 kg
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#### **Product Features**

- Solid brass high performance projection hinge
- Weight carrying capacity to 100 kg
- Suitable for heavy weight flush doors tested to BS EN 1935 Grade 12
- CE marked FD30 and FD60 fire rated options
- Maintenance free, 25 year performance guarantee

- Security bolt and radius corner options available

Technical Data	P1860	P1860 CE
Load Capacity (3 Hinges)	100.0	100.0 kg
Height	100.0	100.0 mm
Width	101.6	101.6 mm
Knuckle Diameter	13.0	13.0 mm
Leaf Thickness	3.5	3.5 mm
Screw Size	10.0	10.0 g
Amount of Projection	50.0	50.0 mm

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

PVD Finishes: PVD Brass (UK 517), PVD Copper Rose (UK 518), PVD Matt Black (UK 519), PVD Rainbow (UK 520), PVD Stainless Steel Effect (UK 521) Salt spray tested to over 1,000 hours

#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required. Find out more about projection hinges on page 71.

#### **Classification key**

4	7	5	1	1	4	0	12
	2002 Eigh	t Digit Cod	o (pago 72 f	for dotails)			

BS EN1935:2002 Eight Digit Code (page 72 for details)





## COLUMBUS

## **COLUMBUS 3D**

Easy adjustment to door position in all three directions

Hinge	up to 70 kg	

### Product Features

- Quick and easy mounting
- Maintenance free
- (MSTS) Security device for outward opening doors
- Three way adjustable hinges allow adjustment to doors horizontally, vertically
- and compression by turning socket screws

### **Technical Data**

Load Capacity (3 Hinges)	70.0 kg
Height	101.6 mm
Width	88.0 mm
Knuckle Diameter	13.0 mm
Leaf Thickness	2.5 mm
Receiver Depth	14.0 mm

#### Adjustment

Augustinent	
Height	+/- 3mm
Side	+/- 2mm
Depth	+/- 4mm

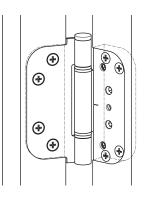
### Finishes

include: Brassed, Satin Stainless Steel, Polished Stainless Steel Powder Coated Colours: Silver, White, Black, Brown, Gold Other finishes available to special order

#### Note

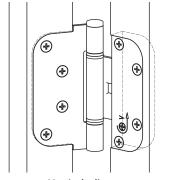
Fixing screws are not supplied.



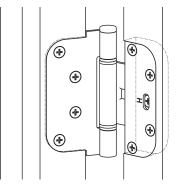


## ULTIMATE





Vertical adjustment



Horizontal adjustment

## **ULTIMATE 2D**

Doors should be mounted using 2 guide and 1 set hinge

Hinge	2D adjustable	up to 70 kg

#### **Product Features**

Quick and easy mounting

- Maintenance free
- (MSTS) Security device for outward opening doors
- Two way adjustable hinges allow easy adjustment to doors horizontally and vertically with the turn of a screw
- GUIDE hinge provides the Horizontal adjustment
- SET hinge provides the Vertical adjustment

• One door set should comprise 2 x GUIDE and 1 x SET hinge

Guide	Set
70.0	70.0 kg
92.0	92.0 mm
32.0	32.0 mm
13.0	13.0 mm
2.5	2.5 mm
15.0	15.0 mm
	70.0 92.0 32.0 13.0 2.5

#### Adjustment

Height	+/- 2.5mm
Side	+/-2mm

#### Finishes

include: Brassed, Satin Stainless Steel, Polished Stainless Steel Powder Coated Colours: Silver, White, Black, Brown, Gold Other finishes available to special order

#### Note

Fixing screws are not supplied.

#### SIMONSWERK

## **BRASS HINGE**

### Unwashered

Suitable for cabinets and lightweight flush doors and windows

Butt hinge	

#### Product Features

- Brass pin
- 10 year performance guarantee
- Suitable for lightweight flush doors and windows

Technical Data	0920	0940	0950
Load Capacity (3 Hinges)	-	-	– kg
Height	38.0	50.8	50.8 mm
Width	22.5	28.5	38.0 mm
Knuckle Diameter	4.0	5.0	6.0 mm
Leaf Thickness	1.6	1.7	2.3 mm
Screw Size	4.0	4.0	6.0 g

Technical Data	0955	0960	0962
Load Capacity (3 Hinges)	_	-	– kg
Height	63.5	63.5	63.5 mm
Width	28.5	35.5	38.0 mm
Knuckle Diameter	5.5	5.5	6.0 mm
Leaf Thickness	1.7	2.0	2.3 mm
Screw Size	4.0	6.0	6.0 g

Technical Data	0965	0970	1010
Load Capacity (3 Hinges)	10.0	10.0	20.0 kg
Height	75.0	75.0	75.0 mm
Width	35.5	42.0	50.8 mm
Knuckle Diameter	5.5	6.0	7.8 mm
Leaf Thickness	2.0	2.0	2.9 mm
Screw Size	6.0	8.0	8.0 g

Technical Data	1020	1030	1040
Load Capacity (3 Hinges)	20.0	20.0	20.0 kg
Height	76.2	100.0	100.0 mm
Width	61.0	61.0	65.0 mm
Knuckle Diameter	8.5	8.5	9.2 mm
Leaf Thickness	3.0/3.6	3.1	3.5 mm
Screw Size	8.0	10.0	10.0 g

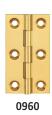
Technical Data	1050	1070	1080
Load Capacity (3 Hinges)	20.0	20.0	20.0 kg
Height	100.0	127.0	152.4 mm
Width	75.0	75.0	75.0 mm
Knuckle Diameter	11.0	11.0	11.0 mm
Leaf Thickness	4.0	4.0	4.0 mm
Screw Size	10.0	12.0	12.0 g

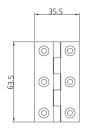
#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

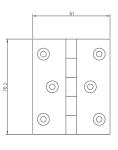


Note

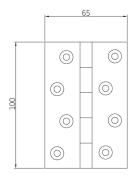


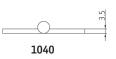




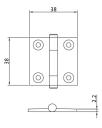








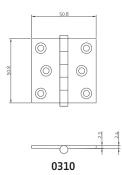




0300



0305



### **Unwashered**

Suitable for cabinets and lightweight flush doors and windows

#### **Product Features**

- Optional detachable decorative finials
- Stainless steel pin
- 10 year performance guarantee
- Suitable for cabinets and lightweight flush doors and windows

Technical Data	0300	0305	0310
Load Capacity (3 Hinges)	20.0	20.0	20.0 kg
Height	38.0	50.8	50.8 mm
Width	38.0	38.0	50.8 mm
Knuckle Diameter	6.3	6.3	6.3 mm
LeafThickness	2.2	2.2	2.2 mm
Screw Size	6.0	6.0	6.0 g

Technical Data	0315	0320	0325
Load Capacity (3 Hinges)	20.0	20.0	20.0 kg
Height	63.5	63.5	76.2 mm
Width	50.8	63.5	50.8 mm
Knuckle Diameter	6.3	6.3	6.3 mm
LeafThickness	2.2	2.2	2.2 mm
Screw Size	6.0	6.0	6.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

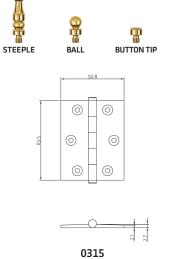
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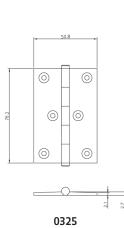
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#### Note

Supplied complete with fixing screws if required.









### Unwashered

Suitable for lightweight flush doors and windows

Projection hinge	

#### **Product Features**

Solid brass plain unwashered projection hinge

- Brass pin
- 10 year performance guarantee
- Suitable for lightweight flush doors and windows

Technical Data	P1025	P1060	P1075
Load Capacity (3 Hinges)	20.0	20.0	20.0 kg
Height	76.2	100.0	127.0 mm
Width	75.0	101.6	101.6 mm
Knuckle Diameter	11.0	11.0	11.0 mm
Leaf Thickness	4.0	4.0	4.0 mm
Screw Size	10.0	12.0	12.0 g
Amount of Projection	32.0	50.0	50.0 mm

Technical Data	P1085	P1090
Load Capacity (3 Hinges)	20.0	40.0 kg
Height	152.4	126.6 mm
Width	101.6	125.0 mm
Knuckle Diameter	11.0	12.7 mm
Leaf Thickness	4.0	5.0 mm
Screw Size	12.0	12.0 g
Amount of Projection	50.0	68.0 mm

Technical Data	P1095	P1096
Load Capacity (3 Hinges)	40.0	40.0 kg
Height	152.0	152.0 mm
Width	125.0	152.0 mm
Knuckle Diameter	12.7	12.7 mm
Leaf Thickness	5.0	5.0 mm
Screw Size	12.0	12.0 g
Amount of Projection	68.0	75.0 mm

#### Finishes

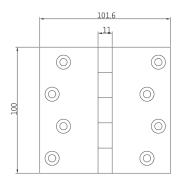
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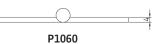
#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required. Find out more about projection hinges on page 71.



P1060

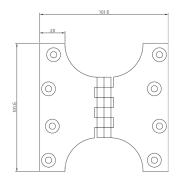






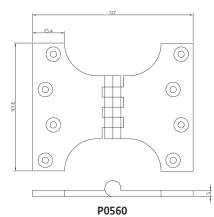


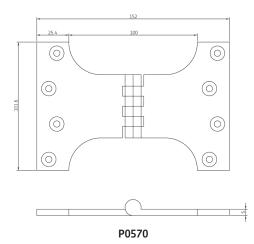
P0550





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**Unwashered** 

Suitable for lightweight flush doors and French windows

Parliament hinge		
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#### **Product Features**

- Brass pin
- 10 year performance guarantee
- Suitable for lightweight flush doors and French windows

Technical Data	P0550	P0560	P0570
Load Capacity (3 Hinges)	25.0	30.0	35.0 kg
Height	101.6	101.6	101.6 mm
Width	101.6	127.0	152.0 mm
Knuckle Diameter	11.0	12.7	12.7 mm
LeafThickness	4.0	5.0	5.0 mm
Screw Size	10.0	10.0	12.0 g
Amount of Projection	64.0	75.0	100.0 mm

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note



## Unwashered

Suitable for bar and shop counters

Counter flap	Dovetail hinge

#### **Product Features**

• Suitable for flush wooden counters

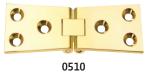
Technical Data	0500	0510	0520
Load Capacity (2 Hinges)	5.0	10.0	10.0 kg
Height	26.5/34.0	31.0/38.0	38.0/44.5 mm
Width	77.3	101.6	114.0 mm
Leaf Thickness	2.6	3.0	4.0 mm
Screw Size	8.0	10.0	10.0 g

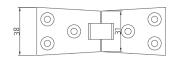
#### Finishes

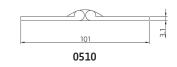
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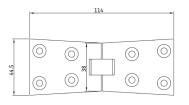
#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.

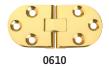


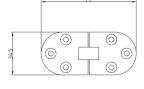












**Radius hinge** 



#### **Product Features**

**Counter flap** 

Unwashered

Suitable for flush wooden counters

Suitable for bar and shop counters

Radius Ends for easy mortice

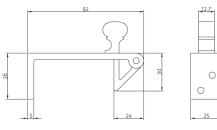
Technical Data	0610
Height	34.5 mm
Width	75.0 mm
Leaf Thickness	4.0 mm
Screw Size	10.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note





0600

## **Counter Flap Catch**

Suitable for bar and shop counters

Counter flap	Catch

#### **Product Features**

• Suitable for bar and shop counters

- Catch holds counter at 90 degrees until released

Technical Data	0600
Height	36.0 mm
Width	92.0 mm
Max Counter Thickness	53.0 mm
Leaf Thickness	4.0 mm
Screw Size	6.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note

### Unwashered

Suitable for medium weight toilet cubicle and internal flush doors

### **Rising hinge**

#### **Product Features**

- Rise or fall of 13 mm at 180°
- Brass pin
- 10 year performance guarantee
- Suitable for medium weight toilet cubicle and internal flush doors
- Fitted with heavy duty bronze skews for long life and high resistance to corrosion
- Radius corners optional, by special request
- Handed left or right see figure 2 on page 77

Technical Data	1810	1840
Load Capacity (2 Hinges)	40.0	45.0 kg
Height	75.0	100.0 mm
Width	67.0	67.0 mm
Knuckle Diameter	14.5	14.5 mm
Leaf Thickness	4.0	4.0 mm
Screw Size	10.0	10.0 g

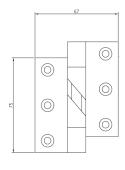
#### Finishes

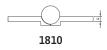
Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note



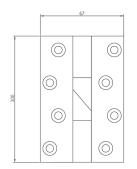


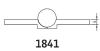


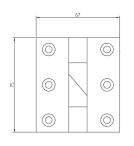














### **Unwashered**

Suitable for medium weight toilet cubicle and internal flush doors

Falling hinge	

#### **Product Features**

- Rise or fall of 13 mm at 180°
- Brass pin
- 10 year performance guarantee
- Suitable for medium weight toilet cubicle and internal flush doors
- Fitted with heavy duty bronze skews for long life and high resistance to corrosion
- Radius corners optional, by special request
- Handed left or right see figure 2 on page 77

Technical Data	1811	1841
Load Capacity (2 Hinges)	40.0	45.0 kg
Height	75.0	100.0 mm
Width	67.0	67.0 mm
Knuckle Diameter	14.5	14.5 mm
Leaf Thickness	4.0	4.0 mm
Screw Size	10.0	10.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note

### Unwashered

Suitable for medium weight toilet cubicle and internal flush doors

### Support hinge

#### **Product Features**

- Fitted with one pair of normal brass rising hinges
- Increases weight carrying capacity up to 65 kg
- Supports the top of the door preventing any leverage problems
- Mild steel pin
- 10 year performance guarantee
- Suitable for medium weight toilet cubicle and internal flush doors
- Radius corners optional, by special request
- Handed left or right see figure 2 on page 77

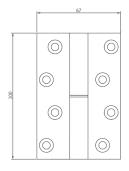
Technical Data	0100
Load Capacity (2 Hinges)	65.0 kg
Height	100.0 mm
Width	67.0 mm
Knuckle Diameter	14.5 mm
Leaf Thickness	4.0 mm
Screw Size	10.0 g

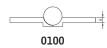
#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note

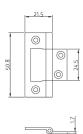












0985



0990

### **Unwashered**

Suitable for use on cabinets and lightweight doors

Flush hinge		

#### **Product Features**

- Brass pin
- 10 year performance guarantee
- Brass flush hinges reducing the need to mortice hinges into cabinets
- Suitable for use on cabinets and lightweight doors

Technical Data	0985	0990
Load Capacity (2 Hinges)	5.0	7.5 kg
Height	50.8	63.5 mm
Width	21.5	21.5 mm
Knuckle Diameter	5.0	5.0 mm
Leaf Thickness	1.7	1.7 mm
Screw Size	4.0	4.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note



## Unwashered

Suitable for use on wooden box lids, wooden chests etc.

Back flap hinge	

#### **Product Features**

- Brass pin
- 10 year performance guarantee
- Suitable for use on wooden box lids, wooden chests etc

Technical Data	0400	0410	0420
Load Capacity (3 Hinges)	5.0	10.0	15.0 kg
Height	32.0	38.1	50.8 mm
Width	48.0	60.0	76.2 mm
Knuckle Diameter	5.5	6.3	7.8 mm
Leaf Thickness	1.9	1.8/2.5	3.5/2.7 mm
Screw Size	6.0	6.0	8.0 g

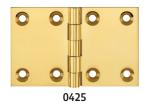
Technical Data	0425	0430
Load Capacity (3 Hinges)	15.0	20.0 kg
Height	63.5	76.2 mm
Width	101.6	127.0 mm
Knuckle Diameter	9.3	9.3 mm
Leaf Thickness	3.8	4.0 mm
Screw Size	10.0	12.0 g

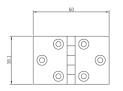
#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

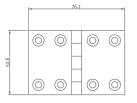
#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.



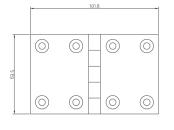






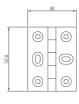


0420



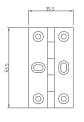




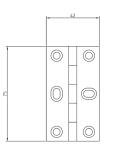


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0950 EH



0960 EH





## Unwashered

Suitable for use on cabinets and lightweight doors

Elongated srew hole hinge		
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#### **Product Features**

- Brass elongated screw hole cabinet hinges allowing fine adjustment before final fit
- Brass pin
- 10 year performance guarantee
- Suitable for use on cabinets and lightweight doors

Technical Data	0950 EH	0960 EH	0970 EH
Load Capacity (3 Hinges)	10.0	10.0	10.0 kg
Height	50.8	63.5	75.0 mm
Width	38.0	35.5	42.0 mm
Knuckle Diameter	6.0	5.5	6.0 mm
Leaf Thickness	2.3	2.0	2.0 mm
Screw Size	6.0	6.0	8.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required. Available with one or two slots. Two slots are standard.



## Washered DPB

Suitable for medium weight flush doors

### Butt hinge

#### **Product Features**

- Double phosphor bronze tab washered brass butt hinges
- Knurled brass plugs for flush end appearance
- Brass pin
- 10 year performance guarantee
- Suitable for medium weight flush doors
- Security bolt and radius corner options available

Technical Data	1210	1240
Load Capacity (3 Hinges)	20.0	40.0 kg
Height	75.0	100.0 mm
Width	50.8	65.0 mm
Knuckle Diameter	7.8	9.2 mm
Leaf Thickness	3.0	3.5 mm
Screw Size	8.0	10.0 g

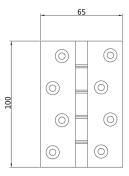
Technical Data	1250	1270	1280
Load Capacity (3 Hinges)	40.0	40.0	40.0 kg
Height	100.0	127.0	152.4 mm
Width	75.0	75.0	75.0 mm
Knuckle Diameter	11.0	11.0	11.0 mm
Leaf Thickness	4.0	4.0	4.0 mm
Screw Size	10.0	12.0	12.0 g

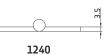
#### Finishes

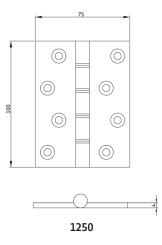
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#### Note



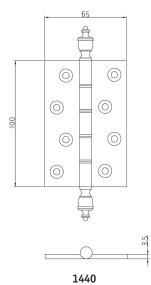




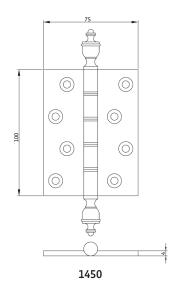








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## Washered DPB

Suitable for medium weight flush doors

#### **Product Features**

- Double phosphor bronze tab washered brass butt hinges
- Brass pin
- 10 year performance guarantee
- Suitable for medium weight flush doors
- Security bolt and radius corner options available

Technical Data	1410	1440
Load Capacity (3 Hinges)	20.0	40.0 kg
Height	75.0	100.0 mm
Width	50.8	65.0 mm
Knuckle Diameter	7.8	9.2 mm
Leaf Thickness	3.0	3.5 mm
Screw Size	8.0	10.0 g

Technical Data	1450	1470	1480
Load Capacity (3 Hinges)	40.0	40.0	40.0 kg
Height	100.0	127.0	152.4 mm
Width	75.0	75.0	75.0 mm
Knuckle Diameter	11.0	11.0	11.0 mm
LeafThickness	4.0	4.0	4.0 mm
Screw Size	10.0	12.0	12.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.





### Washered DPB

Suitable for medium weight flush doors Grade 7

### Butt hinge

**CE** certified

#### **Product Features**

- Double phosphor bronze tab washered brass butt hinges
- Knurled brass plugs for flush end appearance
- CE marked FD30 fire rated
- Brass pin
- 10 year performance guarantee
- Suitable for medium weight flush doors
- Security bolt and radius corner options available

Technical Data	1240 CE	1250 CE
Load Capacity (3 Hinges)	40.0	40.0 kg
Height	100.0	100.0 mm
Width	65.0	75.0 mm
Knuckle Diameter	9.2	11.0 mm
Leaf Thickness	3.5	4.0 mm
Screw Size	10.0	10.0 g

Technical Data	1270 CE	1280 CE
Load Capacity (3 Hinges)	40.0	40.0 kg
Height	127.0	152.4 mm
Width	75.0	75.0 mm
Knuckle Diameter	11.0	11.0 mm
Leaf Thickness	4.0	4.0 mm
Screw Size	12.0	12.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

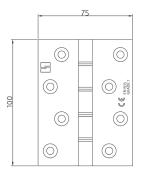
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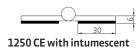
Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.

#### **Classification key**

2	7	2	1	1	4	0	7
BS EN1935	:2002 Eigh	t Digit Cod	e (page 72 i	for details)			

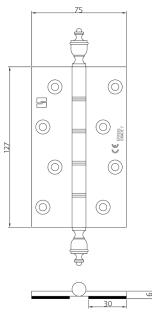












1470 CE with intumescent

### Washered DPB

Suitable for medium weight flush doors Grade 7

Butt hinge	CE certified, Finial
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#### **Product Features**

- Double phosphor bronze tab washered brass butt hinges
- CE marked FD30 fire rated
- Brass pin
- 10 year performance guarantee
- Suitable for medium weight flush doors

- Security bolt and radius corner options available

Technical Data	1440 CE	1450 CE
Load Capacity (3 Hinges)	40.0	40.0 kg
Height	100.0	100.0 mm
Width	65.0	75.0 mm
Knuckle Diameter	9.2	11.0 mm
Leaf Thickness	3.5	4.0 mm
Screw Size	10.0	10.0 g

Technical Data	1470 CE	1480 CE	
Load Capacity (3 Hinges)	40.0	40.0 kg	
Height	127.0	152.4 mm	
Width	75.0	75.0 mm	
Knuckle Diameter	11.0	11.0 mm	
Leaf Thickness	4.0	4.0 mm	
Screw Size	12.0	12.0 g	

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.

#### **Classification key**

2	7	2	1	1	4	0	7
						-	
DC ENITODE	· 2002 Eigh	+ Digit Cod	o (nago 72)	for dotails)			

BS EN1935:2002 Eight Digit Code (page 72 for details)







## Washered DPB

Suitable for medium to heavy flush doors

### **Projection hinge**

#### **Product Features**

- Double phosphor bronze tab washered brass projection hinges
- Knurled brass plugs for flush end appearance
- Brass pin
- 10 year performance guarantee
- Suitable for medium to heavy weight flush doors
- Security bolt and radius corner options available

P1225	P1260	P1262
40.0	40.0	80.0 kg
76.0	100.0	101.6 mm
75.0	101.6	127.0 mm
11.0	11.0	12.5 mm
4.0	4.0	5.0 mm
10.0	12.0	12.0g
32.0	50.0	68.0 mm
	40.0 76.0 75.0 11.0 4.0 10.0	40.0 40.0   76.0 100.0   75.0 101.6   11.0 11.0   4.0 4.0   10.0 12.0

Technical Data	P1264	P1266	P1275
Load Capacity (3 Hinges)	80.0	80.0	40.0 kg
Height	101.6	101.6	127.0 mm
Width	152.4	200.0	101.6 mm
Knuckle Diameter	12.5	12.5	11.0 mm
Leaf Thickness	5.0	5.0	4.0 mm
Screw Size	12.0	12.0	12.0 g
Amount of Projection	85.0	100.0	50.0 mm

Technical Data	P1285	P1295	P1296
Load Capacity (3 Hinges)	40.0	80.0	80.0 kg
Height	152.4	152.4	152.4 mm
Width	101.6	125.0	150.0 mm
Knuckle Diameter	11.0	12.5	12.5 mm
Leaf Thickness	4.0	5.0	5.0 mm
Screw Size	12.0	12.0	12.0 g
Amount of Projection	50.0	68.0	85.0 mm

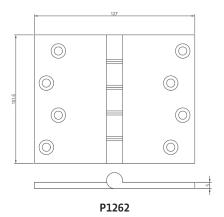
#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

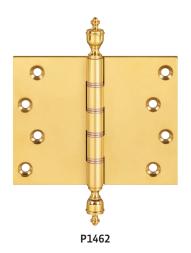
#### Note

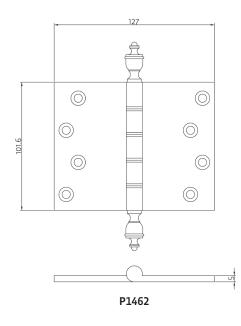
Supplied complete with Pozi/Slotted Head Brass Woodscrews if required. Find out more about projection hinges on page 71.











## Washered DPB

Suitable for medium to heavy flush doors

Projection hinge	Finial
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#### **Product Features**

- Double phosphor bronze tab washered brass projection hinges
- Brass pin
- 10 year performance guarantee
- Suitable for medium to heavy weight flush doors
- Security bolt and radius corner options available

Technical Data	P1460	P1462	P1464
Load Capacity (3 Hinges)	40.0	80.0	80.0 kg
Height	100.0	101.6	101.6 mm
Width	101.6	127.0	152.4 mm
Knuckle Diameter	11.0	12.5	12.5 mm
Leaf Thickness	4.0	5.0	5.0 mm
Screw Size	12.0	12.0	12.0 g
Amount of Projection	50.0	68.0	85.0 mm

Technical Data	P1466	P1475	P1485
Load Capacity (3 Hinges)	80.0	40.0	40.0 kg
Height	101.6	127.0	152.4 mm
Width	200.0	100.0	100.0 mm
Knuckle Diameter	12.5	11.0	11.0 mm
Leaf Thickness	5.0	4.0	4.0 mm
Screw Size	12.0	12.0	12.0 g
Amount of Projection	100.0	50.0	50.0 mm

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required. Find out more about projection hinges on page 71.





### Washered DPB

Suitable for medium weight flush doors Grade 7

### **Projection hinge**

**CE** certified

#### **Product Features**

- Double phosphor bronze tab washered brass projection hinges
- Knurled brass plugs for flush end appearance
- CE marked FD30 fire rated
- Brass pin
- 10 year performance guarantee
- Suitable for medium weight flush doors
- Security bolt and radius corner options available

Technical Data	P1260 CE	P1285 CE
Load Capacity (3 Hinges)	40.0	40.0 kg
Height	100.0	152.4 mm
Width	101.6	101.6 mm
Knuckle Diameter	11.0	11.0 mm
Leaf Thickness	4.0	4.0 mm
Screw Size	12.0	12.0 g
Amount of Projection	50.0	50.0 mm

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

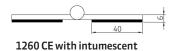
#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required. Find out more about projection hinges on page 71.

#### **Classification key**

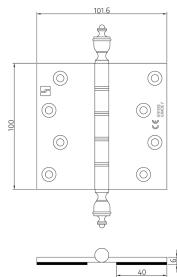
2	7	2	1	1	4	0	7
BS EN1935	:2002 Eigh	t Digit Cod	e (page 72 t	for details)			











1460 CE with intumescent

Washered DPB

Suitable for medium weight flush doors Grade 7

Projection hinge		CE certified, Finial
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#### **Product Features**

- Double phosphor bronze tab washered brass projection hinges
- CE marked FD30 fire rated
- Brass pin
- 10 year performance guarantee
- Suitable for medium weight flush doors
- Security bolt and radius corner options available

Technical Data	P1460 CE	P1485 CE
Load Capacity (3 Hinges)	40.0	40.0 kg
Height	100.0	152.4 mm
Width	101.6	101.6 mm
Knuckle Diameter	11.0	11.0 mm
Leaf Thickness	4.0	4.0 mm
Screw Size	12.0	12.0 g
Amount of Projection	50.0	50.0 mm

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.

#### **Classification key**

2	7	2	1	1	4	0	7

BS EN1935:2002 Eight Digit Code (page 72 for details)







### **Ball Race**

Suitable for medium to heavy weight flush doors

Butt hinge

#### **Product Features**

- Brass ball races running in hardened stainless steel cups
- Stainless steel pin
- Brass Button Tip ends
- 10 year performance guarantee
- Suitable for medium to heavy weight flush doors
- Security bolt and radius corner options available

Technical Data	1510	1540	1550
Load Capacity (3 Hinges)	40.0	60.0	80.0 kg
Height	75.0	100.0	100.0 mm
Width	50.8	65.0	75.0 mm
Knuckle Diameter	7.8	9.2	11.0 mm
Leaf Thickness	2.9	3.5	4.0 mm
Screw Size	8.0	10.0	10.0 g

Technical Data	1570	1580
Load Capacity (3 Hinges)	80.0	80.0 kg
Height	127.0	152.4 mm
Width	75.0	75.0 mm
Knuckle Diameter	11.0	11.0 mm
Leaf Thickness	4.0	4.0 mm
Screw Size	12.0	12.0 g

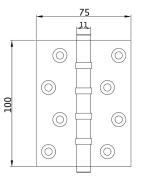
#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

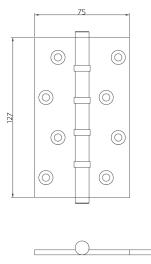
#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.





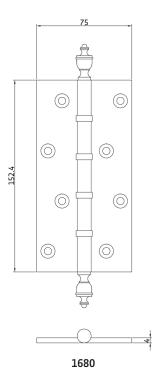




1570







### **Ball Race**

Suitable for medium to heavy weight flush doors

Butt hinge	Finial

#### **Product Features**

- Brass ball races running in hardened stainless steel cups
- Stainless steel pin
- 10 year performance guarantee
- Suitable for medium to heavy weight flush doors
- Security bolt and radius corner options available

Technical Data	1610	1640	1650
Load Capacity (3 Hinges)	40.0	60.0	80.0 kg
Height	75.0	100.0	100.0 mm
Width	50.8	65.0	75.0 mm
Knuckle Diameter	7.8	9.2	11.0 mm
Leaf Thickness	2.9	3.5	4.0 mm
Screw Size	8.0	10.0	10.0 g

Technical Data	1670	1680
Load Capacity (3 Hinges)	80.0	80.0 kg
Height	127.0	152.4 mm
Width	75.0	75.0 mm
Knuckle Diameter	11.0	11.0 mm
Leaf Thickness	4.0	4.0 mm
Screw Size	12.0	12.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.





### **Ball Race**

Suitable for medium to heavy weight flush doors Grade 11

CE certified

#### **Product Features**

- Brass ball races running in hardened stainless steel cups
- CE marked FD30 fire rated
- Stainless steel pin
- Brass Button Tip ends
- 10 year performance guarantee
- Suitable for medium to heavy weight flush doors
- Security bolt and radius corner options available

Technical Data	1540 CE	1550 CE
Load Capacity (3 Hinges)	60.0	80.0 kg
Height	100.0	100.0 mm
Width	65.0	75.0 mm
Knuckle Diameter	9.2	11.0 mm
Leaf Thickness	3.5	4.0 mm
Screw Size	10.0	10.0 g

Technical Data	1570 CE	1580 CE
Load Capacity (3 Hinges)	80.0	80.0 kg
Height	127.0	152.4 mm
Width	75.0	75.0 mm
Knuckle Diameter	11.0	11.0 mm
Leaf Thickness	4.0	4.0 mm
Screw Size	12.0	12.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

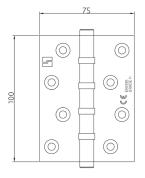
#### Note

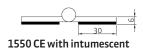
Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.

#### **Classification key**

	3	7	4	1	1	4	0	11
BS EN1935:2002 Eight Digit Code (page 72 for details)								

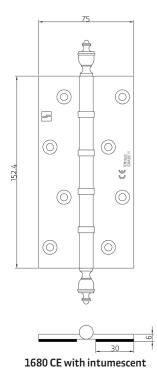












### **Ball Race**

Suitable for medium to heavy weight flush doors Grade 11

Butt hinge	Finial	CE certified

#### **Product Features**

- Brass ball races running in hardened stainless steel cups
- CE marked FD30 fire rated
- Stainless steel pin
- 10 year performance guarantee
- Suitable for medium to heavy weight flush doors

- Security bolt and radius corner options available

Technical Data	1640 CE	1650 CE
Load Capacity (3 Hinges)	60.0	80.0 kg
Height	100.0	100.0 mm
Width	65.0	75.0 mm
Knuckle Diameter	9.2	11.0 mm
LeafThickness	3.5	4.0 mm
Screw Size	10.0	10.0 g

Technical Data	1670 CE	1680 CE
Load Capacity (3 Hinges)	80.0	80.0 kg
Height	127.0	152.4 mm
Width	75.0	75.0 mm
Knuckle Diameter	11.0	11.0 mm
LeafThickness	4.0	4.0 mm
Screw Size	12.0	12.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.

#### **Classification key**

3	7	4	1	1	4	0	11
PS EN1025:2002 Eight Digit Code (page 72 for details)							

BS EN1935:2002 Eight Digit Code (page 72 for details)

#### **Finial options**







### **Ball Race**

Suitable for medium to heavy weight flush doors

### **Projection hinge**

#### **Product Features**

- Brass ball races running in hardened stainless steel cups
- Stainless steel pin
- Brass Button Tip ends
- 10 year performance guarantee
- Suitable for medium to heavy weight flush doors
- Security bolt and radius corner options available

Technical Data	P1560	P1562	P1564
Load Capacity (3 Hinges)	80.0	80.0	80.0 kg
Height	100.0	101.6	101.6 mm
Width	101.6	127.0	152.4 mm
Knuckle Diameter	11.0	12.5	12.5 mm
Leaf Thickness	4.0	5.0	5.0 mm
Screw Size	12.0	12.0	12.0 g
Amount of Projection	50.0	68.0	85.0 mm

Technical Data	P1566	P1575	P1585
Load Capacity (3 Hinges)	80.0	80.0	80.0 kg
Height	101.6	127.0	152.4 mm
Width	200.0	100.0	100.0 mm
Knuckle Diameter	12.5	11.0	11.0 mm
Leaf Thickness	5.0	4.0	4.0 mm
Screw Size	12.0	12.0	12.0 g
Amount of Projection	100.0	50.0	50.0 mm

Technical Data	P1590	P1595
Load Capacity (3 Hinges)	80.0	80.0 kg
Height	127.0	152.4 mm
Width	125.0	125.0 mm
Knuckle Diameter	12.7	12.7 mm
Leaf Thickness	5.0	5.0 mm
Screw Size	12.0	12.0 g
Amount of Projection	68.0	68.0 mm

#### Finishes

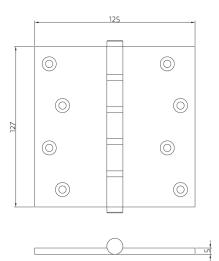
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#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required. Find out more about projection hinges on page 71.



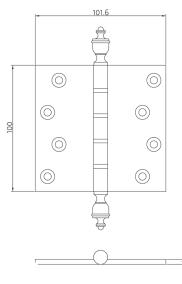
P1590











P1660

### **Ball Race**

Suitable for medium to heavy weight flush doors

Projection hinge	Finial

#### **Product Features**

- Brass ball races running in hardened stainless steel cups
- Stainless steel pin
- 10 year performance guarantee
- Suitable for medium to heavy weight flush doors
- Security bolt and radius corner options available

Technical Data	P1660	P1662	P1664
Load Capacity (3 Hinges)	80.0	80.0	80.0 kg
Height	100.0	101.6	101.6 mm
Width	101.6	127.0	152.4 mm
Knuckle Diameter	11.0	12.5	12.5 mm
Leaf Thickness	4.0	5.0	5.0 mm
Screw Size	12.0	12.0	12.0 g
Amount of Projection	50.0	68.0	85.0 mm

Technical Data	P1666	P1675	P1685
Load Capacity (3 Hinges)	80.0	80.0	80.0 kg
Height	101.6	127.0	152.4 mm
Width	200.0	100.0	100.0 mm
Knuckle Diameter	12.5	11.0	11.0 mm
Leaf Thickness	5.0	4.0	4.0 mm
Screw Size	12.0	12.0	12.0 g
Amount of Projection	100.0	50.0	50.0 mm

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required. Find out more about projection hinges on page 71.

#### **Finial options**





### **Ball Race**

Suitable for medium to heavy weight flush doors Grade 11

**Projection hinge** 

CE certified

#### **Product Features**

- Brass ball races running in hardened stainless steel cups
- CE marked FD30 fire rated
- Stainless steel pin
- Brass Button Tip ends
- 10 year performance guarantee
- Suitable for medium to heavy weight flush doors
- Security bolt and radius corner options available

Technical Data	P1560 CE	P1585 CE
Load Capacity (3 Hinges)	80.0	80.0 kg
Height	100.0	152.4 mm
Width	101.6	101.6 mm
Knuckle Diameter	11.0	11.0 mm
Leaf Thickness	4.0	4.0 mm
Screw Size	12.0	12.0 g
Amount of Projection	50.0	50.0 mm

Technical Data	P1590 CE	P1595 CE
Load Capacity (3 Hinges)	80.0	80.0 kg
Height	127.0	152.4 mm
Width	125.0	125.0 mm
Knuckle Diameter	12.7	12.7 mm
Leaf Thickness	5.0	5.0 mm
Screw Size	12.0	12.0 g
Amount of Projection	68.0	68.0 mm

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note

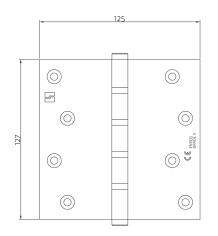
Supplied complete with Pozi/Slotted Head Brass Woodscrews if required. Find out more about projection hinges on page 71.

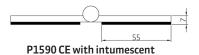
#### **Classification key**

3	7	4	1	1	4	0	11
BS EN1935:2002 Eight Digit Code (page 72 for details)							



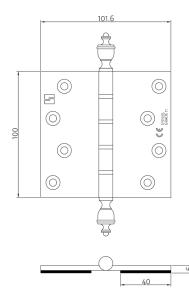
P1590 CE











P1660 CE with intumescent

### **Ball Race**

Suitable for medium to heavy weight flush doors Grade 11

CE certified

#### **Product Features**

- Brass ball races running in hardened stainless steel cups
- CE marked FD30 fire rated
- Stainless steel pin
- 10 year performance guarantee
- Suitable for medium to heavy weight flush doors
- Security bolt and radius corner options available

Technical Data	P1660 CE	P1685 CE
Load Capacity (3 Hinges)	80.0	80.0 kg
Height	100.0	152.4 mm
Width	101.6	101.6 mm
Knuckle Diameter	11.0	11.0 mm
Leaf Thickness	4.0	4.0 mm
Screw Size	12.0	12.0 g
Amount of Projection	50.0	50.0 mm

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required. Find out more about projection hinges on page 71.

#### **Classification key**

3	7	4	1	1	4	0	11
PS EN102E-2002 Eight Digit Code (page 72 for detaile)							

BS EN1935:2002 Eight Digit Code (page 72 for details)

#### **Finial options**







### **Ball Race**

Suitable for medium to heavy weight flush doors

### **Conductor hinge**

#### **Product Features**

- Brass ball races running in hardened stainless steel cups
- Stainless steel pin
- Brass Button Tip ends
- 10 year performance guarantee
- Suitable for medium to heavy weight flush doors
- Hidden transfer of wires from door to frame eliminates the need for an armoured loop
- Capacity 2 wire 24V 5 Amps
- 2, 4,6 or 8 wire options
- Security bolt and radius corner options available

Technical Data	1550 C2	1550 C4
Load Capacity (3 Hinges)	80.0	80.0 kg
Height	100.0	100.0 mm
Width	75.0	75.0 mm
Knuckle Diameter	11.0	11.0 mm
Leaf Thickness	4.0	4.0 mm
Screw Size	10.0	10.0 g

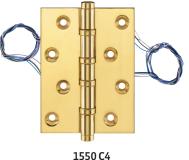
Technical Data	1550 C6	1550 C8
Load Capacity (3 Hinges)	80.0	80.0 kg
Height	100.0	100.0 mm
Width	75.0	75.0 mm
Knuckle Diameter	11.0	11.0 mm
Leaf Thickness	4.0	4.0 mm
Screw Size	10.0	10.0 g

#### Finishes

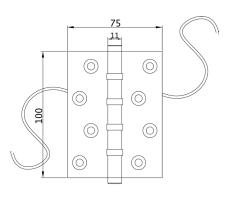
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#### Note

Supplied complete with Pozi/Slotted Head Brass Woodscrews if required.

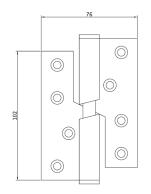












1940

## **Rising hinge**

Suitable for medium weight toilet cubicle and internal flush doors

Hinge		 
	Hinge	

#### **Product Features**

- Rise or fall of 8 mm at 180°
- Stainless steel pin
- Handed left or right see figure 2 on page 77
- Low cost hinges
- Grade 304 Stainless Steel

Technical Data	1940
Load Capacity (3 Hinges)	40.0 kg
Height	102.0 mm
Width	76.0 mm
Knuckle Diameter	14.0 mm
Leaf Thickness	3.0 mm
Screw Size	10.0 g

#### Finishes

Satin Stainless Steel, Bright Polished Stainless Steel

#### Note

Supplied complete with fixing screws. 10 year guarantee does not apply.

## **Falling hinge**

Suitable for medium weight toilet cubicle and internal flush doors

Н	inge
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#### **Product Features**

- Rise or fall of 8 mm at 180°
- Stainless steel pin
- Handed left or right see figure 2 on page 77
- Low cost hinges
- Grade 304 Stainless Steel

#### **Technical Data**

Technical Data	1941
Load Capacity (3 Hinges)	40.0 kg
Height	102.0 mm
Width	76.0 mm
Knuckle Diameter	14.0 mm
Leaf Thickness	3.0 mm
Screw Size	10.0 g

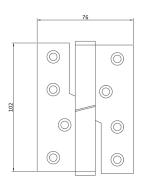
#### Finishes

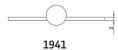
Satin Stainless Steel, Bright Polished Stainless Steel

#### Note

 ${\small Supplied \ complete \ with \ fixing \ screws}.$ 10 year guarantee does not apply.

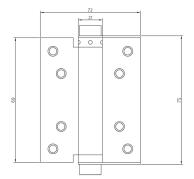


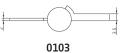












**Spring hinge** Suitable for medium weight internal flush doors

Single action hinge	

#### **Product Features**

- Adjustable spring tension
- Grade 304 Stainless Steel
- Single action, door will return to closed position

Technical Data	0103	0103
Load Capacity (2 Hinges)	18.0	25.0 kg
Height	75.0	100.0 mm
Knuckle Diameter	21.0	21.0 mm
Screw Size	6.0	6.0 g

Technical Data	0103	0103
Load Capacity (2 Hinges)	30.0	45.0 kg
Height	125.0	150.0 mm
Knuckle Diameter	21.0	21.0 mm
Screw Size	8.0	8.0 g

#### Finishes

Satin Stainless Steel

#### Note

Supplied complete with fixing screws. 10 year guarantee does not apply.

## **Spring hinge**

Suitable for medium weight internal flush doors

Double action hinge		
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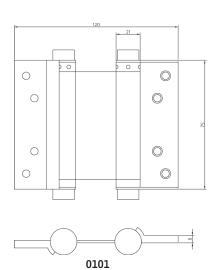
#### **Product Features**

- Adjustable spring tension
- Grade 304 Stainless Steel
- Supplied with complete set of fitting instructions
- Double action, door swings both ways and returns to closing position

Technical Data	0101	0101
Load Capacity (2 Hinges)	18.0	25.0 kg
Height	75.0	100.0 mm
Knuckle Diameter	21.0	21.0 mm
To Suit Maximum Door Thickness	28.0	34.0 mm
Screw Size	6.0	6.0 g

Technical Data	0101	0101
Load Capacity (2 Hinges)	30.0	45.0 kg
Height	125.0	150.0 mm
Knuckle Diameter	21.0	21.0 mm
To Suit Maximum Door Thickness	45.0	45.0 mm
Screw Size	8.0	8.0 g





### Finishes

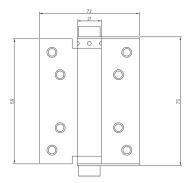
Satin Stainless Steel

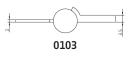
#### Note

Supplied complete with fixing screws. 10 year guarantee does not apply.

## **STEEL HINGE**







**Spring hinge** Suitable for medium weight internal flush doors

Single action hinge	
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#### **Product Features**

Adjustable spring tension

• Single action, door will return to closed position

Technical Data	0103	0103
Load Capacity (2 Hinges)	18.0	25.0 kg
Height	75.0	100.0 mm
Knuckle Diameter	21.0	21.0 mm
Screw Size	6.0	6.0 g

Technical Data	0103	0103
Load Capacity (2 Hinges)	30.0	45.0 kg
Height	125.0	150.0 mm
Knuckle Diameter	21.0	21.0 mm
Screw Size	8.0	8.0 g

#### Finishes

Zinc plated, Brass plated

#### Note

Supplied complete with fixing screws. 10 year guarantee does not apply.

## **STEEL HINGE**

## **Spring hinge**

Suitable for medium weight internal flush doors

Double action hinge	

#### **Product Features**

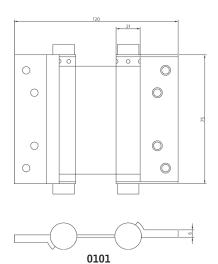
Adjustable spring tension

- Supplied with complete set of fitting instructions
- Double action, door swings both ways and returns to closing position

Technical Data	0101	0101
Load Capacity (2 Hinges)	18.0	25.0 kg
Height	75.0	100.0 mm
Knuckle Diameter	21.0	21.0 mm
To Suit Maximum Door Thickness	28.0	34.0 mm
Screw Size	6.0	6.0 g

Technical Data	0101	0101
Load Capacity (2 Hinges)	30.0	45.0 kg
Height	125.0	150.0 mm
Knuckle Diameter	21.0	21.0 mm
To Suit Maximum Door Thickness	45.0	45.0 mm
Screw Size	8.0	8.0 g





#### Finishes

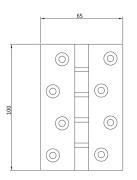
Zinc plated, Brass plated, Nickel plated, Antique Brass, Antique iron

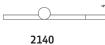
#### Note

Supplied complete with fixing screws. 10 year guarantee does not apply.

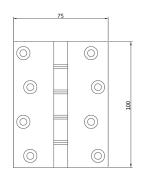


2140









2050

### Washered SD

Suitable for light weight flush doors

Butt hinge	

#### **Product Features**

- Delrin washered aluminium butt hinges
- Aluminium pin
- 10 year performance guarantee
- Suitable for light weight flush doors

Technical Data	2110	2140	2150
Load Capacity (3 Hinges)	20.0	20.0	20.0 kg
Height	75.0	100.0	100.0 mm
Width	50.0	65.0	75.0 mm
Knuckle Diameter	10.0	11.0	11.0 mm
Leaf Thickness	3.0	4.0	4.0 mm
Screw Size	8.0	10.0	10.0 g

#### Finishes

Etched and Anodised, Polished and Anodised

#### Note

Other anodised finishes available on request. Supplied complete with Pozi Head Steel Zinc Plated Woodscrews if required.

### Washered DSS

Suitable for light to medium weight flush doors

	Butt hinge		
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#### **Product Features**

- Double stainless steel tab washered aluminium butt hinges
- Knurled aluminium plugs for flush end appearance
- Stainless steel pin
- 10 year performance guarantee
- Suitable for light weight flush doors

Technical Data	2010	2040	2050
Load Capacity (3 Hinges)	20.0	40.0	40.0 kg
Height	75.0	100.0	100.0 mm
Width	50.0	65.0	75.0 mm
Knuckle Diameter	10.0	11.0	11.0 mm
Leaf Thickness	3.0	4.0	4.0 mm
Screw Size	8.0	10.0	10.0 g

#### Finishes

Etched and Anodised, Polished and Anodised

#### Note

Other anodised finishes available on request.

Supplied complete with Pozi Head Steel Zinc Plated Woodscrews if required.



### **Rising hinge**

Suitable for medium weight toilet cubicle and internal flush doors

### Hinge

#### **Product Features**

- Rise or fall of 13 mm at 180°
- Galvanised steel pin
- 10 year performance guarantee
- Suitable for medium weight toilet cubicle and internal flush doors
- Fitted with medium duty galvanised steel skews
- Radius corners optional, by special request
- Handed left or right see figure 2 on page 77

Technical Data	2810	2840
Load Capacity (2 Hinges)	20.0	25.0 kg
Height	75.0	100.0 mm
Width	68.0	68.0 mm
Knuckle Diameter	14.5	14.5 mm
Leaf Thickness	4.0	4.0 mm
Screw Size	10.0	10.0 g

#### Finishes

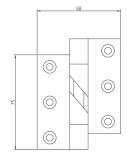
Etched and Anodised, Polished and Anodised

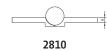
#### Note

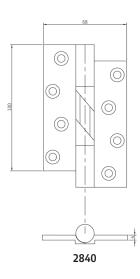
Other anodised finishes available on request.

Supplied complete with Pozi Head Steel Zinc Plated Woodscrews if required.





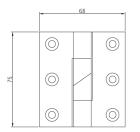


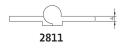


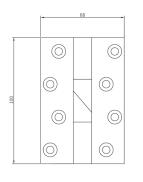




2841









### **Falling hinge**

Suitable for medium weight toilet cubicle and internal flush doors

Hinge		 
	Hinge	

#### **Product Features**

- Rise or fall of 13 mm at 180°
- Galvanised steel pin
- 10 year performance guarantee
- Suitable for medium weight toilet cubicle and internal flush doors
- Fitted with medium duty galvanised steel skews
- Radius corners optional, by special request
- Handed left or right see figure 2 on page 77

Technical Data	2811	2841
Load Capacity (2 Hinges)	20.0	25.0 kg
Height	75.0	100.0 mm
Width	68.0	68.0 mm
Knuckle Diameter	14.5	14.5 mm
LeafThickness	4.0	4.0 mm
Screw Size	10.0	10.0 g

#### Finishes

Etched and Anodised, Polished and Anodised

#### Note

Other anodised finishes available on request.

Supplied complete with Pozi Head Steel Zinc Plated Woodscrews if required.



## **Support hinge**

Suitable for medium weight toilet cubicle and internal flush doors

### Hinge

#### **Product Features**

- Fitted with one pair of normal aluminium rising hinges
- Increases weight carrying capacity up to 45 kg
- Supports the top of the door preventing any leverage problems
- Suitable for medium weight toilet cubicle and internal flush doors
- Radius corners optional, by special request
- Handed left or right see figure 2 on page 77

Technical Data	0200
Load Capacity (2 Hinges)	45.0 kg
Height	100.0 mm
Width	68.0 mm
Knuckle Diameter	14.5 mm
Leaf Thickness	4.0 mm
Screw Size	10.0 g

### Finishes

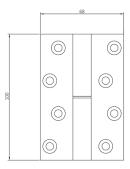
Etched and Anodised, Polished and Anodised

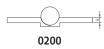
#### Note

Other anodised finishes available on request.

Supplied complete with Pozi Head Steel Zinc Plated Woodscrews if required.





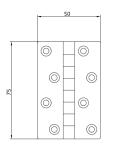




## **NYLON HINGE**



3205





### Unwashered

Suitable for very light weight doors

B	Butthinge	
_		

#### **Product Features**

zinc plated steel pin

- Suitable for very light weight doors
- Useful in areas which need regular cleaning/decontamination

Technical Data	3205
Load Capacity (3 Hinges)	10.0 kg
Height	75.0 mm
Width	50.0 mm
Knuckle Diameter	8.0 mm
LeafThickness	3.0/4.0 mm
Screw Size	7.0 g

#### Finishes

Bronze, Natural

#### Note

Steel zinc plated fixing screws available if required. 10 year guarantee does not apply.

# HARDWARE

#### **Edge Pull**

The solid brass edge pulls are ideal for use on drawers and various door types. With a simple modern design they will compliment any style of furniture and room. The edge pull is suitable for 18 mm and 44 mm+ thick profiles and are available in standard and bespoke lengths in a wide range of finishes including PVD. The PVD finishes have an abrasion and tarnish resistant surface with salt spray tests achieved for over 1,000 hours.



#### **Door Stop**

Quality floor door stops to prevent door handle damage to walls. Available in both designer and commercial styles with a choice of standard and special finishes. Easily removed for decorating and supplied complete with fixings for floor or skirting mounting. Rubber inserts help to protect your door and minimise any noise.



### Floor Stop

Heavy-duty and spring loaded floor mounted aluminium door stops for timber or concrete floors, supplied complete with fixings. Heavy-duty option supplied with M8 stainless steel 6-lobe button head security rawbolt and L shaped wrench – tested to 400 kg. Spring loaded options can be depressed to hold door open or turned to make stop inoperable.



#### **Letter Plate**

Attractive high performance large commercial, aluminium letter plate and inner flap in stainless steel effect finish, etched and polished aluminium and brass finishes. Face fixed outward and inward opening letter plates the 5000 series also offers bolt through fixing.



## **EDGE PULL**

### Brass

Suitable for 18 mm thick profiles

Round flat design	Small

#### **Product Features**

- Solid brass edge pulls for use on drawers and various door types
- Simple modern design that will compliment any style of furniture
- Available in standard 50 mm, 75 mm, 100 mm and 200 mm sizes
- Various finishes including standard and PVD

Technical Data	0012
Suitable Profile Size	18.0 mm
Height	50.0/75.0/100.0/200.0 mm
Knuckle Diameter	7.95 mm
Screw Size	8.0 g

### Brass

Suitable for 44 mm thick profiles

Round flat design	Large

#### **Product Features**

- Solid brass edge pulls for use on drawers and various door types
- Simple modern design that will compliment any style of furniture
- Available in standard 50 mm, 75 mm, 100 mm and 200 mm sizes
- Various finishes including standard and PVD

Ţ	ec	ica	al D	ata	

Suitable Profile Size	44.0 mm
Height	50.0/75.0/100.0/200.0 mm
Knuckle Diameter	9.52 mm
Screw Size	10.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

PVD Finishes: PVD Brass (UK 517), PVD Copper Rose (UK 518), PVD Matt Black (UK 519), PVD Rainbow (UK 520), PVD Stainless Steel Effect (UK 521) Salt spray tested to over 1,000 hours

#### Note

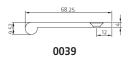
Supplied with brass Pozi-drive head woodscrews. Bespoke length and sizes prices on application.







0039



8.0 g

## **EDGE PULL**

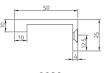


0079





0080



0080

#### **Brass**

Suitable for 18 mm thick profiles

Cube edge design		
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#### **Product Features**

- Solid brass edge pulls for use on drawers and various door types
- Simple modern design that will compliment any style of furniture
- Available in standard 50 mm, 75 mm, 100 mm and 200 mm sizes
- Various finishes including standard and PVD

Technical Data	0079
Suitable Profile Size	18.0 mm
Height	50.0/75.0/100.0/200.0 mm
Knuckle Diameter	9.5 mm
Screw Size	8.0 g

#### Brass

Suitable for 18 mm thick profiles

Cube edge design		With radius angle return
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#### **Product Features**

- Solid brass edge pulls for use on drawers and various door types

- Simple modern design that will compliment any style of furniture
- Available in standard 50 mm, 75 mm, 100 mm and 200 mm sizes
- Various finishes including standard and PVD

Technical Data	0079
Suitable Profile Size	18.0 mm
Height	50.0/75.0/100.0/200.0 mm
Knuckle Diameter	10.0 mm

#### Finishes

Screw Size

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

PVD Finishes: PVD Brass (UK 517), PVD Copper Rose (UK 518), PVD Matt Black (UK 519), PVD Rainbow (UK 520), PVD Stainless Steel Effect (UK 521) Salt spray tested to over 1,000 hours

#### Note

Supplied with brass Pozi-drive head woodscrews. Bespoke length and sizes prices on application.

# **EDGE PULL**

### Brass

Suitable for 18 mm thick profiles

Round flat design	With angle return
-------------------	-------------------

#### **Product Features**

- Solid brass edge pulls for use on drawers and various door types
- Simple modern design that will compliment any style of furniture
- Available in standard 50 mm, 75 mm, 100 mm and 200 mm sizes
- Various finishes including standard and PVD

Technical Data	0082
Suitable Profile Size	18.0 mm
Height	50.0/75.0/100.0/200.0 mm
Knuckle Diameter	8.0 mm
Screw Size	8.0 g

### Brass

Suitable for 44 mm thick profiles

Round flat design	With angle retur

#### **Product Features**

- Solid brass edge pulls for use on drawers and various door types
- Simple modern design that will compliment any style of furniture
- Available in standard 50 mm, 75 mm, 100 mm and 200 mm sizes
- Various finishes including standard and PVD

Tec	hnical	Data

Suitable Profile Size	44.0 mm
Height	50.0/75.0/100.0/200.0 mm
Knuckle Diameter	10.0 mm
Screw Size	10.0 g

#### Finishes

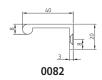
Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

PVD Finishes: PVD Brass (UK 517), PVD Copper Rose (UK 518), PVD Matt Black (UK 519), PVD Rainbow (UK 520), PVD Stainless Steel Effect (UK 521) Salt spray tested to over 1,000 hours

#### Note

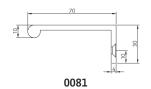
Supplied with brass Pozi-drive head woodscrews. Bespoke length and sizes prices on application.







0081









#### **Brass**

Skirting board mounted doorstop with concealed althread fixing

С	oncealed fix	

#### **Product Features**

Concealed althread fixing

- Skirting board fixing (easily removed for re-decorating)
- Prevents door handle damage to walls

Technical Data	7500	7510
Diameter of body	19.0	19.0 mm
Length	65.0	75.0 mm
Screw Size	10.0	10.0 g

#### Finishes

Aged Brass (UK 501), Antique Brass (UK 502), Antique Nickel (UK 503), Black Nickel (UK 504), Copper Bronze (UK 505), Copper (UK 506), Honeycombe (UK 507), Imitation Bronze (UK 508), Midnight (UK 509), Pearl Nickel (UK 510), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

PVD Finishes: PVD Brass (UK 517), PVD Copper Rose (UK 518), PVD Matt Black (UK 519), PVD Rainbow (UK 520), PVD Stainless Steel Effect (UK 521) Salt Spray tested to over 1,000 hours

#### Note

Supplied complete with fixing screws.

Special finishes available on request.

### Brass

Skirting board mounted doorstop with round rose fixing and concealing cover

Concealed fix	

#### **Product Features**

- Threaded cover for appealing aesthetics concealing fixings
- Skirting board fixing (easily removed for re-decorating)
- Prevents door handle damage to walls

Technical Data	7505	7515
Diameter of body	19.0	19.0 mm
Diameter of rose	47.0	47.0 mm
Length Screw Size	65.0	75.0 mm
Screw Size	6.0	6.0 g

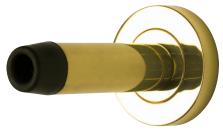
#### Finishes

Self Colour, Imitation Bronze (UK 508), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

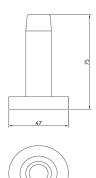
PVD Finishes: PVD Brass (UK 517), PVD Copper Rose (UK 518), PVD Matt Black (UK 519), PVD Rainbow (UK 520), PVD Stainless Steel Effect (UK 521) Salt Spray tested to over 1,000 hours

#### Note

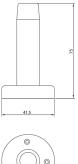
Supplied complete with fixing screws. Special finishes available on request.



7515







7511

#### **Brass**

Skirting board mounted doorstop with round rose fixing

Fa	ice fix	
_		

#### **Product Features**

Skirting board fixing

- Skirting board fixing (easily removed for re-decorating)
- Prevents door handle damage to walls

Technical Data	7501	7511
Diameter of body	19.0	19.0 mm
Diameter of rose	41.5	41.5 mm
Length	65.0	75.0 mm
Screw Size	6.0	6.0 g

#### Finishes

Self Colour, Imitation Bronze (UK 508), Polished Chrome (UK 511), Polished & Lacquered (UK 512), Polished Nickel (UK 513), Satin Brass & Lacquered (UK 514), Satin Chrome (UK 515), Satin Nickel (UK 516)

PVD Finishes: PVD Brass (UK 517), PVD Copper Rose (UK 518), PVD Matt Black (UK 519), PVD Rainbow (UK 520), PVD Stainless Steel Effect (UK 521) Salt Spray tested to over 1,000 hours

#### Note

Supplied complete with fixing screws. Special finishes available on request.

### Aluminium

Skirting board mounted doorstop with concealed althread fixing

Concealed fix	

#### **Product Features**

- Concealed althread fixing
- Skirting board fixing (easily removed for re-decorating)
- Prevents door handle damage to walls

Technical Data	7000	7010
Diameter of body	19.0	19.0 mm
Length	65.0	75.0 mm
Screw Size	10.0	10.0 g

#### Finishes

Gold Anodised, Polished Anodised, Powder Coated

#### Note

Supplied complete with fixing screws. Special finishes available on request.

### Aluminium

Skirting board mounted doorstop with round rose fixing

Face fix	

#### **Product Features**

- Skirting board fixing
- Skirting board fixing (easily removed for re-decorating)
- Prevents door handle damage to walls

Technical Data	7001	7011
Diameter of body	19.0	19.0 mm
Diameter of rose	41.5	41.5 mm
Length	65.0	75.0 mm
Screw Size	6.0	6.0 g

#### Finishes

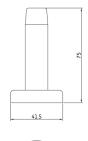
Gold Anodised, Polished Anodised, Powder Coated

#### Note

Supplied complete with fixing screws. Special finishes available on request.



7011



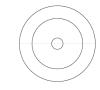


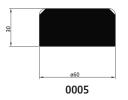






0005





### **Stainless steel**

Heavy duty floor stop with black polyurethane buffer

Round buffer	

#### Product Features

- Heavy duty floor stop with black polyurethane buffer
- Supplied with M8 Stainless Steel 6-lobe button head security bolt, M8 Rawbolt and
- 'L' shaped 6-lobe wrench
- 400 kg load tested

#### Technical Data

Technical Data	0005
Floor Depth Required	60.0 mm
Floor Fixing Guide - Solid substrate drill	14 x 53.0 mm
Support Plate	40 x 2.5 mm
Buffer Diameter	60.0 mm
Buffer Height	30.0 m

#### Finishes

Satin Stainless Steel

#### Note

Fixings are supplied.

### **Stainless steel**

Spring loaded stop can be depressed to hold door open

### Hold open device

#### **Product Features**

- Floor mounted Door Stop
- Spring loaded stop can be depressed to hold door open
- Black polyurethane buffer
- 0007 Timber Floor
- 0008 Concrete Floor Grade
- T316 Grade Stainless Steel
- 100,000 cycle test completed on an 80 kg  $\times$  1000 mm wide door fitted with a size 4 closer

Technical Data	0007	0008
Floor Depth Required	54.0	54.0 mm
Diameter of body	35.0	35.0 mm
Face Plate	45.0Sqx2.5	45.0 Diameterx2.5 mm
Buffer Diameter	25.0	25.0 mm
Buffer Height	20.0	20.0 mm

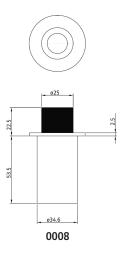
#### Finishes

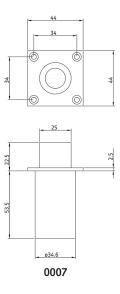
Satin Stainless Steel

#### Note

Fixings are supplied for Timber Fix.

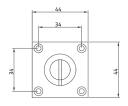


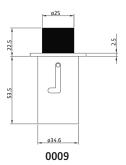






0009





### **Stainless steel**

Spring loaded stop can be depressed and turned to make stop inoperable

Hold open device		Lock down feature
------------------	--	-------------------

#### Product Features

- Spring loaded stop can be depressed to hold door open
- Lockable feature to hold down the sprung stop, coin release
- Black polyurethane buffer
- 0009 Timber Floor
- 0010 Concrete Floor Grade
- T316 Grade Stainless Steel
- 100,000 cycle test completed on an 80 kg x 1000 mm wide door fitted with a size 4 closer

Technical Data	0009	0010
Floor Depth Required	54.0	54.0 mm
Diameter of body	35.0	35.0 mm
Face Plate	45.0Sqx2.5	45.0 Diameterx2.5 mm
Buffer Diameter	25.0	25.0 mm
Buffer Height	20.0	20.0 mm

#### Finishes

Satin Stainless Steel

#### Note

Fixings are supplied for Timber Fix.

### **Stainless steel**

Complete with backstop to prevent door handle damage to walls

#### Backstop

Hold open device

#### **Product Features**

- Spring loaded stop can be depressed to hold door open
- Lockable feature to hold down the sprung stop, coin release (0012 only)
- Black polyurethane buffer
- 0011 Timber Floor
- 0012 Timber Floor plus Lock Down Feature
- T316 Grade Stainless Steel
- Suitable for door thicknesses of 54mm

Technical Data	0011	0012
Floor Depth Required	54.0	54.0 mm
Diameter of body	35.0	35.0 mm
Face Plate	125.0x45.0x2.5 125.0	x45.0x2.5 mm
Buffer Diameter	25.0	25.0 mm
Buffer Height	20.0	20.0 mm

#### Finishes

Satin Stainless Steel

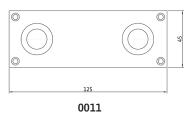
#### Note

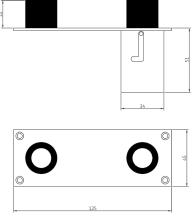
 ${\small Supplied \ complete \ with \ fixing \ screws}.$ 











## **LETTER PLATE**







5502

### Aluminium

Suitable for commercial premises where parcels need to be delivered

#### Outward

#### **Product Features**

Outward opening

- Face Fixed or Bolt Through Fixing

Spring Tensioned

• Aluminium grade 6063 T6

Technical Data	5502	5503
Height	135.0	135.0 mm
Width	355.0	406.0 mm
Opening Aperture	97.0x305.0	97.0x355.0 mm
Screw Size	6.0	6.0 g

Finishes

Stainless Steel Effect, Etched and Anodised, Polished and Anodised, Satin brass plated

#### Note

Powder coated finishes on request.



5513

### Aluminium

Suitable for commercial premises where parcels need to be delivered

Outward	

#### **Product Features**

Outward opening

- Aluminium Grade 6063 T6





Technical Data	5512	5513
Height	130.0	130.0 mm
Width	355.0	406.0 mm
Opening Aperture	120.0x315.0	120.0x365.0 mm
Screw Size	6.0	6.0 g

#### Finishes

Stainless Steel Effect, Etched and Anodised, Polished and Anodised

#### Note

Face Fixed or Bolt Through Fixing to match 5502 and 5503 Letter Plates . Powder coated finishes on request.

# **LETTER PLATE**

### Aluminium

Suitable for commercial premises where parcels need to be delivered

#### Inward

#### **Product Features**

- Inward Opening
- Face Fix or Bolt Through Fixing
- Spring Tensioned

Technical Data	7702	7703
Height	125.0	125.0 mm
Width	355.0	406.0 mm
Opening Aperture	75.0x290.0	75.0x340.0 mm

#### Finishes

Stainless Steel Effect, Etched and Anodised, Polished and Anodised







## **TECHNICAL INFORMATION**



Aged Brass (UK 501)



Copper (SW 506)



Polished Chrome (UK 511)



Satin Nickel (UK 516)



Finishes

Antique Nickel (UK 503)

Imitation Bronze (UK 508)

Polished Nickel (UK 513)

Antique Brass (UK 502)



Honeycombe (UK 507)



**Care of Finishes** 

- 1. Regular cleaning with a cloth damped with good light oil or lanolin should be enough to keep all finishes in its original condition for a long period.
- 2. For extra cleaning of polished and lacquered finishes it is recommended that a good quality wax polish is used, particularly on externally fitted items, applied every few weeks.
- 3. Some lacquered finishes can break down eventually due to adverse conditions. Therefore the



Black Nickel (UK 504)

Midnight (UK 509)







Satin Chrome (UK 515)

life of all finishes is beyond our control and cannot be guaranteed.

- 4. For more information regarding salt spray corrosion testing on certain finishes to BS EN 1670 please contact your distributor or the manufacturer.
- 5. Do not use Solvents, cleaning chemicals or abrasive products on surface finishes.
- 6. Do not apply adhesive tapes to any surface finishes.

Satin Brass & Lacquered (UK 514)



PVD Brass (UK 517)

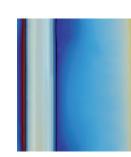


PVD Copper Rose (UK 518)



**PVD** Finishes

PVD Matt Black (UK 519)



PVD Rainbow (UK 520)



PVD Stainless Steel Effect (UK 521)



## **TECHNICAL INFORMATION**

#### **UK GUARANTEES**

All our hinges are given a weight loading based on three hinges per door leaf. Where we give a recommendation of 10 kilos and above, we will guarantee the performance of the hinge for 10 years, subject to compliance with fitting instructions provided in every box of hinges. Selected hinges specify a 25 year guarantee where stated.

#### **HINGE TYPES**

Brass	Produced to precise standards, in a wide range of anti-bacterial
	quality finishes for trouble free use. Suitable for fire doors where
	indicated.
Aluminium	High standard hinges in a variety of finishes. Not suitable for fire
	doors.
Projection	The P symbol shown next to various hinge reference numbers
	throughout the catalogue identifies projection hinges which are
	drilled with holes towards the edge of a broad hinge leaf enabling the

drilled with holes towards the edge of a broad hinge leaf enabling the hinge to clear obstructions when fully opened beyond 90°.

#### **SELECTION – Refer to Technical Section**

When deciding on finish and the best hinge for each application take into account adjusted door weight; appearance to match both the environment and product; position of doors or windows within a building and direction of opening; type of building use e.g. hospital and its location e.g. coastal environments need special consideration as certain finishes are not suitable; frequency of use; security and fire resistance requirements.

#### SPECIFICATION

**CE Marking** – To comply with the new UK Construction Products Regulations CE marking is required for hinges used on fire, smoke and escape route doors. Hinges marked in the catalogue with a CE Reference have been successfully performance tested and also where indicated fire tested up to 30 minutes and 1 hr respectively.

**European Standards** – Hinges detailed in this catalogue comply as required to the European Standard BS/EN 1935 : 2002. The standard covers Building Hardware – Single-Axis Hinges - Requirements and Test Methods as detailed in table A shown in the Technical Section.

**Building Regulations** – Approved Document B to the Building Regulations (England and Wales) recognises the importance of independent product conformity certification. It states: Third party conformity certification schemes not only provide a means of identifying materials and designs of systems, products or structures which have demonstrated that they have the requisite performance in fire, but additionally provide confidence that the systems, materials, products or structures actually supplied are provided to the same specification or design as that tested/assessed.'

The estimated frequency of operation of doors is shown in table B.

**Corrosion** – Hinges are tested in a laboratory controlled environment for corrosion resistance as specified in BS EN 1670:1998.

Strength and Durability – Specification for hinges detailed in this catalogue meet European Standard BS/EN 1935: 2002.

Frame

Door

Amount of projection

Obstruction

Door

 $\ominus$ 

## **TECHNICAL INFORMATION**

#### **Hinges Drilled for Projection**

The 'P' symbol shown next to various hinges throughout the catalogue highlights our Projection Hinges. These are drilled with holes towards the edge of a broad hinge leaf enabling the hinge to clear obstructions when fully open beyond 90°.

It is recommended that the backset should not be less than 12mm (14mm if using an intumescent strip).

When a door is to be opened beyond 90° the width of a hinge can be calculated as follows: Door thickness plus inset (Normally 3.2mm) less backset. Double this and add clearance required.

#### Woodscrews

Customers have the option of buying brass and aluminium hinges complete with the appropriate size and finish of woodscrews. These screws are made by a leading international manufacturer of woodscrews.

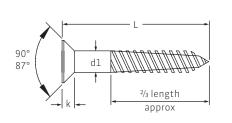
The screws are approximate matching finishes for the hinges, and although not a perfect match, are the nearest finish available.

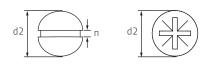
Details are as follows:-

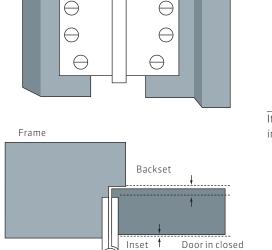
#### Gauge/Size

N°4x1/2" (12.7mm) N°10x1.1/4" (32mm) N°6x3/4" (19.05mm) N°12x1.1/4" (32mm) N°8x1" (25.4mm)

Gauge	2	3	4	5	6	7	8	10	12	14
dl	2.08	2.39	2.74	3.10	3.45	3.81	4.17	4.88	5.59	6.30
d2	4.07	4.67	5.35	6.05	6.73	7.43	8.13	9.51	10.90	12.30
k	1.22	1.40	1.63	1.85	2.08	2.31	2.54	2.97	3.43	3.89
n	0.75	0.87	0.92	1.02	1.15	1.15	1.27	1.40	1.53	1.78







Amount of

projection

Frame

position

Door in open

position (180°)

θ

## **TECHNICAL INFORMATION**

#### BS EN1935: 2002 Building hardware Single-Axis hinges – Requirements and Test Methods

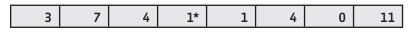
The standard provides details on product types, classification by use, test cycles, door mass, corrosion resistance, as well as definitions, product performance requirements, test apparatus, test methods and making of products. In addition, the published standards include annexes illustrating the various points made through diagrams and supplementary text.

This European Standard has replaced the previous national product performance standard BS 7352: 1990 Strength and durability performance of metal hinges for side hanging applications and dimensional requirements for template drilled hinges.

#### SCOPE

The standard includes a wide range of hinges and includes single axis hinges and lift off hinges for use on windows and doors.

#### Example of eight digit code:



#### DIGIT 1 – Category of use

For all internal or external doors for use by the public or others, with little or no incentive to take care. i.e. where there is chance of misuse of the door.

- **Grade 1** Light duty. Example: Domestic or office situation, areas with no access to general public.
- Grade 2Medium duty. Example: Domestic and office situation where limited<br/>access is allowed to the general public.
- **Grade 3** Heavy duty. Example: Public and institutional buildings such as libraries, hospitals and schools.
- **Grade 4** Severe duty. Example: Hinges for use on doors, which are subject to frequent violent usage..

#### DIGIT 2 – Number of test cycles

When deciding on finish and the best hinge for each application take into account; appearance to match both the environment and product; position of doors or windows within building and direction of opening; type of building use e.g. hospital and its location, coastal situation; frequency of use; (see tables AandB) security and fire resistance requirements.

#### **TESTING – Refer to Table A**

There are three categories identified for hinges manufactured to this standard.

- Grade 310,000 test cyclesGrade 425,000 test cycles
- Grade 7 200,000 test cycles





# kg

#### DIGIT 3 – Test door mass

Eight test door mass grades are identified according to table 1 of the BS EN1935: 2002 standard.

**TECHNICAL INFORMATION** 



#### DIGIT 4 – Fire Behaviour

Two grades of fire behaviour are identified for hinges manufactured to this standard. **Grade 0** Not Suitable for use on fire resistant and / or smoke control door

assembliesGrade 1Suitable for use on fire / smoke resistant door assemblies subject to

satisfactory assessment of the contribution of the hinges to the fire resistance of the specified fire / door assemblies.



#### DIGIT 5 – Safety

All hinges are required to satisfy the essential requirement of safety in use. Therefore only grade 1 is identified.

BS EN1935: 2002 Building hardware Single-Axis hinges – Requirements and Test Methods



#### **DIGIT 6 - Corrosion resistance**

Five grades of corrosion resistance are identified according to BS EN1670:

- Grade 0 No defined corrosion resistance
- Grade 1 Mild resistance
- Grade 2 Moderate resistance
- Grade 3 High resistance
- Grade 4 Very high resistance



#### DIGIT 7 - Security - Burglar-resistance (seventh digit)

Two grades of security are identified for hinges manufactured to this European Standard:

Grade 0 Not suitable for use on burglar –resistant door assemblies;

**Grade 1** Suitable for use on burglar resistant door assemblies, subject to satisfactory assessment of the contribution of the hinges to the burglar resistance of specified burglar-resistant door assemblies.

#### DIGIT 8 - Hinge grade

Fourteen grades of hinge are identified in this European Standard as detailed in Table A.

#### MARKING

The standard requires that single axis hinges manufactured in accordance with this standard for use on fire –resistant and or/ smoke control doors or locked doors on escape routes, shall be marked as follows:

- a) The manufacturers name or trademark or other means of identification
- b) The hinge grade according to Table A
- c) The number of the European Standard (BS EN 1935)

#### **FIRE RATED HINGES**

Hinges supplied for use on fire and escape door sets will be supplied complete with intumescent pads, which must be fitted behind each hinge flap, between the timber door and frame and the metal hinge leaves.

#### Table A

Grade	Max. mass of hinged door leaf kgs	Max. annual number of operations (cycles)
1	10	10,000
2	20	10,000
3	20	25,000
4	20	200,000
5	40	10,000
6	40	25,000
7	40	200,000
8	60	10,000
9	60	25,000
10	60	200,000
11	80	200,000
12	100	200,000
13	120	200,000
14	160	200,000





#### **Hinge Installation**

#### Table B

#### DOOR SITUATION AND ESTIMATED NUMBER OF OPERATIONS

High frequency heavy duty situations:	Daily	Annually
Large departmental store entrances	5,000	1,500,000
Large office building entrance	4,000	920,000
Cinema or theatre entrance	1,300	455,000
School entrance	1,250	225,000
Entrance door to school toilets	1,250	225,000
City centre shop entrance	1,000	300,000
Large city bank entrance	1,000	250,000
School corridor fire door	600	108,000
Town bank entrance	500	125,000
City centre restaurant entrance	500	150,000
Large office corridor fire door	450	120,000
Large office or factory toilet entrance	400	92,000
Hospital ward door	350	128,000
Medium frequency medium duty situations:		
School classroom door	80	15,000
Office door	75	18,000
Store toilet door	60	18,000
Dwelling rear or side entrance	15	5,400
Dwelling front entrance	12	4,400
Low frequency light duty situations:		
Dwelling living room communications doors	30	10,800
Dwelling bathroom/toilet door	20	7,200
Dwelling cupboard door	12	4,300
Dwelling bedroom door	9	3,200
Dwelling wardrobe/closet door	6	2,200
Dwelling cabinet furniture door	5	1,800

#### Table C

#### MASS RANGES OF TYPICAL DOORS

	Size (mm)	Mass (kg)	Duty
Cupboard, wardrobe, cabinet lou- vered doors and shutters	2040 x 626 x 40	3 to 10	Light
Light internal large wardrobe and large louvered doors	2040 x 926 x 40	10 to 17.5	Light
Medium internal doors	2040 x 1012 x 40	17.5 to 25	Medium
Heavy internal doors	2040 x 1012 x 40	25 to 37.5	Medium
Half hour fire doors	2040 x 826 x 44	25 to 37.5	Heavy
Light external doors	2040 x 907 x 40	20 to 37.5	Heavy
Heavy external doors	2040 x 1002 x 44	37.5 to 55	Heavy
One hour fire doors	2040 x 826 x 54	37.5 to 72.5	Heavy
Oversize or special external doors	2040 x 1200	55 to 110	Heavy

#### **Hinge Calculation**

One of the most important factors when determining the correct hinge is the weight of the door, this can affect the stress on the hinges by adding items of hardware, such as an overhead door closer, giving an effective door weight. To establish door weight per sq. metre use table below

#### Table D

Weight per square meter of door (kg)

	Door Thickness		
Material	34 mm	44 mm	54 mm
Hollow core	9.68	9.68	-
Hollow metal	31.75	31.75	31.75
Pine	14.64	17.00	20.77
Mahogany	21.96	28.00	35.52
Oak	29.28	38.75	46.28

Calculate actual door weight: DOOR HEIGHT x DOOR WIDTH x WEIGHT PER SQ METRE = ACTUAL DOOR WEIGHT

#### Important information, the effects on hinges with the addition of a door closer Actual door weight + Door closer = Effective door weight

#### Table E

Actual door weight	Door closer (non-back check) + 20 %	= Effective door weight
	Door closer (with back check) + 75 %	
	Extra heavy use + 10 %	
	Light use – 10 %	

Doors of excessive width add a twisting and bending pressure to the hinges and also the fixings, the factor by which the door mass is calculated is by dividing the door height by the width, normally giving a factor of 2, when less than 2 the effective door weight must be increased as a percentage, please refer to side loading calculations in the table below:

#### Table F

Door height (mm)	Door width (mm)	Factor	Increase of mass of door leaf %
2000	1000	0	0
2000	1050	1.90	10
2000	1100	1.82	18
2000	1150	1.74	26
2000	1200	1.66	33
2000	1250	1.60	40

Note: For doors over 2100 mm in height, please consult our technical team, a forth hinge is sometimes recommended.

Location of the door and its required function can affect the life time of the hinges: Table E

		Annual Operations
High Frequency –	High risk of misuse – General pub-	100,000 to 1.5 million
Heavy Duty	lic use and door closers fitted	cycles
Medium Frequency	Medium chance of misuse -Desig-	5,000 to 25,000
– Medium Duty	nated public areas	cycles
Low Frequency –	High incentive to care – Private	2,000 to 15,000
Low Duty	dwellings not general public	cycles

#### **Hinge Installation**

#### NUMBER OF HINGES

Normally three hinges are fitted to each door leaf in accordance with BS 4787 part 1. For doors exceeding 2100mm in height a fourth hinge should be used.

#### **HINGE INSTALLATION**

Hinges should be installed in accordance with the door manufacturer's recommendations and instructions. Where no such instructions are available care must be taken to ensure that the hinges are correctly aligned and fixed securely to door and frame. The screw holes should be piloted and screwheads must be flush with the hinge face to ensure that the door closes properly.

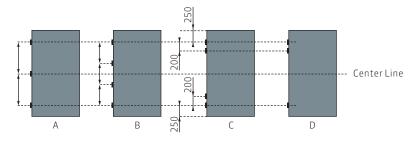
#### **HINGE POSITIONING**

It is usually acceptable to line up the centre hinge with the door handle.

Equally spaced hinges will minimise warping which may occur in environments with extremes of temperature or humidity on either side of the door, Fig.1, a and b.

Unequally spaced hinges Fig.1, c and d, improve load bearing. This is recommended where the hinges are operating near their load bearing maximum or where door closers, particularly back check door closers, are in operation and the door has a high frequency of use.

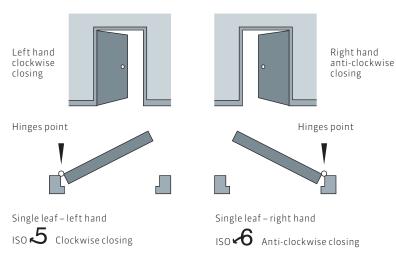
FIGURE 1



#### LIFT-OFF AND RISING/FALLING HINGES

Lift-off, rising and falling hinges are handed and must be specified to operate in either a clockwise closing or an anti-clockwise closing direction. The leaf with the pin in the upwards position must be fitted to the frame. Hinge operation is either clockwise closing or anti-clockwise closing and should be specified using the ISO 5 clockwise closing and ISO 6 anti-clockwise closing convention.

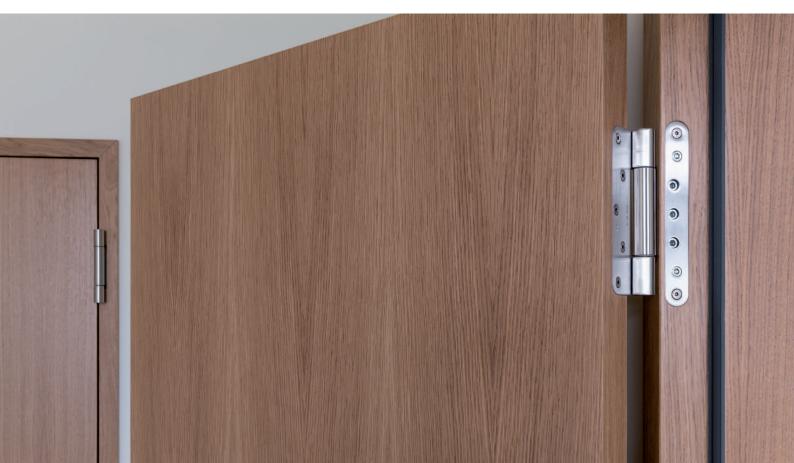
#### FIGURE 2



# SIMONSWERK – THE ORIGINAL HINGE SYSTEMS

SIMONSWERK is a leading manufacturer of heavy-duty, high performance hinge systems, producing premium hinges for over 125 years. As an industry pioneer for adjustable concealed door hinge systems, SIMONSWERK has built an impressive and extensive product offering including a wide range of architectural finishes for high-traffic and heavy-use doors.

With a hinge system for nearly every application, SIMONSWERK constantly strives to meet the demand for innovative design solutions, utilizing functional tools to ensure a simple and smooth installation process. In addition, SIMONSWERK makes every effort to offer an outstanding customer service experience.



## QUALITY AND INNOVATION

The SIMONSWERK brand stands for innovation and high standards of quality and service. These cornerstones date back as far as 1889, with customized solutions leading to the development of new products every year.

SIMONSWERK's quality requirements begin with the products, specifically in the selection of raw materials. Using high-quality materials allows for the largest possible freedom of design, providing diverse options for surface refinement and protection against corrosion.

State-of-the-art resources, including the latest manufacturing techniques and highly flexible automated production processes, make SIMONSWERK a competent partner for all aspects of door hinge technology. To meet the technical, safety and design requirements of modern architecture, SIMONSWERK hinge systems feature precise functioning, often exceeding demands and expectations.

A company's innovative strength is expressed through its competence and its responsibility to its customers in the marketplace. Longevity, top-quality products, and creative thinking give SIMONSWERK the ability to open new markets with new ideas.



## SIMONSWERK – THE COMPANY FACTS

SIMONSWERK, headquartered in Rheda-Wiedenbrück, Germany, is a leading manufacturer of sophisticated hinges and hinge systems for more than 125 years. Today with some 550 employees, SIMONSWERK currently ranks amongst the leading suppliers of hinges and hinge systems in Europe.

With the strategic focus as a full-service provider, SIMONSWERK offers a wide product range of hinges and hinge systems for residential, commercial and entrance doors. For the various designs of doors in timber, steel, aluminum, PVC and glass, over 1,700 models are used in nearly 5,000 versions. All products are invariably "Made in Germany". With this range SIMONSWERK is the absolute market leader in Germany.

At present the company is active in over 70 international markets, 35 of those are served consistently by independent subsidiaries, by representatives or own staff members.



## SERVICE – COMPREHENSIVE EXPERTISE FOR YOUR DAILY WORK

We are happy to provide you with all the documentation you need to calculate which is the most suitable hinge system for your requirements. Please contact us: we would be delighted to work with you to choose the best solution – from high-quality standard sets right up to the most complex solutions.

Please visit our home page for any information not included in this brochure. You will find it easy to navigate through our user-friendly website to arrive at the detailed, comprehensive solutions.

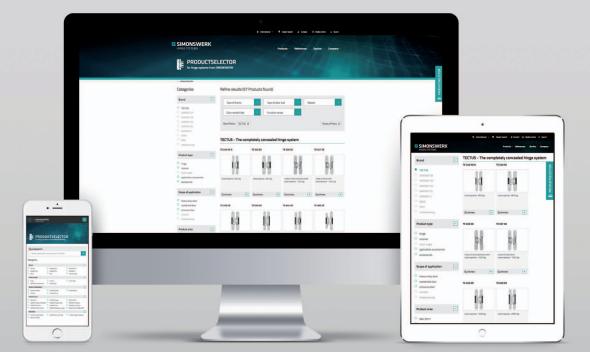
All our brochures and data sheets can be requested in a printed version, or you can simply download them on the spot – and the same applies to our fitting instructions and milling data.

#### www.simonswerk.co.uk

#### VISIT OUR PRODUCTSELECTOR

Whether you are a manufacturer, trade partner or designer, at www.simonswerk.co.uk you can find precise, detailed product descriptions that will help you to choose the most suitable hinge systems.





### NOTES


### NOTES



PLEASE VISIT OUR PRODUCTSELECTOR AT www.simonswerk.co.uk



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