



**G\*GRASS®**

## KINVARO FLAP SYSTEMS

Modern design, innovative technology and functional operating comfort for wall cabinets.





Easy opening, effortless access to cabinet contents and gentle, silent closure - these are the special features of Kinvaro flap systems.





## KINVARO FLAP SYSTEMS

**Whether high-gloss, wood or aluminium frames - the Kinvaro flap systems not only look good, they also provide limitless design freedom.**

And the inner values are irresistible too: a gentle tap or pull is all it takes to set the flaps gently in motion. They seem to glide upwards almost weightlessly. The closing operation is also particularly comfortable. With Soft-close, the integrated damping system, each movement becomes an experience. Soft-close gently slows the movement of the front and pulls it to the fully closed position. It is no surprise therefore, that Soft-close has become the benchmark.



Comfort in four dimensions.  
Folding. Up-and-over. Parallel lifting. Top-hung lifting.  
Kinvaro provides the perfect movement solution for  
every application.

**KINVARO F**  
FOLDING FLAP SYSTEM

The two-part front folds upwards to provide optimal access to the entire storage space. The particularly smooth movement sequence is enhanced by the integrated, adjustable Soft-close damping.



## KINVARO FLAP SYSTEMS

Whichever flap you open – Kinvaro flap systems ensure perfect access and maximum freedom of movement.

With all the space available at the top of cabinets, the only limit is personal choice. The GRASS Kinvaro series redefines the principle of the classic wall cabinet. Wall cabinets continue to rank among the most favoured storage solutions for kitchens. And they are destined to remain so, thanks to our extremely functional and comfortable flap systems. Stable and reliable movement systems, easy and silent in application, ergonomically well designed and comfortable to operate – these are the special ingredients for modern storage concepts. Kinvaro flap systems represent the perfect synthesis of innovative design ambition and functional movement in the spirit of modern furniture culture.



**KINVARO L**  
PARALLEL LIFT FLAP SYSTEM

The single front opens in parallel with the cabinet and remains fixed in any position. Parallel lift flap systems are very elegant in their movement, extremely stable and particularly well suited to cabinets with kitchen equipment.



**KINVARO S**  
UP-AND-OVER FLAP SYSTEM

The single front lifts up above the cabinet at an angle and remains fixed in any position. Up-and-over flap systems are extremely stable and particularly well suited to cabinets with cornices, pelmets and attached lights.



**KINVARO T**  
LIFT-UP FLAP SYSTEMS

The single front opens up comfortably with a gentle lift movement. The particularly elegant movement sequence is enhanced by the integrated, adjustable Soft-close damping. Ideal for light to medium-weight fronts.



#### KINVARO FLAP SYSTEMS

A pleasure to watch.  
Flap systems for an  
elegant style.

QUALITY CERTIFICATE  
**LGAD**

Opening a folding flap system is something special as the fronts glide weightlessly upwards, gently supported by a function spring throughout the entire movement sequence. This finely controlled power assistance provides a very smooth movement and holds the flaps securely in any position.


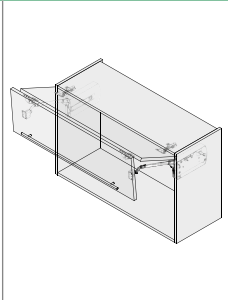

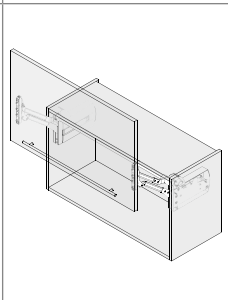

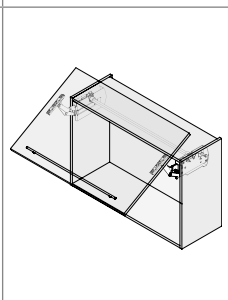

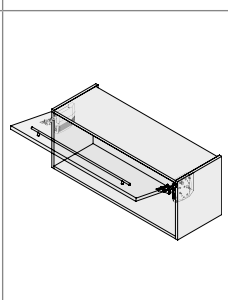

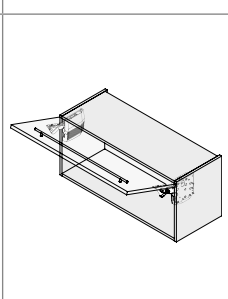

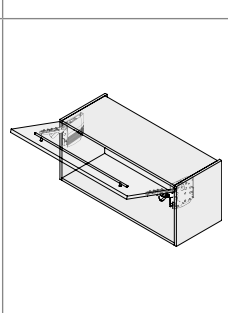


# KINVARO FLAP SYSTEMS


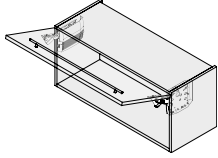

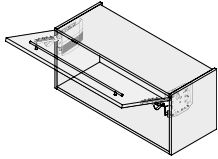

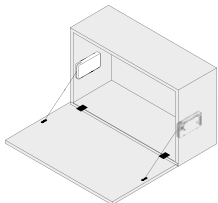

Exclusive flap systems for top requirements in design, technology and operating comfort

| Product designation  | Page |
|--|------|
| Kinvaro F-20 folding flap fitting                          | 10   |
| Kinvaro L-80 parallel lift flap fitting                    | 14   |
| Kinvaro S-35 up-and-over flap fitting                      | 16   |
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| Kinvaro T-70 lift-up flap fitting                          | 20   |
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| Kinvaro T-75 lift-up flap fitting                          | 24   |
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# KINVARO FLAP SYSTEMS

|   | Product description   |   | Page |
|---|---|---|------|
|    | <p><b>Kinvaro F-20 folding flap fitting</b></p> <ul style="list-style-type: none"> <li>• Holds flap securely in any position</li> <li>• Extremely smooth movement</li> <li>• Adjustable spring force</li> <li>• Integrated adjustable closing damper</li> </ul>   |    | 10   |
|    | <p><b>Kinvaro L-80 parallel lift flap fitting</b></p> <ul style="list-style-type: none"> <li>• Holds flap securely in any position</li> <li>• Extremely smooth movement</li> <li>• Adjustable spring force</li> <li>• Integrated adjustable closing damper</li> <li>• Allows the use of cornices, pelmets and attached lights</li> </ul>  |    | 14   |
|   | <p><b>Kinvaro S-35 up-and-over flap fitting</b></p> <ul style="list-style-type: none"> <li>• Securely holds flap in any position from 45° opening angle</li> <li>• Extremely smooth movement</li> <li>• Adjustable spring force</li> <li>• Integrated adjustable closing damper</li> <li>• Allows the use of cornices, pelmets and attached lights</li> </ul>   |   | 16   |
|  | <p><b>Kinvaro T-65 lift-up flap fitting</b></p> <ul style="list-style-type: none"> <li>• Variable opening angle - holds flap securely at any angle between 45° and 100°</li> <li>• Extremely comfortable opening thanks to spring-supported opening mechanism</li> <li>• Adjustable spring force</li> <li>• Integrated adjustable closing damper</li> <li>• Allows additional cabinet installation above</li> </ul> |  | 18   |
|  | <p><b>Kinvaro T-70 lift-up flap fitting</b></p> <ul style="list-style-type: none"> <li>• Variable opening angle - holds flap securely at any angle between 45° and 100°</li> <li>• Extremely comfortable opening thanks to spring-supported opening mechanism</li> <li>• Adjustable spring force</li> <li>• Integrated adjustable closing damper</li> <li>• Allows additional cabinet installation above</li> </ul> |  | 20   |
|  | <p><b>Kinvaro T-71 lift-up flap fitting</b></p> <ul style="list-style-type: none"> <li>• Variable opening angle - holds flap securely at any angle between 45° and 110°</li> <li>• Extremely comfortable opening thanks to spring-supported opening mechanism</li> <li>• Adjustable spring force</li> <li>• Integrated adjustable closing damper</li> <li>• Allows additional cabinet installation above</li> </ul> |  | 22   |



|   | Product description   |   | Page |
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|    | <p><b>Kinvaro T-75 lift-up flap fitting</b></p> <ul style="list-style-type: none"> <li>• Variable opening angle - holds flap securely at any angle between 45° and 110°</li> <li>• Extremely comfortable opening thanks to spring-supported opening mechanism</li> <li>• Adjustable spring force</li> <li>• Integrated adjustable closing damper</li> <li>• Allows additional cabinet installation above</li> </ul> |    | 24   |
|    | <p><b>Kinvaro T-76 lift-up flap fitting</b></p> <ul style="list-style-type: none"> <li>• Variable opening angle - holds flap securely at any angle between 45° and 110°</li> <li>• Extremely comfortable opening thanks to spring-supported opening mechanism</li> <li>• Adjustable spring force</li> <li>• Integrated adjustable closing damper</li> <li>• Allows additional cabinet installation above</li> </ul> |    | 26   |
|   | <p><b>Kinvaro T-57 lift-up flap fitting</b></p> <ul style="list-style-type: none"> <li>• Opening angle adjustable to 75° or 90°</li> <li>• Easy to fit</li> <li>• Adjustable spring force</li> <li>• Allows additional cabinet installation above</li> </ul>  |   | 28   |
|  | <p><b>Kinvaro T-105 flap stay</b></p> <ul style="list-style-type: none"> <li>• Variable opening angle - holds flap securely at any angle between 45° and -105°</li> <li>• Spring-supported opening function</li> <li>• Adjustable spring force</li> <li>• Convenient access, flap lifts clear of the work area</li> <li>• Allows additional cabinet installation above</li> </ul>                                   |  | 30   |
|  | <p><b>Kinvaro D-M flap stay with pull cable</b></p> <ul style="list-style-type: none"> <li>• Damped opening and gentle closing</li> <li>• Opening angle adjustable via length of pull cable</li> <li>• Spring force adjustment</li> <li>• Can be used with shallow cabinets from 110 mm depth</li> <li>• Flap height 200 mm - 480 mm</li> </ul>   |  | 32   |
|  | <p><b>Kinvaro D-S flap stay with pull cable</b></p> <ul style="list-style-type: none"> <li>• Damped opening</li> <li>• Opening angle adjustable via length of pull cable</li> <li>• Can be used with shallow cabinets from 82 mm depth</li> <li>• Flap height 200 mm - 480 mm</li> </ul>  |  | 34   |

# KINVARO

## F-20 folding flap fitting



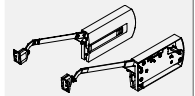
- Holds flap securely in any position
- Extremely smooth movement
- Adjustable spring force
- Integrated adjustable closing damper
- Flap with 3-dimensional adjustment – height, side, angle: Direct adjustment  $\pm 1.5$  mm
- 3-dimensional reveal height, side, depth adjustment: Direct adjustment
- Opening limiter adjustable to 90°
- Wide range of applications for many different flap materials
- Fast, tool-free clip fitting of the front
- Pre-assembled Euro screws and positioning pins for easy fixture of the fitting to the side wall
- Extremely strong
- Weight 3.8 to 19.2 kg
- Range of flaps:  
Width: 400 – 1200 mm  
Height: 520 – 900 mm
- Cover caps in white and grey, similar to RAL 7045

### APPLICATION RANGE

| Cabinet height | Guide lever | Flap weight incl. handle (kg) |            |             |
|----------------|-------------|-------------------------------|------------|-------------|
|                |             | Spring B                      | Spring C   | Spring D    |
| 520 – 559      | Type 2      | 4.6 – 13.8                    | -          | -           |
| 560 – 599      | Type 3      | 4.4 – 12.6                    | 7.0 – 14.7 | -           |
| 600 – 649      | Type 4      | 4.1 – 12.1                    | 6.8 – 15.8 | -           |
| 650 – 699      | Type 5      | 3.8 – 11.4                    | 6.7 – 16.9 | -           |
| 700 – 749      | Type 6      | -                             | 6.5 – 16.4 | 10.0 – 18.0 |
| 750 – 799      | Type 7      | -                             | 6.0 – 15.6 | 8.6 – 19.2  |
| 800 – 849      | Type 7      | -                             | -          | 7.8 – 18.0  |
| 850 – 900      | Type 7      | -                             | -          | 6.5 – 16.5  |

### ORDER INFORMATION

#### Kinvaro F-20 set



| Cabinet height | Cover cap white   |                   |                   | Cover cap grey    |                   |                   |
|----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                | Spring B          | Spring C          | Spring D          | Spring B          | Spring C          | Spring D          |
| 520 – 559      | <b>F152147837</b> | -                 | -                 | <b>F152145237</b> | -                 | -                 |
| 560 – 599      | <b>F152147838</b> | <b>F152147841</b> | -                 | <b>F152145238</b> | <b>F152145239</b> | -                 |
| 600 – 649      | <b>F152147675</b> | <b>F152147842</b> | -                 | <b>F152145240</b> | <b>F152145241</b> | -                 |
| 650 – 699      | <b>F152147840</b> | <b>F152147843</b> | -                 | <b>F152145242</b> | <b>F152145243</b> | -                 |
| 700 – 749      | -                 | <b>F152147844</b> | <b>F152147846</b> | -                 | <b>F152145244</b> | <b>F152145245</b> |
| 750 – 900      | -                 | <b>F152147787</b> | <b>F152147847</b> | -                 | <b>F152145246</b> | <b>F152145247</b> |

#### Aluminium frame adapter, Kinvaro F-20 set



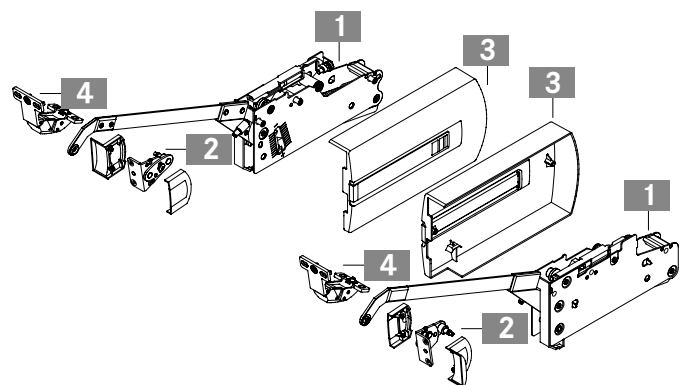
| Designation  | Overlay | Art.-no.          |
|--|---------|-------------------|
| Aluminium frame adapter (2x) for narrow aluminium frames (19 mm) with fixing screws (8x) | 13 – 17 | <b>F152145054</b> |

#### Note:

Please order separately: Tiomos 120° hinges with spring, without damper, and Tiomos mounting plates for top panel.

#### Kinvaro F-20 set comprises:

- 1 Fitting, right and left (1x)
  - 2 Screw-on bracket for wood, incl. cover caps (2x)
  - 3 Cover caps on right and left (1x)
  - 4 Link hinges (2x)
- Paper template (1x)  
Installation instructions (1x)



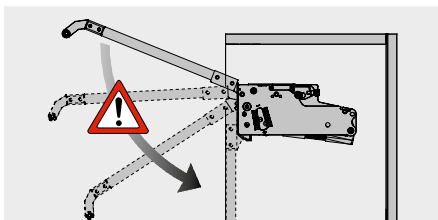
|                                 |    |  |  |
|---------------------------------|----|--|--|
| Assembly aids                   | 50 |  |  |
| Kinvaro F-20 adjustment options | 36 |  |  |

**ASSEMBLY AND INSTALLATION INSTRUCTIONS FOR CABINET HEIGHT 520 – 799**

All dimensions in millimetres

| Required space  | Side wall drilling positions  | Side wall drilling distance   |    |      |   |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |
|---|---|---|----|------|---|-----------|---|-----|-----------|---|-----|-----------|---|-----|-----------|---|-----|-----------|---|-----|-----------|---|-----|-----------|---|-----|-----------|---|-----|-----------|---|-----|-----------|---|-----|-----------|---|-----|-----------|---|-----|-----------|---|-----|-----------|---|-----|-----------|---|-----|-----------|---|-----|
|   |   | <table border="1"> <thead> <tr> <th>KH</th> <th>Type</th> <th>B</th> </tr> </thead> <tbody> <tr><td>520 – 529</td><td>2</td><td>173</td></tr> <tr><td>530 – 539</td><td>2</td><td>158</td></tr> <tr><td>540 – 549</td><td>2</td><td>143</td></tr> <tr><td>550 – 559</td><td>2</td><td>128</td></tr> <tr><td>560 – 569</td><td>3</td><td>183</td></tr> <tr><td>570 – 579</td><td>3</td><td>168</td></tr> <tr><td>580 – 589</td><td>3</td><td>153</td></tr> <tr><td>590 – 599</td><td>3</td><td>138</td></tr> <tr><td>600 – 609</td><td>4</td><td>208</td></tr> <tr><td>610 – 619</td><td>4</td><td>198</td></tr> <tr><td>620 – 629</td><td>4</td><td>178</td></tr> <tr><td>630 – 639</td><td>4</td><td>168</td></tr> <tr><td>640 – 649</td><td>4</td><td>158</td></tr> <tr><td>650 – 699</td><td>5</td><td>225</td></tr> <tr><td>700 – 749</td><td>6</td><td>235</td></tr> <tr><td>750 – 799</td><td>7</td><td>250</td></tr> </tbody> </table> | KH | Type | 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 – 799 | 7 | 250 |
| KH  | Type  | 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 – 799   | 7   | 250   |    |      |   |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |
| <p>Front: installation for flaps with standard aluminium frame profiles (19 mm)</p>   | <p>Front: installation for wooden and frame flaps (min. 45 mm width)</p>  | <p>Front: drilling distance</p>   |    |      |   |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |
| <p>* Pre-drilling required - Ø 2 mm</p>   | <p>* Pre-drilling required - Ø 2 mm</p>   | <table border="1"> <thead> <tr> <th>KH</th> <th>Type</th> <th>C</th> </tr> </thead> <tbody> <tr><td>520 – 529</td><td>2</td><td>133</td></tr> <tr><td>530 – 539</td><td>2</td><td>148</td></tr> <tr><td>540 – 549</td><td>2</td><td>163</td></tr> <tr><td>550 – 559</td><td>2</td><td>178</td></tr> <tr><td>560 – 569</td><td>3</td><td>145</td></tr> <tr><td>570 – 579</td><td>3</td><td>160</td></tr> <tr><td>580 – 589</td><td>3</td><td>175</td></tr> <tr><td>590 – 599</td><td>3</td><td>190</td></tr> <tr><td>600 – 609</td><td>4</td><td>138</td></tr> <tr><td>610 – 619</td><td>4</td><td>148</td></tr> <tr><td>620 – 629</td><td>4</td><td>168</td></tr> <tr><td>630 – 639</td><td>4</td><td>178</td></tr> <tr><td>640 – 649</td><td>4</td><td>188</td></tr> <tr><td>650 – 699</td><td>5</td><td>146</td></tr> <tr><td>700 – 749</td><td>6</td><td>156</td></tr> <tr><td>750 – 799</td><td>7</td><td>166</td></tr> </tbody> </table> | KH | Type | 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 – 799 | 7 | 166 |
| KH  | Type  | 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 – 799   | 7   | 166   |    |      |   |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |
|   | <p><b>Number of hinges at top panel</b><br/>From 900 mm cabinet width: 3 hinges. Hinges with spring require an opening angle of min. 120°</p> |   |    |      |   |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |
| <p><b>Calculation of flap weight</b><br/>           Flap width x flap height x flap thickness x density <sup>1</sup> + weight of handle <sup>2</sup> = weight of flap<br/> <sup>1</sup> Densities: MDF 0.85 kg/dm<sup>3</sup>, chipboard 0.65 kg/dm<sup>3</sup>, spruce/pine 0.45 kg/dm<sup>3</sup><br/> <sup>2</sup> For bar handles allow 0.1 kg for each 100 mm handle width. We recommend a trial fitting</p> |   |   |    |      |   |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |           |   |     |

**WARNING**



**Important!**  
**Caution - risk of injury!**  
**Fitting is spring-tensioned!**

**LEGEND**

- B Drilling dimension - side wall
- C Drilling dimension - front
- F Reveal
- FAS Front overlay, side
- KH Cabinet height

# KINVARO

## F-20 folding flap fitting

### ASSEMBLY AND INSTALLATION INSTRUCTIONS FOR CABINET HEIGHT 800 – 900

All dimensions in millimetres

| <p><b>Required space</b></p>  | <p><b>Side wall drilling positions</b></p>  | <table border="1"> <thead> <tr> <th colspan="3">Side wall drilling distance</th> </tr> <tr> <th>KH</th> <th>Type</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>800 – 849</td> <td>7</td> <td>103</td> </tr> <tr> <td>850 – 900</td> <td>7</td> <td>110</td> </tr> </tbody> </table><br><table border="1"> <thead> <tr> <th colspan="2">Shelf distance</th> </tr> <tr> <th>KH</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>800 – 849</td> <td>≤293</td> </tr> <tr> <td>850 – 900</td> <td>≤312</td> </tr> </tbody> </table> | Side wall drilling distance |      |   | KH        | Type | B   | 800 – 849 | 7 | 103 | 850 – 900 | 7 | 110 | Shelf distance |  | KH | D | 800 – 849 | ≤293 | 850 – 900 | ≤312 |
|---|---|---|-----------------------------|------|---|-----------|------|-----|-----------|---|-----|-----------|---|-----|----------------|--|----|---|-----------|------|-----------|------|
| Side wall drilling distance   |   |   |                             |      |   |           |      |     |           |   |     |           |   |     |                |  |    |   |           |      |           |      |
| KH  | Type  | B   |                             |      |   |           |      |     |           |   |     |           |   |     |                |  |    |   |           |      |           |      |
| 800 – 849   | 7   | 103   |                             |      |   |           |      |     |           |   |     |           |   |     |                |  |    |   |           |      |           |      |
| 850 – 900   | 7   | 110   |                             |      |   |           |      |     |           |   |     |           |   |     |                |  |    |   |           |      |           |      |
| Shelf distance  |   |   |                             |      |   |           |      |     |           |   |     |           |   |     |                |  |    |   |           |      |           |      |
| KH  | D   |   |                             |      |   |           |      |     |           |   |     |           |   |     |                |  |    |   |           |      |           |      |
| 800 – 849   | ≤293  |   |                             |      |   |           |      |     |           |   |     |           |   |     |                |  |    |   |           |      |           |      |
| 850 – 900   | ≤312  |   |                             |      |   |           |      |     |           |   |     |           |   |     |                |  |    |   |           |      |           |      |
| <p><b>Front: installation for flaps with standard aluminium frame profiles (19 mm)</b></p> <p>* Pre-drilling required - Ø 2 mm</p>  | <p><b>Front: installation for wooden and frame flaps (min. 45 mm width)</b></p> <p>* Pre-drilling required - Ø 2 mm</p>                       | <p><b>Front: drilling distance</b></p> <table border="1"> <thead> <tr> <th>KH</th> <th>Type</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>800 – 900</td> <td>7</td> <td>304</td> </tr> </tbody> </table>  | KH                          | Type | C | 800 – 900 | 7    | 304 |           |   |     |           |   |     |                |  |    |   |           |      |           |      |
| KH  | Type  | C   |                             |      |   |           |      |     |           |   |     |           |   |     |                |  |    |   |           |      |           |      |
| 800 – 900   | 7   | 304   |                             |      |   |           |      |     |           |   |     |           |   |     |                |  |    |   |           |      |           |      |
|   | <p><b>Number of hinges at top panel</b><br/>From 900 mm cabinet width: 3 hinges. Hinges with spring require an opening angle of min. 120°</p> |   |                             |      |   |           |      |     |           |   |     |           |   |     |                |  |    |   |           |      |           |      |
| <p><b>Calculation of flap weight</b><br/>         Flap width x flap height x flap thickness x density<sup>1</sup> + weight of handle<sup>2</sup> = weight of flap<br/> <sup>1</sup> Densities: MDF 0.85 kg/dm<sup>3</sup>, chipboard 0.65 kg/dm<sup>3</sup>, spruce/pine 0.45 kg/dm<sup>3</sup><br/> <sup>2</sup> For bar handles allow 0.1 kg for each 100 mm handle width. We recommend a trial fitting</p> |   |   |                             |      |   |           |      |     |           |   |     |           |   |     |                |  |    |   |           |      |           |      |

|                                 |    |
|---------------------------------|----|
| Assembly aids                   | 50 |
| Kinvaro F-20 adjustment options | 36 |



# KINVARO

## L-80 parallel lift flap fitting



- Holds flap securely in any position
- Extremely smooth movement
- Adjustable spring force
- Integrated adjustable closing damper
- Flap 3-dimensionally adjustable – height, side, angle: direct adjustment  $\pm 1.5$  mm
- Allows the use of cornices, pelmets and attached lights
- Wide range of applications for many different flap materials
- Fast, tool-free clip fitting of the front
- Pre-assembled Euro screws and positioning pins for easy fixture of the fitting to the side wall
- Extremely strong
- Weight 1.9 to 14.6 kg
- Range of flaps:  
Width: 450 – 1200 mm  
Height: 350 – 600 mm
- Cover caps in white and grey, similar to RAL 7045

### APPLICATION RANGE

| Cabinet height | Guide lever | Flap weight incl. handle (kg) |           |            |
|----------------|-------------|-------------------------------|-----------|------------|
|                |             | Spring A                      | Spring B  | Spring C   |
| 350 – 369      | Type 1      | 2.5 – 6.5                     | 6.0 – 9.5 | –          |
| 370 – 389      | Type 2      | 2.3 – 6.0                     | 5.5 – 9.0 | 8.5 – 9.6  |
| 390 – 409      | Type 3      | 2.1 – 5.5                     | 5.0 – 8.5 | 8.0 – 10.1 |
| 410 – 429      | Type 4      | 1.9 – 5.0                     | 4.5 – 8.0 | 7.5 – 14.6 |
| 430 – 600      | Type 5      | 2.0 – 4.5                     | 4.0 – 7.5 | 7.0 – 14.6 |

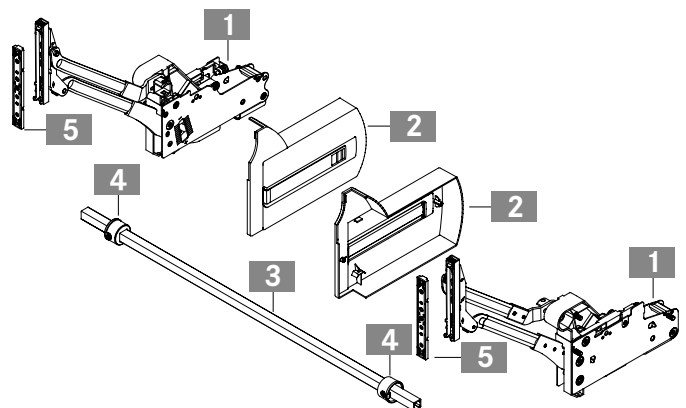
### ORDER INFORMATION

| Kinvaro L-80 set |                 |            |            |                |            |            |
|------------------|-----------------|------------|------------|----------------|------------|------------|
| Cabinet height   | Cover cap white |            |            | Cover cap grey |            |            |
|                  | Spring A        | Spring B   | Spring C   | Spring A       | Spring B   | Spring C   |
| 350 – 369        | F152147781      | F152147828 | –          | F152145248     | F152147444 | –          |
| 370 – 389        | F152147824      | F152147829 | F152147833 | F152147440     | F152145249 | F152145250 |
| 390 – 409        | F152147825      | F152147830 | F152147834 | F152147441     | F152145251 | F152145252 |
| 410 – 429        | F152147826      | F152147831 | F152147835 | F152147442     | F152145281 | F152145282 |
| 430 – 600        | F152147827      | F152147715 | F152147788 | F152147443     | F152145253 | F152145254 |

| Aluminium frame adapter, Kinvaro L-80 set   |         |            |
|---|---------|------------|
| Designation   | Overlay | Art.-no.   |
| Aluminium frame adapter (2x) for narrow aluminium frames (19 mm) with fixing screws (16x) | 13 – 17 | F152145055 |

#### Kinvaro L-80 set comprises:

- 1 Fitting, right and left (1x)
  - 2 Cover caps on right and left (1x)
  - 3 1090 mm cross bar for cutting to length (1x)
  - 4 Sliding sleeves (2x)
  - 5 Mounting plates (2x)
- Paper template (1x)  
Installation instructions (1x)



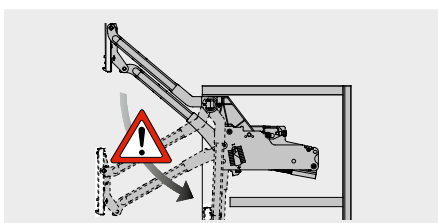
|                                 |    |  |  |
|---------------------------------|----|--|--|
| Assembly aids                   | 50 |  |  |
| Kinvaro L-80 adjustment options | 38 |  |  |

ASSEMBLY AND INSTALLATION INSTRUCTIONS

All dimensions in millimetres

| <p><b>Required space</b></p>  | <p><b>Side wall drilling positions</b></p>  | <p><b>Side wall drilling distance</b></p> <table border="1"> <thead> <tr> <th>Type</th> <th>min. LHK</th> <th>D1</th> <th>D2</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>312</td> <td>161</td> <td>304</td> </tr> <tr> <td>2</td> <td>332</td> <td>176</td> <td>337</td> </tr> <tr> <td>3</td> <td>352</td> <td>191</td> <td>370</td> </tr> <tr> <td>4</td> <td>372</td> <td>206</td> <td>403</td> </tr> <tr> <td>5</td> <td>392</td> <td>221</td> <td>436</td> </tr> </tbody> </table> <p><b>Cornice projection</b></p> <table border="1"> <thead> <tr> <th>F</th> <th>KP max.</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>22</td> </tr> <tr> <td>3</td> <td>35</td> </tr> <tr> <td>4</td> <td>39</td> </tr> </tbody> </table> | Type | min. LHK | D1 | D2        | 1 | 312 | 161       | 304 | 2   | 332       | 176 | 337 | 3         | 352 | 191 | 370       | 4 | 372 | 206 | 403 | 5 | 392 | 221 | 436 | F | KP max. | 2 | 22 | 3 | 35 | 4 | 39 |
|---|---|---|------|----------|----|-----------|---|-----|-----------|-----|-----|-----------|-----|-----|-----------|-----|-----|-----------|---|-----|-----|-----|---|-----|-----|-----|---|---------|---|----|---|----|---|----|
| Type  | min. LHK  | D1  | D2   |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| 1   | 312   | 161   | 304  |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| 2   | 332   | 176   | 337  |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| 3   | 352   | 191   | 370  |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| 4   | 372   | 206   | 403  |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| 5   | 392   | 221   | 436  |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| F   | KP max.   |   |      |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| 2   | 22  |   |      |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| 3   | 35  |   |      |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| 4   | 39  |   |      |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| <p><b>Front: installation for flaps with standard aluminium frame profiles (19 mm)</b></p>  | <p><b>Front: installation for wooden and frame flaps (min. 45 mm width)</b></p> <p>* Pre-drilling required - Ø 2 mm</p> | <p><b>Front: drilling distance</b></p> <table border="1"> <thead> <tr> <th>KH</th> <th>Type</th> <th>X</th> </tr> </thead> <tbody> <tr> <td>350 - 369</td> <td>1</td> <td>190</td> </tr> <tr> <td>370 - 389</td> <td>2</td> <td>210</td> </tr> <tr> <td>390 - 409</td> <td>3</td> <td>230</td> </tr> <tr> <td>410 - 429</td> <td>4</td> <td>250</td> </tr> <tr> <td>430 - 600</td> <td>5</td> <td>270</td> </tr> </tbody> </table> <p><b>Cutting dimensions</b><br/>Cross bar</p>   | KH   | Type     | X  | 350 - 369 | 1 | 190 | 370 - 389 | 2   | 210 | 390 - 409 | 3   | 230 | 410 - 429 | 4   | 250 | 430 - 600 | 5 | 270 |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| KH  | Type  | X   |      |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| 350 - 369   | 1   | 190   |      |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| 370 - 389   | 2   | 210   |      |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| 390 - 409   | 3   | 230   |      |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| 410 - 429   | 4   | 250   |      |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| 430 - 600   | 5   | 270   |      |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |
| <p><b>Calculation of flap weight</b></p> <p>Flap width x flap height x flap thickness x density<sup>1</sup> + weight of handle<sup>2</sup> = weight of flap</p> <p><sup>1</sup> Densities: MDF 0.85 kg/dm<sup>3</sup>, chipboard 0.65 kg/dm<sup>3</sup>, spruce/pine 0.45 kg/dm<sup>3</sup></p> <p><sup>2</sup> For bar handles allow 0.1 kg for each 100 mm handle width. We recommend a trial fitting</p> |   |   |      |          |    |           |   |     |           |     |     |           |     |     |           |     |     |           |   |     |     |     |   |     |     |     |   |         |   |    |   |    |   |    |

WARNING



**Important!**  
**Caution - risk of injury!**  
**Fitting is spring-tensioned!**

LEGEND

- D Distance
- F Reveal
- FAO Front overlay, top
- FAS Front overlay, side
- KH Cabinet height
- KP Cornice
- LHK Inside cabinet height
- LWK Inside cabinet width

# KINVARO

## S-35 up-and-over flap fitting



- Securely holds flap in any position from 45° opening angle
- Extremely smooth movement
- Adjustable spring force
- Integrated adjustable closing damper
- Flap 3-dimensionally adjustable – height, side, angle: direct adjustment  $\pm 1.5$  mm
- Allows the use of cornices, pelmets and attached lights
- Wide range of applications for many different flap materials
- Fast, tool-free clip fitting of the front
- Pre-assembled Euro screws and positioning pins for easy fixture of the fitting to the side wall
- Extremely strong
- Weight 1.5 to 17.5 kg
- Range of flaps:  
Width: 450 – 1200 mm  
Height: 420 – 750 mm
- Cover caps in white and grey, similar to RAL 7045

### APPLICATION RANGE

| Cabinet height | Flap weight incl. handle (kg) |            |            |             |             |
|----------------|-------------------------------|------------|------------|-------------|-------------|
|                | Spring A                      | Spring B   | Spring C   | Spring D    | Spring E    |
| 420 – 449      | 1.5 – 7.5                     | 5.0 – 11.0 | -          | -           | -           |
| 450 – 479      | 1.8 – 7.5                     | 5.0 – 12.0 | -          | -           | -           |
| 480 – 509      | 1.8 – 6.5                     | 5.0 – 12.5 | -          | -           | -           |
| 510 – 539      | 2.0 – 6.0                     | 5.0 – 13.0 | -          | -           | -           |
| 540 – 569      | 2.0 – 6.0                     | 5.0 – 12.5 | 6.0 – 14.0 | -           | -           |
| 570 – 599      | 2.0 – 6.0                     | 5.0 – 11.0 | 5.5 – 12.0 | 11.5 – 14.5 | -           |
| 600 – 629      | 2.0 – 5.5                     | 4.5 – 10.0 | 5.5 – 11.5 | 10.5 – 15.5 | -           |
| 630 – 659      | 2.0 – 5.5                     | -          | 4.5 – 11.0 | 8.5 – 16.0  | -           |
| 660 – 689      | 2.0 – 5.0                     | -          | 4.0 – 10.0 | 7.5 – 15.0  | 12.0 – 16.5 |
| 690 – 719      | 2.0 – 5.0                     | -          | 4.0 – 8.5  | 6.5 – 13.5  | 12.0 – 17.5 |
| 720 – 750      | -                             | -          | 4.0 – 8.0  | 6.5 – 12.5  | 10.0 – 17.0 |

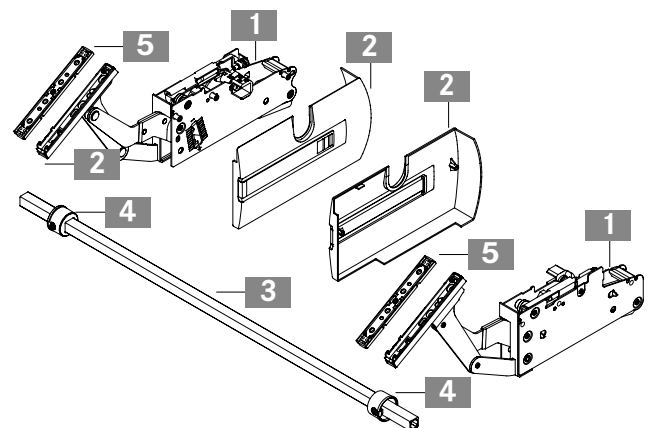
### ORDER INFORMATION

| Kinvaro S-35 set |                   |                   |                   |                   |                   |
|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Cabinet height   | Spring A          | Spring B          | Spring C          | Spring D          | Spring E          |
| Cover caps white |                   |                   |                   |                   |                   |
| 420 – 750        | <b>F152147818</b> | <b>F152147819</b> | <b>F152147820</b> | <b>F152147821</b> | <b>F152147822</b> |
| Cover caps grey  |                   |                   |                   |                   |                   |
| 420 – 750        | <b>F152000255</b> | <b>F152000256</b> | <b>F152000257</b> | <b>F152000258</b> | <b>F152000259</b> |

| Aluminium frame adapter, Kinvaro S-35 set   |         |                   |
|---|---------|-------------------|
| Designation   | Overlay | Art.-no.          |
| Aluminium frame adapter (2x) for narrow aluminium frames (19 mm) with fixing screws (16x) | 13 – 17 | <b>F152145055</b> |

**Kinvaro S-35 set** comprises:

- 1 Fitting, right and left (1x)
  - 2 Cover caps on right and left (1x)
  - 3 1090 mm cross bar for cutting to length (1x)
  - 4 Sliding sleeves (2x)
  - 5 Mounting plates (2x)
- Paper template (1x)  
Installation instructions (1x)



|                                 |    |  |  |
|---------------------------------|----|--|--|
| Assembly aids                   | 50 |  |  |
| Kinvaro S-35 adjustment options | 39 |  |  |

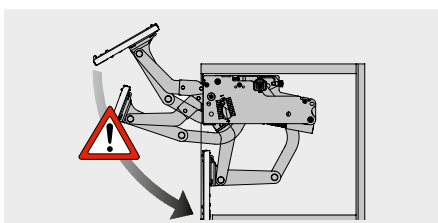


**ASSEMBLY AND INSTALLATION INSTRUCTIONS**

All dimensions in millimetres

|   |   |
|---|---|
| <p><b>Required space</b></p>  | <p><b>Side wall drilling positions</b></p>                                      |
| <p><b>Front: installation for flaps with standard aluminium frame profiles (19 mm)</b></p>  | <p><b>Front: installation for wooden and frame flaps (min. 45 mm width)</b></p> |
| <p><b>Calculation of flap weight</b></p> <p>Flap width x flap height x flap thickness x density<sup>1</sup> + weight of handle<sup>2</sup> = weight of flap</p> <p><sup>1</sup> Densities: MDF 0.85 kg/dm<sup>3</sup>, chipboard 0.65 kg/dm<sup>3</sup>, spruce/pine 0.45 kg/dm<sup>3</sup></p> <p><sup>2</sup> For bar handles allow 0.1 kg for each 100 mm handle width. We recommend a trial fitting</p> |   |

**WARNING**



**Important!**  
**Caution - risk of injury!**  
**Fitting is spring-tensioned!**

**LEGEND**

FAO Front overlay, top  
FAS Front overlay, side  
LWK Inside cabinet width

# KINVARO

## T-65 lift-up flap fitting



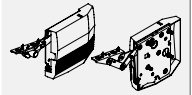
- Variable opening angle - holds flap securely at any angle between 45° and 100°
- Extremely comfortable opening thanks to spring-supported opening mechanism
- Adjustable spring force
- Integrated adjustable closing damper
- Adjustable flap height  $\pm 3.0$  mm
- No hinges fitted to the top panel
- Allows additional cabinet installation above
- Can be used for wooden flaps or aluminium frames with glass infill
- Weight 0.7 to 7.4 kg
- Range of flaps:  
Width: to 1200 mm  
Height: 250 – 600 mm
- Cover caps in white and grey, similar to RAL 7045

### APPLICATION RANGE

| Cabinet height | Flap weight incl. handle (kg) |                             |                            |
|----------------|-------------------------------|-----------------------------|----------------------------|
|                | Spring on one side yellow     | Spring on both sides yellow | Spring on both sides black |
| 250            | 0.9 – 2.1                     | 1.8 – 4.2                   | 2.4 – 7.4                  |
| 300            | 0.7 – 1.7                     | 1.4 – 3.4                   | 2.0 – 6.3                  |
| 350            | -                             | 1.0 – 2.9                   | 1.7 – 5.4                  |
| 400            | -                             | 0.8 – 2.5                   | 1.5 – 4.7                  |
| 450            | -                             | 0.7 – 2.2                   | 1.3 – 4.2                  |
| 500            | -                             | 0.6 – 2.0                   | 1.3 – 3.9                  |
| 550            | -                             | -                           | 1.3 – 3.4                  |
| 600            | -                             | -                           | 1.3 – 3.1                  |

### ORDER INFORMATION

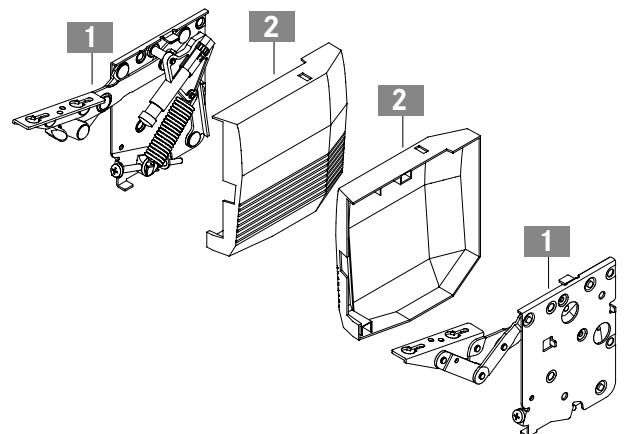
#### Kinvaro T-65 set



| Designation  | Springs      | Version for | Overlay  | Art.-no.           |                    |
|--|--------------|-------------|----------|--------------------|--------------------|
|  |              |             |          | Cover cap white    | Cover cap grey     |
| Kinvaro T-65<br>on right without damper and on left with damper, pre-assembled springs black, incl. cover caps, 2 loose yellow springs | Black/yellow | wood        | variable | <b>F15 1147797</b> | <b>F15 1147682</b> |
|  |              | aluminium   | 13       | <b>F15 1147798</b> | <b>F15 1147678</b> |
|  |              |             | 14       | <b>F15 1147799</b> | <b>F15 1147679</b> |
|  |              |             | 16       | <b>F15 1147800</b> | <b>F15 1147680</b> |
|  |              |             | 17       | -                  | <b>F15 1147681</b> |

#### Kinvaro T-65 set comprises:

- 1 Fitting on the right without and on the left with damper (1x)
- 2 Cover caps on right and left (1x)  
Springs, yellow, loose (2x)  
Paper template (1x)  
Installation instructions (1x)



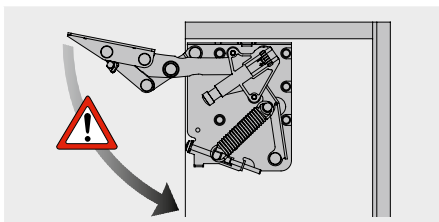
|                                 |    |  |  |
|---------------------------------|----|--|--|
| Assembly aids                   | 50 |  |  |
| Kinvaro T-65 adjustment options | 40 |  |  |

**ASSEMBLY AND INSTALLATION INSTRUCTIONS**

All dimensions in millimetres

|   |  |
|---|--|
| <p><b>Required space</b></p>  | <p><b>Side wall drilling positions</b></p>   |
| <p><b>Front: installation for flaps with standard aluminium frame profiles (19 mm)</b></p> <p style="text-align: right;">* Standard aluminium frame profile (19 mm)</p>   | <p><b>Front: installation for wooden and frame flaps (min. 45 mm width)</b></p> <p style="text-align: right;">* Pre-drilling required - Ø 2 mm</p> |
| <p><b>Calculation of flap weight</b></p> <p>Flap width x flap height x flap thickness x density<sup>1</sup> + weight of handle<sup>2</sup> = weight of flap</p> <p><sup>1</sup> Densities: MDF 0.85 kg/dm<sup>3</sup>, chipboard 0.65 kg/dm<sup>3</sup>, spruce/pine 0.45 kg/dm<sup>3</sup></p> <p><sup>2</sup> For bar handles allow 0.1 kg for each 100 mm handle width. We recommend a trial fitting</p> |  |

**WARNING**



**Important!**  
**Caution - risk of injury!**  
**Fitting is spring-tensioned!**

**LEGEND**

F Reveal  
FAS Front overlay, side

# KINVARO

## T-70 lift-up flap fitting



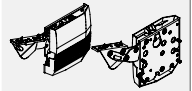
- Variable opening angle - holds flap securely at any angle between 45° and 110°
- Extremely comfortable opening thanks to spring-supported opening mechanism
- Adjustable spring force
- Integrated adjustable closing damper
- Adjustable flap height  $\pm 2.0$  mm
- No hinges fitted to the top panel
- Allows additional cabinet installation above
- Can be used for wooden flaps or aluminium frames with glass infill
- Weight 1.4 to 8.5 kg
- Range of flaps:  
Width: up to 1200 mm  
Height: 300 – 600 mm
- Cover caps in white and grey, similar to RAL 7045

### APPLICATION RANGE

| Cabinet height | Flap weight incl. handle (kg) |                |
|----------------|-------------------------------|----------------|
|                | Spring, white                 | Spring, orange |
| 300            | 2.1 – 7.4                     | 2.5 – 8.5      |
| 350            | 1.8 – 6.3                     | 2.3 – 7.5      |
| 400            | 1.7 – 5.4                     | 2.1 – 6.8      |
| 450            | 1.6 – 4.7                     | 2.0 – 5.8      |
| 500            | 1.5 – 4.0                     | 1.8 – 5.0      |
| 550            | 1.4 – 3.7                     | 1.6 – 4.6      |
| 600            | 1.4 – 3.3                     | 1.4 – 4.2      |

### ORDER INFORMATION

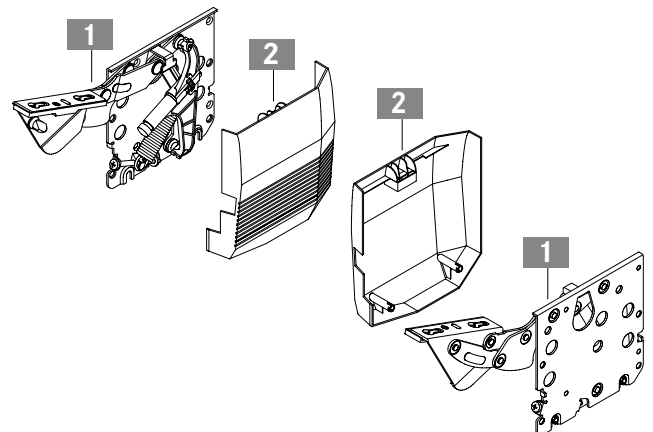
#### Kinvaro T-70 set



| Designation  | Springs      | Version for | Overlay  | Art.-no.          |                   |
|--|--------------|-------------|----------|-------------------|-------------------|
|  |              |             |          | Cover cap white   | Cover cap grey    |
| Kinvaro T-70<br>on right without damper and on left with damper, pre-assembled springs white, incl. cover caps, 2 loose orange springs | white/orange | wood        | variable | <b>F151147693</b> | <b>F151147692</b> |
|  |              | aluminium   | 13       | <b>F151147807</b> | <b>F151147688</b> |
|  |              |             | 14       | <b>F151147808</b> | <b>F151147689</b> |
|  |              |             | 16       | <b>F151147809</b> | <b>F151147690</b> |
|  |              |             | 17       | <b>F151147810</b> | <b>F151147691</b> |

#### Kinvaro T-70 set comprises:

- 1 Fitting on the right without and on the left with damper (1x)
- 2 Cover caps on right and left (1x)  
Springs, orange, loose (2x)  
Paper template (1x)  
Installation instructions (1x)



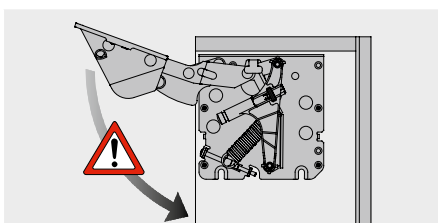
|                                 |    |  |  |
|---------------------------------|----|--|--|
| Assembly aids                   | 50 |  |  |
| Kinvaro T-70 adjustment options | 41 |  |  |

**ASSEMBLY AND INSTALLATION INSTRUCTIONS**

All dimensions in millimetres

|   |  |
|---|--|
| <p><b>Required space</b></p>  | <p><b>Side wall drilling positions</b></p>   |
| <p><b>Front: installation for flaps with standard aluminium frame profiles (19 mm)</b></p> <p style="text-align: right;">* Standard aluminium frame profile (19 mm)</p>   | <p><b>Front: installation for wooden and frame flaps (min. 55 mm width)</b></p> <p style="text-align: right;">* Pre-drilling required - Ø 2 mm</p> |
| <p><b>Calculation of flap weight</b></p> <p>Flap width x flap height x flap thickness x density<sup>1</sup> + weight of handle<sup>2</sup> = weight of flap</p> <p><sup>1</sup> Densities: MDF 0.85 kg/dm<sup>3</sup>, chipboard 0.65 kg/dm<sup>3</sup>, spruce/pine 0.45 kg/dm<sup>3</sup></p> <p><sup>2</sup> For bar handles allow 0.1 kg for each 100 mm handle width. We recommend a trial fitting</p> |  |

**WARNING**



**Important!**  
**Caution - risk of injury!**  
**Fitting is spring-tensioned!**

**LEGEND**

F Reveal  
FAO Front overlay, top  
FAS Front overlay, side  
KOB Cabinet top panel

# KINVARO

## T-71 lift-up flap fitting



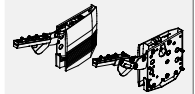
- Variable opening angle - holds flap securely at any angle between 45° and 110°
- Extremely comfortable opening thanks to spring-supported opening mechanism
- Adjustable spring force
- Integrated adjustable closing damper
- Flap 3-dimensionally adjustable - height, side, angle: direct adjustment ±1.5 mm
- No hinges fitted to the top panel
- Allows additional cabinet installation above
- Can be used for wooden flaps or aluminium frames with glass infill
- Fast, tool-free clip fitting of the front
- Weight 1.4 to 8.5 kg
- Range of flaps:  
Width: up to 1200 mm  
Height: 300 – 600 mm
- Cover caps in white and grey, similar to RAL 7045

### APPLICATION RANGE

| Cabinet height | Flap weight incl. handle (kg) |                |
|----------------|-------------------------------|----------------|
|                | Spring, white                 | Spring, orange |
| 300            | 2.1 – 7.4                     | 2.5 – 8.5      |
| 350            | 1.8 – 6.3                     | 2.3 – 7.5      |
| 400            | 1.7 – 5.4                     | 2.1 – 6.8      |
| 450            | 1.6 – 4.7                     | 2.0 – 5.8      |
| 500            | 1.5 – 4.0                     | 1.8 – 5.0      |
| 550            | 1.4 – 3.7                     | 1.6 – 4.6      |
| 600            | 1.4 – 3.3                     | 1.4 – 4.2      |

### ORDER INFORMATION

#### Kinvaro T-71 set



| Designation  | Springs      | Version for | Overlay  | Art.-no.          |                   |
|--|--------------|-------------|----------|-------------------|-------------------|
|  |              |             |          | Cover cap white   | Cover cap grey    |
| Kinvaro T-71<br>on right without damper and on left with damper, pre-assembled springs white, incl. cover caps, 2 loose orange springs | white/orange | wood        | variable | <b>F151147811</b> | <b>F151147696</b> |

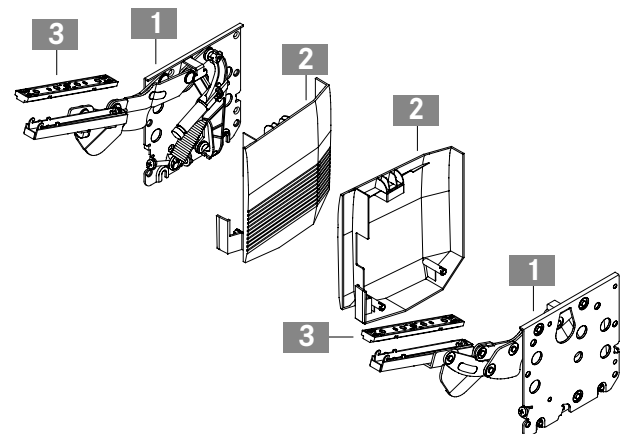
#### Aluminium frame adapter, Kinvaro T-71 set



| Designation   | Overlay | Art.-no.          |
|---|---------|-------------------|
| Aluminium frame adapter (2x) for narrow aluminium frames (19 mm) with fixing screws (16x) | 13 – 17 | <b>F151145226</b> |

#### Kinvaro T-71 set comprises:

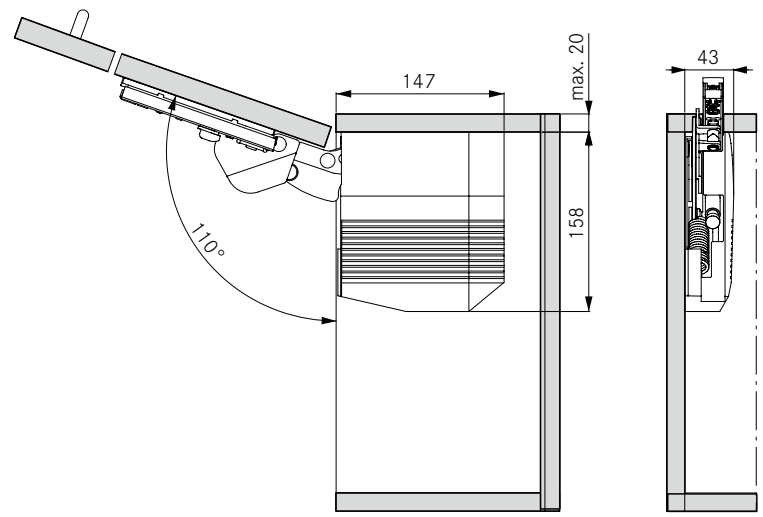
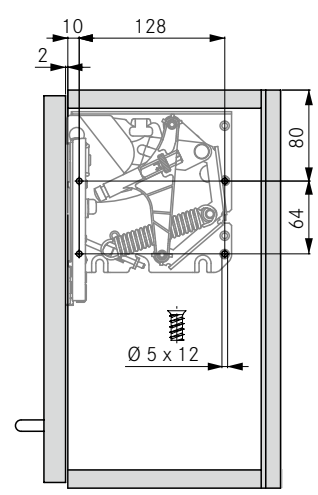
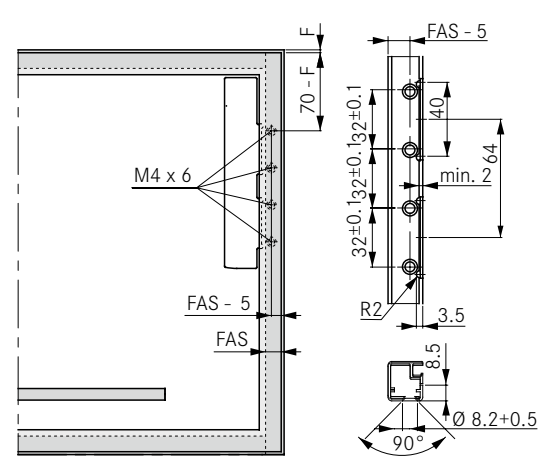
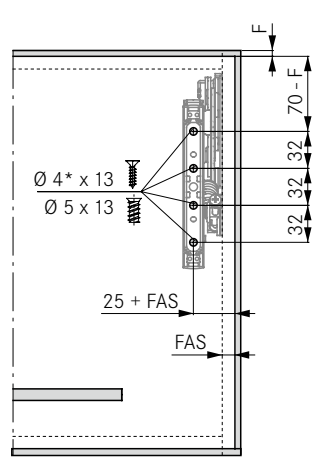
- 1** Fitting on the right without and on the left with damper (1x)
- 2** Cover caps on right and left (1x)
- 3** Mounting plates (2x)  
Springs, orange, loose (2x)  
Paper template (1x)  
Installation instructions (1x)



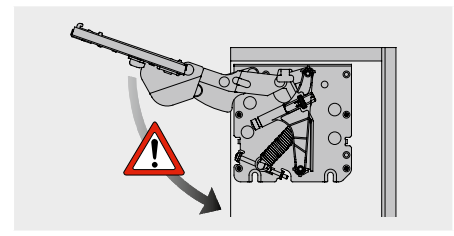
|                                 |    |  |  |  |  |
|---------------------------------|----|--|--|--|--|
| Assembly aids                   | 50 |  |  |  |  |
| Kinvaro T-71 adjustment options | 42 |  |  |  |  |

**ASSEMBLY AND INSTALLATION INSTRUCTIONS**

All dimensions in millimetres

|  |  |
|--|--|
| <p>Required space</p>   | <p>Side wall drilling positions</p>   |
| <p>Front: installation for flaps with standard aluminium frame profiles (19 mm)</p>  <p>* Standard aluminium frame profile (19 mm)</p>   | <p>Front: installation for wooden and frame flaps (min. 55 mm width)</p>  <p>* Pre-drilling required - Ø 2 mm</p> |
| <p>Calculation of flap weight</p> <p>Flap width x flap height x flap thickness x density<sup>1</sup> + weight of handle<sup>2</sup> = weight of flap</p> <p><sup>1</sup> Densities: MDF 0.85 kg/dm<sup>3</sup>, chipboard 0.65 kg/dm<sup>3</sup>, spruce/pine 0.45 kg/dm<sup>3</sup></p> <p><sup>2</sup> For bar handles allow 0.1 kg for each 100 mm handle width. We recommend a trial fitting</p> |  |

**WARNING**



**Important!**  
**Caution - risk of injury!**  
**Fitting is spring-tensioned!**

**LEGEND**

F Reveal  
 FAS Front overlay, side

# KINVARO

## T-75 lift-up flap fitting



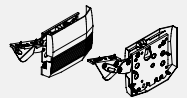
- Variable opening angle - holds flap securely at any angle between 45° and 110°
  - Extremely comfortable opening thanks to spring-supported opening mechanism
  - Adjustable spring force
  - Integrated adjustable closing damper
  - Adjustable flap height ±2.0 mm
  - No hinges fitted to the top panel
  - Allows additional cabinet installation above
  - Can be used for wooden flaps or aluminium frames with glass infill
  - Weight 5.2 to 11.0 kg
- Range of flaps:  
Width: up to 1200 mm  
Height: 400 – 600 mm
  - Cover caps in white and grey, similar to RAL 7045

### APPLICATION RANGE

| Cabinet height | Flap weight incl. handle (kg) |
|----------------|-------------------------------|
|                | Spring, standard              |
| 400            | 7.0 – 11.0                    |
| 450            | 6.7 – 9.6                     |
| 500            | 5.8 – 8.5                     |
| 550            | 5.6 – 7.6                     |
| 600            | 5.2 – 7.0                     |

### ORDER INFORMATION

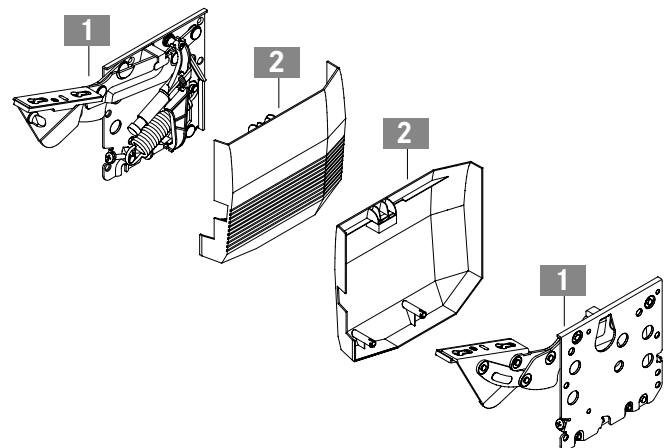
#### Kinvaro T-75 set



| Designation   | Springs  | Version for | Overlay  | Art.-no.          |                   |
|---|----------|-------------|----------|-------------------|-------------------|
|   |          |             |          | Cover cap white   | Cover cap grey    |
| Kinvaro T-75<br>on right without damper and on left with<br>damper incl. cover caps | standard | wood        | variable | <b>F151147700</b> | <b>F151147699</b> |
|   |          | aluminium   | 13       | <b>F151147813</b> | <b>F151147702</b> |
|   |          |             | 14       | <b>F151147814</b> | <b>F151147703</b> |
|   |          |             | 16       | <b>F151147815</b> | <b>F151147704</b> |
|   |          |             | 17       | <b>F151147816</b> | <b>F151147705</b> |

#### Kinvaro T-75 set comprises:

- 1 Fitting on the right without and on the left with damper (1x)
- 2 Cover caps on right and left (1x)  
Paper template (1x)  
Installation instructions (1x)

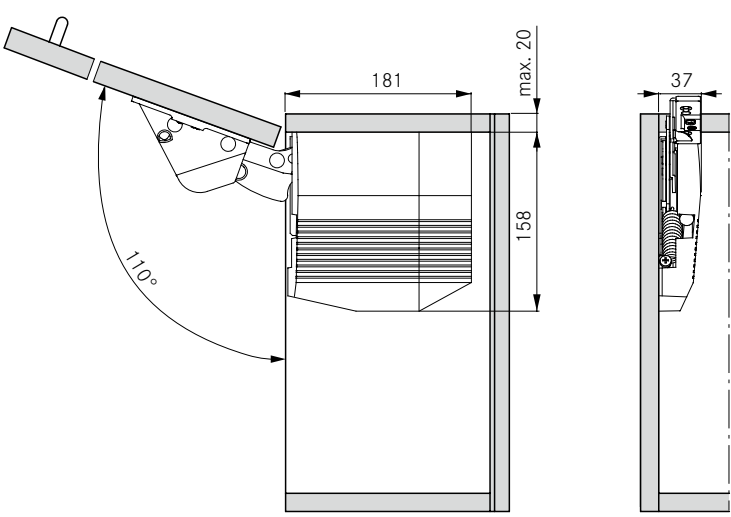
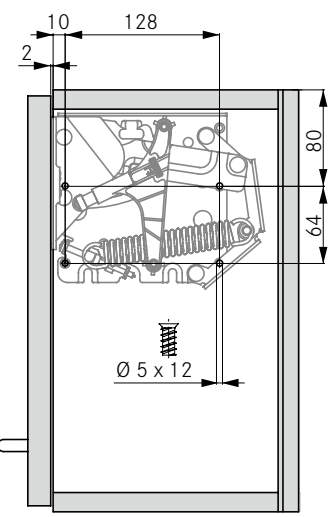
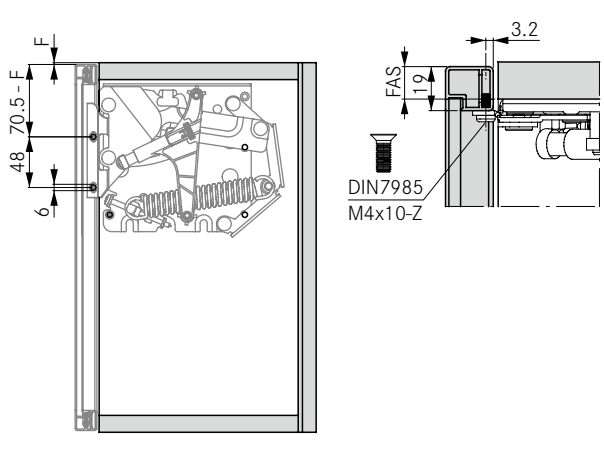
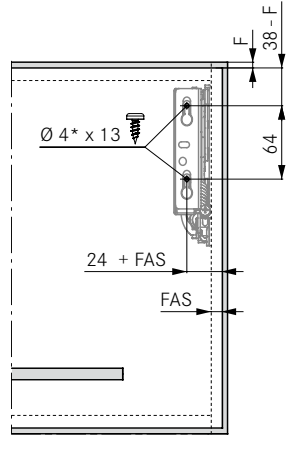


|                                 |    |  |  |
|---------------------------------|----|--|--|
| Assembly aids                   | 50 |  |  |
| Kinvaro T-75 adjustment options | 43 |  |  |

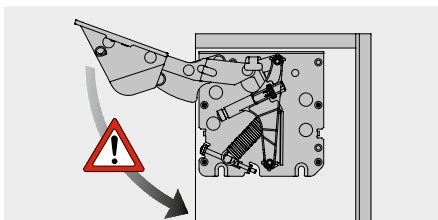


**ASSEMBLY AND INSTALLATION INSTRUCTIONS**

All dimensions in millimetres

|   |   |
|---|---|
| <p><b>Required space</b></p>   | <p><b>Side wall drilling positions</b></p>   |
| <p><b>Front: installation for flaps with standard aluminium frame profiles (* 19 mm)</b></p>   | <p><b>Front: installation for wooden and frame flaps (min. 55 mm width)</b></p>  <p>* Pre-drilling required - Ø 2 mm</p> |
| <p><b>Calculation of flap weight</b></p> <p>Flap width x flap height x flap thickness x density<sup>1</sup> + weight of handle<sup>2</sup> = weight of flap</p> <p><sup>1</sup> Densities: MDF 0.85 kg/dm<sup>3</sup>, chipboard 0.65 kg/dm<sup>3</sup>, spruce/pine 0.45 kg/dm<sup>3</sup></p> <p><sup>2</sup> For bar handles allow 0.1 kg for each 100 mm handle width. We recommend a trial fitting</p> |   |

**WARNING**



**Important!**  
**Caution - risk of injury!**  
**Fitting is spring-tensioned!**

**LEGEND**

F Reveal  
FAS Front overlay, side

# KINVARO

## T-76 lift-up flap fitting



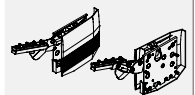
- Variable opening angle - holds flap securely at any angle between 45° and 110°
- Extremely comfortable opening thanks to spring-supported opening mechanism
- Adjustable spring force
- Integrated adjustable closing damper
- Flap 3-dimensionally adjustable - height, side, angle: direct adjustment ±1.5 mm
- No hinges fitted to the top panel
- Allows additional cabinet installation above
- Can be used for wooden flaps or aluminium frames with glass infill
- Fast, tool-free clip fitting of the front
- Weight 5.2 to 11.0 kg
- Range of flaps:  
Width: to 1200 mm  
Height: 400 – 600 mm
- Cover caps in white and grey, similar to RAL 7045

### APPLICATION RANGE

| Cabinet height | Flap weight incl. handle (kg) |
|----------------|-------------------------------|
|                | Spring, standard              |
| 400            | 7.0 – 11.0                    |
| 450            | 6.7 – 9.6                     |
| 500            | 5.8 – 8.5                     |
| 550            | 5.6 – 7.6                     |
| 600            | 5.2 – 7.0                     |

### ORDER INFORMATION

#### Kinvaro T-76 set



| Designation   | Springs  | Version for | Overlay  | Art.-no.          |                   |
|---|----------|-------------|----------|-------------------|-------------------|
|   |          |             |          | Cover cap white   | Cover cap grey    |
| Kinvaro T-76<br>on right without damper and on left with damper, pre-assembled springs standard, incl. cover caps | standard | wood        | variable | <b>F151147817</b> | <b>F151147706</b> |

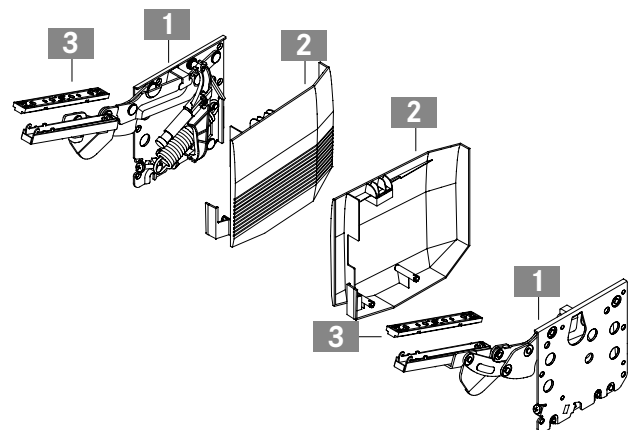
#### Aluminium frame adapter, Kinvaro T-76 set



| Designation   | Overlay | Art.-no.          |
|---|---------|-------------------|
| Aluminium frame adapter (2x) for narrow aluminium frames (19 mm) with fixing screws (16x) | 13 – 17 | <b>F151145226</b> |

#### Kinvaro T-76 set comprises:

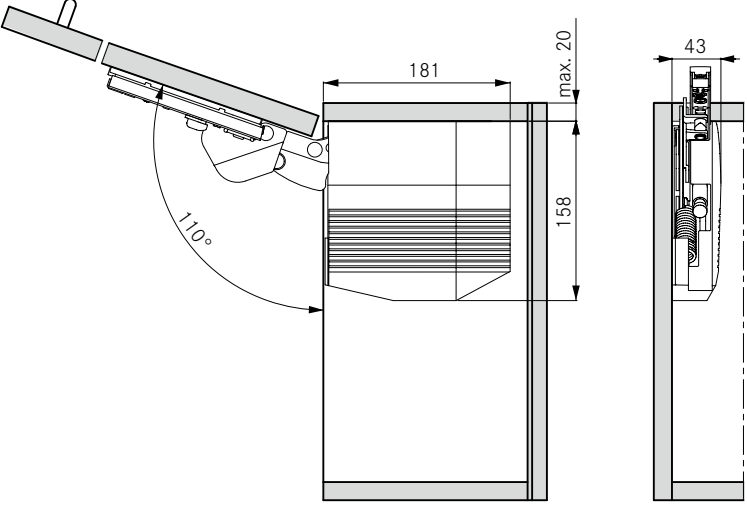
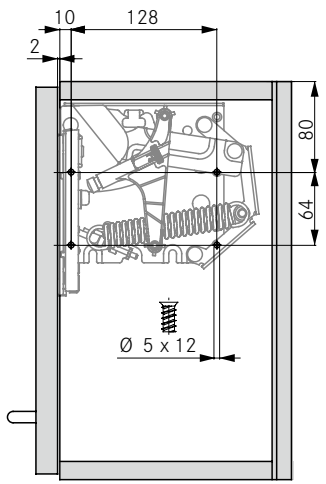
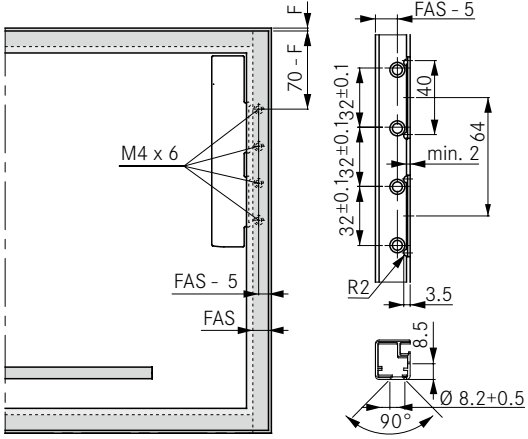
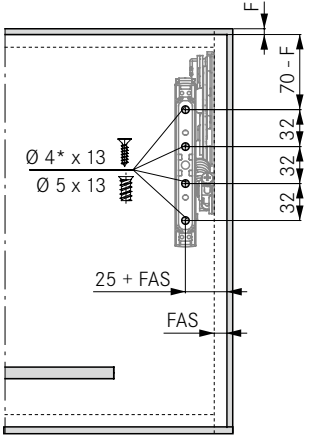
- 1 Fitting on the right without and on the left with damper (1x)
- 2 Cover caps on right and left (1x)
- 3 Mounting plates (2x)  
Paper template (1x)  
Installation instructions (1x)



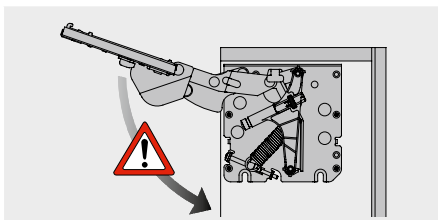
|                                 |    |  |  |
|---------------------------------|----|--|--|
| Assembly aids                   | 50 |  |  |
| Kinvaro T-76 adjustment options | 44 |  |  |

**ASSEMBLY AND INSTALLATION INSTRUCTIONS**

All dimensions in millimetres

|   |  |
|---|--|
| <p><b>Required space</b></p>   | <p><b>Side wall drilling positions</b></p>    |
| <p><b>Front: installation for flaps with standard aluminium frame profiles (19 mm)</b></p>    | <p><b>Front: installation for wooden and frame flaps (min. 55 mm width)</b></p>  <p style="text-align: right;">* Pre-drilling required - Ø 2 mm</p> |
| <p><b>Calculation of flap weight</b></p> <p>Flap width x flap height x flap thickness x density<sup>1</sup> + weight of handle<sup>2</sup> = weight of flap</p> <p><sup>1</sup> Densities: MDF 0.85 kg/dm<sup>3</sup>, chipboard 0.65 kg/dm<sup>3</sup>, spruce/pine 0.45 kg/dm<sup>3</sup></p> <p><sup>2</sup> For bar handles allow 0.1 kg for each 100 mm handle width. We recommend a trial fitting</p> |  |

**WARNING**



**Important!**  
**Caution - risk of injury!**  
**Fitting is spring-tensioned!**

**LEGEND**

F Reveal  
FAS Front overlay, side

# KINVARO

## T-57 lift-up flap fitting



- Opening angle adjustable to 75° or 90°
- Easy to fit
- Adjustable spring force
- Adjustable flap height  $\pm 1.0$  mm
- No hinges fitted to the top panel
- Allows additional cabinet installation above
- Can be used for wooden flaps or aluminium frames with glass infill
- Weight 1.0 to 6.2 kg
- Range of flaps:  
Width: up to 1200 mm  
Height: 300 – 600 mm
- High-quality finish, nickel-plated

### APPLICATION RANGE

| Cabinet height | Flap weight incl. handle |      |
|----------------|--------------------------|------|
|                | min.                     | max. |
| 300            | 1.0                      | 6.2  |
| 350            | 1.2                      | 4.9  |
| 400            | 1.4                      | 3.8  |
| 450            | 1.5                      | 3.6  |
| 500            | 1.7                      | 2.9  |
| 550            | 1.9                      | 2.7  |
| 600            | 2.1                      | 2.5  |

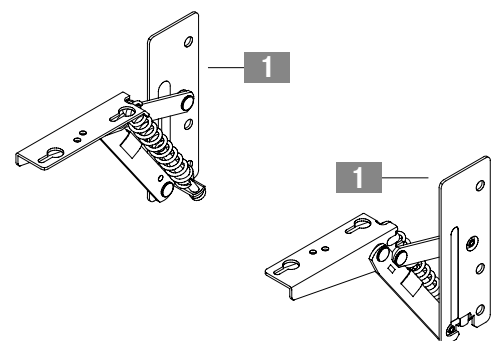
### ORDER INFORMATION

| <b>Kinvaro T-57 set</b>   |             |          |                   |
|---|-------------|----------|-------------------|
| Designation   | Version for | Overlay  | Art.-no.          |
| Kinvaro T-57, nickel-plated<br>adjustable springs on right and left | wood        | variable | <b>F151145224</b> |
|   | aluminium   | 14       | <b>F151145222</b> |
|   |             | 16       | <b>F151145223</b> |

**Kinvaro T-57 set** comprises:

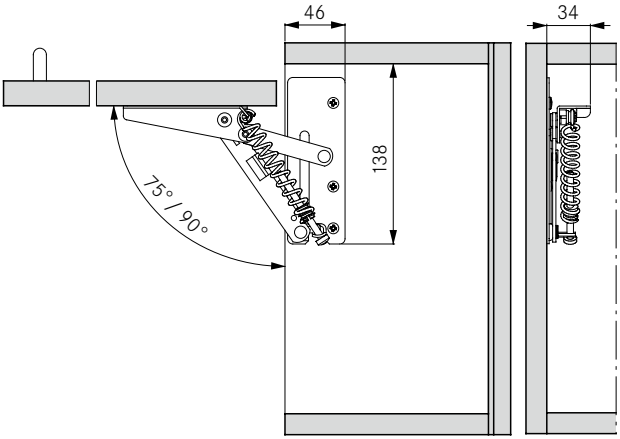
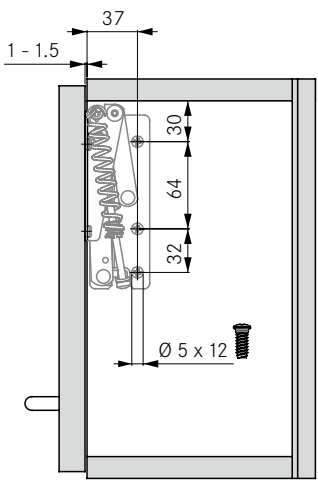
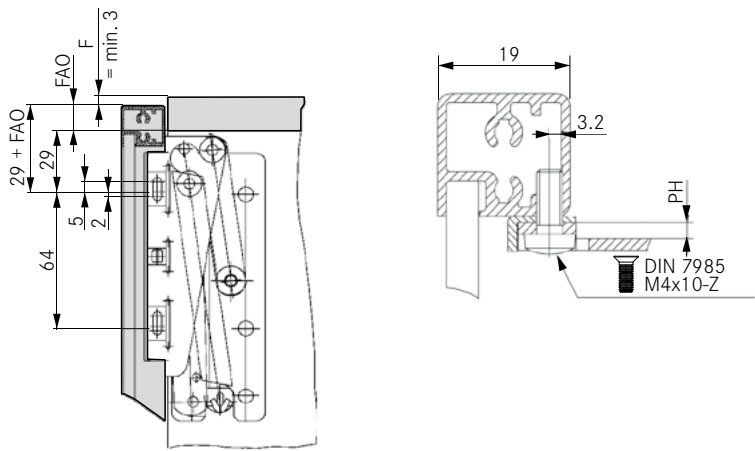
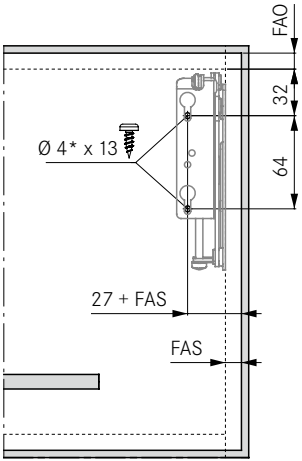
- 1** Fitting, right and left (1x)
- Paper template (1x)
- Installation instructions (1x)

|                                 |    |
|---------------------------------|----|
| Assembly aids                   | 50 |
| Kinvaro T-57 adjustment options | 45 |

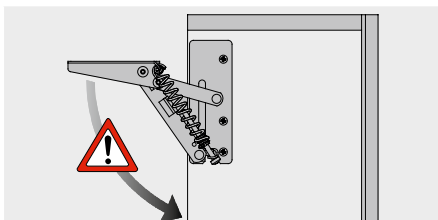


ASSEMBLY AND INSTALLATION INSTRUCTIONS

All dimensions in millimetres

|  |  |
|--|--|
| <p>Required space</p>   | <p>Side wall drilling positions</p>   |
| <p>Front: installation for flaps with standard aluminium frame profiles (19 mm)</p>    | <p>Front: installation for wooden and frame flaps (min. 55 mm width)</p>  <p>* Pre-drilling required - Ø 2 mm</p> |
| <p>Calculation of flap weight</p> <p>Flap width x flap height x flap thickness x density<sup>1</sup> + weight of handle<sup>2</sup> = weight of flap</p> <p><sup>1</sup> Densities: MDF 0.85 kg/dm<sup>3</sup>, chipboard 0.65 kg/dm<sup>3</sup>, spruce/pine 0.45 kg/dm<sup>3</sup></p> <p><sup>2</sup> For bar handles allow 0.1 kg for each 100 mm handle width. We recommend a trial fitting</p> |  |

WARNING



**Important!**  
**Caution - risk of injury!**  
**Fitting is spring-tensioned!**

LEGEND

F Reveal  
FAO Front overlay, top  
FAS Front overlay, side  
PH Stamping height

# KINVARO

## T-105 flap stay



- Variable opening angle, holds flaps securely from 45° to 105°
- Spring-supported opening function
- Convenient access, flap lifts clear of the work area
- Suitable for wooden doors and aluminium frames with glass infill
- Allows additional cabinet installation above
- Maintenance-free, no readjustment required
- High-quality zinc diecasting, nickel-plated
- Range of flaps:
  - Width: up to 1200 mm
  - Weight: 250 – 500 mm

**Note:**

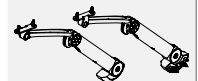
- Tiomos 120° hinges with spring, without damper, and Tiomos mounting plates for top panel need to be ordered separately

### APPLICATION RANGE

| Cabinet height | Number of flap stays | Flap weight incl. handle (kg) |               |
|----------------|----------------------|-------------------------------|---------------|
|                |                      | Spring, standard              | Spring, black |
| 250            | 1                    | 1.4 – 4.4                     | 3.0 – 5.5     |
|                | 2                    | 3.4 – 8.9                     | 6.0 – 11.1    |
| 300            | 1                    | 1.6 – 4.3                     | 2.8 – 5.2     |
|                | 2                    | 3.2 – 8.6                     | 5.5 – 10.4    |
| 350            | 1                    | 1.3 – 4.1                     | 2.4 – 4.8     |
|                | 2                    | 2.6 – 8.1                     | 4.8 – 9.5     |
| 400            | 1                    | 1.3 – 3.4                     | 2.2 – 4.0     |
|                | 2                    | 2.6 – 6.8                     | 4.3 – 8.1     |
| 450            | 1                    | 1.2 – 3.0                     | 1.9 – 3.8     |
|                | 2                    | 2.4 – 6.1                     | 3.8 – 7.4     |
| 500            | 1                    | 1.1 – 2.9                     | 1.7 – 3.5     |
|                | 2                    | 2.2 – 5.8                     | 3.3 – 6.7     |

### ORDER INFORMATION

| Kinvaro T-105 set   |          |             |          |                   |                   |
|---|----------|-------------|----------|-------------------|-------------------|
| Designation   | Springs  | Version for | Overlay  | Left              | Right             |
| Kinvaro T-105 right, adjustable standard springs, incl. black cover cap | standard | wood        | variable | <b>F151145220</b> | <b>F151145221</b> |
|   | black    |             |          | <b>F151145218</b> | <b>F151145219</b> |
|   | standard | aluminium   | 14       | <b>F151145214</b> | <b>F151145215</b> |
|   |          |             | 16       | <b>F151145216</b> | <b>F151145217</b> |

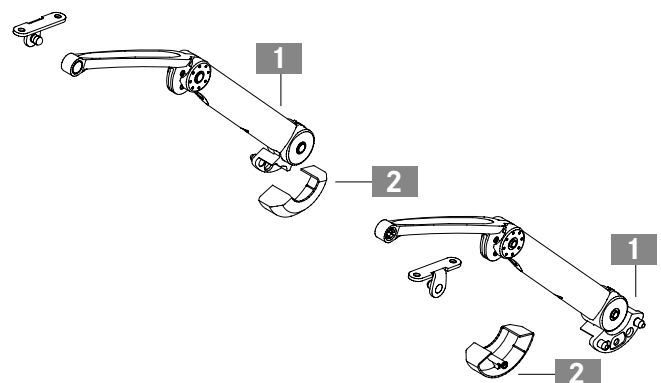


**Note:**

Please order separately: Tiomos 120° hinges with spring, without damper, and Tiomos mounting plates for top panel.

**Kinvaro T-105 set** comprises:

- 1** Fitting, right or left (1x)
- 2** Cover caps, right or left, in black (1x)
- Paper template (1x)
- Installation instructions (1x)



|                                  |    |  |  |  |  |
|----------------------------------|----|--|--|--|--|
| Assembly aids                    | 50 |  |  |  |  |
| Kinvaro T-105 adjustment options | 46 |  |  |  |  |

**ASSEMBLY AND INSTALLATION INSTRUCTIONS**

All dimensions in millimetres

| <p><b>Required space</b></p>  | <p><b>Side wall drilling positions</b></p>                                      |          |          |   |     |          |          |          |        |          |          |          |   |
|---|---|----------|----------|---|-----|----------|----------|----------|--------|----------|----------|----------|---|
| <p><b>Front: installation for flaps with standard aluminium frame profiles (19 mm)</b></p>  | <p><b>Front: installation for wooden and frame flaps (min. 45 mm width)</b></p> |          |          |   |     |          |          |          |        |          |          |          |   |
| <table border="1"> <thead> <tr> <th>Opening angle</th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>95°</td> <td>169 + MH</td> <td>174 + MH</td> <td>118 + MH</td> </tr> <tr> <td>≥ 105°</td> <td>164 + MH</td> <td>169 + MH</td> <td>113 + MH</td> </tr> </tbody> </table>   | Opening angle   | A        | B        | C | 95° | 169 + MH | 174 + MH | 118 + MH | ≥ 105° | 164 + MH | 169 + MH | 113 + MH | <p>Minimum gap and door protrusion depend on the fitted hinge.<br/>You can find suitable hinges in the hinge systems product catalogue.</p> <p>Where cup hinges with different opening angles are used in a combination of wooden flaps and aluminium frame flaps, the smaller opening angle of the hinges used determines the installation dimensions for <b>both</b> flaps.</p> |
| Opening angle   | A   | B        | C        |   |     |          |          |          |        |          |          |          |   |
| 95°   | 169 + MH  | 174 + MH | 118 + MH |   |     |          |          |          |        |          |          |          |   |
| ≥ 105°  | 164 + MH  | 169 + MH | 113 + MH |   |     |          |          |          |        |          |          |          |   |
| <p><b>Calculation of flap weight</b></p> <p>Flap width x flap height x flap thickness x density<sup>1</sup> + weight of handle<sup>2</sup> = weight of flap</p> <p><sup>1</sup> Densities: MDF 0.85 kg/dm<sup>3</sup>, chipboard 0.65 kg/dm<sup>3</sup>, spruce/pine 0.45 kg/dm<sup>3</sup></p> <p><sup>2</sup> For bar handles allow 0.1 kg for each 100 mm handle width. We recommend a trial fitting</p> |   |          |          |   |     |          |          |          |        |          |          |          |   |

**LEGEND**

- A** Side wall fastening dimension
- B** Side wall fastening dimension
- C** Front fastening dimension
- FAO** Front overlay, top
- FAS** Front overlay, side
- MH** Mounting plate height

# KINVARO

## D-M flap stay with pull cable



- Damped opening and gentle closing
- Opening angle adjustable via length of pull cable
- Spring force adjustment
- Can be used with shallow cabinets from 110 mm depth
- Flap weight up to 10 kg
- Flap height 200 mm – 480 mm
- Can be used on left/right
- Easy to install horizontally or vertically
- Colours White, Night and Smoke
- Colour-coordinated with Tiomos flap hinge


**Note:**

- Please order Tiomos flap hinges separately

### APPLICATION RANGE

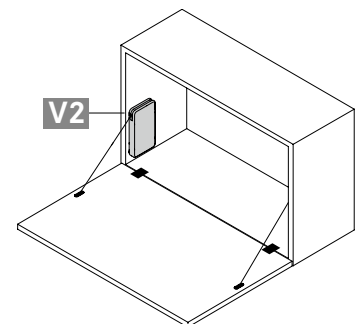
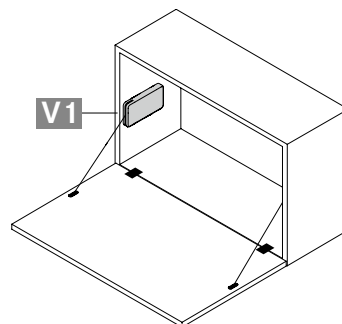
| Front height (FH) | V1                            |         |             |         |             |          |             |           | V2                            |         |             |          |             |           |             |           |
|-------------------|-------------------------------|---------|-------------|---------|-------------|----------|-------------|-----------|-------------------------------|---------|-------------|----------|-------------|-----------|-------------|-----------|
|                   | Flap weight incl. handle (kg) |         |             |         |             |          |             |           | Flap weight incl. handle (kg) |         |             |          |             |           |             |           |
|                   | Spring 60N                    |         | Spring 100N |         | Spring 160N |          | Spring 200N |           | Spring 60N                    |         | Spring 100N |          | Spring 160N |           | Spring 200N |           |
|                   | 1 x                           | 2 x     | 1 x         | 2 x     | 1 x         | 2 x      | 1 x         | 2 x       | 1 x                           | 2 x     | 1 x         | 2 x      | 1 x         | 2 x       | 1 x         | 2 x       |
| 200-230           | 4.0-4.8                       | -       | 4.2-6.2     | -       | 5.8-8.0     | -        | 7.2-10.4    | -         | 4.1-5.9                       | -       | 5.3-7.3     | -        | -           | -         | -           | -         |
| 230-270           | 3.0-4.4                       | 6.0-8.4 | 3.6-5.2     | 6.8-9.6 | 5.2-7.0     | -        | 6.8-8.6     | -         | 3.3-4.8                       | 6.8-9.6 | 4.2-6.0     | 9.6-12.8 | -           | -         | -           | -         |
| 270-330           | 2.9-3.8                       | 5.6-7.8 | 3.0-4.6     | 6.4-8.8 | 4.6-6.0     | 8.6-11.8 | 6.4-7.8     | -         | 3.2-4.5                       | 6.3-8.1 | 3.8-5.1     | 7.9-11.1 | 5.3-6.5     | 10.7-12.9 | -           | -         |
| 330-380           | 2.7-3.7                       | 5.0-8.0 | 3.2-4.3     | 6.5-8.5 | 4.3-5.7     | 8.7-11.1 | 5.5-7.1     | 11.9-13.5 | 2.6-3.4                       | 5.0-6.5 | 3.3-4.5     | 7.3-8.5  | 4.8-5.6     | 9.8-11.4  | 6.7-7.3     | 11.8-13.0 |
| 380-430           | 2.9-3.6                       | 4.5-6.1 | 3.1-3.9     | 5.7-7.3 | 4.5-6.1     | 8.5-10.1 | 5.4-6.9     | 10.9-12.5 | 2.5-3.4                       | 5.0-6.2 | 3.2-4.2     | 6.2-8.2  | 6.1-8.0     | 9.0-10.4  | 5.9-6.6     | 13.3-14.9 |
| 430-460           | 2.7-3.1                       | 4.3-6.1 | 2.7-3.9     | 5.9-8.3 | 4.1-4.9     | 8.3-9.5  | 5.3-5.7     | 10.1-11.5 | 2.3-3.0                       | 4.6-6.2 | 3.0-3.8     | 6.2-7.8  | 4.6-5.4     | 12.9-15.5 | 5.6-6.6     | 11.4-12.2 |
| 460-480           | 2.5-2.9                       | 4.1-5.7 | 2.8-3.8     | 5.3-7.7 | 3.8-4.8     | 7.2-9.6  | 5.4-5.6     | 9.8-11.4  | 2.4-3.2                       | 4.6-6.0 | 2.8-4.0     | 5.6-7.8  | 4.5-5.4     | 8.8-10.4  | 5.4-6.0     | 10.8-11.6 |

### ORDER INFORMATION

| Kinvaro D-M flap stay  |        |        |   |
|--|--------|--------|---|
|  |        |        |  |
| Designation  | Spring | Colour | Art.-no.  |
| Kinvaro D-M flap stay including front holder and fixing screws | 60N    | Grey   | <b>F053139661</b>   |
|  | 100N   | Grey   | <b>F053139662</b>   |
|  | 160N   | Grey   | <b>F053139686</b>   |
|  | 200N   | Grey   | <b>F053139687</b>   |

### ORDER INFORMATION

| Kinvaro D-M cover cap                         |        |   |
|---|--------|---|
|   |        |  |
| Designation                                   | Colour | Art.-no.  |
| Cover cap for Kinvaro D-M White, Night, Smoke | White  | <b>F053139668</b>   |
|   | Night  | <b>F053139669</b>   |
|   | Smoke  | <b>F053139670</b>   |



**Note:**

Please order Tiomos flap hinges separately.

|                                |    |
|--------------------------------|----|
| Assembly aids                  | 50 |
| Kinvaro D-M adjustment options | 47 |

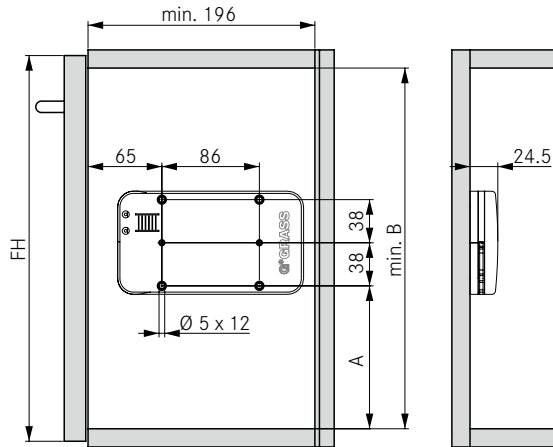


ASSEMBLY AND INSTALLATION INSTRUCTIONS

All dimensions in millimetres

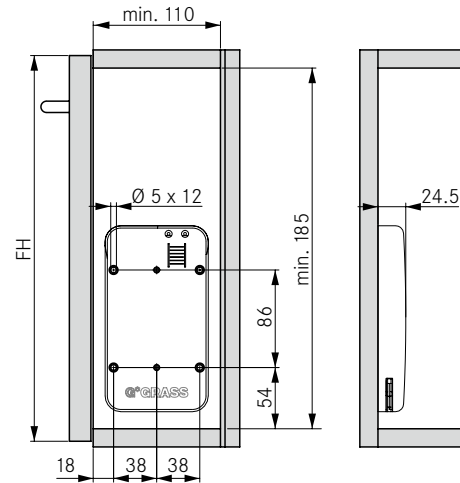
Drill position and space required

V1

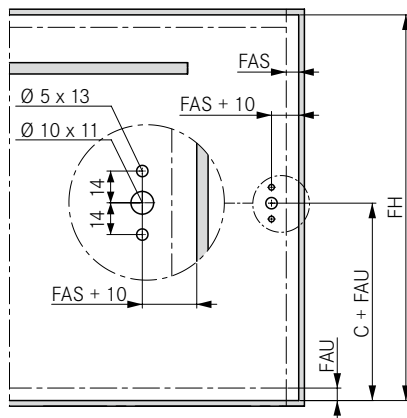


| FH        | A   | B   |
|-----------|-----|-----|
| 200 - 330 | 102 | 194 |
| 330 - 430 | 126 | 218 |
| 430 - 480 | 136 | 228 |

V2



Front mounting for wooden flaps



| FH        | C (V1) | C (V2) |
|-----------|--------|--------|
| 200 - 330 | 137    | 161    |
| 330 - 430 | 161    | 161    |
| 430 - 480 | 171    | 161    |

Minimum gap and door protrusion depend on the hinge fitted.  
You can find suitable hinges in the hinge systems product catalogue.

Calculation of flap weight

Flap width x flap height x flap thickness x density <sup>1</sup> + weight of handle <sup>2</sup> = weight of flap

<sup>1</sup> Densities: MDF board 0.85 kg/dm<sup>3</sup>, chipboard 0.65 kg/dm<sup>3</sup>, spruce/pine 0.45 kg/dm<sup>3</sup>

<sup>2</sup> Bar handles must be entered with 0.1 kg per 100 mm of handle length. We recommend a trial fitting

LEGEND

- FAS Front overlay, side
- FAU Front overlay, bottom
- FH Front height

# KINVARO

## D-S flap stay with pull cable



- Damped opening
- Opening angle adjustable via length of pull cable
- Can be used with shallow cabinets from 82 mm depth
- Flap height 200 mm – 480 mm
- Can be used on left/right
- Easy to install horizontally or vertically
- Colours White and Night
- Colour-coordinated with Tiomos flap hinge


**Note:**

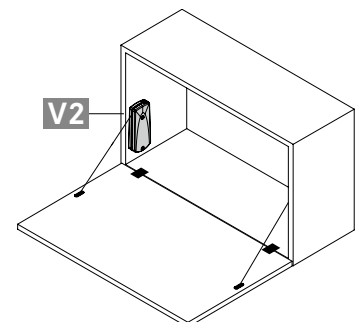
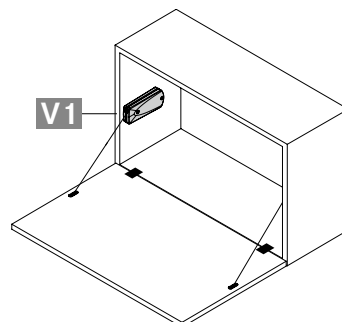
- Please order Tiomos flap hinges separately

### APPLICATION RANGE

| Front height (FH) | V1 + V2                       |           |            |           |
|-------------------|-------------------------------|-----------|------------|-----------|
|                   | Flap weight incl. handle (kg) |           |            |           |
|                   | Spring 40N                    |           | Spring 60N |           |
|                   | 1 x                           | 2 x       | 1 x        | 2 x       |
| 200 - 270         | 1.7 - 3.0                     | 3.9 - 4.5 | 3.1 - 4.0  | 7.5 - 8.0 |
| 270 - 330         | 1.7 - 3.0                     | 3.3 - 4.5 | 3.1 - 4.0  | 6.1 - 7.4 |
| 330 - 380         | 1.7 - 1.9                     | 3.2 - 3.5 | 2.9 - 3.5  | 5.1 - 6.8 |
| 380 - 430         | 1.5 - 1.8                     | 2.7 - 3.3 | 2.5 - 3.3  | 4.8 - 6.6 |
| 430 - 460         | 1.2 - 1.7                     | 2.5 - 3.1 | 2.3 - 3.3  | 4.6 - 6.0 |
| 460 - 480         | -                             | -         | 2.2 - 2.8  | 4.4 - 5.3 |

### ORDER INFORMATION

| Kinvaro D-S flap stay  |        |        |  |
|--|--------|--------|---|
| Designation  | Spring | Colour | Art.-no.  |
| Kinvaro D-S flap stay including front holder and fixing screws | 40N    | White  | <b>F053139664</b>   |
|  |        | Night  | <b>F053139665</b>   |
|  | 60N    | White  | <b>F053139666</b>   |
|  |        | Night  | <b>F053139667</b>   |



**Note:**

Please order Tiomos flap hinges separately.

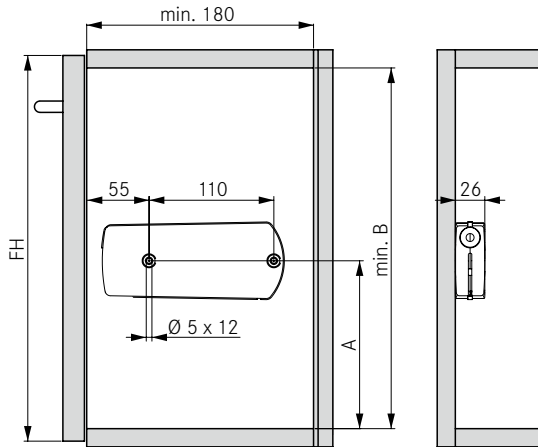
|                                |    |
|--------------------------------|----|
| Assembly aids                  | 50 |
| Kinvaro D-S adjustment options | 48 |

ASSEMBLY AND INSTALLATION INSTRUCTIONS

All dimensions in millimetres

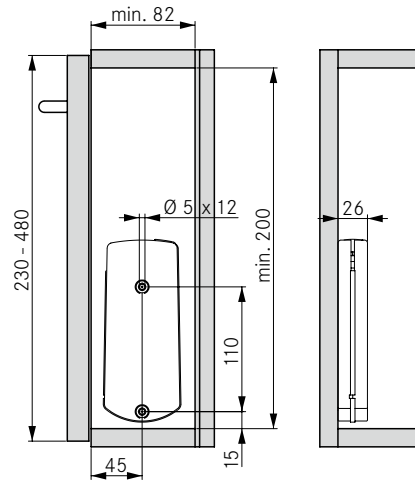
Drill position and space required

V1

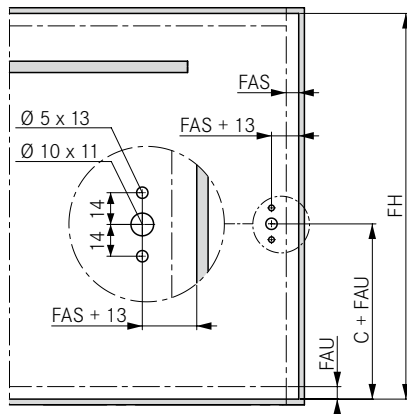


| FH        | A   | B   |
|-----------|-----|-----|
| 200 - 270 | 135 | 173 |
| 270 - 480 | 148 | 186 |

V2



Front mounting for wooden flaps



| FH        | C (V1) | C (V2) |
|-----------|--------|--------|
| 200 - 270 | 123    | -      |
| 270 - 480 | 144    | -      |
| 230 - 480 | -      | 123    |

Minimum gap and door protrusion depend on the fitted hinge.  
You can find suitable hinges in the hinge systems product catalogue.

Calculation of flap weight

Flap width x flap height x flap thickness x density <sup>1</sup> + weight of handle <sup>2</sup> = weight of flap

<sup>1</sup> Densities: MDF board 0.85 kg/dm<sup>3</sup>, chipboard 0.65 kg/dm<sup>3</sup>, spruce/pine 0.45 kg/dm<sup>3</sup>

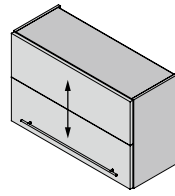
<sup>2</sup> Bar handles must be entered with 0.1 kg per 100 mm of handle length. We recommend a trial fitting

LEGEND

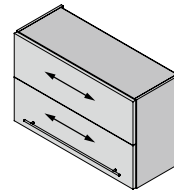
- FAS Front overlay, side
- FAU Front overlay, bottom
- FH Front height

# KINVARO

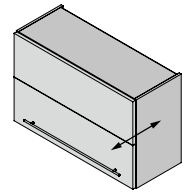
## Adjustment options F-20



(HV) Height adjustment  
+/- 1.5 mm



(SV) Side adjustment  
+/- 2 mm

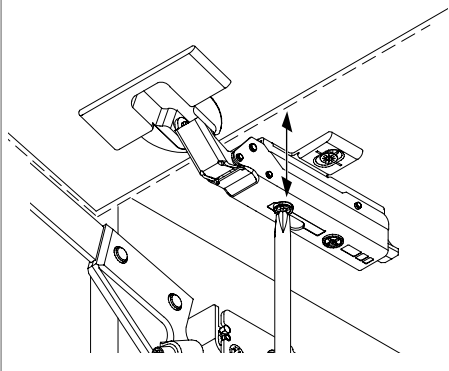


(TV) Depth adjustment  
+/- 0.5 mm

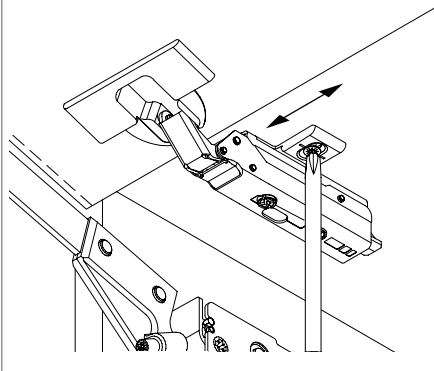
All adjustments can be carried out independently of each other.

### ADJUSTMENT OPTIONS FOR HINGE IN CABINET TOP PANEL

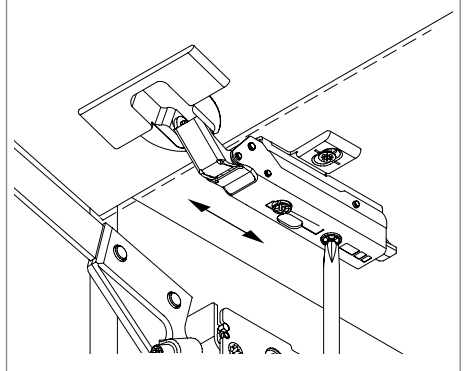
Height adjustment (HV)



Side adjustment (SV)

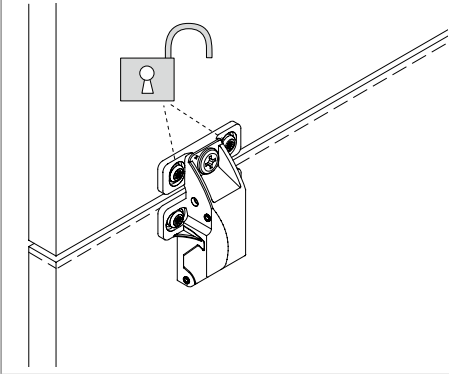


Depth adjustment (TV)

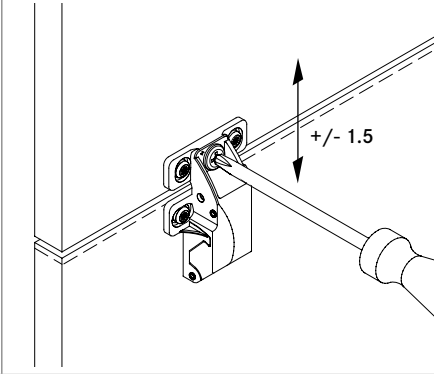


### ADJUSTMENT OPTIONS FOR INTERMEDIATE HINGE

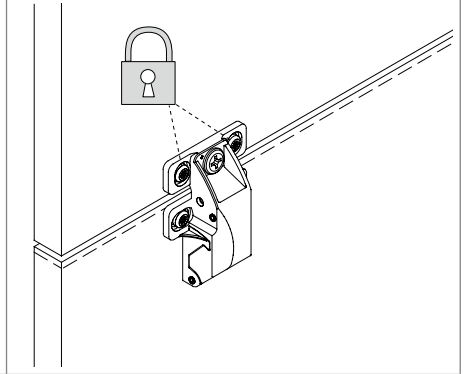
Height adjustment (HV)



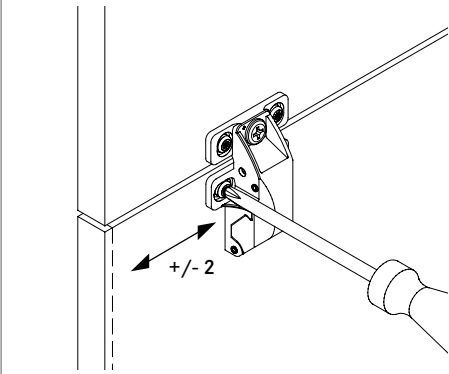
Side adjustment (SV)



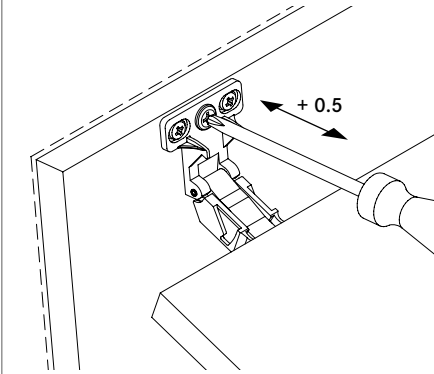
Depth adjustment (TV)



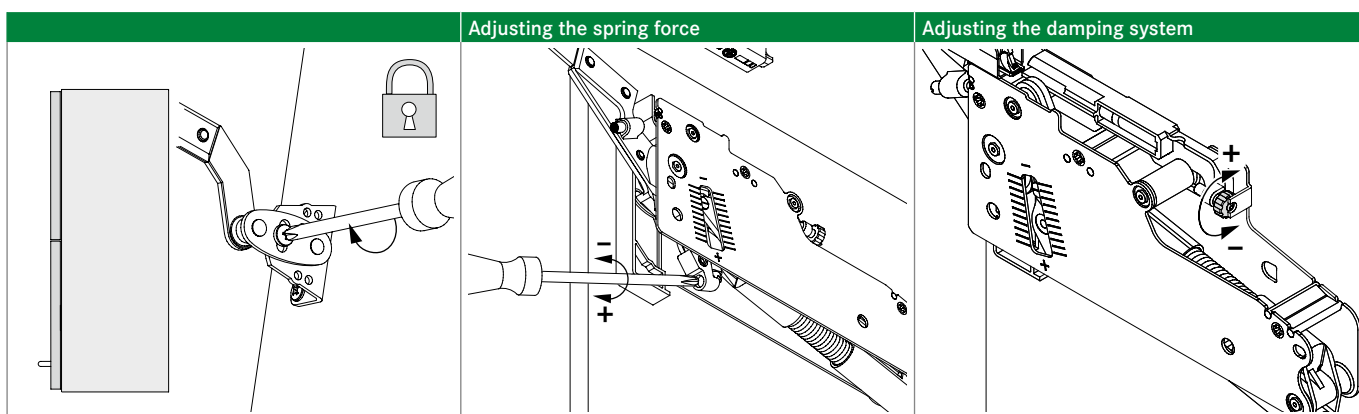
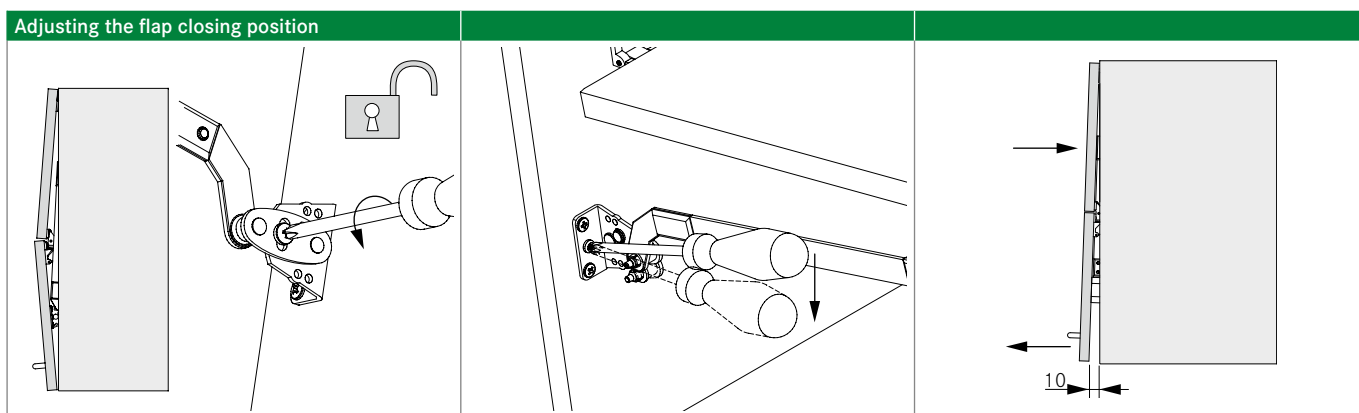
Side adjustment (SV)



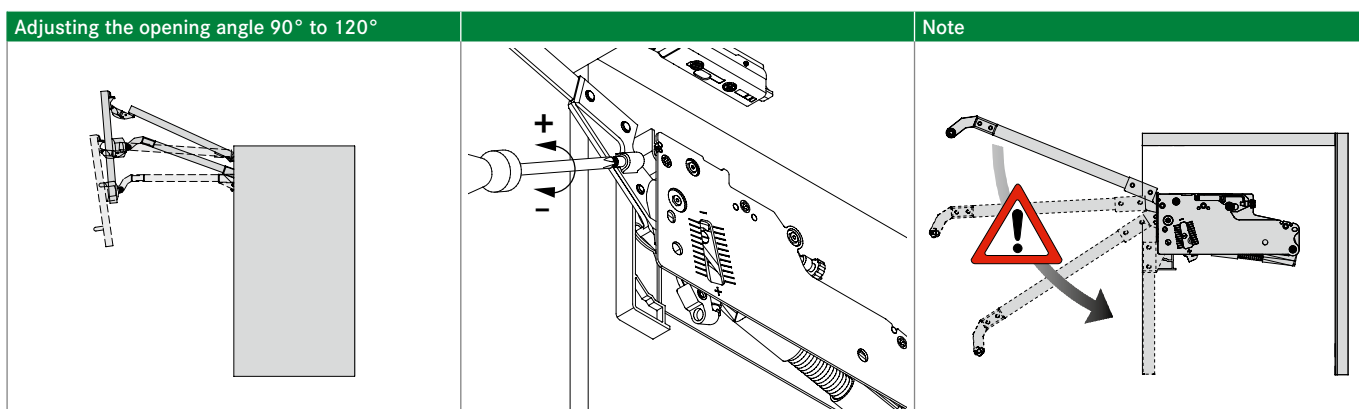
Depth adjustment (TV)



### ADJUSTMENTS

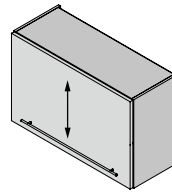
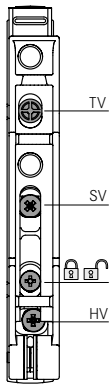


### WARNING

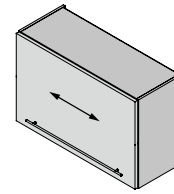


# KINVARO

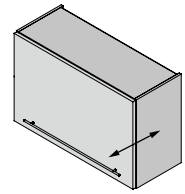
## Adjustment options L-80



(HV) Height adjustment  
+/- 1.5 mm



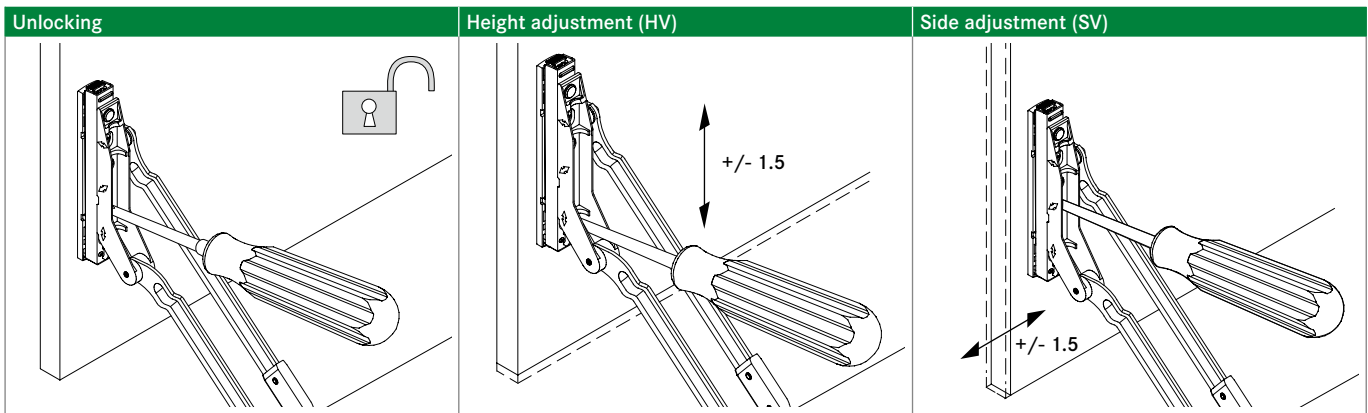
(SV) Side adjustment  
+/- 1.5 mm



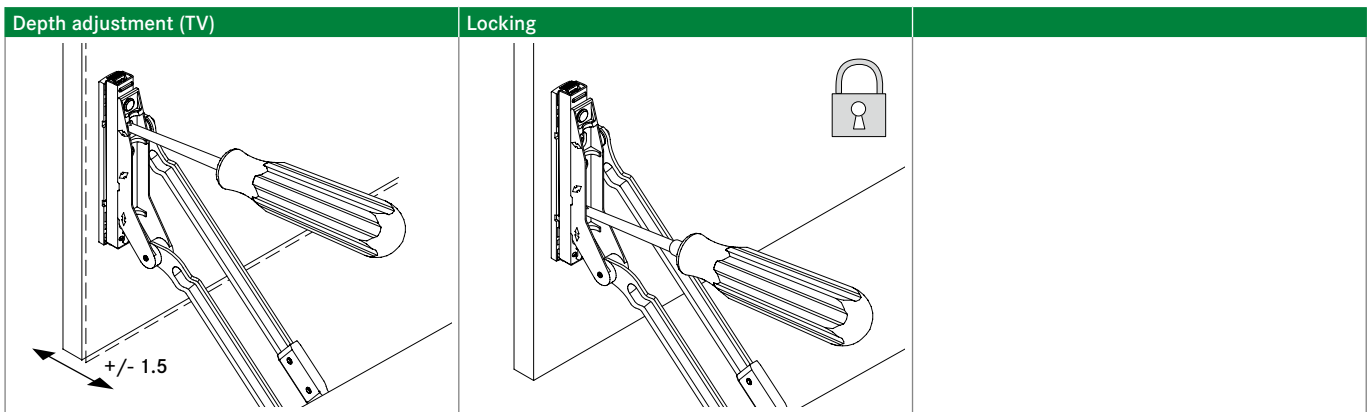
(TV) Depth adjustment  
+/- 1.5 mm

All adjustments can be carried out independently of each other.

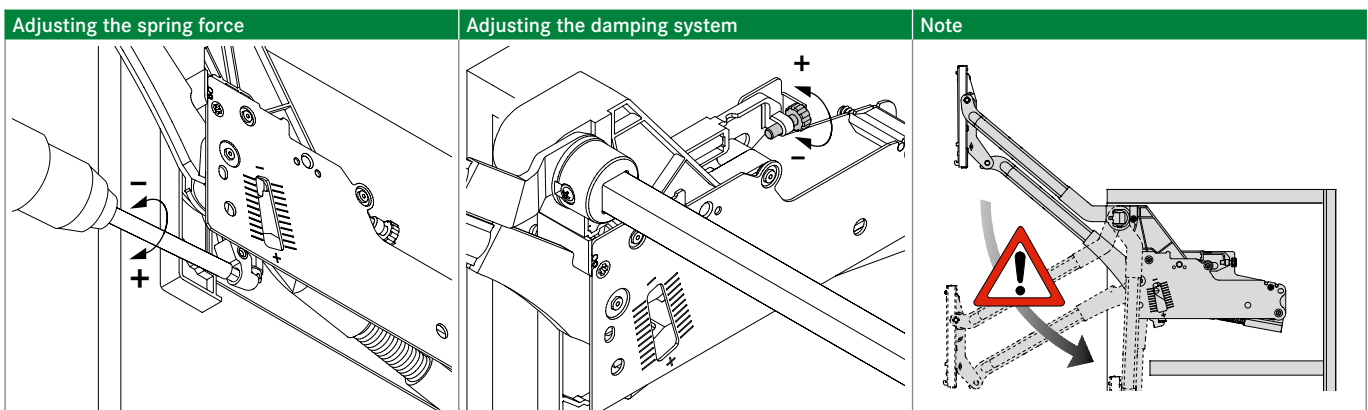
### ADJUSTMENT OPTIONS

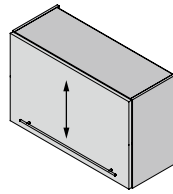
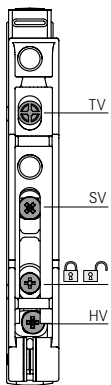


### ADJUSTMENTS

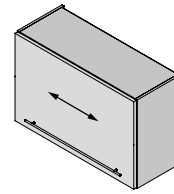


### WARNING

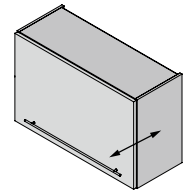




(HV) Height adjustment  
+/- 1.5 mm



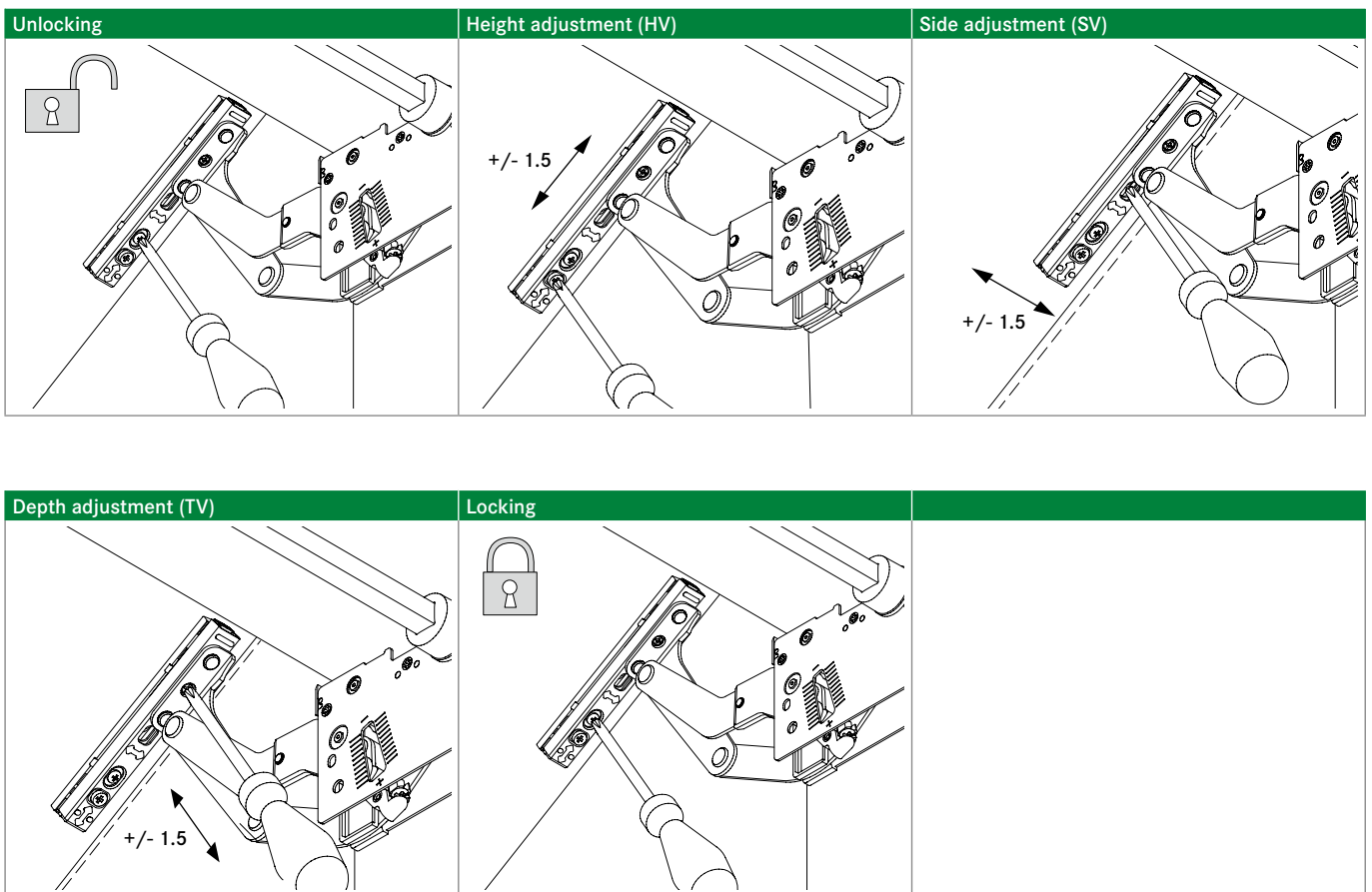
(SV) Side adjustment  
+/- 1.5 mm



(TV) Depth adjustment  
+/- 1.5 mm

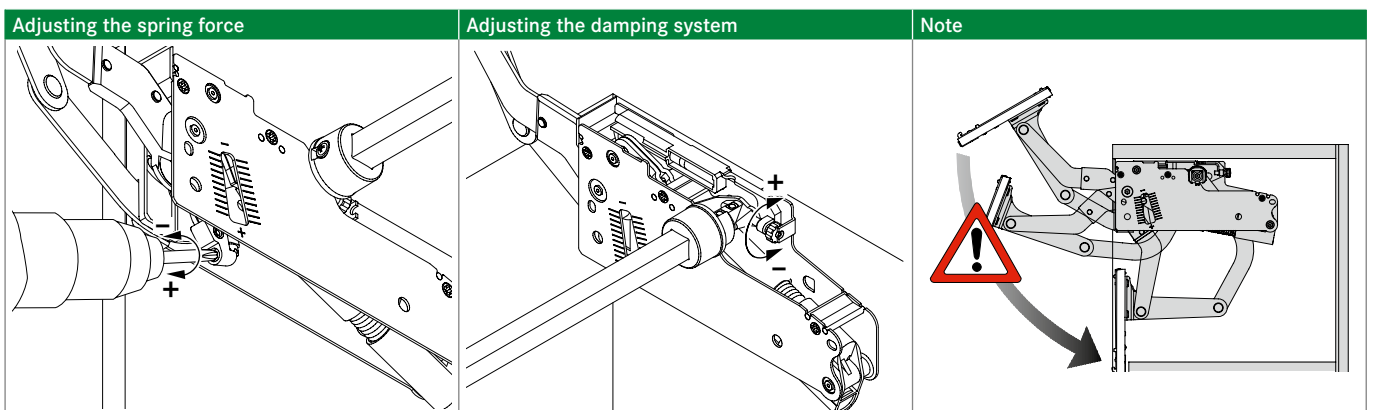
All adjustments can be carried out independently of each other.

## ADJUSTMENT OPTIONS



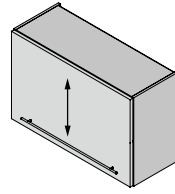
## ADJUSTMENTS

## WARNING



# KINVARO

## Adjustment options T-65



(HV) Height adjustment  
+/-3 mm

All adjustments can be carried out independently of each other.

### ADJUSTMENT OPTIONS

| Height adjustment (HV) | Locking |  |
|------------------------|---------|--|
|                        |         |  |

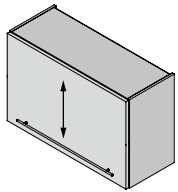
### ADJUSTMENTS

| Adjusting the spring force | Adjusting the damping system |  |
|----------------------------|------------------------------|--|
|                            |                              |  |

### WARNING

|  |  | Note |
|--|--|------|
|  |  |      |





(HV) Height adjustment  
+/- 2 mm

All adjustments can be carried out independently of each other.

## ADJUSTMENT OPTIONS

| Unlocking | Height adjustment (HV) | Locking |
|-----------|------------------------|---------|
|           |                        |         |

## ADJUSTMENTS

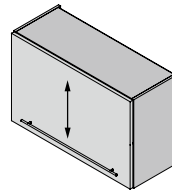
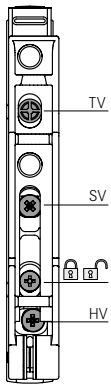
| Adjusting the spring force | Adjusting the damping system |  |
|----------------------------|------------------------------|--|
|                            |                              |  |

## WARNING

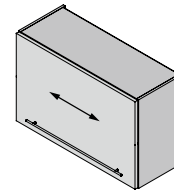
|  |  | Note |
|--|--|------|
|  |  |      |

# KINVARO

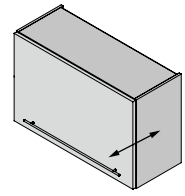
## Adjustment options T-71



(HV) Height adjustment  
+/- 1.5 mm



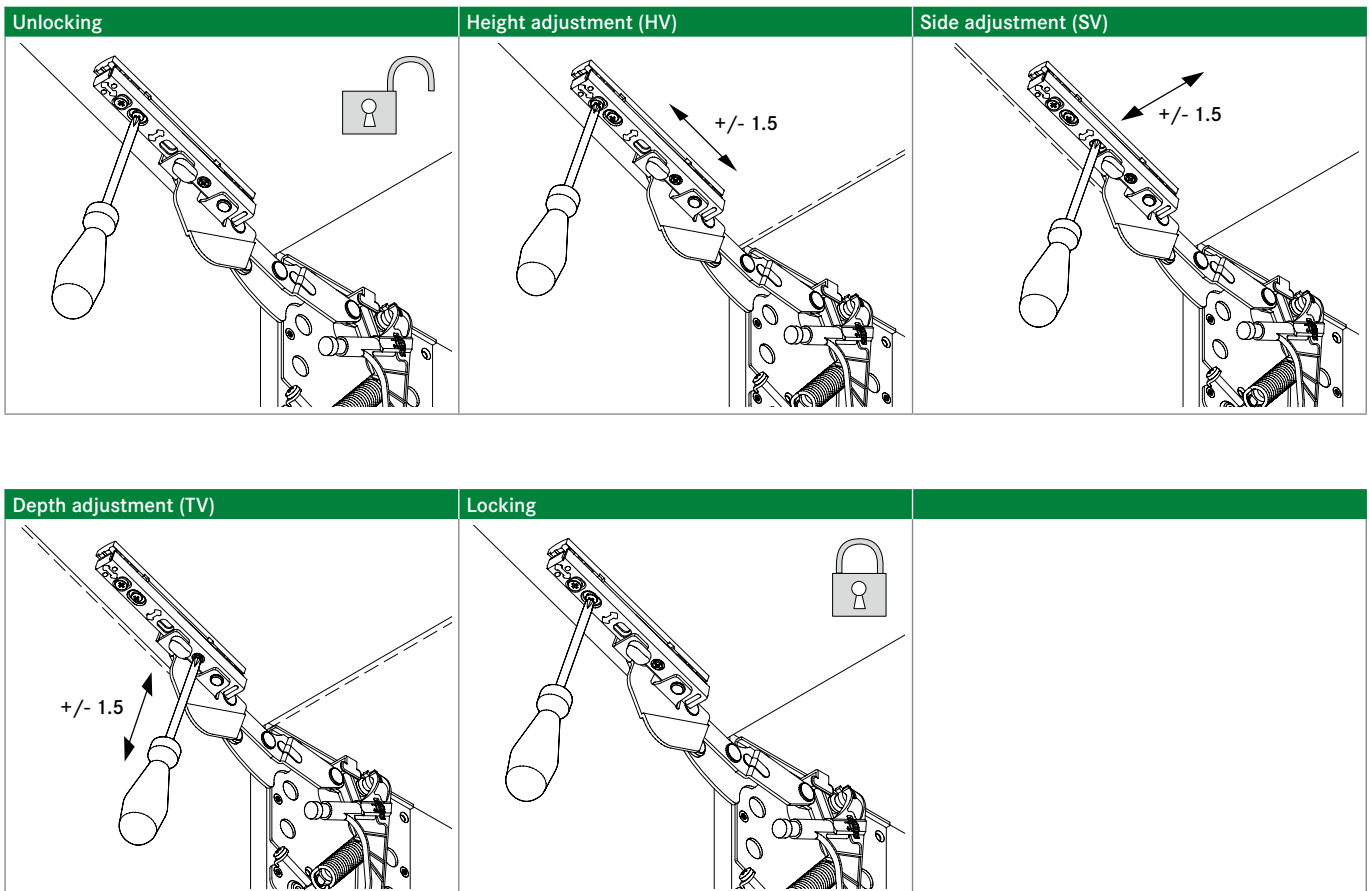
(SV) Side adjustment  
+/- 1.5 mm



(TV) Depth adjustment  
+/- 1.5 mm

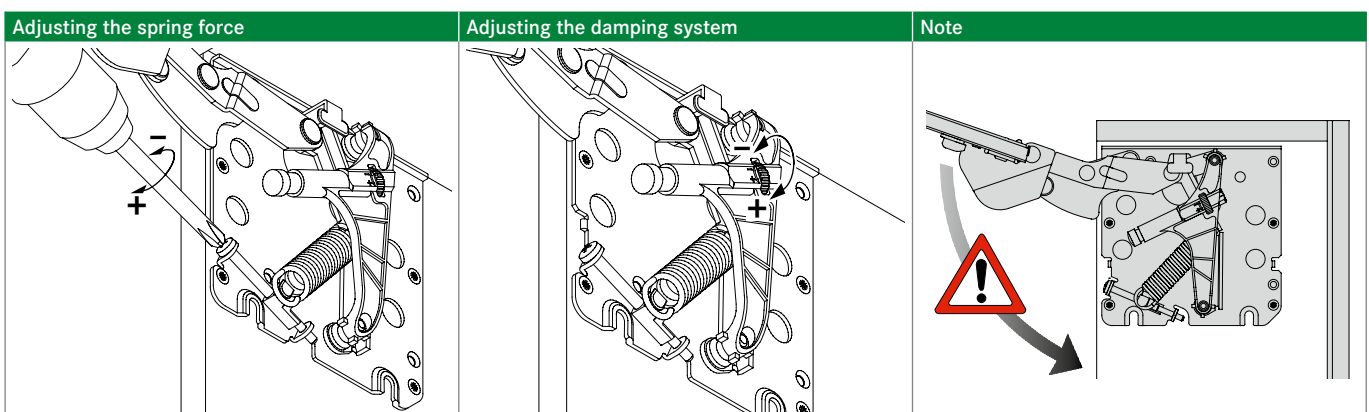
All adjustments can be carried out independently of each other.

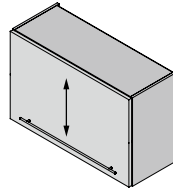
### ADJUSTMENT OPTIONS



### ADJUSTMENTS

### WARNING

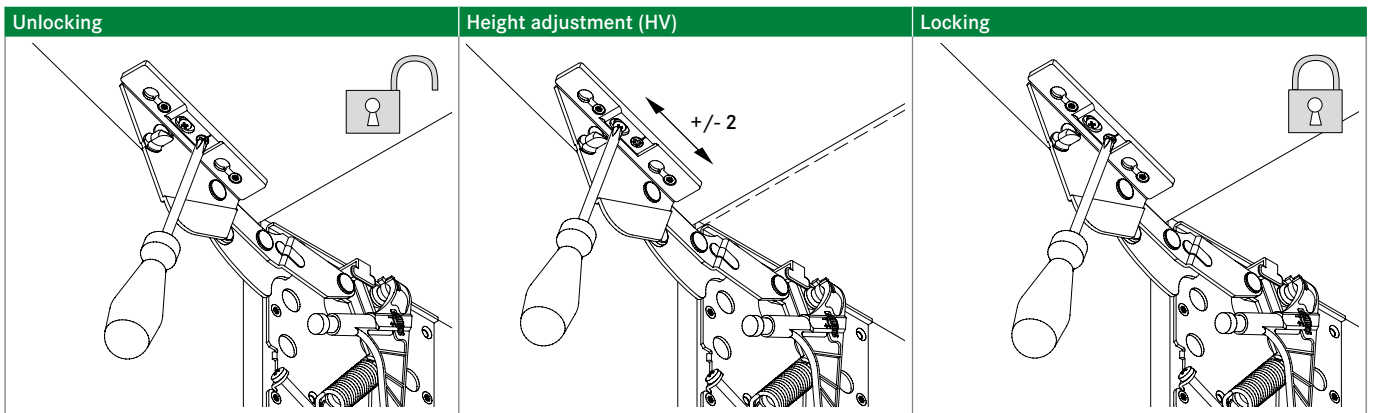




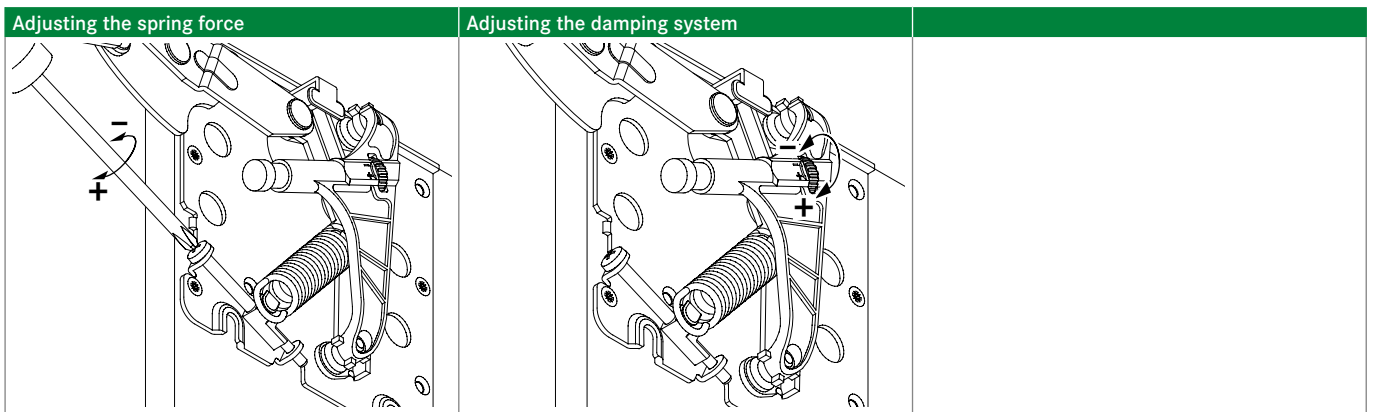
(HV) Height adjustment  
+/-2 mm

All adjustments can be carried out independently of each other.

## ADJUSTMENT OPTIONS



## ADJUSTMENTS

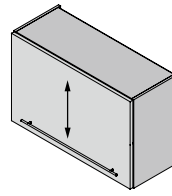
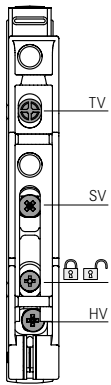


## WARNING

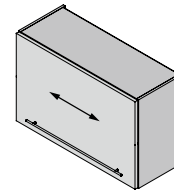


# KINVARO

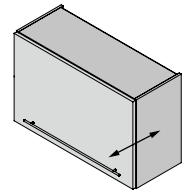
## Adjustment options T-76



(HV) Height adjustment  
+/- 1.5 mm



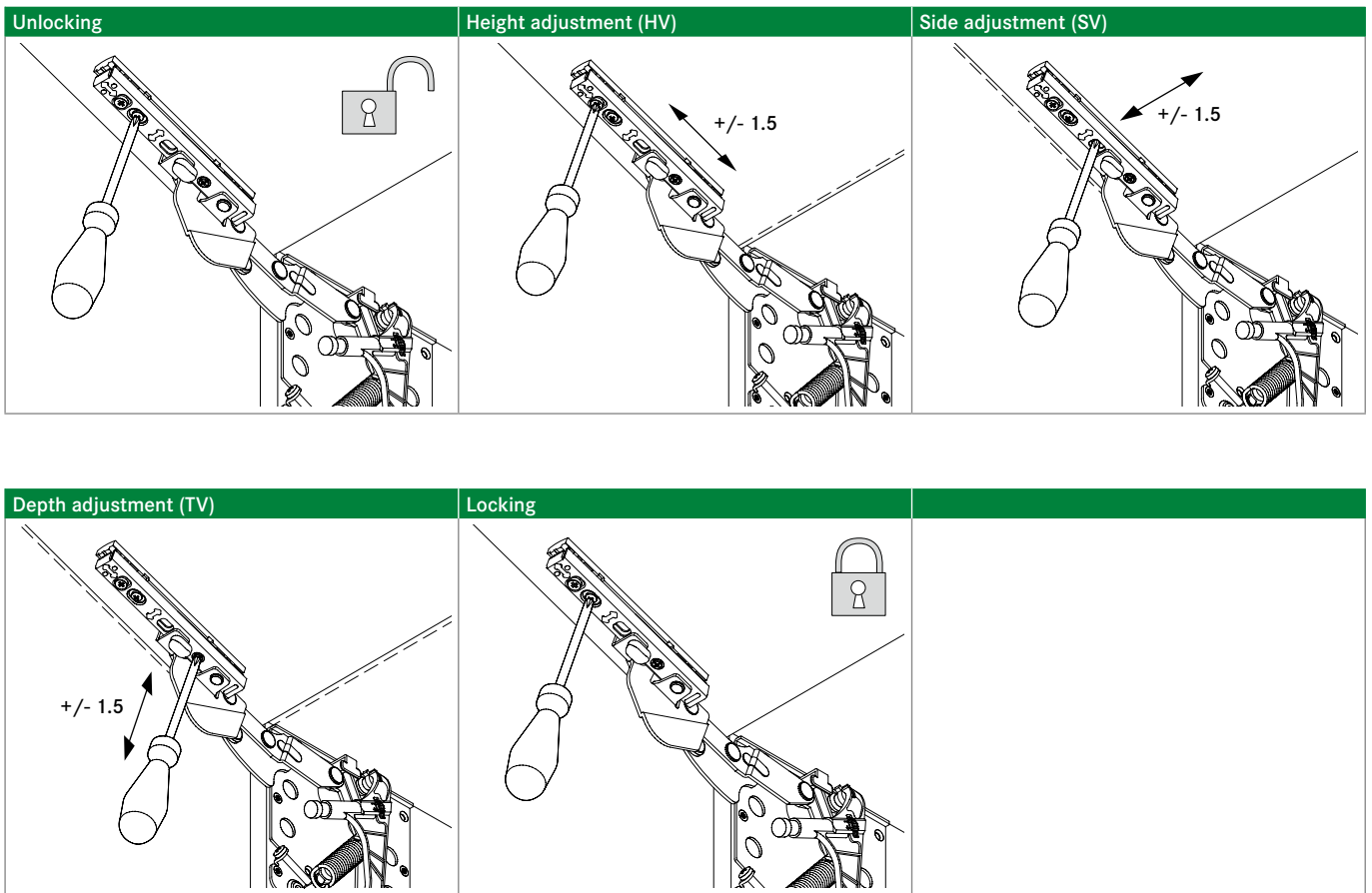
(SV) Side adjustment  
+/- 1.5 mm



(TV) Depth adjustment  
+/- 1.5 mm

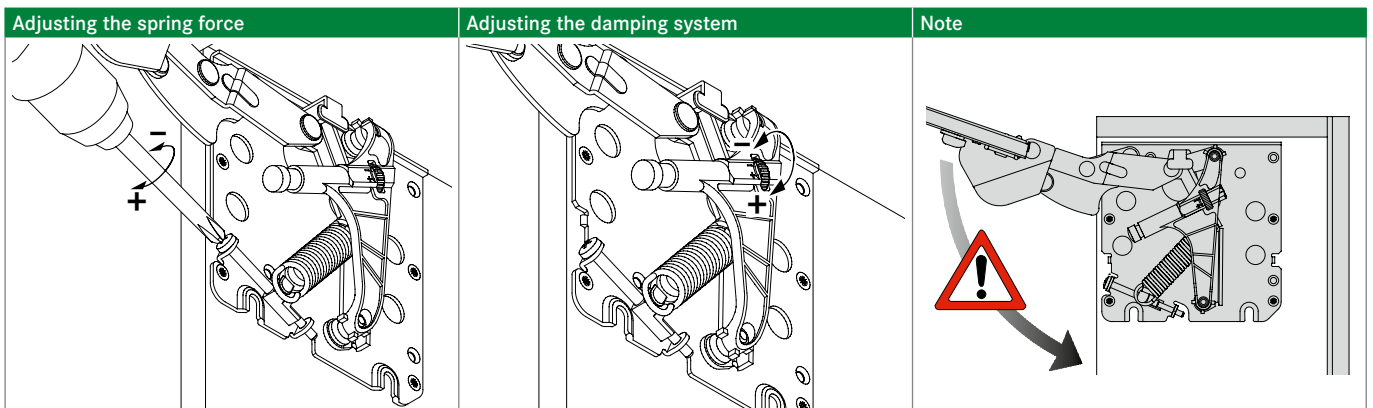
All adjustments can be carried out independently of each other.

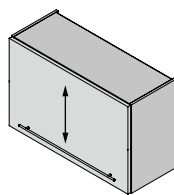
### ADJUSTMENT OPTIONS



### ADJUSTMENTS

### WARNING





(HV) Height adjustment  
+/- 1 mm

All adjustments can be carried out independently of each other.

### ADJUSTMENT OPTIONS

| Height adjustment (HV) | Locking |  |
|------------------------|---------|--|
|                        |         |  |

### ADJUSTMENTS

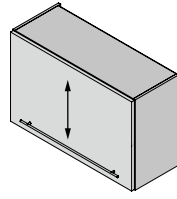
| Adjusting to 75° opening angle | Adjusting to 100° opening angle | Adjusting the spring force |
|--------------------------------|---------------------------------|----------------------------|
|                                |                                 |                            |

### WARNING

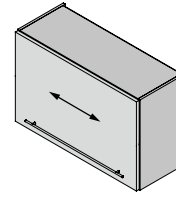
|  |  | Note |
|--|--|------|
|  |  |      |

# KINVARO

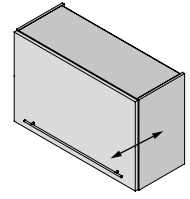
## Adjustment options T-105



(HV) Height adjustment



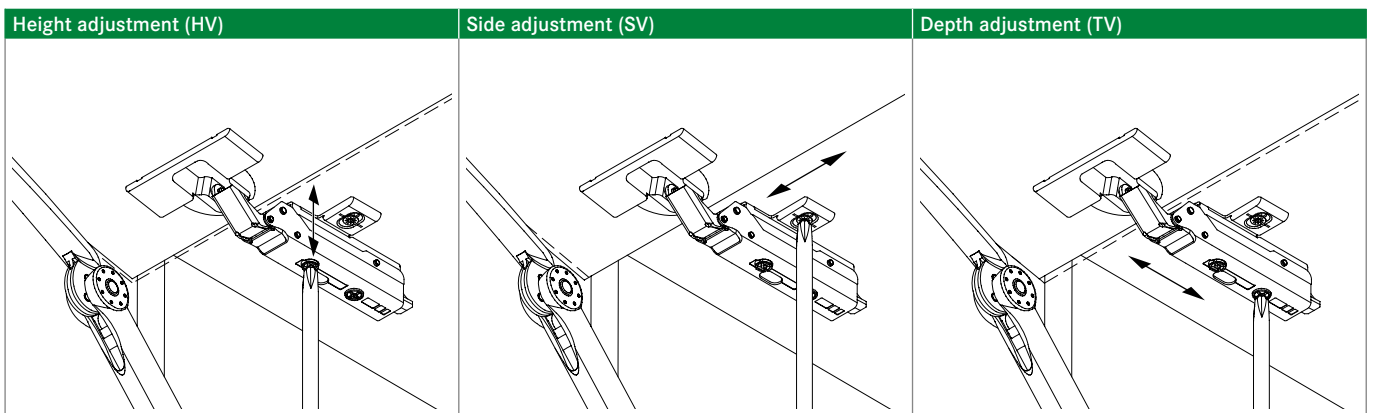
(SV) Side adjustment



(TV) Depth adjustment

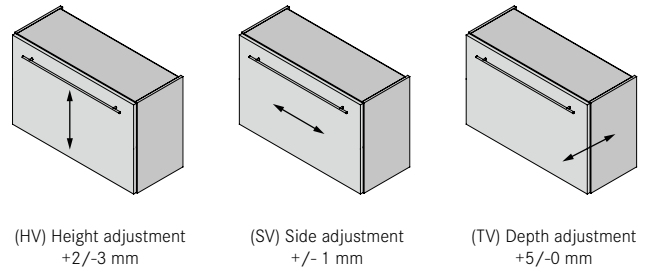
All adjustments can be carried out independently of each other.

### ADJUSTMENT OPTIONS FOR HINGE IN CABINET TOP PANEL



### ADJUSTMENTS





All adjustments can be carried out independently of each other.

## ADJUSTMENT OPTIONS, HINGE IN THE CABINET BASE

| Height adjustment (HV)  | Side adjustment (SV) | Depth adjustment (TV) |
|---|----------------------|-----------------------|
| <p>+2/-3 mm</p>   | <p>+/- 1 mm</p>      | <p>+5/-0 mm</p>       |
| <p>The adjustment options shown here refer to the TIOMOS flap hinge. You can find these in the hinge systems product catalogue.</p> |                      |                       |

## ADJUSTMENTS

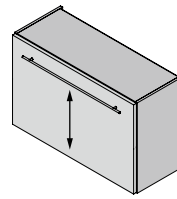
| Adjusting the opening angle                             |  | Adjusting the opening speed |
|---|--|-----------------------------|
| <p>Easing the weight of the door during adjustment.</p> |  |                             |

## WARNING

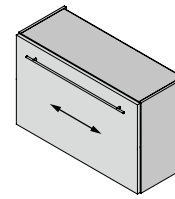
|  |  | Note |
|--|--|------|
|  |  |      |

# KINVARO

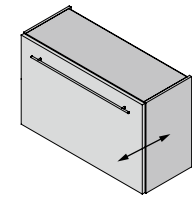
## Adjustment options D-S



(HV) Height adjustment  
+2/-3 mm



(SV) Side adjustment  
+/- 1 mm



(TV) Depth adjustment  
+5/-0 mm

All adjustments can be carried out independently of each other.

### ADJUSTMENT OPTIONS, HINGE IN THE CABINET BASE

| Height adjustment (HV)  | Side adjustment (SV) | Depth adjustment (TV) |
|---|----------------------|-----------------------|
|   |                      |                       |
| <p>The adjustment options shown here refer to the TIOMOS flap hinge. You can find these in the hinge systems product catalogue.</p> |                      |                       |

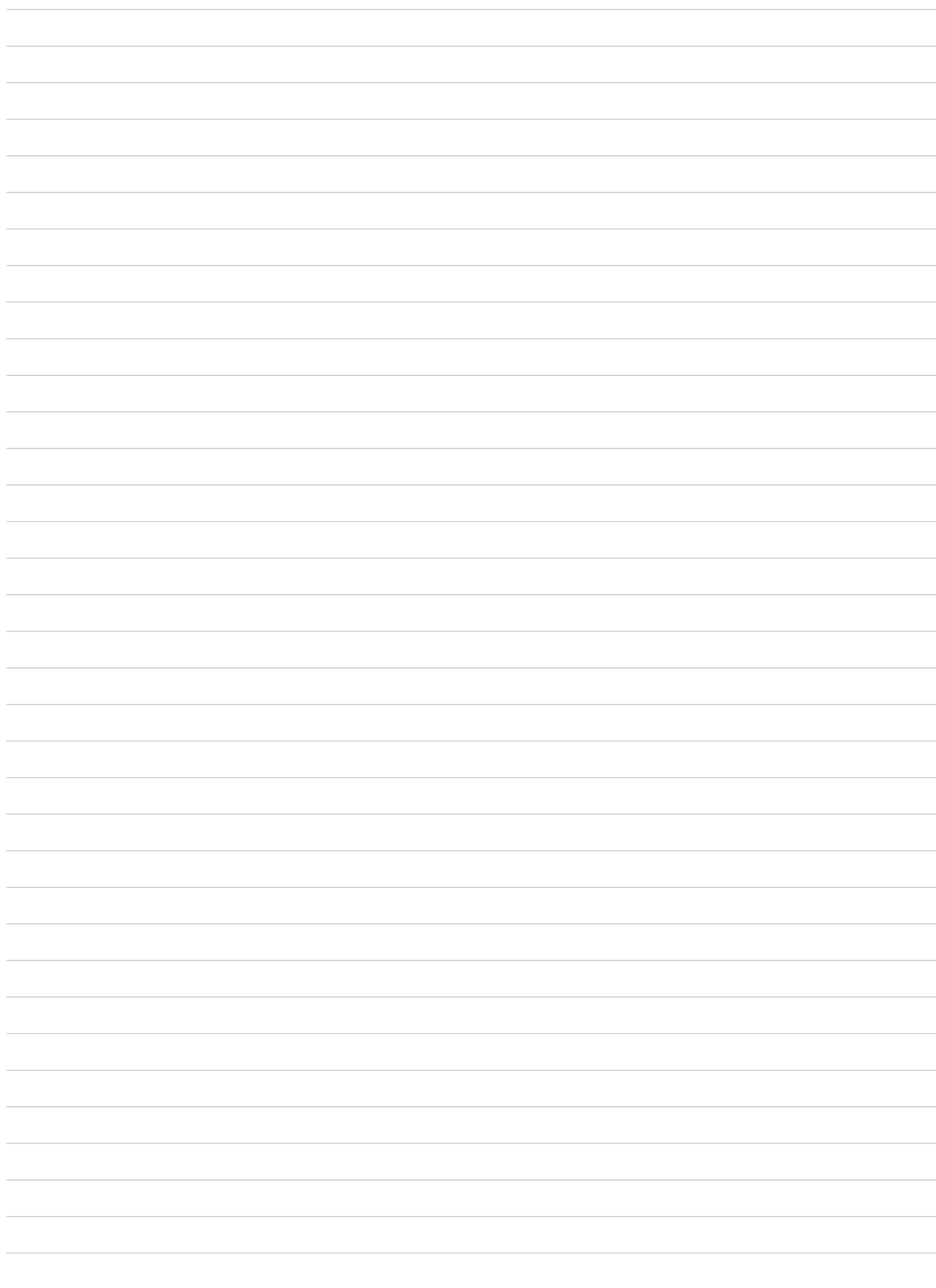
### ADJUSTMENTS

| Adjusting the opening angle                             |  |  |
|---|--|--|
| <p>Easing the weight of the door during adjustment.</p> |  |  |

### WARNING

|  |  | Note |
|--|--|------|
|  |  |      |





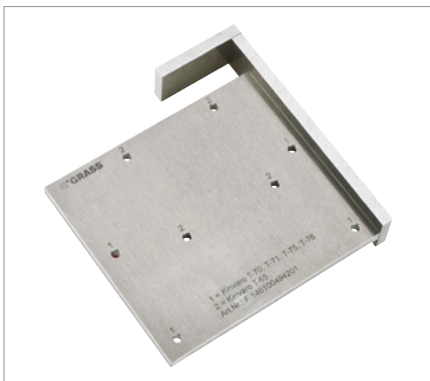


### DRILLING JIG FOR FLAP FITTINGS

For Kinvaro, side wall application

- S-35
- L-80
- F-20

|  |                   |
|--|-------------------|
|  | Art.-no.          |
|  | <b>F146100495</b> |



### DRILLING JIG FOR FLAP FITTINGS

For Kinvaro, side wall application

- T-65
- T-70
- T-71
- T-75
- T-76

|  |                   |
|--|-------------------|
|  | Art.-no.          |
|  | <b>F146100494</b> |



### DRILLING JIG FOR FLAP FITTINGS

For Kinvaro, flap application

- S-35
- L-80
- F-20
- T-65
- T-70
- T-71
- T-75
- T-76

|  |                   |
|--|-------------------|
|  | Art.-no.          |
|  | <b>F146100609</b> |



### WOOD DRILL BIT Ø 5 MM WITH STOP RING

Use for pre-drilling holes for Euro screws.

- Ø 5 mm
- with stop ring
- Length 75 mm
- Accessories for use with F146100494 and F146100495

|  |                   |
|--|-------------------|
|  | Art.-no.          |
|  | <b>F146092594</b> |



**SPECIAL DRILL Ø 5 MM  
FOR FLAP FITTINGS**

Use for pre-drilling holes for Euro screws.

- Ø 5 mm
- Required for T-71, T-76, S-35, L-80 and connection hinge for F-20
- Accessories for use with F146100609

|  |                   |
|--|-------------------|
|  | Art.-no.          |
|  | <b>F146100608</b> |

|                      |   |
|----------------------|---|
| Kinvaro flap systems | 7 |
|                      |   |

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

#### CABINET MAKING ACCESSORIES

From shelf supports, connecting screws, door buffers through to corner connectors – everything necessary for cabinet making.



# CABINET MAKING ACCESSORIES

Small components  
with a big effect.

|   | Product description                                       | Page |
|---|---|------|
|  | Connecting shelf supports, shelf supports                 | 54   |
|  | Mitre joint fasteners, front panel adjuster, door buffers | 56   |
|  | Eccentric connector Fixogross 9200                        | 58   |

# CABINET MAKING ACCESSORIES

## Shelf supports




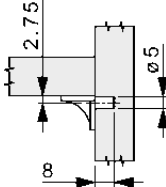

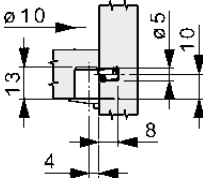

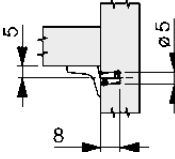

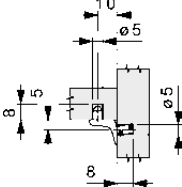

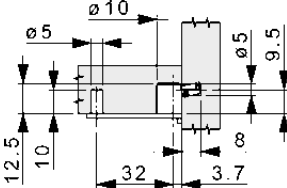

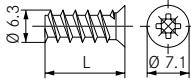

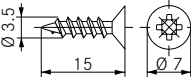
- Connecting shelf support FixoGRASS 9000
- Avoids possible buckling of cabinet side wall
- For heavily loaded shelves
- For shelves with a minimum thickness of 19 mm
- Clip prevents fitting from working loose

### ORDER INFORMATION

| Designation   |  |  | Material             | Art.-no.          |
|---|--|--|----------------------|-------------------|
| Shelf support for fixing with wood screws (length 13 mm, Ø 3.5 mm)                    |  |  | Zamak, nickel-plated | <b>F148043028</b> |
| Shelf support for fixing with Euro screws (length 13 mm, Ø 6.2 mm) BT- drilling depth |  |  | Zamak, nickel-plated | <b>F148043036</b> |
| Housing   |  |  | Plastic, white       | <b>F148043056</b> |
| Expanding pin (for housing)   |  |  | Steel, zinc-plated   | <b>F148043053</b> |

|               |    |
|---------------|----|
| Assembly aids | 50 |
|---------------|----|

ORDER INFORMATION

| Designation                    |   |  | Material                | Art.-no.          |
|--------------------------------|---|--|-------------------------|-------------------|
| Shelf support                  |    |    | Zamak,<br>nickel-plated | <b>F069073459</b> |
| Shelf support                  |   |   | Zamak,<br>nickel-plated | <b>F069073460</b> |
| Shelf support                  |  |  | Zamak,<br>nickel-plated | <b>F069073464</b> |
| Shelf support                  |  |  | Zamak,<br>nickel-plated | <b>F069073463</b> |
| Shelf support                  |  |  | Zamak,<br>nickel-plated | <b>F069073461</b> |
| Euro screw, Ø 6.3 x 10.5 mm    |  |  | Nickel-plated           | <b>F146073979</b> |
| Euro screw, Ø 6.3 x 13 mm      |   |  |                         | <b>F069135297</b> |
| Chipboard screw, Ø 3.5 x 15 mm |  |  | Nickel-plated           | <b>F146073976</b> |


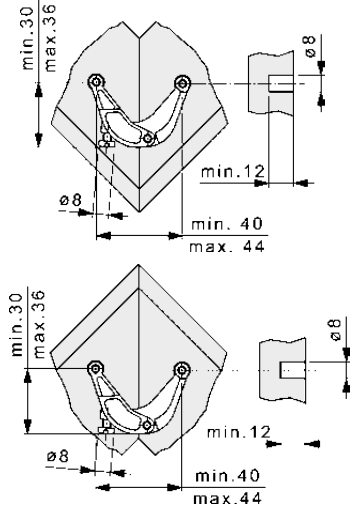

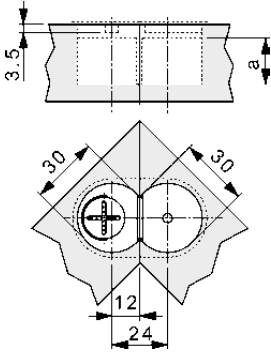

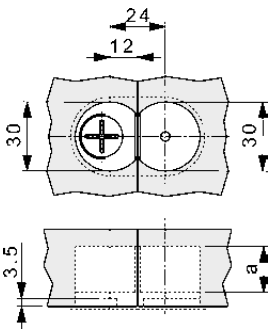
Assembly aids 50

# CABINET MAKING ACCESSORIES

Mitre joint fasteners, front panel adjusters, door buffers



## ORDER INFORMATION


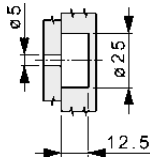
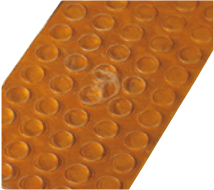
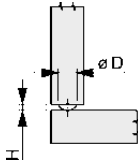
| Designation  |   |  | Material                      | Art.-no.          |
|--|---|--|-------------------------------|-------------------|
| Mitre joint fastener   |   |   | Zamak, natural                | <b>F069073454</b> |
| Mitre joint fastener for thick profiles and worktops, drilling depth (a) 12 mm |  |  | Zamak, natural plastic, white | <b>F069073453</b> |
| Mitre joint fastener for thick profiles and worktops, drilling depth (a) 20 mm |  |  |                               | <b>F069073452</b> |

|               |    |
|---------------|----|
| Assembly aids | 50 |
|---------------|----|





ORDER INFORMATION

| Designation                                    |  |   | Material                     | Art.-no.          |
|--|--|---|------------------------------|-------------------|
| Front panel adjuster<br>(Fixing with screw M4) |   |   | Plastic,<br>black            | <b>F069073381</b> |
| Door buffer Ø 7 mm (D), H 1.5 mm               |  |  | Plastic,<br>transpar-<br>ent | <b>F146073835</b> |
| Door buffer Ø 10 mm (D), H 3 mm                |  |   |                              | <b>F146073836</b> |

|               |    |
|---------------|----|
| Assembly aids | 50 |
|               |    |

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# CABINET MAKING ACCESSORIES

## Eccentric connectors FixoGRASS 9200



- For connecting side walls with worktops, base panels or shelves
- Small but sturdy connection fitting
- A range of steel bolts for different application options
- Easy to fit
- Eccentric installation with SW5 Allen key

### ORDER INFORMATION

| Designation  |  |  | Material                | Art.-no.          |
|--|--|--|-------------------------|-------------------|
| Eccentric for board thickness 14 - 16 mm                   |  |  | Zamak,<br>nickel-plated | <b>F148043000</b> |
| Eccentric for board thickness 17 - 20 mm                   |  |  |                         | <b>F148043007</b> |
| Eccentric for board thickness 21 - 23 mm                   |  |  |                         | <b>F148043015</b> |
| Corner bolt for fixing with Euro thread $\varnothing$ 6 mm |  |  | Steel,<br>zinc-plated   | <b>F148044883</b> |
| Corner bolt for fixing with dowel $\varnothing$ 8 mm/M5    |  |  | Steel,<br>zinc-plated   | <b>F148044748</b> |
| Dowel $\varnothing$ 8 mm/M5                                |  |  | Plastic,<br>white       | <b>F071085142</b> |
| Corner bolt for fixing with dowel $\varnothing$ 10 mm/M6   |  |  | Steel,<br>zinc-plated   | <b>F148043024</b> |
| Dowel $\varnothing$ 10 mm/M6                               |  |  | Plastic,<br>white       | <b>F145083050</b> |
| Twin bolts for fitting in $\varnothing$ 5 mm holes         |  |  | Steel,<br>zinc-plated   | <b>F148044841</b> |
| Twin bolts for fitting in $\varnothing$ 5 mm holes         |  |  |                         | <b>F148044842</b> |

Assembly aids 50

INSTALLATION INFORMATION

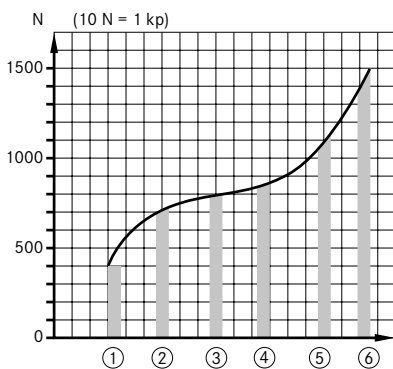
All dimensions in millimetres

Installation dimensions

| Board thickness |         |         |         |
|-----------------|---------|---------|---------|
|                 | 14 - 16 | 17 - 20 | 21 - 23 |
| a               | 12.5    | 15.0    | 16.2    |
| b               | 8.0     | 9.5     | 11.0    |

Installation drawing with corner bolts      Installation drawing with countersunk bolts / twin bolts

LOAD



- 1 Dowel Ø8/M5 (not glued)
- 2 Dowel Ø8/M5 (glued)
- 3 Euro screw Ø6 x 11
- 4 Dowel Ø10/M6 (not glued)
- 5 Dowel Ø10/M6 (glued)
- 6 Twin pins

NOTES

The max. loads shown in the diagram are guide values for the axial pull-out resistance (of the bolt on the cabinet side).

The critical factors are the material quality and the diameter of the hole.

In case of doubt, the pull-out resistance should be determined with a trial application.

LEGEND

BOLH Bolt sleeve  
BOLS Bolt screw  
BS Shelf thickness  
BT Drilling depth

kp Kilopond  
N Newton

# ART.-NO. INDEX

F article no. / Article no., old

| F Article no. | Article no., old | PU | Page |
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|---------------|------------------|----|------|

## F053

|               |   |    |    |
|---------------|---|----|----|
| F053139661607 | - | 10 | 32 |
| F053139662607 | - | 10 | 32 |
| F053139664607 | - | 10 | 34 |
| F053139665607 | - | 10 | 34 |
| F053139666607 | - | 10 | 34 |
| F053139667607 | - | 10 | 34 |
| F053139668507 | - | 10 | 32 |
| F053139669507 | - | 10 | 32 |
| F053139670507 | - | 10 | 32 |
| F053139686607 | - | 10 | 32 |
| F053139687607 | - | 10 | 32 |

## F069

|               |                 |      |    |
|---------------|-----------------|------|----|
| F069073381211 | 351.002.02.2662 | 20   | 57 |
| F069073452240 | 371.001.02.0074 | 500  | 56 |
| F069073453240 | 371.001.03.0074 | 500  | 56 |
| F069073454240 | 371.201.00.0801 | 500  | 56 |
| F069073459240 | 517.206.61.9915 | 500  | 55 |
| F069073460240 | 517.206.64.9915 | 500  | 55 |
| F069073461247 | 517.206.65.9915 | 1000 | 55 |
| F069073463240 | 517.206.73.9915 | 500  | 55 |
| F069073464240 | 517.206.87.9915 | 500  | 55 |
| F069135297256 | 711.362.61.9715 | 5000 | 55 |

## F071

|               |          |     |    |
|---------------|----------|-----|----|
| F071085142123 | 85142-42 | 100 | 58 |
|---------------|----------|-----|----|

## F145

|               |          |     |    |
|---------------|----------|-----|----|
| F145083050123 | 83050-42 | 100 | 58 |
|---------------|----------|-----|----|

## F146

|               |                 |      |    |
|---------------|-----------------|------|----|
| F146073835253 | 630.000.03.0750 | 2500 | 57 |
| F146073836256 | 630.000.03.1050 | 5000 | 57 |
| F146073976256 | 707.333.51.9815 | 5000 | 55 |
| F146073979256 | 711.331.61.9715 | 5000 | 55 |
| F146092594501 | 92594           | 1    | 50 |
| F146100494201 | -               | 1    | 50 |
| F146100495201 | -               | 1    | 50 |
| F146100608101 | -               | 1    | 51 |
| F146100609201 | -               | 1    | 50 |

## F148

|               |          |     |    |
|---------------|----------|-----|----|
| F148043000123 | 43000-42 | 100 | 58 |
| F148043007123 | 43007-42 | 100 | 58 |
| F148043015123 | 43015-42 | 100 | 58 |
| F148043024123 | 43024-42 | 100 | 58 |
| F148043028123 | 43028-42 | 100 | 54 |
| F148043036123 | 43036-42 | 100 | 54 |
| F148043053123 | 43053-42 | 100 | 54 |
| F148043056123 | 43056-42 | 100 | 54 |
| F148044748123 | 44748-42 | 100 | 58 |
| F148044841123 | 44841-42 | 100 | 58 |
| F148044842123 | 44842-42 | 100 | 58 |
| F148044883123 | 44883-42 | 100 | 58 |

## F151

|               |             |   |    |
|---------------|-------------|---|----|
| F151145214513 | D2651533125 | 1 | 30 |
| F151145215513 | D2651533225 | 1 | 30 |
| F151145216513 | D2651535125 | 1 | 30 |
| F151145217513 | D2651535225 | 1 | 30 |
| F151145218513 | D2653108125 | 1 | 30 |
| F151145219513 | D2653108225 | 1 | 30 |
| F151145220513 | D2651103125 | 1 | 30 |

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|               |             |   |    |
|---------------|-------------|---|----|
| F151145221513 | D2651103225 | 1 | 30 |
| F151145222501 | -           | 1 | 28 |
| F151145223501 | -           | 1 | 28 |
| F151145224501 | -           | 1 | 28 |
| F151145226101 | D2712521325 | 1 | 22 |
| F151147678201 | -           | 1 | 18 |
| F151147679201 | -           | 1 | 18 |
| F151147680201 | -           | 1 | 18 |
| F151147681201 | -           | 1 | 18 |
| F151147682201 | -           | 1 | 18 |
| F151147688201 | -           | 1 | 20 |
| F151147689201 | -           | 1 | 20 |
| F151147690201 | -           | 1 | 20 |
| F151147691201 | -           | 1 | 20 |
| F151147692201 | -           | 1 | 20 |
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| F151147696201 | -           | 1 | 22 |
| F151147699201 | -           | 1 | 24 |
| F151147700201 | -           | 1 | 24 |
| F151147702201 | -           | 1 | 24 |
| F151147703201 | -           | 1 | 24 |
| F151147704201 | -           | 1 | 24 |
| F151147705201 | -           | 1 | 24 |
| F151147706201 | -           | 1 | 26 |
| F151147797201 | -           | 1 | 18 |
| F151147798201 | -           | 1 | 18 |
| F151147799201 | -           | 1 | 18 |
| F151147800201 | -           | 1 | 18 |
| F151147807201 | -           | 1 | 20 |
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| F151147809201 | -           | 1 | 20 |
| F151147810201 | -           | 1 | 20 |
| F151147811201 | -           | 1 | 22 |
| F151147813201 | -           | 1 | 24 |
| F151147814201 | -           | 1 | 24 |
| F151147815201 | -           | 1 | 24 |
| F151147816201 | -           | 1 | 24 |
| F151147817201 | -           | 1 | 26 |

## F152

|               |             |   |    |
|---------------|-------------|---|----|
| F152000255201 | -           | 1 | 16 |
| F152000256201 | -           | 1 | 16 |
| F152000257201 | -           | 1 | 16 |
| F152000258201 | -           | 1 | 16 |
| F152000259201 | -           | 1 | 16 |
| F152145054201 | D2879013000 | 1 | 10 |
| F152145055201 | D2359045000 | 1 | 14 |
| F152145237201 | -           | 1 | 10 |
| F152145238201 | -           | 1 | 10 |
| F152145239201 | -           | 1 | 10 |
| F152145240201 | -           | 1 | 10 |
| F152145241201 | -           | 1 | 10 |
| F152145242201 | -           | 1 | 10 |
| F152145243201 | -           | 1 | 10 |
| F152145244201 | -           | 1 | 10 |
| F152145245201 | -           | 1 | 10 |
| F152145246201 | -           | 1 | 10 |
| F152145247201 | -           | 1 | 10 |
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| F152145249201 | -           | 1 | 14 |
| F152145250201 | -           | 1 | 14 |
| F152145251201 | -           | 1 | 14 |
| F152145252201 | -           | 1 | 14 |
| F152145253201 | -           | 1 | 14 |
| F152145254201 | -           | 1 | 14 |

| F Article no. | Article no., old | PU | Page |
|---------------|------------------|----|------|
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|               |   |   |    |
|---------------|---|---|----|
| F152145281201 | - | 1 | 14 |
| F152145282201 | - | 1 | 14 |
| F152147440201 | - | 1 | 14 |
| F152147441201 | - | 1 | 14 |
| F152147442201 | - | 1 | 14 |
| F152147443201 | - | 1 | 14 |
| F152147444201 | - | 1 | 14 |
| F152147675201 | - | 1 | 10 |
| F152147715201 | - | 1 | 14 |
| F152147781201 | - | 1 | 14 |
| F152147787201 | - | 1 | 10 |
| F152147788201 | - | 1 | 14 |
| F152147818201 | - | 1 | 16 |
| F152147819201 | - | 1 | 16 |
| F152147820201 | - | 1 | 16 |
| F152147821201 | - | 1 | 16 |
| F152147822201 | - | 1 | 16 |
| F152147824201 | - | 1 | 14 |
| F152147825201 | - | 1 | 14 |
| F152147826201 | - | 1 | 14 |
| F152147827201 | - | 1 | 14 |
| F152147828201 | - | 1 | 14 |
| F152147829201 | - | 1 | 14 |
| F152147830201 | - | 1 | 14 |
| F152147831201 | - | 1 | 14 |
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| F152147834201 | - | 1 | 14 |
| F152147835201 | - | 1 | 14 |
| F152147837201 | - | 1 | 10 |
| F152147838201 | - | 1 | 10 |
| F152147840201 | - | 1 | 10 |
| F152147841201 | - | 1 | 10 |
| F152147842201 | - | 1 | 10 |
| F152147843201 | - | 1 | 10 |
| F152147844201 | - | 1 | 10 |
| F152147846201 | - | 1 | 10 |
| F152147847201 | - | 1 | 10 |

# ART.-NO. INDEX

F article no. / Article no., old

## LEGEND

| PU code | Quantity (units, pair, set) |
|---------|-----------------------------|
| 101     | 1                           |
| 123     | 100                         |
| 201     | 1                           |
| 211     | 20                          |
| 240     | 500                         |
| 247     | 1000                        |
| 253     | 2500                        |
| 256     | 5000                        |
| 501     | 1                           |
| 507     | 10                          |
| 513     | 25                          |
| 607     | 10                          |

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## 35

|                 |                      |    |    |
|-----------------|----------------------|----|----|
| 351.002.02.2662 | <b>F069073381211</b> | 20 | 57 |
|-----------------|----------------------|----|----|

## 37

|                 |                      |     |    |
|-----------------|----------------------|-----|----|
| 371.001.02.0074 | <b>F069073452240</b> | 500 | 56 |
| 371.001.03.0074 | <b>F069073453240</b> | 500 | 56 |
| 371.201.00.0801 | <b>F069073454240</b> | 500 | 56 |

## 43

|          |                      |     |    |
|----------|----------------------|-----|----|
| 43000-42 | <b>F148043000123</b> | 100 | 58 |
| 43007-42 | <b>F148043007123</b> | 100 | 58 |
| 43015-42 | <b>F148043015123</b> | 100 | 58 |
| 43024-42 | <b>F148043024123</b> | 100 | 58 |
| 43028-42 | <b>F148043028123</b> | 100 | 54 |
| 43036-42 | <b>F148043036123</b> | 100 | 54 |
| 43053-42 | <b>F148043053123</b> | 100 | 54 |
| 43056-42 | <b>F148043056123</b> | 100 | 54 |

## 44

|          |                      |     |    |
|----------|----------------------|-----|----|
| 44748-42 | <b>F148044748123</b> | 100 | 58 |
| 44841-42 | <b>F148044841123</b> | 100 | 58 |
| 44842-42 | <b>F148044842123</b> | 100 | 58 |
| 44883-42 | <b>F148044883123</b> | 100 | 58 |

## 51

|                 |                      |      |    |
|-----------------|----------------------|------|----|
| 517.206.61.9915 | <b>F069073459240</b> | 500  | 55 |
| 517.206.64.9915 | <b>F069073460240</b> | 500  | 55 |
| 517.206.65.9915 | <b>F069073461247</b> | 1000 | 55 |
| 517.206.73.9915 | <b>F069073463240</b> | 500  | 55 |
| 517.206.87.9915 | <b>F069073464240</b> | 500  | 55 |

## 63

|                 |                      |      |    |
|-----------------|----------------------|------|----|
| 630.000.03.0750 | <b>F146073835253</b> | 2500 | 57 |
| 630.000.03.1050 | <b>F146073836256</b> | 5000 | 57 |

## 70

|                 |                      |      |    |
|-----------------|----------------------|------|----|
| 707.333.51.9815 | <b>F146073976256</b> | 5000 | 55 |
|-----------------|----------------------|------|----|

## 71

|                 |                      |      |    |
|-----------------|----------------------|------|----|
| 711.331.61.9715 | <b>F146073979256</b> | 5000 | 55 |
| 711.362.61.9715 | <b>F069135297256</b> | 5000 | 55 |

## 83

|          |                      |     |    |
|----------|----------------------|-----|----|
| 83050-42 | <b>F145083050123</b> | 100 | 58 |
|----------|----------------------|-----|----|

## 85

|          |                      |     |    |
|----------|----------------------|-----|----|
| 85142-42 | <b>F071085142123</b> | 100 | 58 |
|----------|----------------------|-----|----|

## 92

|       |                      |   |    |
|-------|----------------------|---|----|
| 92594 | <b>F146092594501</b> | 1 | 50 |
|-------|----------------------|---|----|

## D2

|             |                      |   |    |
|-------------|----------------------|---|----|
| D2359045000 | <b>F152145055201</b> | 1 | 14 |
| D2651103125 | <b>F151145220513</b> | 1 | 30 |
| D2651103225 | <b>F151145221513</b> | 1 | 30 |
| D2651533125 | <b>F151145214513</b> | 1 | 30 |
| D2651533225 | <b>F151145215513</b> | 1 | 30 |
| D2651535125 | <b>F151145216513</b> | 1 | 30 |
| D2651535225 | <b>F151145217513</b> | 1 | 30 |
| D2653108125 | <b>F151145218513</b> | 1 | 30 |
| D2653108225 | <b>F151145219513</b> | 1 | 30 |
| D2712521325 | <b>F151145226101</b> | 1 | 22 |
| D2879013000 | <b>F152145054201</b> | 1 | 10 |

## LEGEND

| PU code | Quantity (units, pair, set) |
|---------|-----------------------------|
| 101     | 1                           |
| 123     | 100                         |
| 201     | 1                           |
| 211     | 20                          |
| 240     | 500                         |
| 247     | 1000                        |
| 253     | 2500                        |
| 256     | 5000                        |
| 501     | 1                           |
| 507     | 10                          |
| 513     | 25                          |
| 607     | 10                          |





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