

Kinvaro F-20

Top performance for flap fittings.



The Kinvaro F-20 folding flap fitting moves flaps smoothly and safely – and really comes into its own on handle-free cabinet fronts.

When a folding flap is opened, the spring-assisted function guarantees smooth movement and holds both flaps securely in any position. The opening angle can be selected and set individually by the user with a stopper function. Even heavy flaps made of MDF or glass can be closed extremely gently and silently with the Kinvaro F-20, thanks to its integrated, adjustable damping mechanism.

A special connecting hinge with reveal adjustment controls the synchronous movement of the two flaps arranged one above the other.

In addition, an integrated finger protection guarantees safe closing for tall or short kitchen users.

The design of the Kinvaro F-20, including its attractively shaped cover cap available in different colours, is co-ordinated to match all other models in the product family, and blends in elegantly with all modern interiors.

Hinges for use in combination with the Kinvaro F-20 can be found in the Grass Hinge Catalogue



Example:
Nexis Click-on 22



Example:
Nexis Click-on 17AL

Drilling jigs for Kinvaro F-20 on request.

All product benefits at a glance

- Extremely smooth movement
- Also for use with handle-free furniture fronts
- Even heavy flaps easy to open and close thanks to spring-assisted opening function and integrated, adjustable damping for closing action
- Holds flap securely in any position
- Opening limiter adjustable to up to 90°
- Designed for different cabinet fronts
- Wide range of applications for extremely diverse cabinet materials and flap weights, e.g. wood, glass, MDF with narrow or wide aluminium or wood frames
- Simple flap installation without tools and extremely easy adjustment of entire flap element
- Pre-fitted Euro screws for fastening the fitting to the side wall
- For use with two cabinet shelves with a cabinet height of 65 cm or more and with the shelves evenly spaced

Application range

Flap weight from 3.8 kg to 19.2 kg

Flap size: width 400 mm - 1200 mm, height 2 x 260 mm - 2 x 400 mm

Fitting installation on one side

For cabinet dimensions of more than 600 mm in width, the fitting has to be used on both sides.

For cabinet dimensions of up to 600 mm in width, the fitting can be used on one side only. In this case, the possible flap weights specified in the following table must be halved.

Cabinet height mm	Guide level type	Flap weight incl. handle ^o in kg		
		Spring B	Spring C	Spring D
520 – 559	Type 2	4.6 – 13.8 ⁽¹⁾	-	-
560 – 599	Type 3	4.4 – 12.6	7.0 – 14.7 ⁽¹⁾	-
600 – 649	Type 4	4.1 – 12.1	6.8 – 15.8 ⁽¹⁾	-
650 – 699	Type 5	3.8 – 11.4	6.7 – 16.9 ⁽¹⁾	-
700 – 749	Type 6	-	6.5 – 16.4	10.0 – 18.0
750 – 800	Type 7	-	6.0 – 15.6	8.6 – 19.2

Calculation of flap weight (all measurements in dm)

Flap width x flap height x flap thickness x density⁽²⁾ + handle weight⁽³⁾ = flap weight

Example: 6 dm x 4 dm x 0.19 dm x 0.85 + 0.9 kg/dm³ = 4.8 kg

Calculation of flap width (all measurements in dm)

$$\frac{\text{Flap weight} - \text{handle weight}^{(3)}}{\text{Flap height} \times \text{flap thickness} \times \text{density}^{(2)}} = \text{Flap width} \quad \text{Example: } \frac{4.8 - 0.9}{4 \times 0.19 \times 0.85} = 6.0 \text{ dm (600 mm)}$$

⁽¹⁾ This value corresponds to the maximum flap weight with a 1200 mm cabinet width and bar handle in 22 mm thick MDF material (0.85 kg/dm³).

⁽²⁾ Density: pine/spruce = 0.45 kg/dm³, chipboard = 0.65 kg/dm³, MDF = 0.85 kg/dm³

⁽³⁾ Bar handles must be calculated with 0.1 kg per 100 mm handle width when calculating the flap weight. Other weights are possible. When using higher weights, please consult the manufacturer. We recommend performing a trial mounting before series application.

Ordering information for set packaging

Kinvaro F-20 is available in industrial or set packaging.

Folding flap fitting Kinvaro F-20 set packaging

Guide level type	Spring	Item No.
Type 2	B	D2876007125
Type 3	B	D2876012125
Type 3	C	D2876013125
Type 4	B	D2876017125
Type 4	C	D2876018125
Type 5	B	D2876022125
Type 5	C	D2876023125
Type 6	C	D2876028125
Type 6	D	D2876030125
Type 7	C	D2876033125
Type 7	D	D2876035125
PU/packaging unit		PU 1

PU 1 = 1 set per carton consisting of: 1 fitting right and left, 2 fixing brackets for wood incl. cover caps,

1 cover cap right sided and 1 left sided in grey RAL 7040, 2 connecting hinges, 1 mounting instruction

Aluminium frame adapter Kinvaro F-20 set packaging

	Item No.
Aluminium frame adapter for small aluminium frames (19 mm) / overlay 13-17 mm	D2879013000
PU/packaging unit	PU 1

PU 1 = 1 set / 1 set consisting of: 2 aluminium frame adapters, 8 fixing screws, 1 mounting instruction

All dimensions in millimetres.

Kinvaro F-20

Folding flap fitting.

Ordering information for industrial packaging

The Kinvaro F-20 is available in industrial or set packaging.

Folding flap fitting Kinvaro F-20 industrial packaging

	Guide level type	Spring	Item No.
Kinvaro F-20 left	Type 2	B	D2877013125
Kinvaro F-20 right	Type 2	B	D2877014125
Kinvaro F-20 left	Type 3	B	D2877023125
Kinvaro F-20 right	Type 3	B	D2877024125
Kinvaro F-20 left	Type 3	C	D2877025125
Kinvaro F-20 right	Type 3	C	D2877026125
Kinvaro F-20 left	Type 4	B	D2877033125
Kinvaro F-20 right	Type 4	B	D2877034125
Kinvaro F-20 left	Type 4	C	D2877035125
Kinvaro F-20 right	Type 4	C	D2877036125
Kinvaro F-20 left	Type 5	B	D2877043125
Kinvaro F-20 right	Type 5	B	D2877044125
Kinvaro F-20 left	Type 5	C	D2877045125
Kinvaro F-20 right	Type 5	C	D2877046125
Kinvaro F-20 left	Type 6	C	D2877055125
Kinvaro F-20 right	Type 6	C	D2877056125
Kinvaro F-20 left	Type 6	D	D2877059125
Kinvaro F-20 right	Type 6	D	D2877060125
Kinvaro F-20 left	Type 7	C	D2877065125
Kinvaro F-20 right	Type 7	C	D2877066125
Kinvaro F-20 left	Type 7	D	D2877069125
Kinvaro F-20 right	Type 7	D	D2877070125
PU/packaging unit			PU 10

PU 10 = 1 carton with 10 fittings right or left, 1 mounting instruction, 10 adjustment instructions

Connecting hinges Kinvaro F-20 industrial packaging

	Colour	Item No.
Connecting hinges	nickel plated	D2859025125
PU/packaging unit		PU 20

PU 20 = 1 carton with 20 connecting hinges

Cover caps Kinvaro F-20 industrial packaging

	Colour	Item No.
Cover cap left	grey RAL 7040	D2879001907
Cover cap right	grey RAL 7040	D2879002907
Cover cap left	white	D2879001962
Cover cap right	white	D2879002962
Cover cap left	alu coloured RAL 9006	D2879001997
Cover cap right	alu coloured RAL 9006	D2879002997
PU/packaging unit		PU 10

PU 10 = 1 carton with 10 cover caps right or left

Other colours on request.

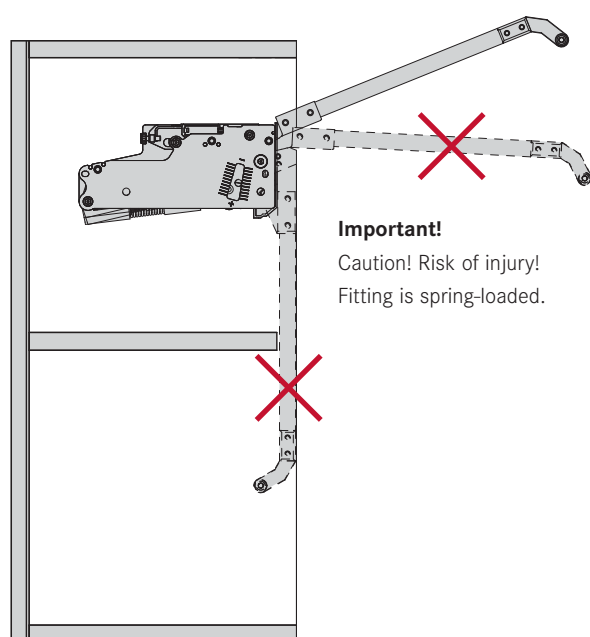
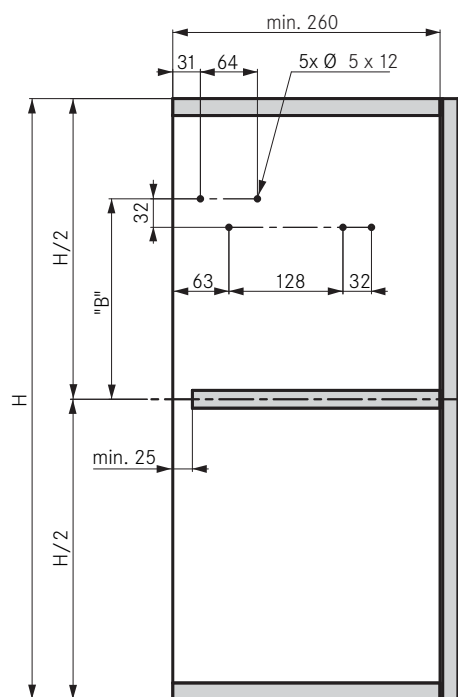
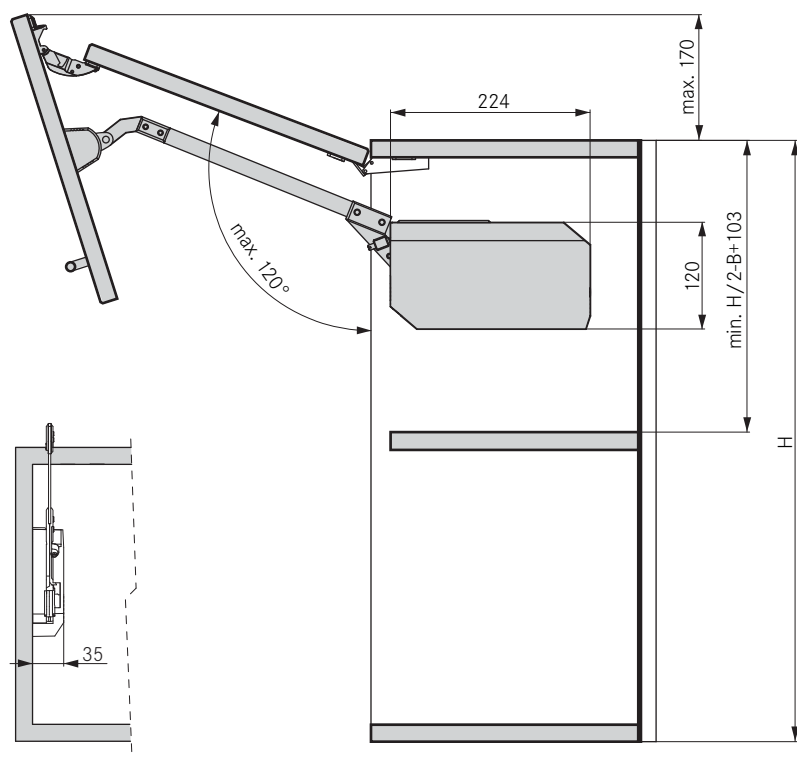
Fixing brackets Kinvaro F-20 industrial packaging

	Item No.
Standard fixing bracket	D2879011000
Fixing bracket with aluminium frame adapter / overlay 13 - 17 mm	D2879014000
PU/packaging unit	PU 10

PU 10 = 1 carton with 10 fixing brackets right or left

Mounting and installation information

Left cabinet side (right cabinet side mirror image)



Important!
Caution! Risk of injury!
Fitting is spring-loaded.

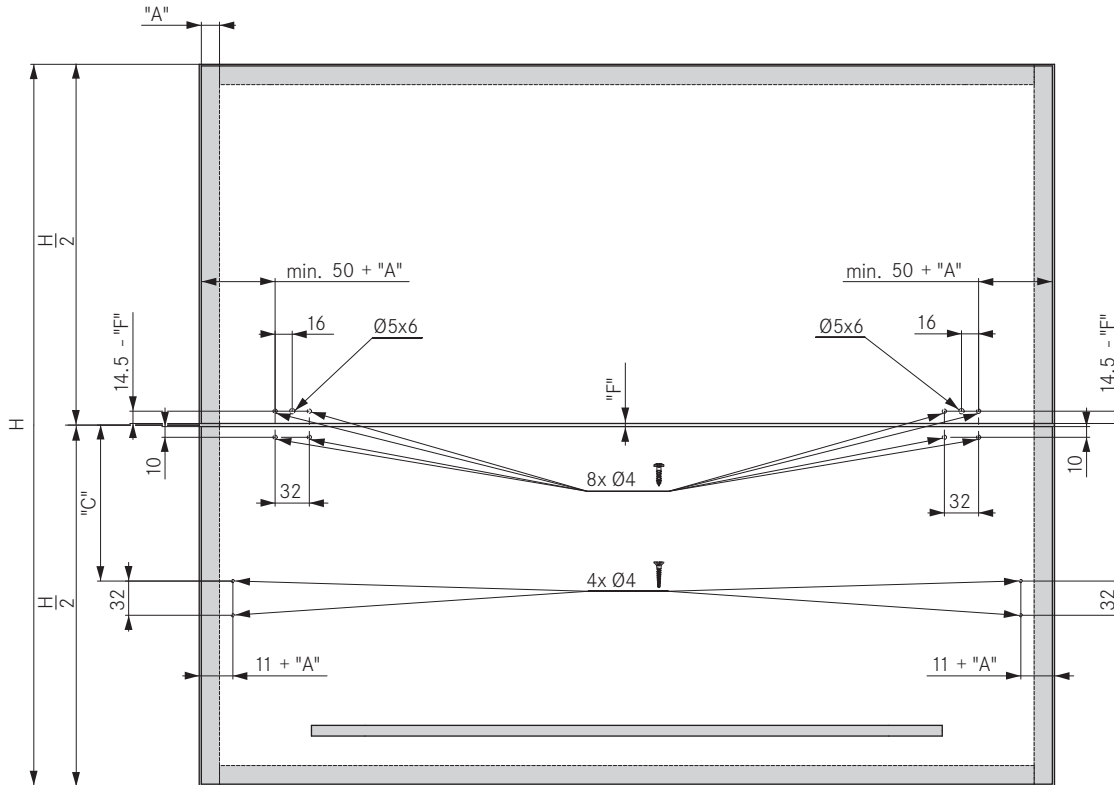
H (height)	Kinvaro F-20	"B"
520 - 529	2	173
530 - 539	2	158
540 - 549	2	143
550 - 559	2	128
560 - 569	3	183
570 - 579	3	168
580 - 589	3	153
590 - 599	3	138
600 - 609	4	208
610 - 619	4	198
620 - 629	4	178
630 - 639	4	168
640 - 649	4	158
650 - 699	5	225
700 - 749	6	235
750 - 800	7	250

Kinvaro F-20

Folding flap fitting.

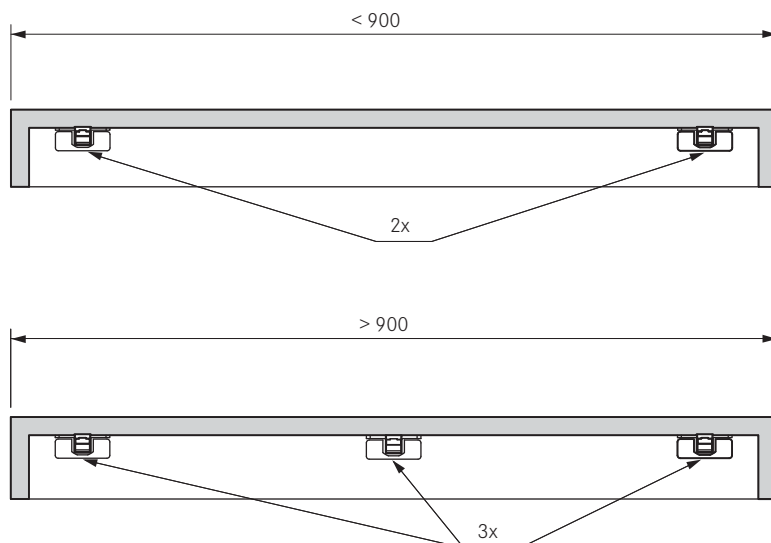
Mounting positions for wooden flaps and frame flaps (min. 45 mm width)

Flap inside



A = 13 - 17 mm

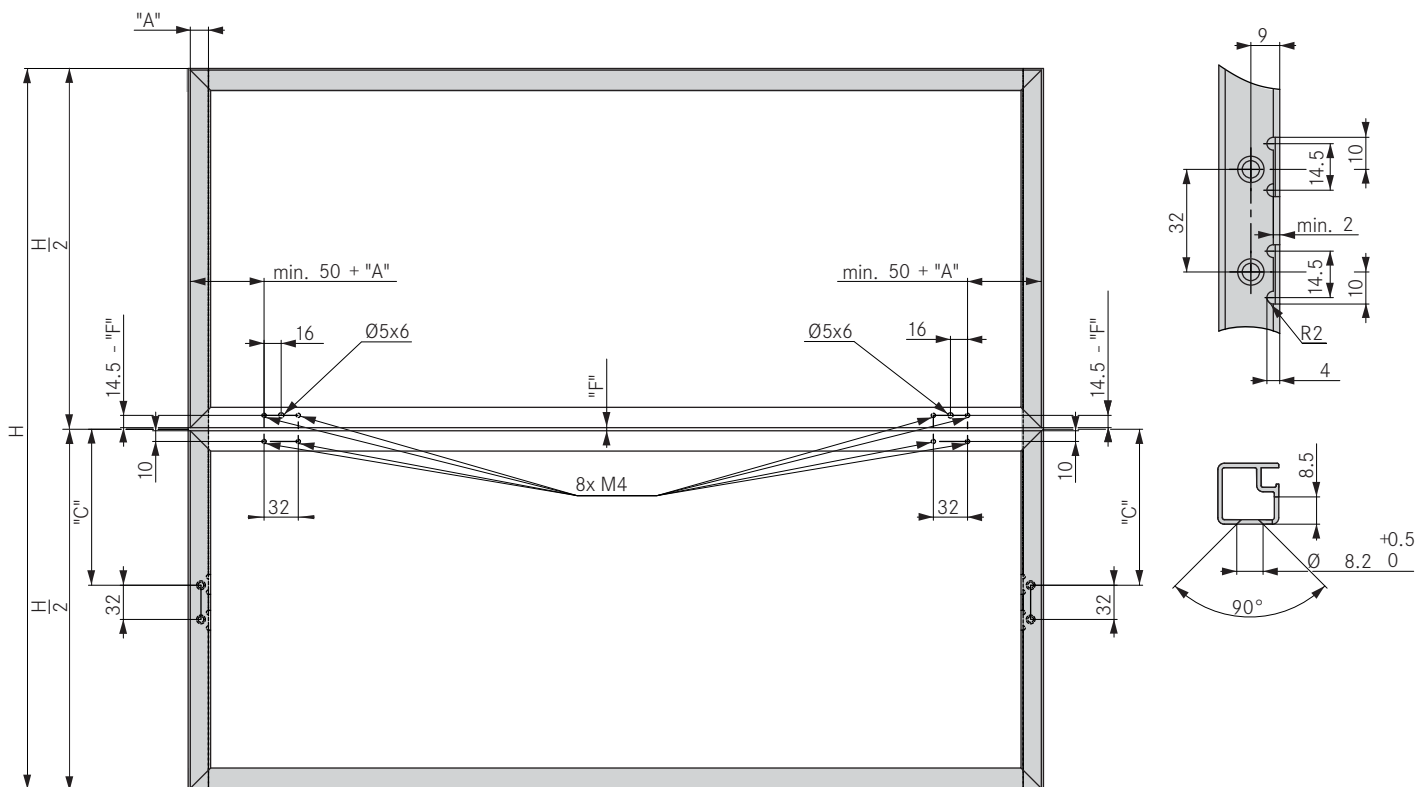
The reveal (F) can be between 2 mm and 5 mm.



H (height)	Kinvaro F-20	"C"
520 - 529	2	133
530 - 539	2	148
540 - 549	2	163
550 - 559	2	178
560 - 569	3	145
570 - 579	3	160
580 - 589	3	175
590 - 599	3	190
600 - 609	4	138
610 - 619	4	148
620 - 629	4	168
630 - 639	4	178
640 - 649	4	188
650 - 699	5	146
700 - 749	6	156
750 - 800	7	166

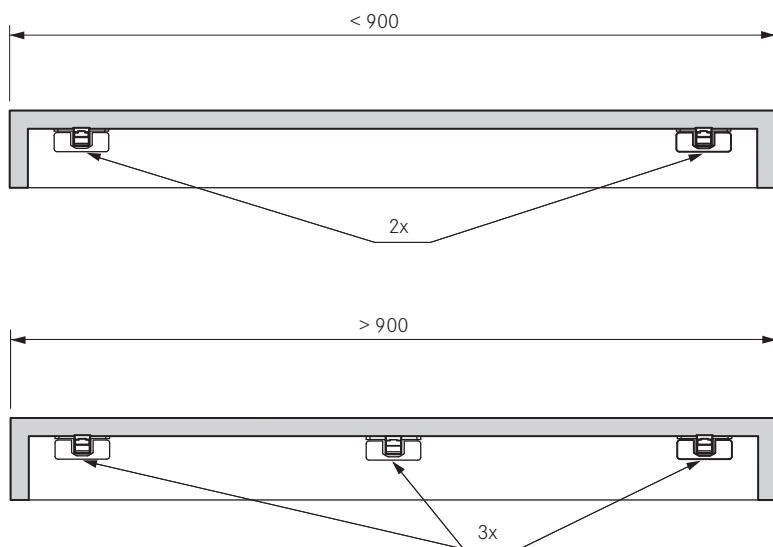
Mounting positions for standard aluminium frame profiles (19 mm)

Flap inside



A = 13 - 17

The reveal (F) can be between 2 mm and 5 mm.



H (height)	Kinvaro F-20	"C"
520 - 529	2	133
530 - 539	2	148
540 - 549	2	163
550 - 559	2	178
560 - 569	3	145
570 - 579	3	160
580 - 589	3	175
590 - 599	3	190
600 - 609	4	138
610 - 619	4	148
620 - 629	4	168
630 - 639	4	178
640 - 649	4	188
650 - 699	5	146
700 - 749	6	156
750 - 800	7	166

All dimensions in millimetres.