Friction door holder and friction casement stay

Used for windows and glazed doors together with Fix espagnolette, which has transmission device.

Fix 150 and 150S: With fixed frame fixture.
Fix 160 and 160S: with detachable frame fixture.
Fix 150S and 160S are type-approved as child-safe restrictor according to building regulations outlined by the Swedish National Board of Building, Planning and Housing. Applicable when the key has been removed.

Operation and features
Operated with the espagnolette handle. With the handle in closed position, friction holds the sash in the desired airing position. To reduce wear on sash and hinges, the casement stay slips when overloaded. With the handle in open position, the sash can be moved freely. The friction increases with the opening angle. 150S and 160S have a locking bolt, which limits the opening to allowed airing position with regard to child safety (max 100 mm opening). To open past this position, the detachable key must be in place and turned. When the sash is opened, the key is turned before the sash reaches the locking position. The locking function returns automatically when the sash is closed and the key is removed. It also returns by turning the key back manually when closing the sash.

Use the plate Fix 4575 to have permanently freed locking function (included in manipulation fitting Fix 4570).

Screw
For friction casing, use no. 5 (3.0 mm) TFX / DIN 7997. For frame fixture, use no. 7 (3.8 mm) TFX / DIN 7997. For operating catch, use no. 5 (3.0 mm) TKFX / DIN 7995.

3. Inward- or outward-opening (applies to Fix 150S and 160S).
4. Operating catch Fix 4570 (applies to Fix 150S and 160S).
5. Frame fixture Fix 5550T, 5580 or 1640, page I 172 (applies to Fix 160 and 160S).

Construction
a) Friction casing
b) End bearing
c) Locking spindle
d) Arm
e) Friction runner
f) Frame fixture
g) Lock housing (applies to 150S and 160S).

Note:
When opening at narrow airing positions (0–200 mm openings), supplement with ventilation stay Fix 85, 86 page I 179 or 92, 93 page I 178.
Friction door holder and friction casement stay

Use and standard sizes

<table>
<thead>
<tr>
<th>Sash width max – min</th>
<th>Standard size 150</th>
<th>Standard size 150S</th>
<th>Locking spindle length at max casing sash width</th>
<th>Friction casing length</th>
<th>Arm length</th>
</tr>
</thead>
<tbody>
<tr>
<td>140 – 200*</td>
<td>00</td>
<td>192</td>
<td>109</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>201 – 300*</td>
<td>0</td>
<td>286</td>
<td>157</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>301 – 400*</td>
<td>1</td>
<td>357</td>
<td>202</td>
<td>140</td>
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</tr>
<tr>
<td>401 – 550</td>
<td>2</td>
<td>457</td>
<td>252</td>
<td>205</td>
<td></td>
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<tr>
<td>730</td>
<td>3</td>
<td>587</td>
<td>352</td>
<td>280</td>
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<td>551 – 800</td>
<td>3</td>
<td>657</td>
<td>352</td>
<td>280</td>
<td></td>
</tr>
<tr>
<td>830</td>
<td>4</td>
<td>537</td>
<td>452</td>
<td>450</td>
<td></td>
</tr>
<tr>
<td>801 – 1200</td>
<td>4**</td>
<td>907</td>
<td>452</td>
<td>450</td>
<td></td>
</tr>
<tr>
<td>1101– 1500</td>
<td>5</td>
<td>1083</td>
<td>452</td>
<td>450</td>
<td></td>
</tr>
</tbody>
</table>

*) For sash width less than 400 mm, the detachment function does not work on 160 and 160S.

**) Fix 150/4 and 160/4 are also used for sash widths over 1100 mm, when the opening angle is limited to 60 or 45 degrees. See measurement table, page I 173.

Inward-opening

Upper section with 160+1640

Upper section with 150S

When milling, the friction casing and espagnolette centre lines must align.
**Friction door holder and friction casement stay**

### Instructions for milling, Fix 150 and 160 inward-/outward-opening

<table>
<thead>
<tr>
<th>Sash width</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>Inward</th>
<th>Outward</th>
</tr>
</thead>
<tbody>
<tr>
<td>140–200*</td>
<td>00</td>
<td>8</td>
<td>112</td>
<td>25</td>
<td>75</td>
<td>45°</td>
<td>–</td>
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<tr>
<td>201–300*</td>
<td>0</td>
<td>12</td>
<td>157</td>
<td>34</td>
<td>115</td>
<td>62°</td>
<td>88°</td>
</tr>
<tr>
<td>301–400*</td>
<td>1</td>
<td>34</td>
<td>202</td>
<td>64</td>
<td>155</td>
<td>85°</td>
<td>99°</td>
</tr>
<tr>
<td>401–550</td>
<td>2</td>
<td>92</td>
<td>252</td>
<td>108</td>
<td>220</td>
<td>90°±2°</td>
<td></td>
</tr>
<tr>
<td>551–800</td>
<td>3</td>
<td>144</td>
<td>352</td>
<td>179</td>
<td>295</td>
<td>90°±2°</td>
<td></td>
</tr>
<tr>
<td>801–1200</td>
<td>4</td>
<td>234</td>
<td>452</td>
<td>261</td>
<td>465</td>
<td>90°±2°</td>
<td></td>
</tr>
<tr>
<td>1101–1500</td>
<td>5</td>
<td>428</td>
<td>452</td>
<td>388</td>
<td>465</td>
<td>90°</td>
<td>–</td>
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<td>1101–1500</td>
<td>5</td>
<td>566</td>
<td>452</td>
<td>510</td>
<td>465</td>
<td>45°</td>
<td>–</td>
</tr>
</tbody>
</table>

*) For sash width less than 400 mm, the detachment function does not work on 160 and 160S.

### Instructions for milling, Fix 150S and 160S inward-/outward-opening

<table>
<thead>
<tr>
<th>Sash width</th>
<th>Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Inward</th>
<th>Outward</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>E</th>
<th>Outward</th>
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<td>201–300*</td>
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<td>78°</td>
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<td>157</td>
<td>40</td>
<td>18</td>
<td>60°</td>
<td></td>
</tr>
<tr>
<td>301–400*</td>
<td>1</td>
<td>42</td>
<td>202</td>
<td>65</td>
<td>155</td>
<td>56</td>
<td>90°</td>
<td>27</td>
<td>202</td>
<td>57</td>
<td>56</td>
<td>90°</td>
<td></td>
</tr>
<tr>
<td>401–550</td>
<td>2</td>
<td>99</td>
<td>252</td>
<td>99</td>
<td>220</td>
<td>106</td>
<td>90°</td>
<td>92</td>
<td>252</td>
<td>106</td>
<td>90°</td>
<td></td>
<td></td>
</tr>
<tr>
<td>551–800</td>
<td>3</td>
<td>144</td>
<td>352</td>
<td>170</td>
<td>295</td>
<td>213</td>
<td>90°</td>
<td>147</td>
<td>352</td>
<td>184</td>
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<td>90°</td>
<td></td>
</tr>
<tr>
<td>801–1200</td>
<td>4</td>
<td>234</td>
<td>452</td>
<td>254</td>
<td>465</td>
<td>321</td>
<td>90°</td>
<td>297</td>
<td>452</td>
<td>263</td>
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<td>90°</td>
<td></td>
</tr>
<tr>
<td>1101–1500</td>
<td>5</td>
<td>425</td>
<td>452</td>
<td>384</td>
<td>465</td>
<td>321</td>
<td>60°</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*) For sash width less than 400 mm, the detachment function does not work on 160 and 160S.

**Outward-opening**

Drill diameter = 14

When milling, the friction casing and espagnolette centre lines must align.
Friction casement stay, for Euro-note

Used for window airing position. Fix 750 and 760 together with Fix espagnolettes, which have transmission devices.

Fix 740 with detachable frame fixture. Permanent, adjustable friction.
Fix 750 with fixed frame fixture.
Fix 760 with detachable frame fixture.

**Operation and features**
Fix 740 holds the sash with permanent friction in the desired airing position. The friction is adjustable. Adjusted after mounting.
Fix 750 and 760 are operated by using the espagnolette handle. With the handle in closed position, friction holds the sash in the desired airing position. With the handle in open position, the sash moves freely.
To reduce wear on sash and hinges, the casement stay slips when overloaded.

**Construction**
- a) Friction casing
- b) End bearing
- c) Locking spindle
- d) Arm
- e) Friction runner
- f) Frame fixture

**Material**
Friction runner on Fix 740 of acetal plastic.
Friction runner on Fix 750 and 760 of zamak.
End bearing of zamak.
Friction casing of anodized aluminium. Other parts of galvanized steel.

**Installation**
Top or bottom. Instructions for milling, with measurements, see below.

**Screw**
For end bearing, use no. 5 (3.0 mm) TFX / DIN 7997.
For frame fixture, use no. 7 (3.8 mm) TFX / DIN 7997.

---

**Instructions for mounting of Fix 740**
for inward- and outward-opening window

<table>
<thead>
<tr>
<th>Sash width</th>
<th>Item no.</th>
<th>Opening A</th>
<th>B</th>
<th>C</th>
<th>Friction casing length</th>
<th>Arm length</th>
</tr>
</thead>
<tbody>
<tr>
<td>301–400</td>
<td>740/1</td>
<td>85</td>
<td>60</td>
<td>70</td>
<td>155</td>
<td>210</td>
</tr>
<tr>
<td>401–550</td>
<td>740/2</td>
<td>85</td>
<td>110</td>
<td>110</td>
<td>220</td>
<td>260</td>
</tr>
<tr>
<td>551–800</td>
<td>740/3</td>
<td>85</td>
<td>160</td>
<td>185</td>
<td>295</td>
<td>360</td>
</tr>
<tr>
<td>801–1100</td>
<td>740/4</td>
<td>85</td>
<td>310</td>
<td>265</td>
<td>468</td>
<td>460</td>
</tr>
</tbody>
</table>

**Instructions for mounting of Fix 750 and 760**
for inward- and outward-opening window. **Cut length Spindle = sash width A-4**

<table>
<thead>
<tr>
<th>Sash width</th>
<th>Item no.</th>
<th>Opening A</th>
<th>B</th>
<th>C</th>
<th>Friction casing length</th>
<th>Arm length</th>
<th>Spindle length</th>
</tr>
</thead>
<tbody>
<tr>
<td>301–400</td>
<td>750/1</td>
<td>85</td>
<td>45</td>
<td>65</td>
<td>155</td>
<td>207</td>
<td>140</td>
</tr>
<tr>
<td>401–550</td>
<td>750/2</td>
<td>85</td>
<td>100</td>
<td>105</td>
<td>220</td>
<td>257</td>
<td>205</td>
</tr>
<tr>
<td>551–800</td>
<td>750/3</td>
<td>85</td>
<td>150</td>
<td>180</td>
<td>295</td>
<td>357</td>
<td>280</td>
</tr>
<tr>
<td>801–1100</td>
<td>750/4</td>
<td>85</td>
<td>300</td>
<td>260</td>
<td>465</td>
<td>457</td>
<td>450</td>
</tr>
</tbody>
</table>
Friction casement stays
Fix 522 and 532

Used for side-hung and top-hung windows.

For outward-opening windows:
Fix 522/1, 522/2.
For inward-opening windows:
Fix 532/1, 532/2.

Operation and features
Holds the window with friction in desired open position. The friction force can be adjusted using the friction adjustment device. Fits both right and left.

Construction
a) Frame fixture.
b) Telescope tube.
c) Friction adjustment.
d) Rod.
e) Sash fixture.

Material
Frame and sash fixtures of varnished steel with cover plate of acetal plastic. Telescope tube of varnished steel with joint head of acetal plastic. Friction adjustment of acetal plastic. Stainless steel rod with joint head of acetal plastic. White.

Installation
Mounted according to instructions below.

Screw
For frame fixture, use no. 9 (4.5 mm) TFX / DIN 7997. For sash fixture, use no. 7 (3.8 mm) TFX / DIN 7997.

Mounting instructions Fix 522, for outward-opening

522/1, 522/2

Mounting instructions Fix 532, for inward-opening

532/1, 532/2

<table>
<thead>
<tr>
<th>Frame sight measure</th>
<th>Item no.</th>
<th>Opening angle</th>
<th>Measure A mm</th>
<th>Measure B mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>260</td>
<td>522/1</td>
<td>c:a 45</td>
<td>58</td>
<td>152</td>
</tr>
<tr>
<td>370</td>
<td>522/2</td>
<td>c:a 80</td>
<td>58</td>
<td>262</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Frame sight measure</th>
<th>Item no.</th>
<th>Opening angle</th>
<th>Measure A mm</th>
<th>Measure B mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>270</td>
<td>532/1</td>
<td>c:a 90</td>
<td>65</td>
<td>152</td>
</tr>
<tr>
<td>420</td>
<td>532/2</td>
<td>c:a 90</td>
<td>110</td>
<td>262</td>
</tr>
</tbody>
</table>
Casement stays
Fix 202 and 220

Used for inward-opening windows with sash lipped over frame.

For sash width less than 500 mm: Fix 202.
For sash width over 500 mm: Fix 220.
Desired opening position is fixed with the adjusting screw. Fits both right and left.

Construction
a) Rod.
b) Sash fixture with runner and adjusting screw.
c) Rod fixture with pin.

Material
Rod of anodized aluminium.
Brass adjusting screw with polyamide head.
Pin of galvanized brass.
Other parts of acetal plastic in white or brown.

Installation
Assemble the casement stay for right-or left-hung sash. Push down the rod fixture pin until it snaps in.
Mount according to adjacent instruction. Measurements from the hinge side. The rod fixture is mounted to place the rod parallel to the sash.

Screw
For rod fixture, use no. 7 (3.8 mm) TKX / DIN 7996.
For sash fixture, use no. 6 (3.5 mm) TKFX / DIN 7995.

<table>
<thead>
<tr>
<th>Frame width mm</th>
<th>Item no.</th>
<th>Opening angle</th>
<th>Measure A mm</th>
<th>Measure B mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 500</td>
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<td>c:a 80°</td>
<td>95</td>
<td>75</td>
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<tr>
<td>over 500</td>
<td>220</td>
<td>c:a 80°</td>
<td>190</td>
<td>75</td>
</tr>
</tbody>
</table>
Casement stays
Fix 225 and 230

Used for outward-opening windows.

For sash width less than 500 mm: Fix 225.
For sash width over 500 mm: Fix 230.

**Operation and features**
Desired opening position is fixed with the adjusting screw. Fits both right and left. Can also be used for keeping a separated sash open.
Lift the rod pin, separate the rod from the rod fixture and hook it into the plate on the outer frame.

**Construction**
- a) Rod.
- b) Frame fixture with runner and adjusting screw.
- c) Sash fixture with rod pin.

**Material**
- Rod of anodized aluminium.
- Rod pin and adjusting screw of brass with polyamide head.
- Plate of galvanized steel. Other parts of acetal plastic in white or brown.

**Installation**
Mounted according to instructions below. Measurements from the hinge side. The rod fixture is mounted to place the rod parallel to the frame. The plate is mounted on the outer sash after making a slot for the rod end.

**Screw**
For rod fixture, use no. 7 (3.8 mm) TKX / DIN 7996.
For frame fixture, use no. 6 (3.5 mm) TKFX / DIN 7995.
For plate, use no. 4 (2.7 mm) TFX / DIN 7997.
Ventilation stays
Fix 92 and 93

Type-approved, child-safe.

Fix 92 for inward-opening windows. Fix 93 for outward-opening windows.

**Operation and features**
The fitting has a fixed airing position, which automatically comes into operation when the window is opened. To close the window, push the arm to the side while moving the sash towards a closed position. For openings larger than 100 mm, the fitting can be freed by pushing the arm to the side when it is in a certain position. The operation comes back automatically when the window is closed. Fits both right and left.

**Construction**
- a) Frame fixture with arm and mounting plate.
- b) Sash fixture.
- c) Frame fixture.
- d) Sash fixture with arm.

**Material**
Frame/sash fixture and arm of acetal plastic in white or brown.

**Installation**
Mounted to make the opening gap max 100 mm. For the Fix 92 frame fixture, there are 3 different mounting plates. Fits lipping of 13–20 mm.

**Screw**
For a and d, use no. 6 (3.5 mm) TFX / DIN 7997
For b and c, use no. 6 (3.5 mm) TKFX / DIN 7995.
Ventilation stays 85 and 86
Restrictors 84 and 184

Fix 84 is type-approved, child-safe.

Fix 85, for inward-opening windows with lipped over sash (also for outward-opening with frame depth less than 32 mm). Fix 86, for outward-opening windows.

**Operation and features**
The sash is held in fixed airing positions as the rod and the teeth of the arm catch/frame fixture grip each other. Fits both right and left as the arm catch/frame fixture can be rotated.

**Construction**
a) Arm with fixture.
b) Sash fixture and arm catch.
c) Frame fixture.

**Material**
Acetal plastic in white or brown.

**Installation**
Mounted according to instructions with measurements.

**Fix 84 and Fix 184**
For windows and glazed doors, for limiting the opening position.

**Operation and features**
Stops the sash in an open position decided by the position of the restrictor. May be uncoupled by pushing in the spring-operated locking reed while the rope is unhooked. Fits both right and left.

**Construction Fix 84**
a) Rope fixture with rope and locking knob.
b) Locking plate.

**Material**
White polyester rope. Other parts of acetal plastic in white or black.

**Construction Fix 184**
(Type-approved, child-safe)
a) Wire fixture with plastic coated wire and locking knob.
b) Locking plate with cover.

**Material**
Wire with plastic coating. Other parts of acetal plastic in white or black.

**Screw**
Use no. 6 (3.5 mm) TKFX/DIN 7995.
Window catches
Fix 392 and 393

For outward-opening windows:
Fix 393
For inward-opening windows:
Fix 392

Operation and features
Locks the window in narrow airing positions. Restricts the opening possibility and increased protection against forced entry and child accident.

May be uncoupled when the frame is closed. For child safety, the uncoupling can be locked with a separate key. Fits side- and top-hung sash and window, H-window type, or pivot window.

Material

Installation
Plastic template is included.
Window stay restrictor
Fix 203

Used for inward-opening windows with bottom-hung, lipped sash.

**Operation and features**
Stops the sash in an open position decided by the position of the window stay restrictor. Fits both right and left. When tilting the sash past the stop position, such as for cleaning, the pin is pushed out of its snap-in position, which uncouples the rod from its fitting.

**Construction**
a) Rod.
b) Sash fixture with runner.
c) Frame fixture with pin.

**Material**
Rod of anodized aluminium. Pin of galvanized brass. Other parts of acetal plastic in white or brown.

**Installation**
Assemble the window stay restrictor for right or left side. Push down the frame fixture pin until it snaps in. The outer frame fixture and the sash fixture are positioned to obtain the desired opening angle. The frame fixture is mounted to place the rod parallel to the sash.

**Screw**
For frame fixture, use no. 7 (3.8 mm) TKX / DIN 7996. For sash fixture, use no. 6 (3.5 mm) TKFX / DIN 7995.
Elbow fittings

Fix 831 and 8310

Used for inward-opening windows with bottom-hung sash.

Fix 8310 has a catch, which can be locked with a 3 mm Allen key.

**Operation and features**

Stops the sash in an open position decided by the length and position of the elbow fitting. Fits both right and left. When tilting the sash past the stop position, e.g. for cleaning, the catch is pushed free, which uncouples the elbow fitting from the sash fixture. On Fix 8310, the Allen screw must first be loosened with an Allen key.

**Construction**

a) Restrictor.
b) Frame fixture.
c) Sash fixture.
d) Catch.

**Material**

Stainless steel catch. Other parts of galvanized steel.

**Screw**

Use no. 7 (3.8 mm) TFX/DIN 7997.

<table>
<thead>
<tr>
<th>Standard lengths mm</th>
<th>Item no. 831/140</th>
<th>Item no. 8310/140</th>
<th>Milling measurements A</th>
<th>Milling measurements B</th>
</tr>
</thead>
<tbody>
<tr>
<td>140</td>
<td>831/140</td>
<td>8310/140</td>
<td>153</td>
<td>150</td>
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<td>220</td>
<td>831/220</td>
<td>8310/220</td>
<td>193</td>
<td>190</td>
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<tr>
<td>300</td>
<td>831/300</td>
<td>8310/300</td>
<td>233</td>
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</tr>
<tr>
<td>400</td>
<td>831/400</td>
<td>8310/400</td>
<td>283</td>
<td>280</td>
</tr>
</tbody>
</table>

**831, 8310**

X minus any clearance

**Milling measurements Fix 831, 8310**
Door holder Fix 520

Used for outward-opening glazed doors.

**Operation and features**
The door is fixed in the desired open position with the adjusting screw. The stop spring works as a shock absorber and thereby reduces wear on door and hinges. Fits both right and left.

**Construction**
- a) Rod.
- b) Frame fixture with runner and adjusting screw.
- c) Sash fixture with pin.
- d) Stop spring.

**Material**
Rod of anodized aluminium.
Brass adjusting screw with polyamide head. Pin of galvanized brass. Stop spring of galvanized spring steel. Other parts of acetal plastic in white or brown.

**Installation**
For opening angle of 90 degrees, mount according to instructions below. Measurements are made from the hinge side. The sash fixture is mounted to place the rod parallel to the frame.

**Accessories**
Fixing plate Fix 3976 of galvanized steel, with two sheet metal screws. Used for frame depths less than 30 mm.

**Screw**
For sash fixture, use no. 7 (3.8 mm) TKX / DIN 7996.
For frame fixture, use no. 6 (3.5 mm) TKFX / DIN 7995.
For fixing plate, use no. 8 (4.0 mm) TFX / DIN 7997.
Door holder
Fix 440

Used for holding doors in a fully open position.

Operation and features
The door fixture is pressed into the holder in open position to keep the door in this position. When pulling the door, the holder releases the door fixture.

Construction
a) Holder
b) Door fixture

Material
Holder of grey age-resistant rubber.
Door fixture of acetal plastic.

Installation
The holder is mounted on the wall, the door fixture on the door.

Screw
For holder, use no. 12 (5.5 mm) TKX / DIN 7996
For door fixture, use no. 9 (4.5 mm) TKX / DIN 7996
Friction door holders
Fix 523T, 533T and 534R

Used for external doors, glazed doors, storage room doors, etc. Fix 523T, for outward-opening doors. Fix 533T and 534R, for inward-opening doors.

**Operation and features**
Holds the door with friction in desired open position. Prevents the door from blowing closed and reduces the risk of jam injuries. The friction can be adjusted with the friction adjuster (on Fix 534R, a tool must be used to loosen the lock nut). Fits both right and left.

**Construction**
- a) Frame fixture
- b) Telescope tube
- c) Friction adjuster
- d) Nut M16
- e) Rod
- f) Door fixture

**Material**
Frame and door fixtures of varnished steel with cover plate of acetal plastic. Varnished steel telescopic tube with joint head of acetal plastic. Friction adjuster of acetal plastic (for Fix 534R: nut of nickle plated brass and stainless steel friction adjustment). Stainless steel rod with joint head of acetal plastic.

**Installation**
Mounted according to instructions below.

**Screw**
For frame fixture, use no. 9 (4.5 mm) TFX / DIN 7997. For door fixture, use no. 7 (3.8 mm) TFX / DIN 7997.

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**Mounting instructions Fix 523T**

<table>
<thead>
<tr>
<th>Frame width mm</th>
<th>Item no.</th>
<th>Opening angle</th>
<th>Measure A mm</th>
<th>Measure B mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>590–769</td>
<td>523T/1</td>
<td>c:a 95°</td>
<td>130</td>
<td>380</td>
</tr>
<tr>
<td>770–910</td>
<td>523T/2</td>
<td>c:a 95°</td>
<td>210</td>
<td>480</td>
</tr>
</tbody>
</table>

**Mounting instructions Fix 533T, 534R**

<table>
<thead>
<tr>
<th>Door width mm</th>
<th>Item no.</th>
<th>Opening angle</th>
<th>Measure A mm</th>
<th>Measure B mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>620–809</td>
<td>533T/1</td>
<td>c:a 95°</td>
<td>190</td>
<td>380</td>
</tr>
<tr>
<td>810–910</td>
<td>533T/2</td>
<td>c:a 95°</td>
<td>275</td>
<td>480</td>
</tr>
<tr>
<td>570–760</td>
<td>534R</td>
<td>c:a 95°</td>
<td>170</td>
<td>360</td>
</tr>
</tbody>
</table>
Friction door holders
Fix 328 and 328A

Used for storage room doors and lighter internal doors. Fix 328, for outward-opening doors. Fix 328A, for inward-opening doors.

Operation and features
Holds the door with friction in desired open position. The friction force can be adjusted using the adjustment nut. The restrictor arm can be loosened from the frame fixture on Fix 328, and from the door fixture on Fix 328A, respectively. Fits both right and left.

Construction
a) Restrictor arms
b) Frame fixture
c) Door fixture
d) Friction plates
e) Spring plate
f) Adjustment nut

Material
Friction plate of acetal plastic.
Other parts of galvanized steel

Installation
For 90 degree opening angle, mount according to the adjacent instruction. Frame and door fixtures must align with each other when the door is closed.

Screw
Use no. 9 (4.5 mm) TKX/DIN 7996.
Door holders
Fix 270 and 271

Used for keeping doors in a fully open position, approx. 90 degrees. Max door weight 125 kg.

Fix 270
For door width 800–1100 mm.
Fits both right- and left-hung door (decided when mounting).

Fix 271
For door width 1100–1300 mm.
For right- and left-hung door.

Operation and features
In fully open position (approx. 90 degrees), the catch automatically falls into a locking position and keeps the door in position. When the door is pushed further towards the open position, the catch is released so the door can be closed. The stop spring also works as a shock absorber and thereby reduces wear on door and hinges.

Construction
a) Frame fixture with restrictor arm and runner
b) Door rail
c) Catch

Material
Steel, galvanized or galvanized and powder painted white.

Installation
Surface mounting. Mounting instructions and screw in the package.
Hinges

Hinge D110227
Used for cupboard doors.

Material
Chrome plated zamak.

Pivot hinge D110196
Used for rotating windows with horizontal-hung sash.

Material
Chrome plated zamak.

Note:
Max sash weight is 150 kg.

Pivot hinge Fix 3045
Used for rotating windows with horizontal-hung sash.

Construction:
The friction housing has two rotation points with friction, which cooperate from closed position to 180 degrees rotated position. The top rotation point has permanent friction.

The bottom rotation point has adjustable friction. The friction housing movement is such that the rotation points always have the most favourable position in relation to the opening angle of the sash. This means an even holding and manipulation and gives continuous airing positions. The sash can be lifted into and out of its hinges in the frame in all positions between 90 and 180 degrees. The hinge only sticks out 18 mm from sash and frame in closed position.

Material
a) Friction housing, zamak
b) Fixing plate for frame fixture, galvanized steel
c) Cover strip, acetal plastic
d) Front strip, aluminium.

Friction discs, fibre material. Other parts, galvanized steel.

Installation
Recessed.

Note:
Max sash weight is 150 kg.