

HAWGOOD Swing Door Hinges

DICTATOR HAWGOOD swing door hinges close swing doors fast and trouble-free, and keep them closed. They are therefore particularly suitable for doors in frequent use (eg in public buildings and industry), as the door immediately returns to its closed position and is ready to be opened again by the next person, without him having to wait until the door has swung closed.

DICTATOR HAWGOOD swing door hinges are also used regularly in swing doors or flaps in interior fittings (e.g. cashier stations in supermarkets, small swing doors in counters etc).

When the door opens the door leaf swings away from the frame due to the special design of the hinge "shoe." This means the hinge does not reduce the clear width of the opening and only a small gap remains between the door leaf and frame when the door is closed.

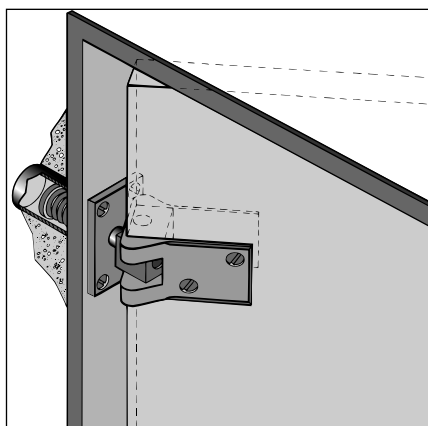
The hinges come in different sizes to fit different doors (thickness of door leaf, weight etc.).



Technical Data

Types of doors	swing doors with 19 to 40 mm thickness
Door weight	up to over 100 kg, depending on hinges
Door width	please refer to tables
Opening angle	max. 100°
Hold-open feature	at 90° of opening (models 41 & 42 also available without)
Models available	4000 E and D, 4500 E and D, 40K, 41K, 41, 42

Installation



At least two hinges are necessary per door. They should be mounted at approx. 60 mm (for 4000 and 4500 models) or 120 mm (for 40K, 41K, 41, 42 models) below the upper edge or above the lower edge of the door leaf.

Firstly drill a **hole for the spring tube** into the frame. Depending on the type of hinge the following dimensions should be used:

4000 and 4500 models: diameter 24 mm, depth of hole approx. 60 mm
 40K, 41K, 41 and 42 models: diameter 38 mm, depth of hole approx. 90 mm

The hole must be situated in the centre of the frame and should be drilled accurately at a 90° angle to the edge.

Now the dimensions of the **fixing plate** should be marked on the frame. Place the pivot of the swing door hinge into the hole and ensure that there is clearance all around the plastic tubes. Otherwise the spring in the plastic tube could not work properly. The plate has to be parallel to the edge of the frame, too. Remove the swing door hinge and prepare the sinking of the mounting plate into the doorframe (thickness of the plate of the types 4000 and 4500: 3 mm, of the types 40K, 41K, 41 and 42: 4 mm), so that the hinge mounting plate is flush with the doorframe. Now the fixing holes are drilled and the plate is screwed to the frame.

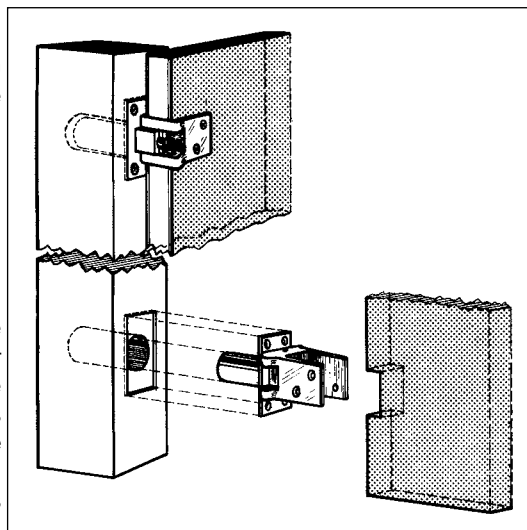
Important: the hinge shoe must be positioned exactly rectangular to the frame to ensure the door closes completely.

Now **fix the shoe to the door leaf**. Move the door leaf against the frame (if necessary place a block of wood underneath to achieve the correct height) and press it against the shoes so that you can mark the exact height where the shoes need to be seated.

Size of the recess:

4000E/4500E	ca. 24 x 14 mm
4000D/4500D	ca. 47 x 14 mm
40K/41K	ca. 60 x 29 mm
41/42	ca. 48 x 29 mm

If the door leaf is thicker than the inner measurement of the shoe (not adjustable), the door leaf must be reduced to the necessary thickness equally on both sides. Now insert the door into the shoes and drill the fixing holes. Make sure the fixing screws are securely screwed in the door.



ATTENTION: if the holes fixing the shoe to the door are not exactly central to the holes in the shoe, the shoe could become slightly distorted and get jammed against the spring.

For doors which **open more than 100°**, an additional **door stopper** or similar must be used.

Maintenance

To achieve optimum performance and a long life we recommend you clean the DICTATOR HAWGOOD swing door hinges regularly and lubricate all moving and rotating parts.



4000 and 4500 HAWGOOD Swing Door Hinges for Doors up to 26 kg and Max. 30 mm Thick

4000 and 4500 swing door hinges are designed for small swing doors and swing flaps (e.g. on shop counters). They differ in the inner (not adjustable) dimension of the shoe. The 4000 model is suitable for a door thickness of 19 (- 24) mm, the 4500 model for 25 (- 30) mm. The spring forces on both models are identical.

Both hinges have a **hold-open feature at 90°** of opening. They are available with either one spring (E) or with two springs (D).

With the help of the table below you can find out which type should be chosen depending on the width, height and weight of the door. On a door leaf you have to use either a pair of type "E" or type "D" hinges.

Survey of Types

There are available different executions of the 4000 and 4500 swing door hinges. For aesthetically demanding solutions you should use the swing door hinge with a **shoe from brass** (brushed or nickel-plated). The version with a **shoe from abrasion-proof plastics** (light grey or black) represents a solution with the same high quality and durability and a very economic one, too. It can even be furnished with a fixing plate of stainless steel, which makes it ideal for humid surroundings or its use outdoors.

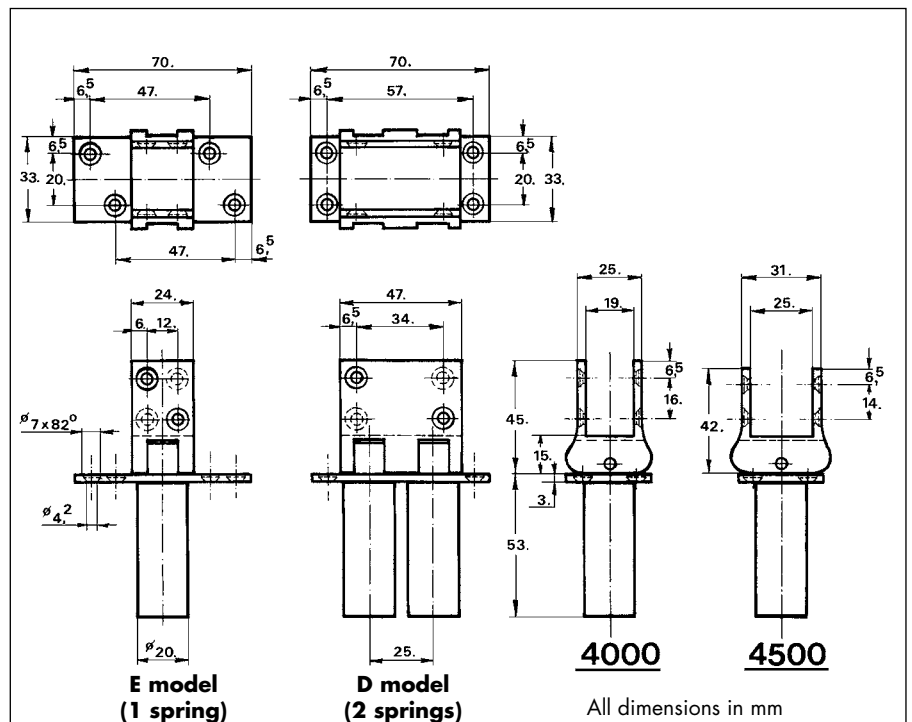
Selecting the Right Model depending on the size and weight of the door

E = 2 x single spring (1 pair)

D = 2 x double spring (1 pair)

	E		D		E		D		E		D	
Width of door	300 mm		400 mm		500 mm		600 mm		700 mm			
Height	Admissible weight of door leaf in kg											
500 mm	9	16	6	11	5	9	4	7	3	5	4	5.4
600 mm	11	20	8	14	6	11	5	9	4	7	4	7
700 mm	12	22	9	16	7	13	6	11	5	9	5	9
800 mm	14	25	11	20	8	14	7	13	6	11	6	11
900 mm	16	26	12	22	10	18	8	14	7	12	7	12
1000 mm	18	26	13	23	11	20	9	16	7	13	7	13
1100 mm	20	26	15	26	12	22	10	18	8	15	8	15
1200 mm	22	26	16	26	13	23	11	20	9	16	9	16
1300 mm	22	26	17	26	14	25	12	22	10	18	10	18
1400 mm	22	26	19	26	15	26	12	22	11	20	11	20
1500 mm	22	26	20	26	16	26	13	23	11	20	11	20
1600 mm	22	26	22	26	17	26	14	25	12	22	12	22
1800 mm	22	26	22	26	19	26	16	26	14	25	14	25
2000 mm	22	26	22	26	21	26	18	26	15	26	15	26

Dimensions: Models with Shoe from Brass





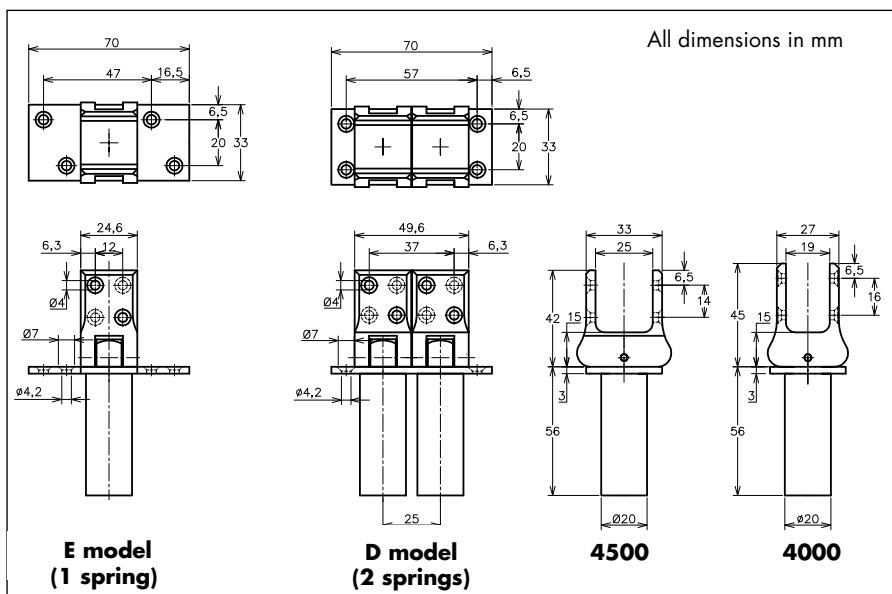
4000 and 4500 HAWGOOD Swing Door Hinges for Doors up to 26 kg and Max. 30 mm Thick - cont.

The dimensions of the swing door hinges with shoe from plastics differ a littlebit from those with shoe from brass. Furthermore, the shoe of the D type is made from two single shoes mounted on a plate.

The plastic shoe, made of a special abrasion-proof material, gives long life.

On request the swing door hinges 4000/4500 are also available with particular mounting plates e.g. for round posts.

Dimensions: Models with Shoe from plastics



Order Information

Swing door hinge	Material	Plate	Part No.
4000E	nickel-plated brass	zinc-plated	300350
4000D	nickel-plated brass	zinc-plated	300359
4000E	brushed brass	zinc-plated	300360
4000D	brushed brass	zinc-plated	300361
4500E	nickel-plated brass	zinc-plated	300362
4500D	nickel-plated brass	zinc-plated	300363
4500E	brushed brass	zinc-plated	300364
4500D	brushed brass	zinc-plated	300365
4000E	light grey plastics	zinc-plated	300350K
4000E	black plastics	zinc-plated	301420
4000D	light grey plastics	zinc-plated	300359K
4000D	black plastics	zinc-plated	301421
4500E	light grey plastics	zinc-plated	300362K
4500D	light grey plastics	zinc-plated	300363K
4000E	light grey plastics	AISI 304	300350KV2A
4000D	light grey plastics	AISI 304	300359KV2A
4500E	light grey plastics	AISI 304	300362KV2A
4500D	light grey plastics	AISI 304	300363KV2A

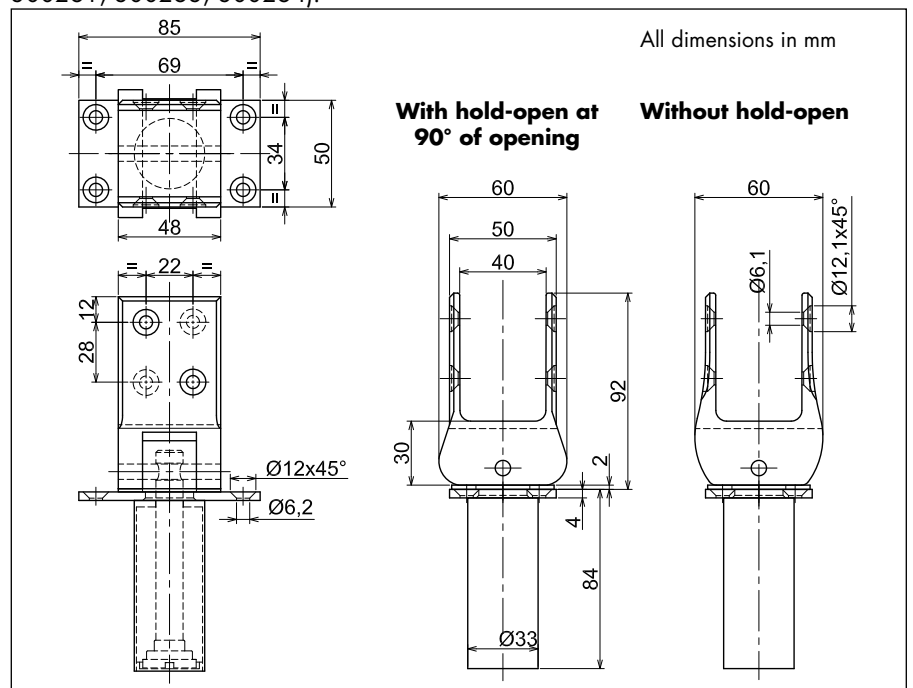


41 and 42 HAWGOOD Swing Door Hinges for Doors up to 60 kg, 40 mm Thick, Max. 1 m Wide

41 and 42 swing door hinges are designed for larger swing doors. Please see the formula shown below for information on possible door dimensions and weight. If your door is heavier or larger than the formula allows, please seek our advice. Models 41 and 42 only differ in their spring force. The spring in 42 is covered by a white plastic tube and the spring in 41 by a black plastic tube. When combining both models on a door, model 42 must always be placed at the top.

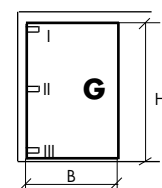
41 and 42 swing door hinges are available either with or without the hold-open feature at 90° of opening. The shoe is made of stainless steel and the fixing plate is either zinc-plated or stainless steel (recommended for use in areas containing food). The hinges are also available in yellow pearl finish, fixing plate zinc-plated yellow (part no. 300260, 300261, 300263, 300264).

Dimensions



Selecting the Right Model

The number of hinges and the model required (41 and/or 42) can be determined with the formula shown on the right. Up to 4 hinges can be fitted to one door (see table). Please make sure that model 42 is always mounted at the top. Furthermore the upper hinge should be placed as high as possible.



G = Door weight in kg
H = Door height in mm
B = Door width in mm

$$K = \frac{G \times 1/2B}{H}$$

K = Key for determining the hinges required

K	I	II	III
- 8	1x41		1x41
8 - 16	1x42		1x41
16 - 20	1x42		1x42
20 - 30	1x42+ 1x41		1x42
30 - 50	2x42	1x41	1x42

Order Information

41 hinge, stainless steel shoe, zinc-plated plate, without hold-open	part no. 300440
41 hinge, stainless steel shoe, zinc-plated plate, with hold-open	part no. 300441
41 hinge, completely AISI 304, without hold-open	part no. 300442
41 hinge, completely AISI 304, with hold-open	part no. 300443
42 hinge, stainless steel shoe, zinc-plated plate, without hold-open	part no. 300444
42 hinge, stainless steel shoe, zinc-plated plate, with hold-open	part no. 300445
42 hinge, completely AISI 304, without hold-open	part no. 300446
42 hinge, completely AISI 304, with hold-open	part no. 300447

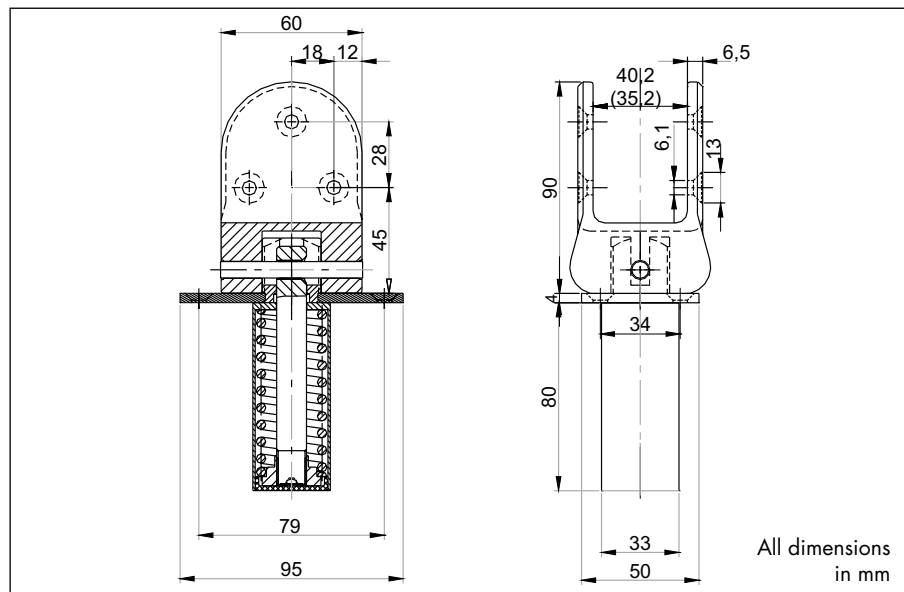


40K and 41K HAWGOOD Swing Door Hinges, Plastic Shoe, for Doors up to 50 kg and 35/40 mm Thick

The swing door hinges type 40K and 41K are intended for doors of up to 50 kg and are available for doors being thick 35 mm and 40 mm. The series 40K/41K stands out due to their very favourable price. The abrasion-proof plastic material easily resists even heavy duty. The types 40K and 41K have a different spring force (the colour of the plastic cover of the spring indicates the type: 40K = grey, 41K = black). The fixing plate is available in zinc-plated steel or in AISI 304 stainless steel. The series 40K and 41K are always produced with a **hold-open at 90°**.

The form of the plastic shoes has been designed in order to allow relieving their contours in the door with ordinary frasers.

Dimensions



Dimensions and Weights of the Doors

Thickness:	35 or 40 mm
Height	up to ca. 2000 mm
Width	up to ca. 1000 mm
Weight	up to ca. 50 kg

$$K = \frac{G \times 1/2 B}{H}$$

K = factor for choosing the type
 G = weight of door in kg
 H = height of door in mm
 B = width of door in mm

K	I	III	weight (kg)
< 4	1x40K	1x40K	< 20
4 - 6	1x41K	1x40K	20 - 30
6 - 10	1x41K	1x41K	30 - 50

Order Information

	Part no.
40K swing door hinge, 40 mm shoe, light grey, zinc-plated plate	301400
40K swing door hinge, 40 mm shoe, black, zinc-plated plate	301401
41K swing door hinge, 40 mm shoe, light grey, zinc-plated plate	301410
41K swing door hinge, 40 mm shoe, black, zinc-plated plate	301411
40K swing door hinge, 40 mm shoe, light grey, AISI 304 plate	301400V2A
40K swing door hinge, 40 mm shoe, black, AISI 304 plate	301401V2A
41K swing door hinge, 40 mm shoe, light grey, AISI 304 plate	301410V2A
41K swing door hinge, 40 mm shoe, black, AISI 304 plate	301411V2A
40K swing door hinge, 35 mm shoe, light grey, zinc-plated plate	VAR-301400-001
40K swing door hinge, 35 mm shoe, black, zinc-plated plate	VAR-301401-001
41K swing door hinge, 35 mm shoe, light grey, zinc-plated plate	VAR-301410-001
41K swing door hinge, 35 mm shoe, black, zinc-plated plate	VAR-301411-001

The delivery includes special threaded inserts which ensure a safe and stable fixing also on not massive doors.