TRITECH CE Ref. 1750 CE

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

TRITECH

Technical details

load capacity	160.0 kg
overall length	100.0 mm
overall width	75.0 mm
knuckle diameter	13.0 mm
material thickness	3.5 mm
screws	10.0 g

Note

High performance concealed bearing brass hinge with 25 year performance guarantee.
Maintenance free.

CE marked versions suitable for use on 1 hour and 1/2 hour fire and escape doorsets - supplied complete with intumescent pads.
Security dog bolt, radius corner and designer finial options available.
Supplied complete with fixing screws if required. Special finishes available upon request.

Product features

- solid brass high performance concealed bearing hinge
- suitable for heavy weight flush doors tested to BS EN 1935 Grade 14
- CE marked 30 & 60 min. fire rated options
- maintenance free, 25 year performance guarantee
- security bolt and radius corner options available

Classification key

4	7	7	1	1	4	0	14

Quality marks

CE

Items (DIN reference: DIN right and left hand)

Finish(es)	ohne
packing unit	à 5 Pair
item number	1750 CE

SIMONSWERK

Performance Guarantee (UK Only)

These hinges are performance guaranteed for 10 or 25 years respectively please refer to distributor for details. The hinges must be fitted correctly in accordance with our fitting instructions. Any replacements will be made through our distributors who will require evidence of purchase date, and may require access to site for inspection purposes.

IMPORTANT INFORMATION

Fixing Instructions

Our hinges are produced to high quality specifications and the performance of these hinges will be affected by the standard of fixing. Bad fixing will reduce the life of our hinges. The following points should be noted:

1. The correct hinges should be used to suit the total adjusted door weight including any hardware, if in doubt contact your distributor or the manufacturer.
2. Use the correct size and gauge of screw and drill pilot holes in exact position.
3. Hinge pins should be in correct alignment with each other.
4. Hinge flaps should be recessed into the door and frame evenly.
5. If the hinge flap is recessed deeper at the top of the flap than the bottom the hinge pin will be subject to pressure, which will cause the hinge to wear rapidly, and may squeeze out the pin.
6. No responsibility will be taken for hinges fitted in a manner that they were not designed for, unless we are informed of the special application before placing the order.
7. 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.

Lubrication

1. Hinges are supplied non – lubricated and should be oiled after fixing and at regular intervals there after at least once every six months or 25,000 cycles.
2. A lubricating oil such as SAE 80 MIN or equivalent is recommended.
3. Regular maintenance and lubrication will enhance the lifetime and performance of hinges.

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 recommend 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 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.

For **UKCA/CE marked hinges** you will find an eight digit coding system on the packaging which is explained briefly below, for further information please refer to your distributor or the manufacturer.

The standard for single axis hinges is as follows:

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

Under this standard the product is tested and classified accordingly to show it's compliance by the identification of an 8 –digit code that is visible on the packaging. Each digit represents a category and how it measured against the standard to which it was tested.

Example of eight digit code:

3	7	4	1*	1	4	0	11

Digit 1 – Category of use
- Grade 1: Light duty.
- Grade 2: Medium duty.
- Grade 3: Heavy duty.
- Grade 4: Severe duty.

Digit 2 – Number of test cycles.
- Grade 3: 10,000 test cycles
- Grade 4: 25,000 test cycles
- Grade 7: 200,000 test cycles

Digit 3 – Test door mass
- Grade 0: 10kg
- Grade 1: 20kg
- Grade 2: 40kg
- Grade 3: 60kg
- Grade 4: 80kg
- Grade 5: 100kg
- Grade 6: 120kg
- Grade 7: 160kg

Digit 4 – Fire Behaviour
- Grade 0: Not Suitable for use on fire resistant and / or smoke control door assemblies
- Grade 1: Suitable 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. (For more specific information regarding suitability for FD30 or FD60 fire resistant door sets please contact your distributor or the manufacturer)

Digit 5 – Safety
- Grade 1: Only grade 1 is identified.

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

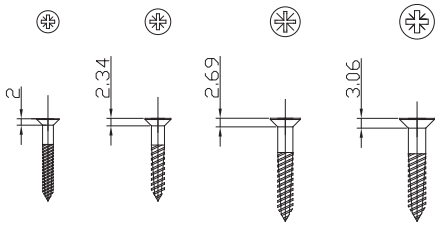
Digit 7 – Security - Burglar-resistance (seventh digit)
- Grade 0: Not suitable for use on burglar –resistant door assemblies;
- Grade 1: Suitable for use on burglar resistant door assemblies.

Digit 8 – Hinge grade
Fourteen grades of hinge are identified in this European Standard as detailed in Table A.

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

Care With Brass Woodscrews



Gauge	4	6	8	10	12
Overall Length (A)	13mm	13mm	25mm	32mm	32mm
Shank Hole size (C)	2.8mm	3.57mm	3.97mm	4.76mm	5.56mm
Depth (B)				6mm	6mm
Pilot Hole Size					
Hardwood (D)	1.98mm	2.38mm	2.78mm	3.17mm	3.57mm
Softwood (D)	1.59mm	1.98mm	2.38mm	2.78mm	3.17mm
Depth (A)	13mm	13mm	25mm	32mm	32mm

Great care must be taken when using brass wood screws, they are not like steel or stainless steel fixing screws and can easily be damaged. It is essential that pilot holes are pre-drilled in the timber door and frame before driving the wood screws into the timber to secure the hinges the wood screws into the timber to secure the hinges

We recommend using a steel or stainless steel wood screw to drive into the timber to pre-cut the thread into the timber after pre-drilling the pilot holes, this will ensure the brass screw heads are not damaged when fitting. Pilot holes should be pre-drilled using the closest size wood drill to the chart above for both the shank and threaded part of the wood screw.

If using powered screw drivers, drills or impact drivers the torque must be adjusted to a low setting and only used up until the final few turns of the screw. To avoid damaging the screw we recommend using a hand held screw driver with the correct Phillips head **PH2**, to finally drive home the woodscrews.

Problems that can occur:-
1 Phillips screw head damage. Reasons, using power tools with a high torque setting.
2 Breaking screw heads completely off . Reasons, using power tools the too high torque setting.
3 Both the above problems will occur if not pre-drilling pilot holes into the timber doors and frames.
4 The density of Hardwood doors and frames will increase the need to pre-cut the thread into the timber to reduce any damage to the brass woodscrews.

It is essential when fitting brass wood screws that this information is given to the contractors fitting the hinges.