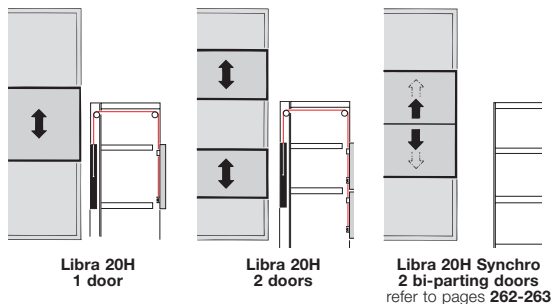


HAWA-LIBRA 20 H VERTICALLY SLIDING DOOR SYSTEM

For 1 or 2 vertically sliding doors, inset or overlay, with counterweight system. For top quality joinery work.

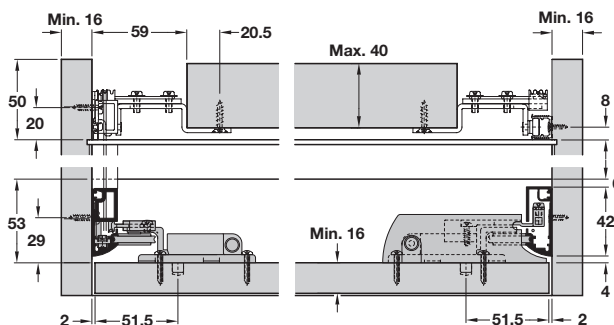
- > HAWA-LIBRA 20 H Inslide / Forslide
- > Range:
 - Max. door panel weight **20 kg**
 - Min. door thickness **16 mm**
 - Max. panel height **1000 mm**
 - Max. panel width **1600 mm**
- > Refer below for method of calculating size and weight of counterweight



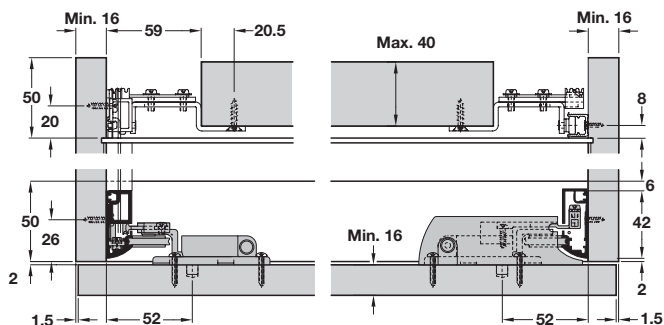
Tracks and cover profiles must be ordered separately, shown on page 1.83



HAWA-LIBRA 20 H Inslide installation



HAWA-LIBRA 20 H Forslide installation



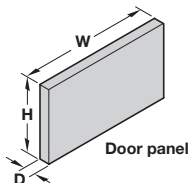
- > To calculate counterweight size and weight:
- > Counterweight width =
- > Internal carcass width - 118 mm
- > To determine counterweight height use **Table A** and the calculations shown right - based on total weight of door panel

Table A - To calculate M - panel density (kg/m²) based on panel material and thickness D (mm)

D (mm)	M (kg/m ²)	
Panel thickness	Chipboard	MDF
16	11.0	12.8
19	13.0	15.1
22	14.5	17.4
25	16.5	19.7
30	18.4	22.5
35	-	26.0
40	24.5	29.7

1. Calculate door panel weight:

Use table A to calculate measurement M of door panel used then follow the calculations below to determine total door panel weight:



$$W \text{ m} \times H \text{ m} \times M \text{ kg/m}^2 = \text{kg}$$

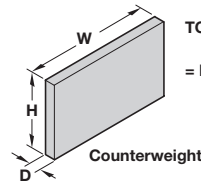
Fitting set 0.050 kg

Optional handle kg

TOTAL door panel weight kg

2. Calculate counterweight height:

Using TOTAL door panel weight determined from above, calculate counterweight height:

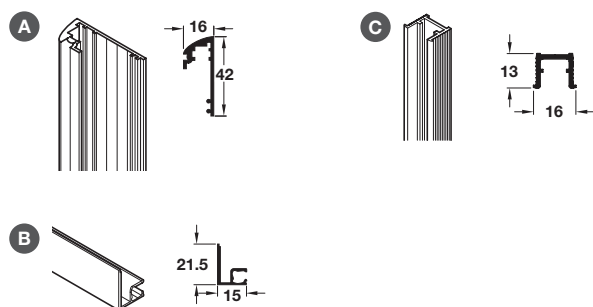


$$\text{TOTAL kg divided by } M \text{ kg/m}^2 \text{ divided by } W^{**} \text{ m} = H \text{ m}$$

**Counterweight width W = Internal carcass width - 118 mm

Please note: These calculations assume the same type and thickness of timber is used for both door panel and counterweight

HAWA Libra 20H Vertical tracks and profiles



> Order tracks and profiles separately

A Front track, surface mounted, with screw holes for front side fixing, anodised aluminium

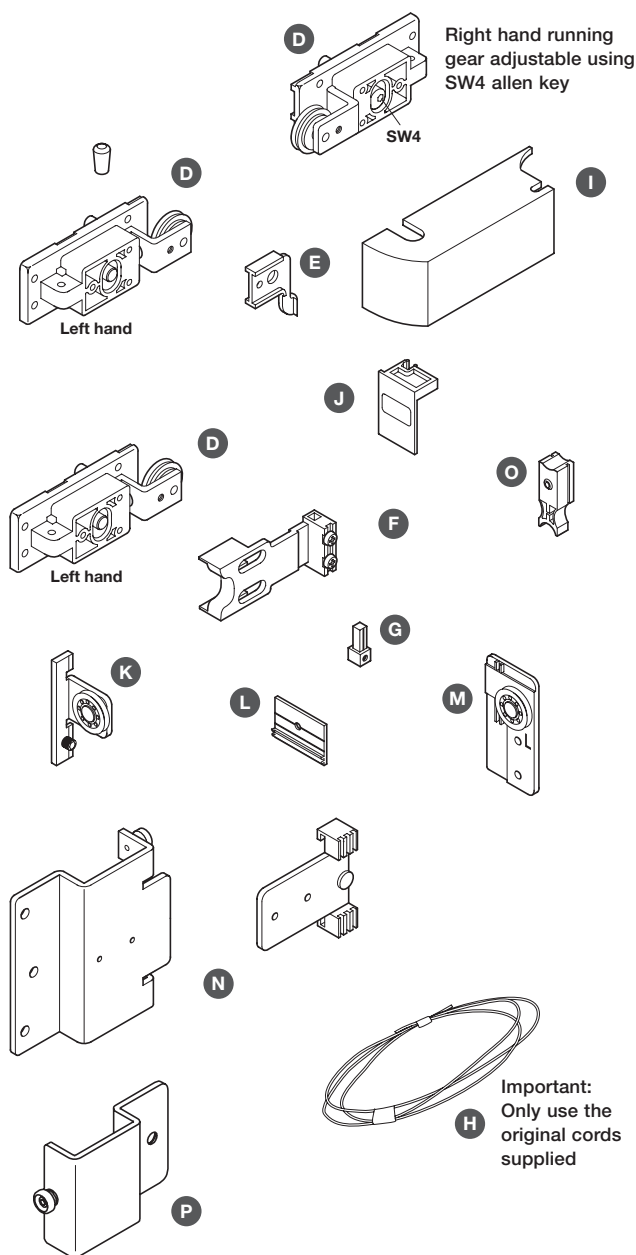
B Cover profile, clips on to front track and over brackets K, anodised aluminium

C Rear track, pre-drilled for screw mounting, bright aluminium

> Order qty: 1 pc (1 pc = 2.5 or 3.5 m length)

Item	2.5 m	3.5 m
A Front track	403.21.925	-
B Cover profile	403.22.925	-
C Rear track	405.30.025	405.30.035

HAWA Libra 20H Vertical fitting sets



> Fitting set consists of:

D Running gear, used at top and bottom of unit, left hand with retaining spring, right hand adjustable using SW4 allen key, plug in and screw fix to door panel, with black rubber door buffer and plastic roller with metal axle, anthracite grey plastic

E Top bracket, screw fixes to top running gear and guides cord, silver chromatised steel

F Bottom bracket, screw fixes to bottom running gear and guides cord, silver chromatised steel

G Locking pin, secures cord to bottom bracket, steel

H Cord, blue kevlar

I Running gear covers, clip on, anthracite grey plastic

J Cover plates, clip on, anthracite grey plastic

K Cord front guides, slots into track A, secured using SW3 allen key, yellow chromatised steel, plastic

L Cord guide bracket, screw fix to cabinet side wall, guides cord from front to rear, silver chromatised steel

M Cord rear guides screw fixing, side mounted at rear of cabinet, silver chromatised steel, plastic

N Counterweight guide; silver chromatised steel bracket for screw fixing to counterweight and anthracite grey plastic bracket for securing cord, slot on and screw fix to steel bracket

O Rear track buffer, anthracite grey plastic

> Order qty: 1 set

> Additional fittings, order separately

P Additional guide roller, silver chromatised steel, for use when counterweight is higher than 500 mm, i.e. internal cabinet width higher than 618 mm

Item	For 1 door	For 2 doors
D Running gear	2 pairs	4 pairs
E Top bracket	2 pcs	4 pcs
F Bottom bracket	2 pcs	4 pcs
G Locking pin	2 pcs	4 pcs
H Cord	2 pcs	4 pcs
I Running gear covers	2 pairs	4 pairs
J Cover plates	2 pairs	2 pairs
K Cord front guides	1 pair	1 pair
L Cord guide bracket	4 pcs	4 pcs
M Cord rear guides	1 pair	1 pair
N Counterweight guide	2 pcs	4 pcs
O Rear track buffer	4 pcs	4 pcs
Cat. No.	403.20.001	403.20.002
Additional items	Order qty.	Cat. No.
P Additional guide roller	1 pc	403.23.900



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