

Slimline fanlight opener



**GEZE OL 90 N, OL 95, OL 100**



Herzzentrum Bad Krozingen

## Page      Contents

	Slimline fanlight opener GEZE OL 90 N, opening width 170 mm
<b>3</b>	OL 90 N for rectangular bottom-hung windows, inward opening
<b>5</b>	OL 90 N for top-hung windows, outward opening
<b>6</b>	OL 90 N for special shapes
<hr/>	
	<b>Accessories GEZE OL 90 N</b>
<b>13</b>	Gears Fz 90, Fz 91 and Fz 92
<b>15</b>	Linkage bearing for gear and connecting rods (for OL 90 N and OL 100)
<b>17</b>	Post-rail façade
<b>18</b>	Flexible linkage for negotiating sills
<b>19</b>	Bell-type angle transmission, transmission with cranked rod and special versions
<b>20</b>	Scissors and hand lever
<b>21</b>	Supplementary locking device and concealed locking device with locking driver
<hr/>	
	<b>Slimline fanlight opener OL 95 N, opening width 220 mm</b>
<b>22</b>	Scissor stay for slimline fanlight opener OL 95
<hr/>	
	<b>Slimline fanlight opener OL 100, opening width 260 mm</b>
<b>24</b>	Slimline fanlight opener OL 100
<hr/>	
	<b>Accessories OL 100</b>
<b>27</b>	Gear Fz 100 and Fz 101
<b>28</b>	Special versions, accessories and concealed locking device with locking driver
<hr/>	
<b>30</b>	Gripping and cleaning scissor
<hr/>	
<b>32</b>	Electro-drive E 212 / E 205 and actuation devices



# GEZE OL 90 N

## Surface-mounted slimline fanlight opener for rectangular windows, inward opening



### Units:

1 slimline scissor  
1 scissor stay base  
1 back plate  
1 casement bracket  
1 corner transmission  
1 cover plate  
1 hand lever  
2 rod guides  
plus: rods and cover profiles

### Product features

- Easy fitting even with deep window reveals since scissor stays and linkage can be fitted from front
- Large opening width: 170 mm
- All fixing screws concealed
- Minimal clearance above and to the side of the casement required
- Locking mechanism in scissor stay
- Easily adjustable latching force setting with automatic compensation of frame inaccuracies
- Fixed casement joint without sliding parts
- With trigger device - that makes it easy to hang out the scissors
- All units pre-assembled, which means fewer fittings
- Drilling template ensures quick and accurate fitting
- Full opening width possible with all casement heights

### Note:

With inward or outward opening bottom-hung casements, safety scissors which restrict the travel of the casement when the scissor is disengaged must be attached in addition to the fanlight fitting. (see GEZE FPS gripping and cleaning scissor)

**Installation drawing:** 40444-EP-001

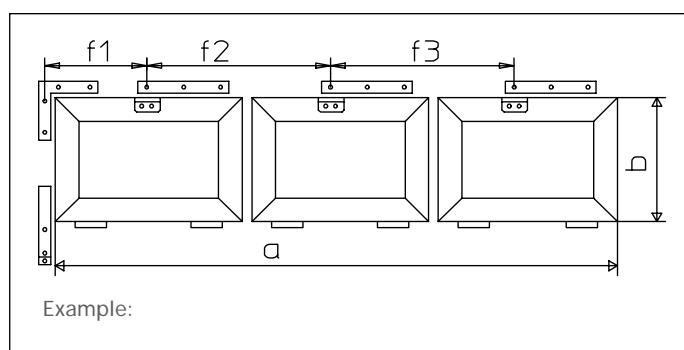
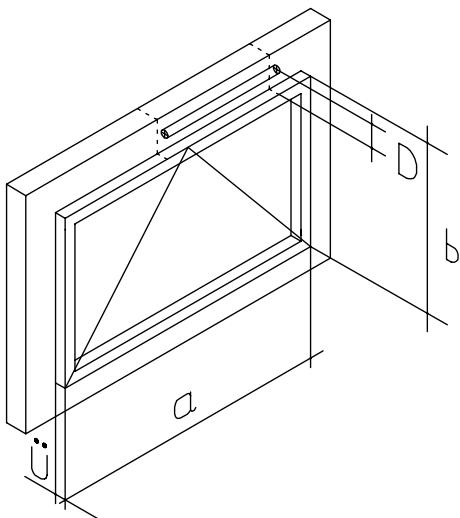
### Application range

Only for vertically mounted inward opening, top-hung, bottom-hung and side-hung casements made of timber, plastic or light alloy with overlap depth of 0-25 mm.  
Max. casement weight 80 kg.  
To use in dry areas only.

Casement width a	max. panel weight
380-1200 mm > 1 scissor	30 kg/m <sup>2</sup>
1201-2400 mm > 2 scissors	30 kg/m <sup>2</sup>
2401-3600 mm > 3 scissors	25 kg/m <sup>2</sup>

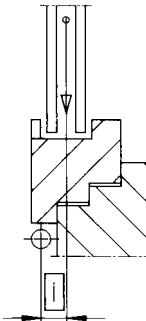
### D-dimension and space requirement (mm)

Casement height b	Upper space requirement Y	Dimension D mind.
250-300 mm	D +9	16
301-400 mm	D +9	14
401-500 mm	D +9	12
from 501 mm	D +9	10



### Amplification:

- i = Distance from centre of gravity to casement pivot point: 10 to 60 mm
- ü = Overlap depth 0 – 25 mm
- D = Outer edge of casement to middle of drive rod
- X = Space required at side: D+10mm
- Y = Space required on top
- F1, F2, F3 = Fitting dimensions for scissor



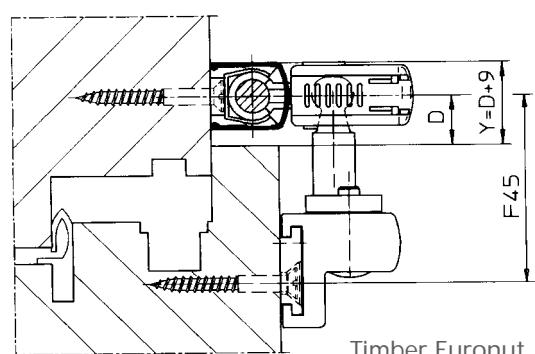
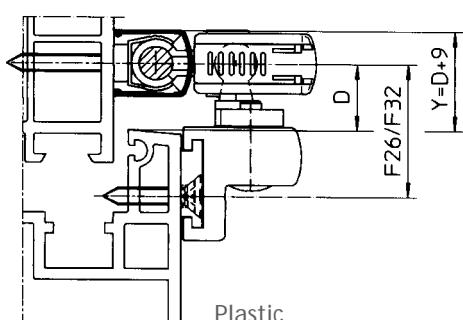
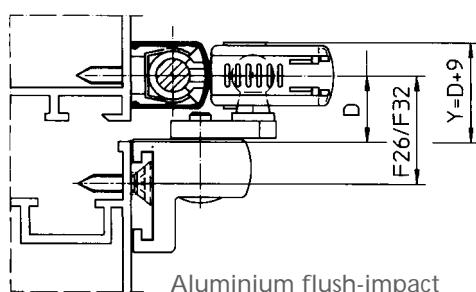
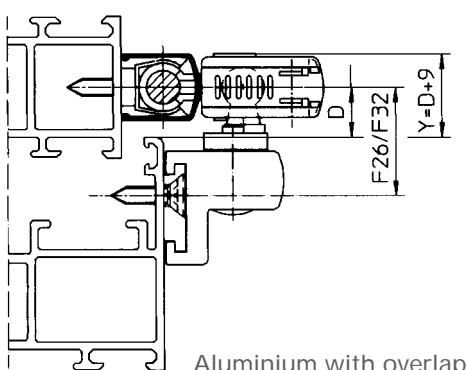
### D-dimension and space requirement

Fitting dimension D

top without supplementary locking device 10-18 mm  
top with supplementary locking device 16 mm

side min. 10 mm

Space requirement top and side: D +9 mm



# GEZE OL 90 N

## Fanlight opener for top-hung windows, outward opening

### Product features

such as for rectangular windows

Installation drawing: 40444-EP-018

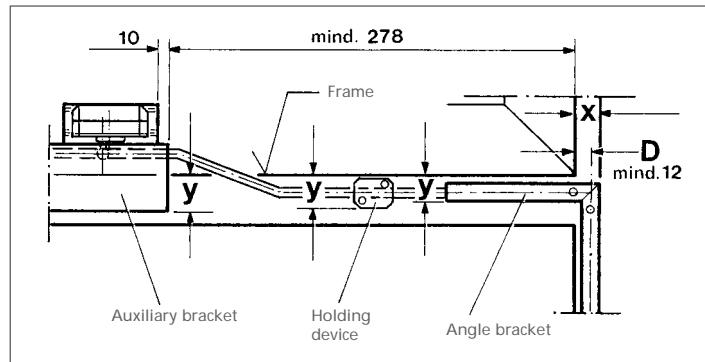
### Applications for windows with hand lever

- ▶ For windows made of timber, plastic and aluminium
- ▶ For vertically installed top-hung casements outward opening, for use on left and right
- ▶ Soffit depth e: 0 (flush to surface) up to 73 mm
- ▶ Casement width
  - (a) 560-1200 mm (with 1 scissor)
  - (a) 1201-2400 mm (with 2 scissors)
- ▶ Casement height (b) min. 370 mm  
Opening width approx. 170 mm  
Stroke 54 mm
- ▶ Casement weight max. 80 kg  
Panel weight max. 30 kg/m<sup>2</sup>
- ▶ Clearance dimension i: 10-60 mm (distance from centre of gravity to casement pivot point of hinge)
- ▶ Dimension J max. 70 mm (distance from inner edge of casement to pivot point of hinge )

### Package

Standard fitting parts OL 90 N with additional:  
casement plate, scissor angle and angled rod,  
in two designs depending on soffit depth

### Standard installation



#### Y = space requirement at bottom of frame

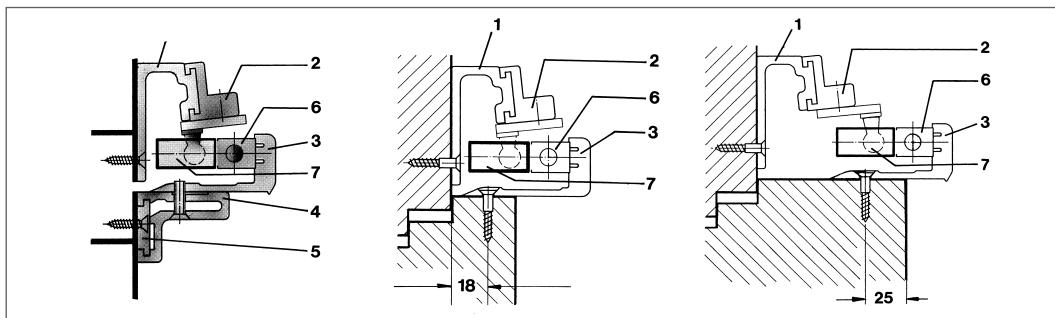
without holding device:	23 mm
with holding device:	28 mm
with auxiliary bracket:	33 mm

#### X = space requirement at side of frame

Hand lever:	D+10 mm
Gear Fz90:	D+10 mm
Gear Fz 90 with detachable cranking handle:	D+14 mm
Electric drive:	D+23 mm
Outgoing side:	D+ 8 mm

With vertical gears and the electric drive, the space required to the side will be correspondingly greater.

### Fixing of the casement and frame parts according to soffit depth



#### Aluminium window

Soffit depth  
e = 0 (flush to surface) - 30 mm  
(additional package 0-30 mm)

#### Timber window

soffit depth  
e = 31 - 42 mm  
(additional package 31-73 mm)

#### Timber window

soffit depth  
e = 43 - 73 mm  
(additional package 31-73 mm)

#### Aluminium window

tapping screws with countersunk head 4,2 mm or countersunk screws M5

#### Timber window

countersunk wood screws 4 x 35 mm

#### Plastic windows

tapping screws with countersunk head 4,2 mm

#### Caption:

1. Bracket set
2. Casement bracket
3. Scissor angle
4. Auxiliary bracket
5. Fixing plate
6. Scissor bearing
7. Slimline scissor



# GEZE OL 90 N for special shapes

## Fanlight opener for angular windows, inward opening

with hand lever, basic fitting for angular windows comprising:

- 1 slimline scissor stay
  - 1 scissor bearing
  - 1 fixing plate for angular windows
  - 1 casement bracket for angular windows
  - 1 bendable corner transmission
  - 1 hand lever
  - 2 rod guides
- plus: rods and cover profiles

### Window shapes and permissible dimensions

$\alpha$	b min.	a min.	a1 min.
up to 30°	400	420	700
30°-40°	550	360	650
40°-50°	650	320	550
50°-60°	750	270	450
Special application $\beta$			
min. 60°	600	420	---

### Product features

such as for rectangular windows

Installation drawing: 40444-EP-006

### Application range

For vertically installed inward opening bottom-hung casements of timber, plastic and aluminium  
Overlap depths of 0-25 mm.  
Max. casement weight 80 kg  
Max. panel weight 30 kg/m<sup>2</sup>

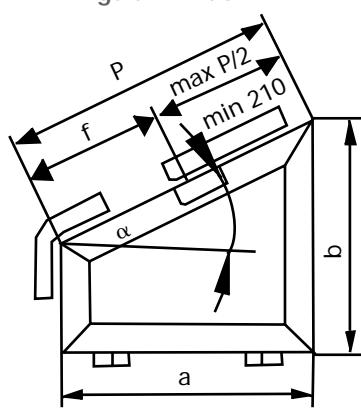
Window shapes and permissible dimensions are depending on inclination angle  $\alpha$  (bending angle of corner transmission).  
Max. length of angled leg  
 $P=2000$  mm

Fitting dimension D	Space required
at top, without additional lock	10-18 mm
at top, with additional lock	16 mm
at side	min. 10 mm
at top and at side	D+9 mm

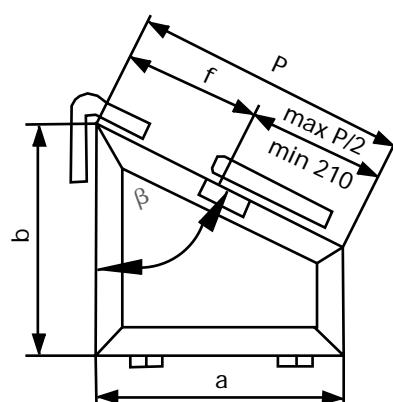
### Amplification:

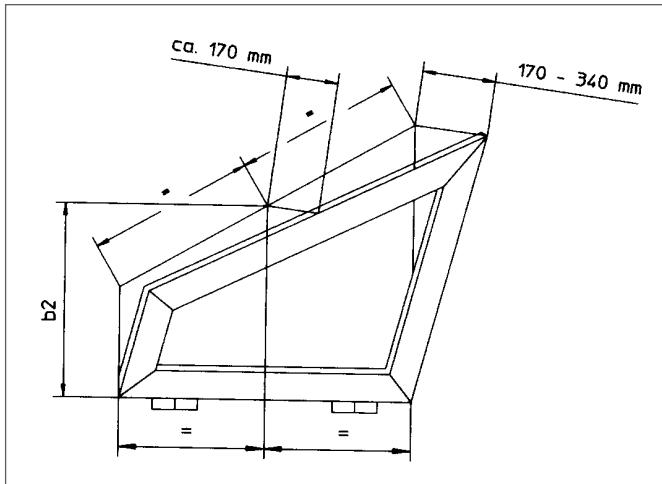
- i = Distance from centre of gravity to casement pivot point of hinge: 10 to 60 mm
- $\ddot{u}$  = Overlap depth 0 – 25 mm
- D = Outer edge of casement to middle of drive rod
- X = Space requirement at side: D+10mm
- Y = Space requirement at top
- $\alpha, \beta$  = Linkage angle of corner guide, downtilt
- f = Fitting dimension for scissor stay

Angular window



Special application



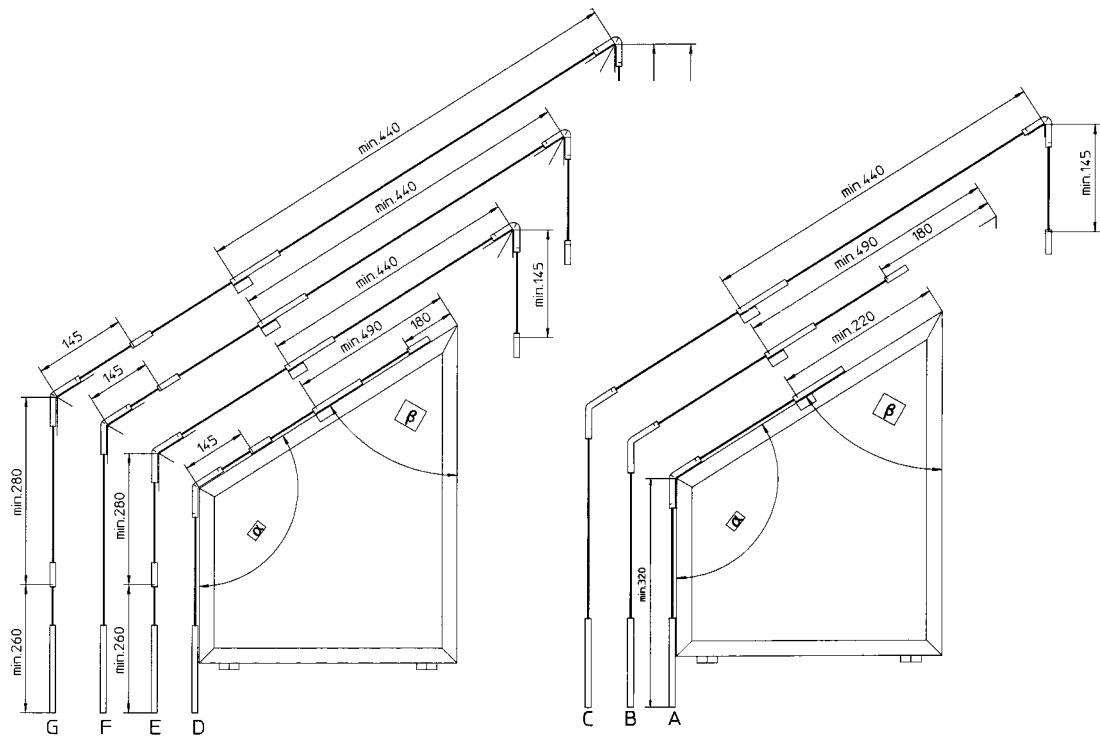


Opening width b2 = mean annual casement height

#### Fitting arrangements and minimum dimensions

$$\alpha = 60^\circ - 150^\circ$$

$$\beta = 150^\circ - 60^\circ$$



A: Hand lever - Corner transmission - Scissor

B: Hand lever - Corner transmission - Scissor - Locking device

C: Hand lever - Corner transmission - Scissor - Corner transmission - Locking device

D: Hand lever - Corner transmission - Locking device - Scissor - Locking device

E: Hand lever - Locking device - Corner transmission - Scissor - Corner transmission - Locking device

F: Hand lever - Corner transmission - Locking device - Scissor - Corner transmission - Locking device

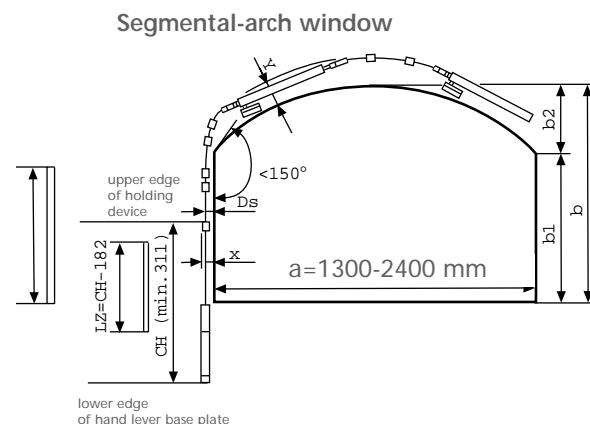
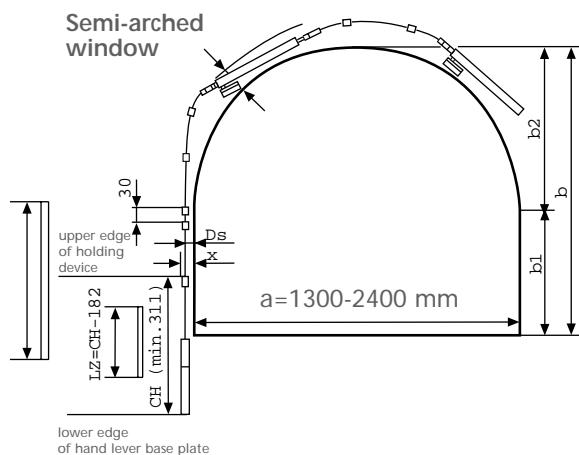
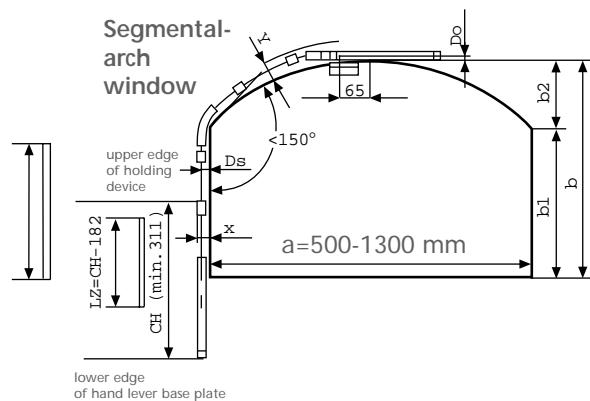
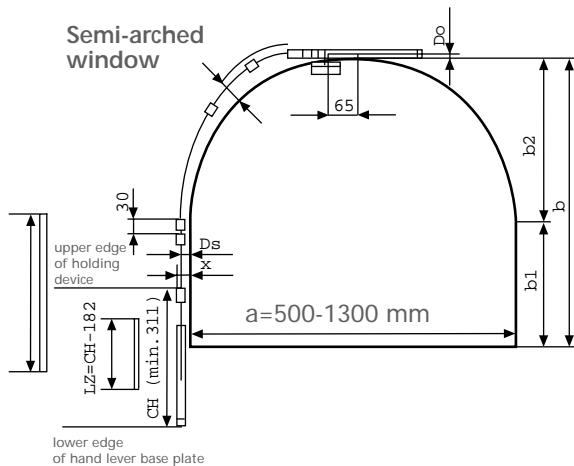
G: Hand lever - Locking device - Corner transmission - Locking device - Scissor - Corner transmission - Locking device - Locking device

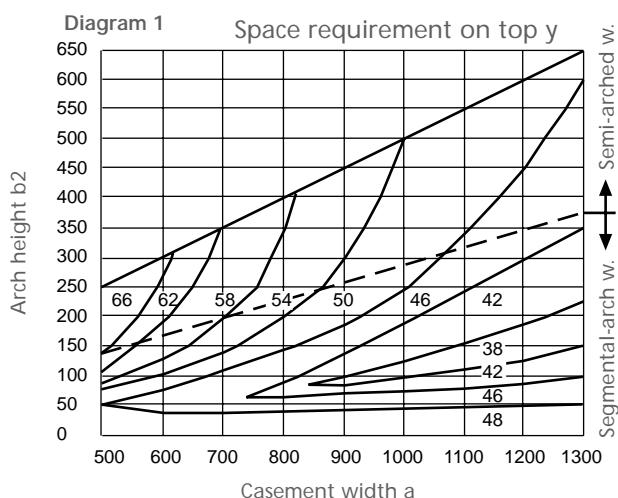


# GEZE OL 90 N for special shapes

## Fanlight opener for semi-arched and segmental-arch windows

with flexible link arm for vertically installed bottom-hung casements  
(inward opening) as semi-arched and segmental-arch windows





### Semi-arched window

(angle W greater 150°)

Casement width a: 500-1300 mm  
(1301-2400 mm)

Casement height b: 300 mm (600 mm)

Casement weight: max. 80 kg

Panel weight: max. 30kg/m<sup>2</sup>

Distance from gravity centre of casement to pivot point of hinge i: 10 to 60 mm

Overlap depth Ü: 0 – 25 mm

Distance from outer edge of casement to middle of drive rod D: see table 1

Space required at side X: D-dim. at side +10 mm

Space required at top Y: see diagram

**Table 1**

Casement height b	D-dimension at top	D-dimension at side
100–400 mm from 400 mm	12 mm 10–12 mm	min. 10 mm min. 10 mm

### Segmental-arch window

(angle W less than 150°)

Casement width a: 500-1300 mm  
(1301-2400 mm)

Casement height b: 250 mm (600 mm)

Casement weight: max. 80 kg

Panel weight: max. 30kg/m<sup>2</sup>

Distance from gravity centre of casement to pivot point of hinge i: 10 to 60 mm

Overlap depth Ü: 0 – 22 (0-25) mm

Distance from outer edge of casement to middle of drive rod D: see table 2

Space required at side X = Y

Space required at top Y:

see diagram D = table 2

**Table 2**

Casement height b	D-dimension at top
250–300 mm	16 mm
100–400 mm from 400 mm	12–16 mm 10–16 mm

( ) = for 2 scissor version

### Installation drawing:

40444-EP-010 (1 scissor)

40444-EP-017 (2 scissors)



# GEZE OL 90 N for special shapes

## Fanlight opener for triangular windows

with hand lever, basic fitting for triangular windows comprising:

- 1 slimline scissor stay
  - 1 scissor bearing
  - 1 fixing plate
  - 1 casement bracket
  - 1 bendable corner transmission
  - 1 hand lever
  - 2 rod guides
- plus: rods and cover profiles

### Product features

such as for rectangular windows

**Installation drawing:** 40444-EP--012

### Application range

For vertically installed inward opening bottom-hung casements of timber, plastic and aluminium  
Overlap depth 0-25 mm.  
Max. casement weight 80 kg  
Max. panel weight 30 kg/m<sup>2</sup>

Window shapes and permissible dimensions  
depending on inclination angle  $\alpha$  (bending angle of corner transmission)  
Max. length of angled leg  
 $P=2000$  mm

### Fensterformen und zulässige Abmessungen

$> \alpha$	b min.	a min.	a1 min.
bis 30°	400	420	700
30°-40°	550	360	650
40°-50°	650	320	550
50°-60°	750	270	450
Special application $\beta$			
min. 0°-30°)	600	420	---

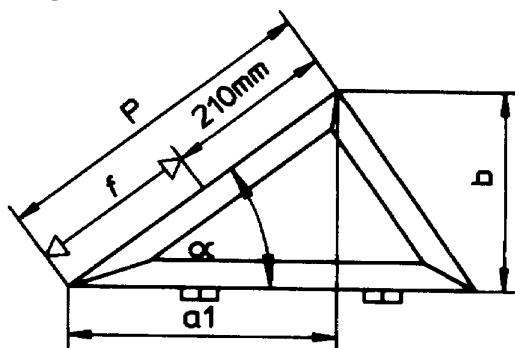
\*) border line (avoid if possible)

Fitting dimension D	Space required
at top, without additional lock	10-18 mm
at top, with additional lock	16 mm
at side	min. 10 mm
at top and at side	D+9 mm

### Amplification:

- i = Distance from centre of gravity to casement pivot point of hinge: 10 to 60 mm
- $\ddot{u}$  = Overlap depth 0 – 25 mm
- D = Outer edge of casement to middle of drive rod
- X = Space required at side D+10mm
- Y = Space required at top
- $\alpha, \beta$  = Linkage angle of corner guide, downtilt
- f = Fitting dimension of scissor stay

### Triangular window



## GEZE OL 90 N – Ordering information

Description	Finish	ID No.
GEZE OL 90 N hand lever and corner transmission	EV1	030611
	white RAL 9016	030615
	RAL colour	030614
GEZE OL 90 N scissor with standard casement bracket	EV1	030373
	white RAL 9016	030377
	RAL colour	030376
Rod ø 8, L = 2000 mm	galvanized	016555
Rod ø 8, L = 3000 mm	galvanized	016591
Rod ø 8, L = 6000 mm	galvanized	016592
Cover profile (mitred ends), L = 2000 mm	EV1	030401
	white RAL 9016	030405
Cover profile (mitred ends), L = 3000 mm	EV1	030396
	white RAL 9016	030400
Cover profile (straight ends), L = 6000 mm	EV1	027558
	white RAL 9016	027561
	LM roh	027556
GEZE OL 90 N hand lever and corner transmission (Fixpack 25)	EV1	030557
	white RAL 9016	030561
	RAL colour	030560
GEZE OL 90 N scissor with standard casement bracket (Fixpack 25)	EV1	030574
	white RAL 9016	030578
	RAL colour	030577
GEZE OL 90 N scissor without casement bracket	EV1	071203
	white RAL 9016	071207
	RAL colour	071206
GEZE OL 90 N casement bracket for timber window Euronut	EV1	030886
	white RAL 9016	030890
	RAL colour	030889
GEZE OL 90 N standard casement bracket	EV1	074424
	white RAL 9016	074428
	RAL colour	074427
Rod guide	plastic	010878
Rod guide with fixing plate	galvanized	002747
Rod connector for rod ø 8 mm	galvanized	043546
Corner transmission	galvanized	070546
Corner transmission cover	EV1	071503
	white RAL 9016	071507
Corner transmission, bendable	galvanized	071354
Hand lever OL 90 N	EV1	026882
	white RAL 9016	026887
Fixing plate for hand lever	galvanized	004530
Drilling plate for timber	yellow	054799
Drilling plate for aluminium and plastic	blue	054800
Accessories for multi-part drilling template		020477
Supplementary drilling plate F 45		028141

Description	Finish	ID No.
GEZE OL 90 N supplementary top-hung pack soffit depth 0-30 mm (1 pcs per scissor)	EV1	030831
	white RAL 9016	030835
	RAL colour	030834
GEZE OL 90 N supplementary top-hung pack soffit depth 31-73 mm (1 pcs per scissor)	EV1	030841
	white RAL 9016	030845
	RAL colour	030844
Cranked drive rod, soffit depth 0-30 mm	galvanized	001841
Cranked drive rod, soffit depth 31-73 mm	galvanized	001842

Rods and cover profiles, see standard version

#### OL 90 N for semi-arched and segmental-arched windows – Ordering information

Description	Finish	ID No.
Flexible rod assembly without accessories	linkage length 700 mm	EV1 / white RAL 9016
	linkage length 1000 mm	EV1 / white RAL 9016
	linkage length 1250 mm	EV1 / white RAL 9016
Accessories for flexible rod assembly (special window shapes)	EV1 / white RAL 9016	030862
Corner transmission for f. rod assembly (for angular/segmental-arched win.)	EV1 / white RAL 9016	030764
Guide profile for flexible rod assembly	EV1 / white RAL 9016	022791

Rods and cover profiles, see standard version

#### OL 90 N for angular and triangular windows – Ordering information

Description	Finish	ID No.
Hand lever and bendable corner transmission for angular windows	EV1	076911
	white RAL 9016	076915
GEZE OL 90 N sliding casement bracket for angular and triangular windows	EV1	030970
	white RAL 9016	030974
GEZE OL 90 N sliding casement bracket for angular windows of timber Euronut	EV1	071198
	white RAL 9016	071202



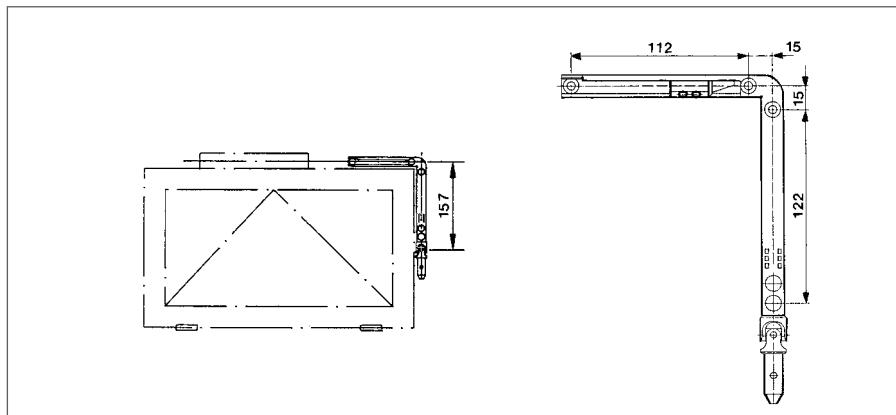
# GEZE OL 90 N Gears

## Product features

- Slim design (16 mm)
- Fully concealed by profile
- High load carrying capacity
- On request: adjustable anti-overload device (ex-factory default setting 7 Nm)
- Min. casement width 380 mm
- Only 9 crank revolutions for full opening width
- Simple fixing
- Drive rod ø 8 mm, can be directly attached
- Stroke 54 mm (stroke limiting possible)

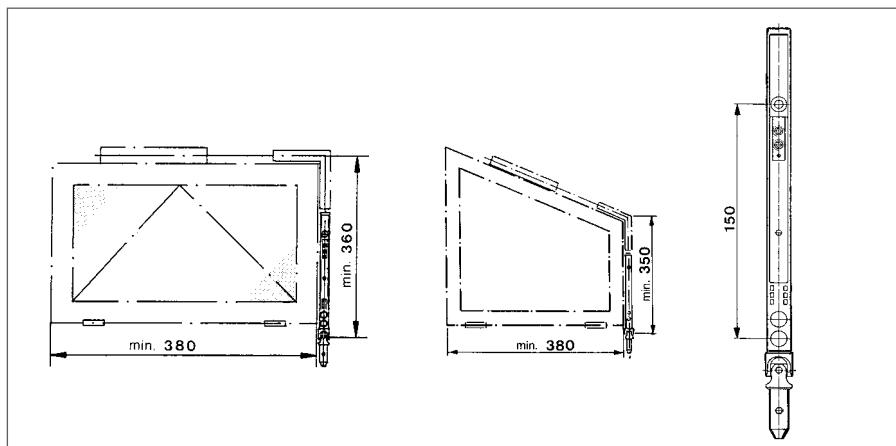
## Installation drawing:

40444-EP-007 (angular window)  
40444-EP-008 (rectangular window)  
40444-EP-022 (with supplementary lock)



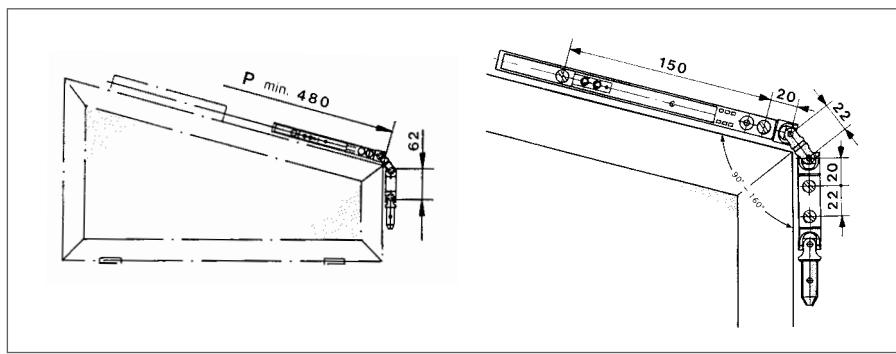
## Corner transmission gear Fz 90

Corner transmission with integrated gear. For fixed and detachable cranking handle. Fz 90 L - left, Fz 90 R - right



## Vertical gear Fz 91

For fixed and detachable cranking handle. For use on left and right.



## Gear Fz 92

For fixed and detachable cranking handle. For use on left and right.

## Application range Fz 90 / Fz 91

only for vertically installed rectangular bottom-hung or top-hung, inward opening

a = casement width 380 to 3600 mm

b = casement height min. 250 mm

casement weight max. 80 kg

max. panel weight:

30 kg/m<sup>2</sup> with casement width (a) = 380 - 2400 mm

25 kg/m<sup>2</sup> with casement width (a) = 2400 - 3600 mm

i = distance from centre of gravity to casement pivot point of hinge = 10 to 60 mm

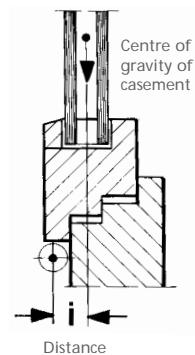
Ü = overlap depth 0 to 25 mm

D = outer edge of casement to middle of drive rod  
(see table)

X = space requirement at side (see table)

Y = space requirement at top (see table)

Casement height b	D-dimension at top	Space req. Y at top
250 to 300 mm	16 to 18 mm	D + 9 mm
300 to 400 mm	14 to 18 mm	D + 9 mm
400 to 500 mm	12 to 18 mm	D + 9 mm
from 500 mm	10 to 18 mm	D + 9 mm



Linkage	D-dimension at side	Space req. X at side
Gear Fz 90 L/R-Fz 91 with fixed cranking handle	min. 10 mm	D + 9 mm
with detachable cranking handle	min. 14 mm	D +14 mm

## Application range Fz 92

only for vertically installed windows, for angular and triangular windows;  
with rectangular windows it can also be used as horizontal gear

a = casement width 380 to 2000 mm

b = casement height min. 250 mm

casement weight max. 80 kg

max. panel weight: 30 kg/m<sup>2</sup> with casement width 380 - 2400 mm

a = linkage angle 90° to 160°

P = length of angled leg

i = distance from centre of gravity to casement pivot point of hinge = 10 to 60 mm

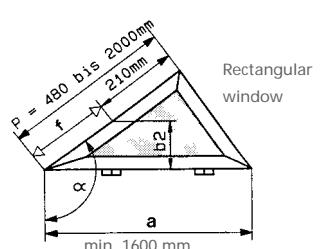
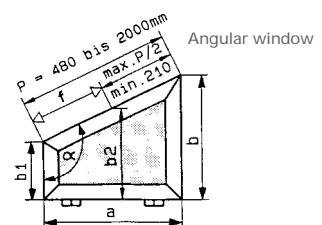
Ü = overlap depth 0 to 25 mm

D = outer edge of casement to middle of drive rod (see table)

X = space requirement at side (see table)

Y = space requirement at top (see table)

b2 = average casement height = min. 300 mm



	D-dimension at top	Space req. Y at top
	10 to 18 mm	D + 9 mm
with supplementary lock	16 mm	D + 9 mm

Linkage	D-dimension at side	Space req. X at side
with fixed cranking handle	min. 12 mm	D + 9 mm
with detachable cranking handle	min. 14 mm	D +14 mm

Note: The gear hole pattern should be drilled in using a drilling template.

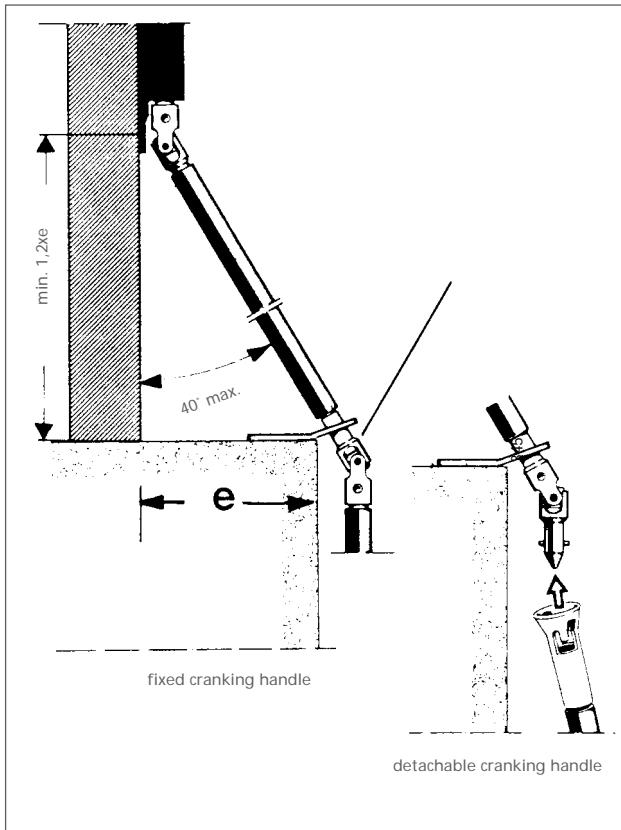
From P = 1200 mm a supplementary locking device is recommended

Only one scissor with sliding casement bracket may be mounted to the angular window.



# GEZE OL 90 N / OL 100 Accessories

## Linkage bearing for gear and connecting rods

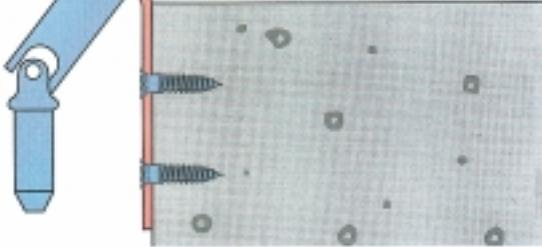
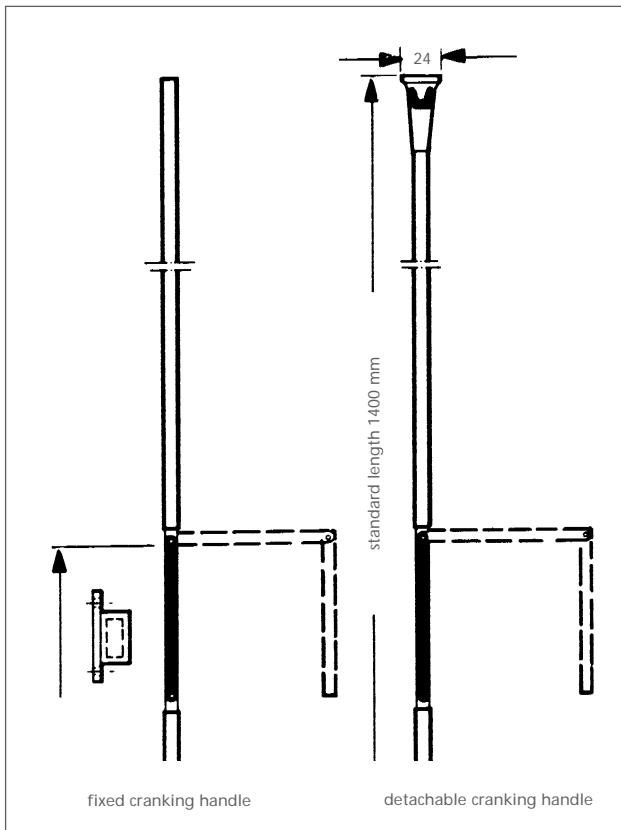
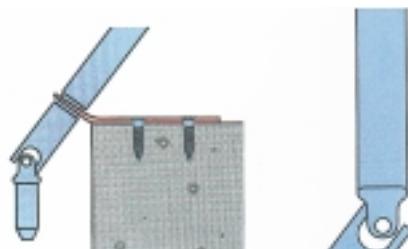


**Linkage transmission with connecting rod**  
Fixed or detachable cranking handle

The linkage bearing is a flexible steel bracket with galvanised or black finish and can be adjusted to various angles.

It can be fitted on top of the reveal, vertically in front of the reveal, or laterally on the reveal.  
The connection rod is then located 25 mm from the wall.

Installation drawing: 40444-EP-011



## GEZE OL 90 N Accessories – Ordering information

Description		Finish	ID No.
GEZE Fz 90 corner transmission with integrated gear	left	galvanized	030809
		black	030810
	right	galvanized	030811
		black	030812
GEZE Fz 91 gear with accessories for vertical mounting		galvanized	030822
		black	030823
GEZE Fz 91 gear with corner transmission		galvanized	030817
		black	030818
GEZE Fz 92 gear for angular and triangular windows		silver / white	030778
Fixed cranking handle, with collapsible handle and cranking handle holder (extended length 1400 mm)		EV1	050857
		white RAL 9016	015864
Detachable cranking handle, with collapsible handle and coupling-bell socket (extended length 1400 mm)		EV1	050856
		white RAL 9016	015879
Linkage bearing with bearing plate for gear Fz 90 - Fz 92 and Fz 100 - Fz 101, for cranking handle		galvanized	022933
		black	022934
Collapsible handle Fz 45/32		EV1	056951
		white RAL 9016	014795
Coupling bell-socket Fz 45/14		silver	042963
Crank rod holder Fz 45/8		EV1	054560
		white RAL 9016	014794
Dowel pin 4x16 mm		galvanized	022932
Stroke limiter for opening width 100 mm			012335
Connecting tube, outer diameter 15 mm, standard length 6000 mm		EV1	053262
		white RAL 9016	014706
Drilling template for connecting tube			059083
Drilling template Fz 92		Holz	013769
		LM / plastic	013770
On request: coated anti-overload device		EV1	020226
		white RAL 9016	020223

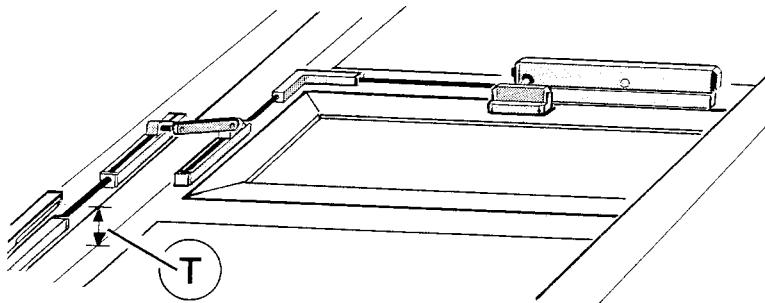
Rods, cover profiles and, when required, supplementary scissor, see standard version GEZE OL 90 N

# Post-rail-façade

## Transmission with pull-handle

Post projection is bridged by a linkage bracket (see illustration)  
For vertically installed rectangular windows only.

Operation with  
 ► hand lever  
 ► gear Fz 91  
 ► electric motor



a = total casement width

b = casement height min. 250 mm

total casement weight max. 80 kg

Casement width a	Panel weight	Casement height b	D-dimension, top	Y min.	Y max.
up to 2400 mm	max. 30 kg/m <sup>2</sup>	250 - 300 mm	16 to 18 mm	D+9 mm	33 mm
2401 - 2900 mm	max. 25 kg/m <sup>2</sup>	301 - 400 mm	12 to 18 mm	D+9 mm	33 mm
2901 - 3600 mm	max. 20 kg/m <sup>2</sup>	from 401 mm	10 to 18 mm	D+9 mm	33 mm

## Amplification:

i = Distance from the centre of gravity to casement pivot point of hinge: 10 to 60 mm

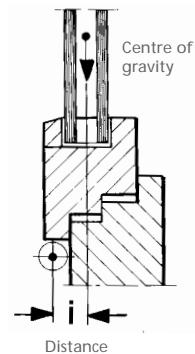
Ü = Overlap depth 0 to 25 mm

D = Outer edge of casement to middle of drive rod (see table)

X = Space requirement at side min. 19 mm (see table)

Y = Space requirement at top (see table)

T = Post/rail projection from frame



Installation drawing: 40444-EP-014

## Ordering information

Description	Finish	ID No.
Curtain wall transmission size 75, T = 0-75 mm	EV1	030744
	white RAL 9016	030748
	RAL colour	030747
Curtain wall transmission size 150, T = 0-150 mm	EV1	030749
	white RAL 9016	030753
	RAL colour	030752

# Flexible linkage for negotiating sills (for OL 90 N only)

## Product features

- Simple adaptable transmission for fanlight opener OL 90 N
- No bell-type angles
- No rod angles
- Fast and easy mounting
- Optically elegant guide

## Application range

Total casement width up to 1200 mm

Space requirement:

Centre of horizontal drive rod to upper edge of sill: min. 440 mm

Bottom edge of upper holder to upper edge of sill: min. 160 mm

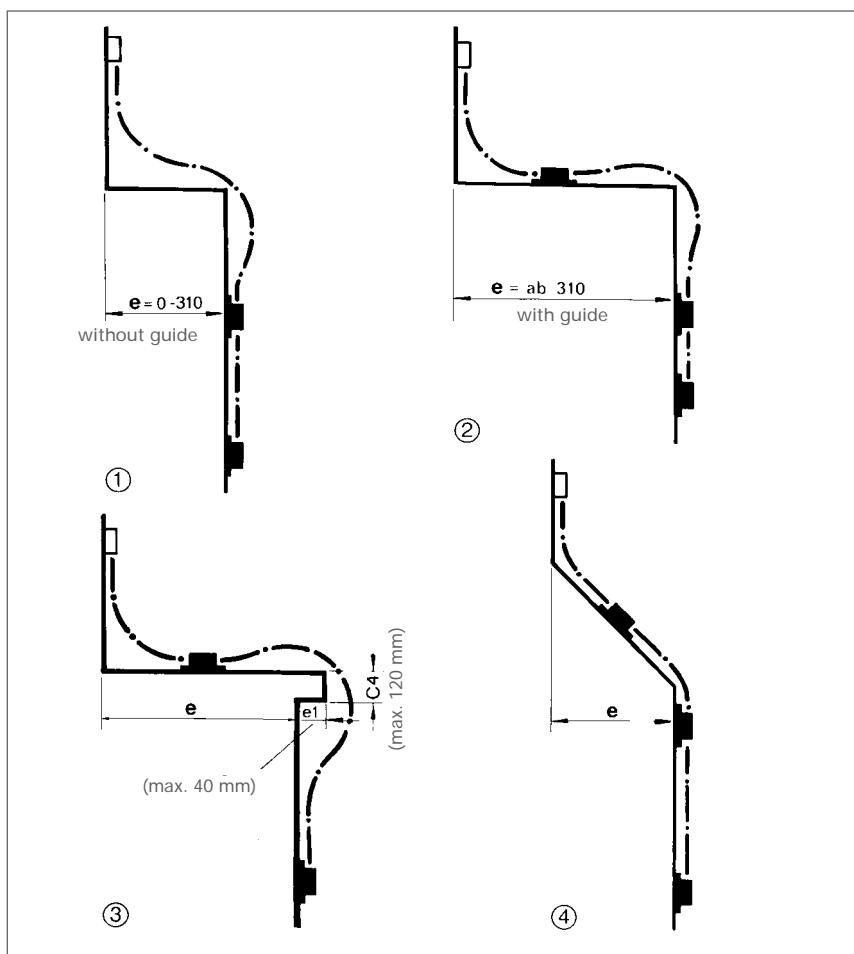
Panel weight: max. 30 kg/m<sup>2</sup>

Casement weight: max. 60 kg

Space requirement at side: min. 19 mm

## Package/Finish

- Flexible linkage in 2 length according to soffit depth
- Accessories comprising: holder, retaining spring, clamping element, guide, rod coupling and fixing plates



## Possible routing arrangements

- 1) Sill with soffit depth  $e =$  up to 310 mm (linkage length 700 mm)
- 2) Sill with soffit depth  $e =$  over 310 mm (linkage length 700 mm to  $e = 380$  mm)  
(linkage length 1000 mm to  $e = 680$  mm)
- 3) Sill with sill protection (linkage length 700 mm to  $e+e1 = 310$  mm)  
(linkage length 1000 mm to  $e+e1 = 610$  mm)  
(linkage length 700 mm to  $e = 380$  mm)  
(linkage length 1000 mm to  $e = 680$  mm)
- 4) Angled sill

Installation drawing: 40444-9-0963

## Ordering information

Description	Finish	ID No.
Flexible rod assembly, linkage length 700 mm with $e = 0$ to 350	brown	008481
	EV1 / white RAL 9016	030747
Flexible rod assembly, linkage length 1000 mm with $e = 0$ to 650	brown	008483
	EV1 / white RAL 9016	022721
Flexible rod assembly, linkage length 1250 mm	brown	030797
	EV1 / white RAL 9016	022721
Accessories for flexible linkage for negotiating sills for OL 90 N: clamping plate, holder/rod coupling, rod guide	brown	030797
	EV1 / white RAL 9016	030798

# Bell-type angle transmission, transmission with cranked rod and special versions

- **Bell-type angle transmission**  
for soffit depth  $e = 170\text{-}410 \text{ mm}$ ,  
see Detail A

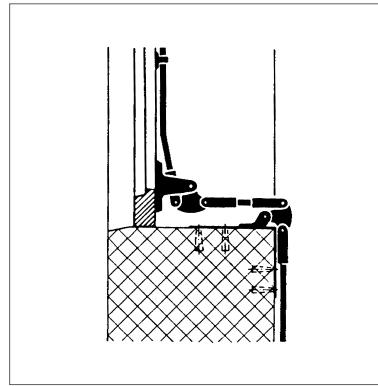
- for soffit depth up to approx. 150 mm,  
transmission with cranked rod  $\varnothing 10 \text{ mm}$ ,  
see Detail B

## Special versions

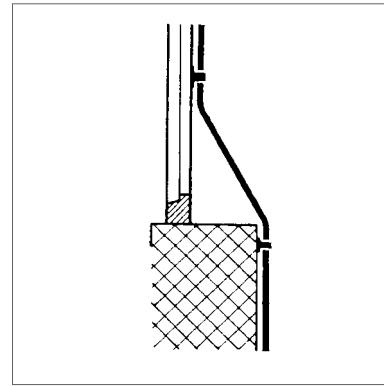
- **Stacked bottom-hung casements with corner angle transmission**

The transmission is situated in front of the corner transmission so that no excessive space requirements exists to the side, see Sketch A

**Installation drawing:** 40444-EP-024



Detail A

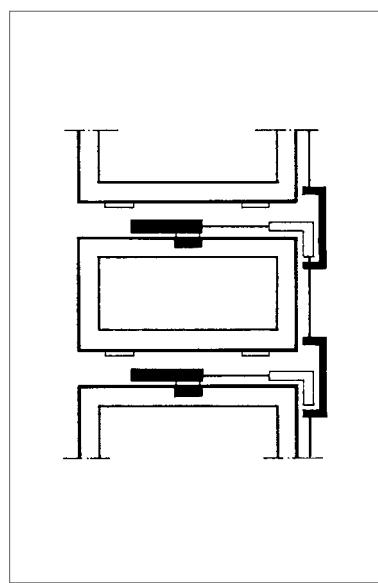


Detail B

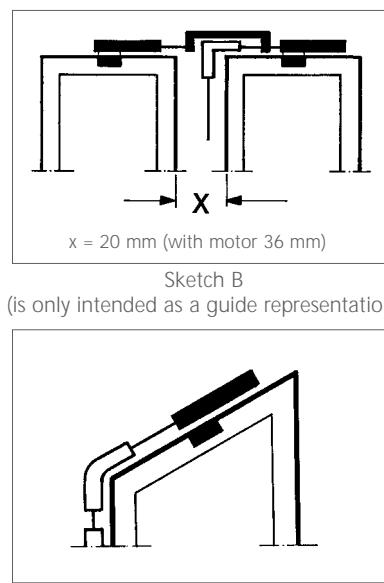
- **Central operation for 2-casement windows with corner transmission**

The transmission is situated in front of the corner transmission so that no excessive space requirements exists to the side, see Sketch B

**Installation drawing:** 40444-EP-023



Sketch A (is only intended as a guide rep.)



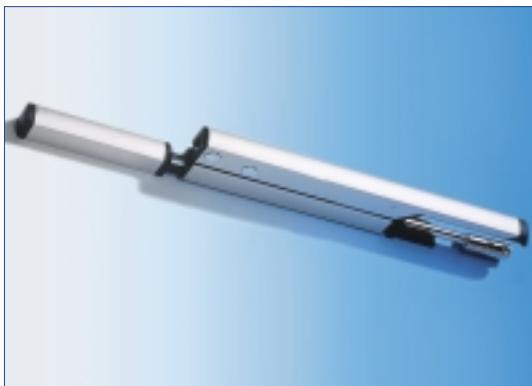
x = 20 mm (with motor 36 mm)  
Sketch B  
(is only intended as a guide representation)

- **Scissor with sliding casement bracket for angular windows**  
with standard corner transmission,  
bendable

## Ordering information

Description	Finish	ID No.
Bell-type angle transmission	as per 'Detail A' as per 'Detail B'	galvanized galvanized
Additional package for cranked rod $\varnothing 10 \text{ mm}$	galvanized	025778 056465
Rod $\varnothing 10 \text{ mm}$ , standard length 2000 mm	galvanized	058124
Transmission for corner angle or hinge	EV1 white RAL 9016	004892 030902 030906
Scissor with sliding casement bracket for angular windows	EV1 white RAL 9016	030596 030599

## Scissors and hand lever



Swivelling hand lever



Scissor with anti-unhinge feature (with casement bracket)

► **Scissor with anti-unhinge feature**  
with casement bracket

► **Lockable scissor**  
with casement bracket

► **Swivelling hand lever**

► **Lockable hand lever**

is available for the slimline fanlight openers GEZE OL 90 and OL 95. This hand lever is equipped with a cylinder lock (locking device for synchronised closing) and it is supplied with 2 keys.

Installation such as for standard hand lever.

The design of the lockable hand lever is based on the regulations published in DIN 18104 "Burglar-retardant retrofitted products for windows and doors". According to DIN it is mandatory that a locked lever does not open when the operating force increases beyond 500 N. This requirement is exceeded.

### Ordering information

Description	Finish	ID No.
GEZE OL 90 scissor with anti-unhinge feature	EV1 white RAL 9016 RAL colour	030498 030502 030501
GEZE OL 90 lockable scissor	EV1 white RAL 9016 RAL colour	029183 029187 029186
Accessories for swivelling hand lever for OL 90 N	EV1 white RAL 9016 RAL colour	030391 030395 030394
Lockable hand lever for GEZE OL 90 N and OL 95	EV1 white RAL 9016 RAL colour	083841 083844 085230

# Supplementary locking device and concealed locking device with locking driver

## Supplementary locking device

- with supplementary angle, overlap depth 0-17 mm, see Fig. A
- without supplementary angle, overlap depth 14-25 mm, see Fig. B

**Installation drawing:** 40444-EP-005

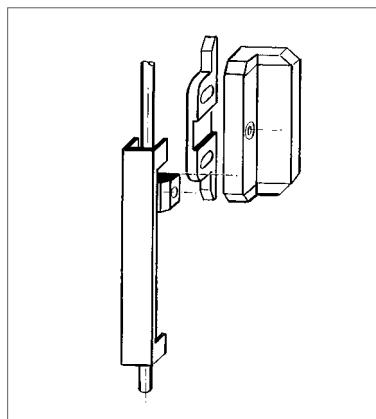


Fig. A

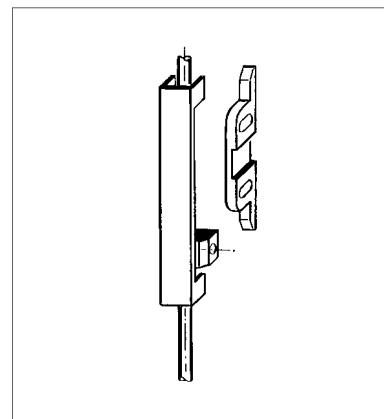


Fig. B

## Concealed locking device with GEZE locking driver

The locking drivers OL 90 N and OL 100 provide thickness and safety over the entire closing surface as well as resistance to forced entry.

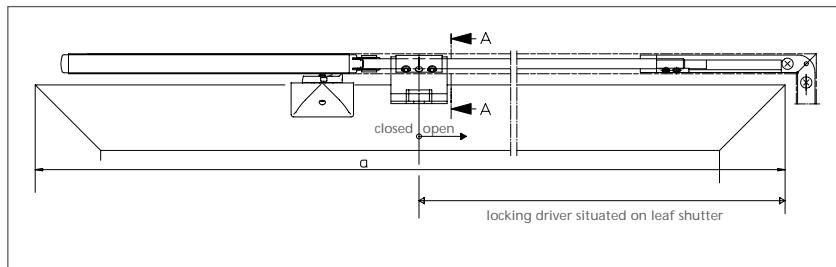
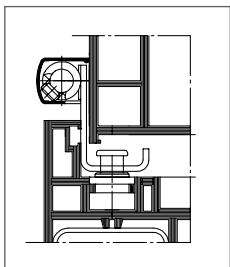
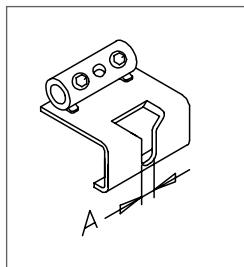
The drivers can be used for standard central locking devices (concealed locking device) and can be simply clamped on. Both drivers have been designed for use with profiles and fittings.

**Installation drawing:** 40408-0-027  
40418-9-0953

## OL 90 coupling with locking driver

	Min. casement width a			
	1 scissor OL 90 N	2 scissors OL 95	OL 90 N	OL 95
Hand lever / gear	480	545	945	1075
GEZE E 212	645	710	1200	1330
GEZE E 205	875	940	1200	1330

Note: The min. casement width and mounting dimensions refer exclusively to the surface-mounted fanlight opener OL 90 N and OL 95. For the central locking devices, if necessary, other minimum casement widths are the result.



## Ordering information

Description	Finish	ID No.
Supplementary locking device*) overlap depth 0-17 mm	EV1	030519
	white RAL 9016	030523
overlap depth 14-25 mm	EV1	030524
	white RAL 9016	030528
Coupling OL 90 N with locking driver A = 8,5	galvanized	024953
A = 11,5	galvanized	029722
A = 15,5	galvanized	030294

\*) Supplementary corner transmission ID No. 070546 if used on opposite side to hand lever.



## GEZE OL 95

Scissor stay for slimline fanlight opener,  
can be combined with nearly all OL 90 N components



Scissor stay GEZE OL 95 with standard casement bracket

### Product features

- ▶ An **opening width of 220 mm** ensures even better ventilation. Particulary suitable for post-rail-facades.
- ▶ The product's design and aesthetics offer creative freedom for architects and designers
- ▶ Unobstructive installation into post-rail-structures due to small overall dimensions
- ▶ Nearly all OL 90 N components can be used in conjunction with the scissor stay OL 95

### Application range

- ▶ Main field of application in post-rail-facades
- ▶ Only for vertically installed rectangular bottom-hung and top-hung windows of timber, plastic or aluminium, inward opening, with overlap depth from 0 to 25 mm.
- ▶ Minimum casement width 440 mm
- ▶ Casement width<sup>\*)</sup>:
  - with 1 scissor: max. 1200 mm
  - with 2 scissors: max. 2400 mm
  - with 3 scissors: max. 3600 mm
- ▶ Casement weight: max. 60 kg
- ▶ Casement height: from 350 mm

<sup>\*)</sup> Different casement weights are possible, depending on application. Please refer to the appropriate installation drawings for the relevant information.

With bottom-hung casements, safety scissors which restrict the travel of the casement when the scissor is disengaged, must be fitted in addition to the fanlight fitting (see GEZE FPS gripping and cleaning scissor).

**Note:** OL 95 is (unlikeOL 90 N) not suitable for outward opening windows.

D-dimension and space requirement (mm)		
Cas. height b	D-dim. at top	Upper space req. Y
350 - 400 mm	18 mm	D + 9 mm
401 - 450 mm	16 to 18 mm	D + 9 mm
451 - 600 mm	14 to 18 mm	D + 9 mm
from 601	12 to 18 mm	D + 9 mm

#### Amplification:

i = Distance from the casement's centre of gravity to the hinge pivot point: 10 to 60 mm

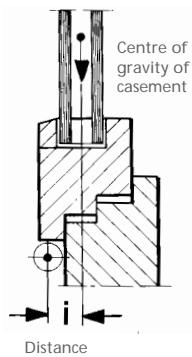
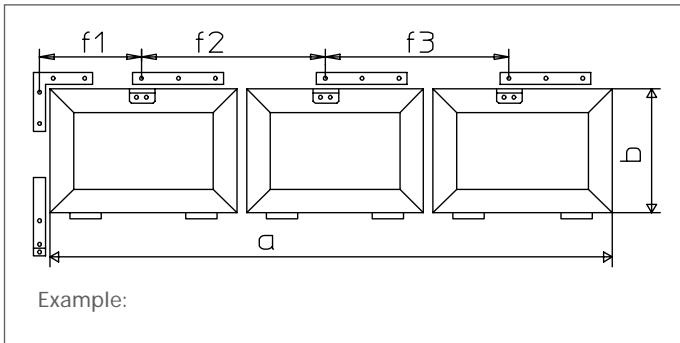
ü = Overlap depth 0 – 25 mm

D = Outer edge of casement to the middle of drive rod

X = Space requirement at side D+10mm

Y = Space requirement at top

F1, F2, F3 = Fitting dimensions for scissor



#### Ordering information

Description	Finish	ID No.
GEZE OL 95 scissor stay with standard casement bracket	EV1	082445
	white RAL 9016	082448
	RAL colour	082449
GEZE OL 95 sliding casement bracket for special window shapes	EV1	084398
	white RAL 9016	080401
	RAL colour	084403
GEZE OL 95 sliding casement bracket for timber framed windows with Euronut	EV1	085327
	white RAL 9016	085330
	RAL colour	085331
GEZE OL 95 scissor stay without casement bracket	EV1	084194
	white RAL 9016	084197
	RAL colour	084199



# GEZE OL 100

**Slimline fanlight opener for vertically installed bottom-hung, top-hung and side-hung windows, inward opening**



#### **Installation drawing:**

OL 100 with electric motor E 212  
40408-EP-030 (horizontal installation)  
40408-EP-029 (vertical installation)

OL 100 with electric motor E 205  
40444-EP-003 (horizontal installation)  
40444-EP-002 (vertical installation)

#### **Product features**

- ▶ Large opening width: approx. 260 mm (on request approx. 190 mm)
- ▶ With red release button. This safety button indicates whether the casement is properly engaged
- ▶ With locking device in scissor
- ▶ Easy installation even with deep reveals since scissors and drive rods can be mounted from front
- ▶ Only one casement bracket for all overlap depths and materials
- ▶ Simple pressure adjustment for automatic correction of frame inaccuracies
- ▶ All visible parts made of aluminium
- ▶ No visible fixing screws
- ▶ Rod connectors unaffected by tolerance restrictions
- ▶ Each rod connector has 2 screws = double safety
- ▶ Low space requirement above and at side of casement
- ▶ Completely pre-assembled units, which means fewer fittings
- ▶ Drilling template ensures time-saving, precise fitting

#### **Application range**

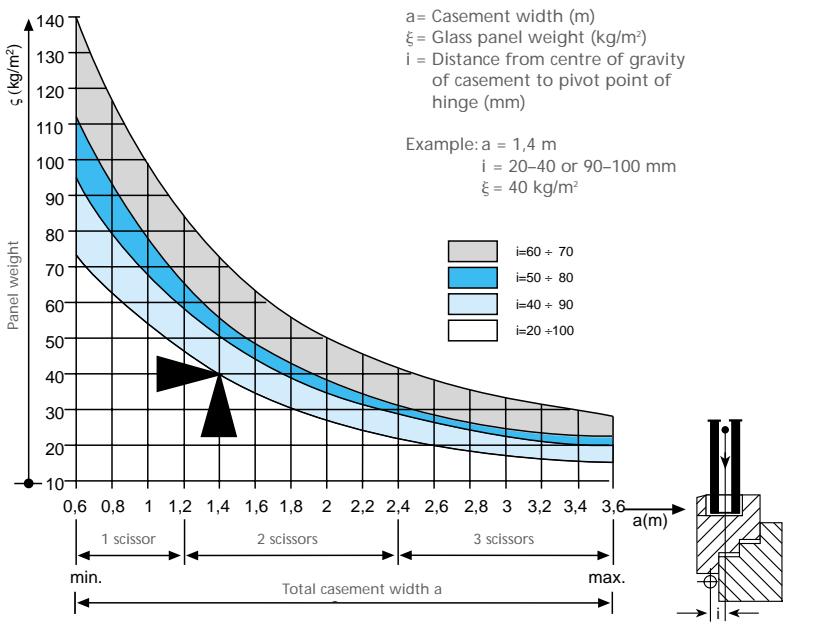
- ▶ For vertically installed bottom-hung, top-hung and side-hung casements, inward opening
- ▶ For use on left or right
- ▶ Overlap depth 0-25 mm
- ▶ Casement weight max. 200 kg, however opening width according to diagram 'Permissible loads'
- ▶ Casement height min. 400 mm  
Casement width min. 600 mm

Provided that permitted complete casement widths are not exceeded, gear Fz 100 and Fz 101 may be mounted with up to 5 scissors, with hand lever max. 3 scissors.

#### **Note:**

With inward and outward opening bottom-hung casements, safety scissors which restrict the travel of the casement when the scissor is disengaged, must be fitted in addition to the fanlight fitting (see GEZE FPS gripping and cleaning scissor).

## Permissible loads



## Standard installation

Example showing the mounting of OL 100 to a vertically installed bottom-hung casement, see 'Standard mounting OL 100'

### ① Hand lever

### ② Corner angle

The corner transmission is a pre-assembled unit. The vertical drive rod and horizontal drive rod are fixed in position.

Fitting does not involve any extra parts. This corner transmission is made of aluminium and can be adjusted to any angle up to 135° (e.g. for angular windows).

### ③ Scissor

Hinge joint in scissor stay and ball joint on casement bracket facilitate full opening width.

### ④ Casement bracket

The casement pressure can be adjusted using an Allen key so that the casement is held firmly against the window seal.

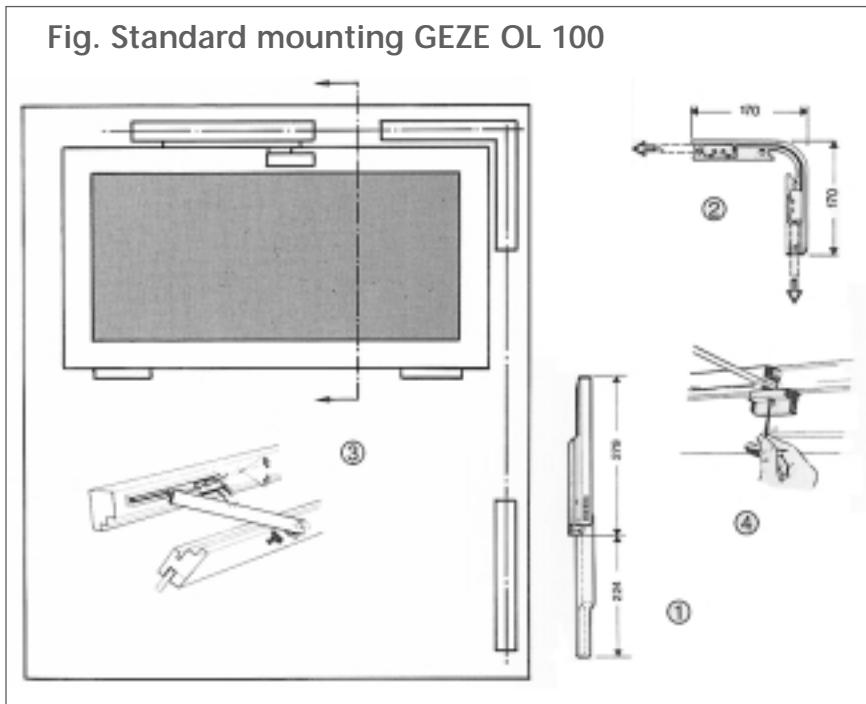
Casement height (mm)	Space req. at top y min. (mm)	Fitting dimension D min. (mm)
400-500	34	21
501-650	32	19
> 650	30	17

Space requirement at side x = D + 13 mm

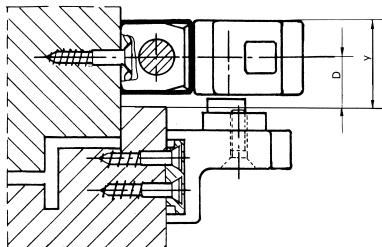
## Standard version

### plastic, timber, aluminium

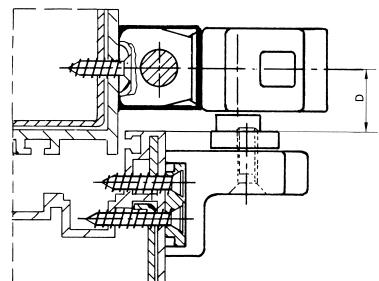
- Fixing using countersunk self-tapping screws 4,8 DIN 7972 through at least 2 profile sections/walls.
- From 40  $\text{kg}/\text{m}^2$  panel weight: scissor bearing and casement bracket
- Countersunk self-tapping screws 4,8 DIN 7972 as metal reinforcement
- Threaded screws M5 with rivet nut (3 pcs per casement bracket)
- Threaded screws M5 with reinforcement plate



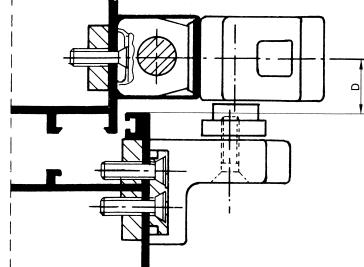
Timber



Plastic



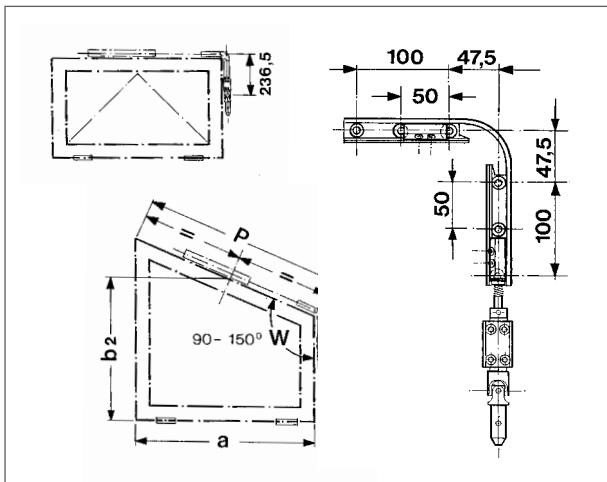
Aluminium



## GEZE OL 100 – Ordering information

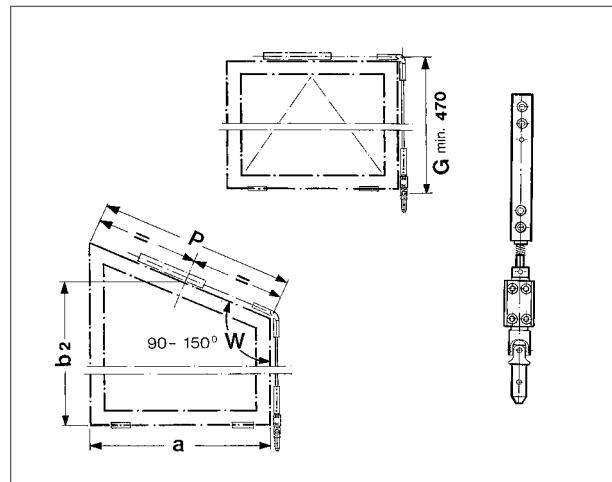
Description	Finish	ID No.
GEZE OL 100 scissor with sliding casement bracket for standard version and angular windows	EV1	058621
	white RAL 9016	018247
	RAL colour	013808
GEZE OL 100 scissor with anti-unhinge feature and sliding casement bracket	EV1	006863
	white RAL 9016	018262
	RAL colour	013809
GEZE OL 100 hand lever (stroke 66 mm) with corner transmission	EV1	077052
	white RAL 9016	077055
	RAL colour	077056
End cover piece for last scissor	EV1	058633
	white RAL 9016	018254
	RAL colour	013816
Rod ø 12 mm, length:	2000 mm	galvanized
	3000 mm	galvanized
	6000 mm	galvanized
Cover profile, length 2000 mm (mitred at each end)	EV1	058771
	white RAL 9016	018293
	RAL colour	014258
Cover profile, length 3000 mm (mitred at each end)	EV1	058774
	white RAL 9016	018294
	RAL colour	014259
Cover profile, length 6000 mm (straight at each end)	EV1	058630
	white RAL 9016	018251
	RAL colour	013814
Rod guide		058653
Corner transmission	galvanized	058648
Hand lever for GEZE OL 100 with stroke 42 mm for opening width 190 mm	EV1	058762
	white RAL 9016	018300
	RAL colour	014116
Hand lever for GEZE OL 100 with stroke 66 mm for opening width 260 mm	EV1	081221
	white RAL 9016	081247
	RAL colour	081248
Corner transmission cover	EV1	012560
	white RAL 9016	018245
	RAL colour	015459
Drilling template for timber		059513
Drilling template for plastic and aluminium		099512

# GEZE OL 100 Gears



## Corner operating gear Fz 100

For fixed and detachable cranking handle.  
For use on left and right. Also for angular windows owing to bendable corner transmission.



## Vertical gear Fz 101

For fixed and detachable cranking handle.  
For use on left and right. Also for angular windows owing to bendable corner transmission.

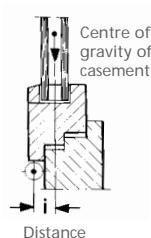
### Product features

- Narrow design, fully concealed by profile
- High load-carrying capacity (quadruple thread)
- On request:  
Adjustable anti-overload device (ex-factory default setting 7 Nm)
- Only 10 crank revolutions for full opening width of approx. 260 mm
- Stroke 66 mm
- Stroke limiting possible for opening widths up to approx. 150 mm
- Simple fixing
- Drive rod Ø12 mm, can be directly attached
- Scissor with sliding casement bracket required
- Auxiliary locking devices can be mounted

**Installation drawing:** 40408-EP-008

### Note:

With using an auxiliary locking device the fitting dimension D must be 19 mm



### Application range for rectangular windows

- For vertically installed bottom-hung casements only
  - Transmission possible on left and right
- a Casement width min. 600 mm  
b Casement height min. 400 mm  
i Distance from centre of gravity of casement to pivot point of hinge = 20 to 100 mm  
Ü Overlap depth 0-25 mm  
D Outer edge of casement to centre of link arm (see table)  
G Centre of transom section to centre of universal joint (only vertical gear Fz 101)  
X Space requirement at side  
X = D + 13 mm,  
X min. = 30 mm,  
D at side min. 17 mm  
Y Space requirement at top (see table)

### Application range for angular windows

- For vertically installed bottom-hung casements only
  - For 1 scissor only
  - Transmission only possible via flush window angle
- a Casement width  
P Length of angled limb 800-2000 mm  
W Angle at window 90-150°  
b2 Casement height min. 400 mm  
i Distance from centre of gravity of casement to pivot point of hinge = 20 to 100 mm  
Ü Overlap depth 0-25 mm  
D Outer edge of casement to centre of link arm (see table)  
X Space requirement at side  
X = D + 13 mm,  
X min. = 30 mm,  
D at side min. 17 mm  
Y Space requirement at top (see table)

Casement height b	D-dimension at top	Space req. Y at top
400-500	21 mm	min. 34 mm
501-650	19/21 mm	D+13 mm
from 650	17/19/21 mm	D+13 mm

**Installation drawing:** 40408-EP-001

Casement height b2	D-dimension at top	Space req. Y at top
400-500	21 mm	min. 34 mm
from 501	19 mm	min. 32 mm

**Installation drawing:** 40408-EP-006

# Linkage bearing for gear and connecting rods, special versions and special accessories

- ▶ Linkage bearing for gear and connecting rods  
see page 18

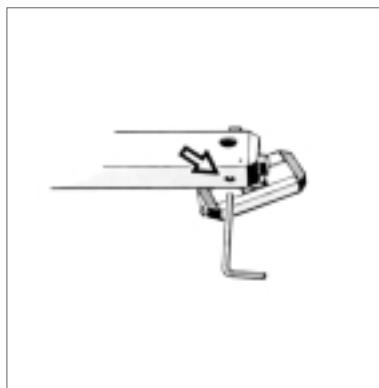
Special versions / special accessories

- ▶ OL 100 scissor with anti-unhinge feature, see Sketch A

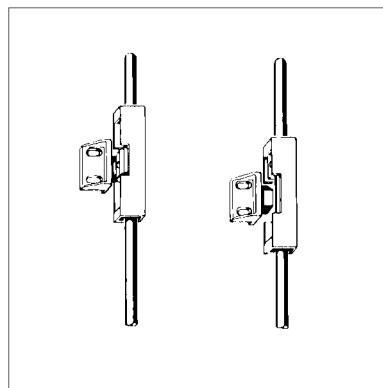
- ▶ Supplementary locking device  
see Sketch B

For use on opposite hand lever side  
with supplementary corner transmission  
ID No. 058648

**Installation drawing:** 40408-0-008



Sketch A

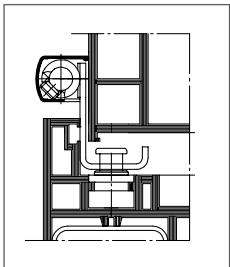
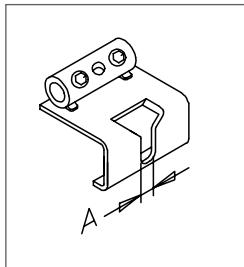


Sketch B

## Concealed locking device with GEZE locking driver

The locking drivers OL 90 N and OL 100 provide thickness and safety over the entire closing surface as well as resistance to forced entry. The drivers can be used for standard central locking devices (concealed locking device) and can be simply clamped on. Both drivers have been designed for use with profiles and fittings.

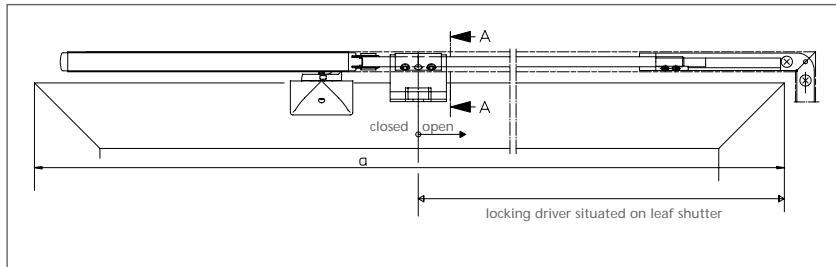
**Installation drawing:** 40408-0-038



## OL 100 coupling with locking driver

Min. casement width a		
	1 scissor	2 scissors
Hand lever / gear	750	1200
GEZE E 212	850	1250
GEZE E 205	950	1351

Note: The min. casement width and mounting dimensions refer exclusively to the surface-mounted fanlight opener OL 100. For the central locking devices, if necessary, other minimum casement widths are the result.



## Ordering information

Description	Finish	ID No.	
GEZE Fz 100 corner operating gear	galvanized	018194	
GEZE Fz 101 vertical gear	galvanized	018196	
Fixed cranking handle, with collapsible handle and cranking handle holder (fully extended length 1400 mm)	EV1	050857	
	white RAL 9016	015864	
Detachable cranking handle, with collapsible handle and cranking handle holder (fully extended length 1400 mm)	EV1	050857	
	white RAL 9016	015864	
Detachable cranking handle, with collapsible handle and coupling bell-socket (fully extended length 1400 mm)	EV1	050856	
	white RAL 9016	015879	
Linkage bearing with bearing plate for gear Fz 90 - Fz 92 and Fz 100 - Fz 101, for cranking handle	galvanized	022933	
	black	022934	
Connecting tube, outer diameter 15 mm, standard length 6000 mm	EV1	053262	
	white RAL 9016	014706	
Collapsible handle Fz 45/32	silver	056951	
	brown	056952	
	white	014795	
Coupling bell-socket Fz 45/14	silver	042963	
	braun	057591	
Roll pin 4 x 16 mm	galvanized	022932	
Cranking handle holder Fz 45/8	silver	054560	
	brown	054561	
	white	014794	
Drilling template for connecting tube		059083	
Anti-overload device painted on request	EV1	020226	
	white RAL 9016	020223	
Scissor with anti-unhinge feature	EV1	006863	
	white RAL 9016	018262	
	RAL colour	013809	
Supplementary locking device*)	EV1	063974	
	white RAL 9016	018257	
	RAL colour	013080	
overlap depth 0-10 mm	EV1	050727	
	white RAL 9016	015519	
	RAL colour	013077	
Concealed locking device coupling OL 100	A = 8,5 A = 11,5	galvanized galvanized	024954 029717
Concealed locking device coupling OL 100 for timber and plastic	A = 8,5 A = 11,5 A = 15,5		029855 029856 030295

Rods, cover profiles and, when required, supplementary scissor, see standard version GEZE OL 100

\*) For use on opposite hand lever side with supplementary corner transmission ID No. 058648

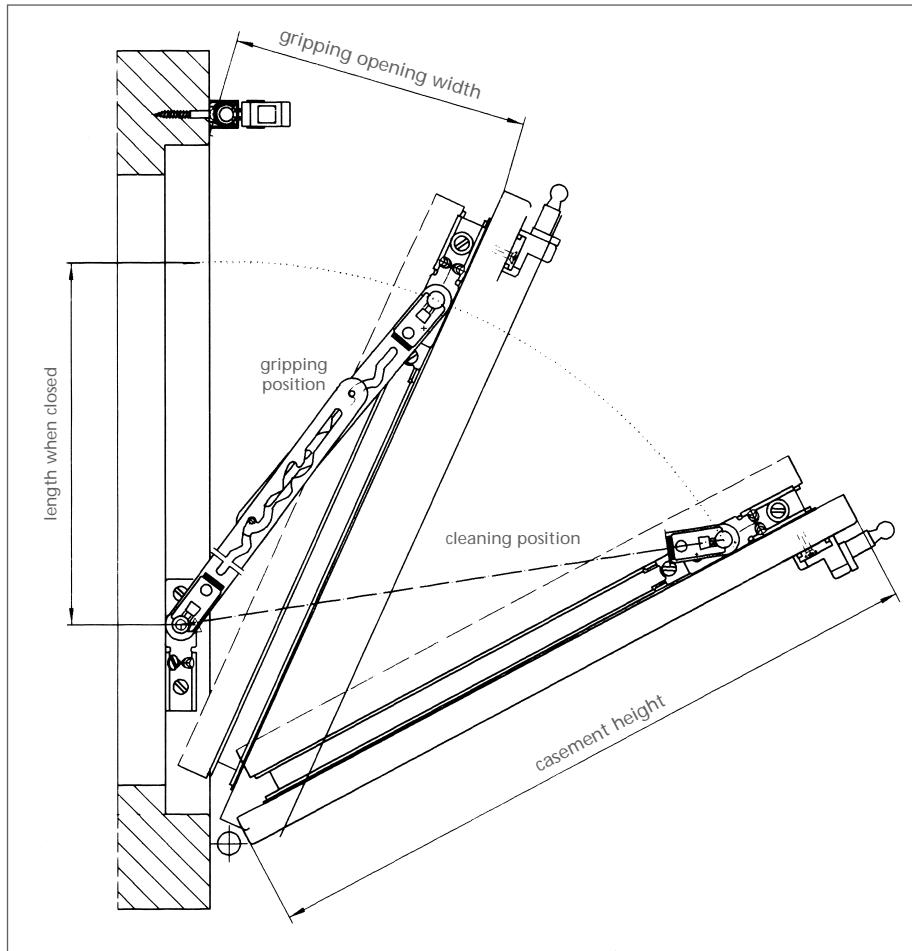


## Gripping and cleaning scissor

In addition to fanlight fittings, restricting devices must be mounted in the case of bottom-hung windows. These devices restrict the travel of the casement (gripping position) when the scissor stay is disengaged so that the casement does not become a potential danger during cleaning work. GEZE FPS is the 'intelligent' gripping and cleaning scissor for vertically installed rectangular bottom-hung casements. Gripping pins in a telescopic bar slide along wave – shaped guides until the cleaning position is reached. To do this, only the left-hand bar has to be lifted by hand. If the casement falls open, the gripping pins move through the guide into the gripping hook, thus stopping the casement from falling further. 2 FPS units and 2 accessory fixing plates for timber, plastic and aluminium windows are required for each casement.

### Product features

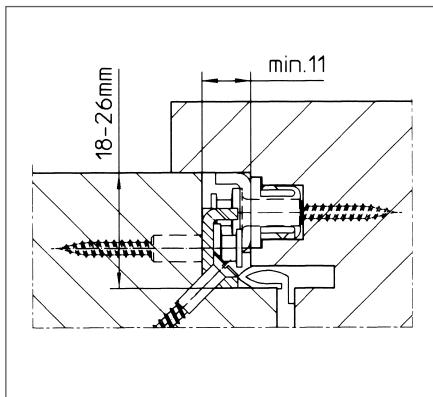
- ▶ For use with OL 90 N and OL 100
- ▶ Casement height:  
min. 360 mm, max. 2000 mm
- ▶ Available in three different sizes  
Size 1: casement height from 360 mm  
Size 2: casement height from 540 mm  
Size 3: casement height from 740 mm
- ▶ For vertically installed rectangular windows with fanlight opener fitting rebate width min. 11 mm,  
rebate depth min. 18 mm
- ▶ High degree of safety owing to numerous gripping positions
- ▶ Casement and frame components can be detached for mounting and transport
- ▶ Mounting template



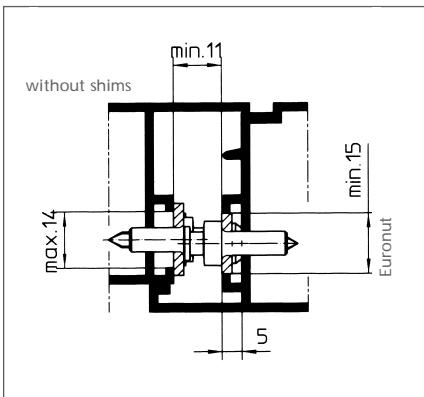
### Installation drawings:

41313/0-4 for aluminium  
41313/0-5 for timber and plastic  
If required, various mounting shims are available for different profiles.

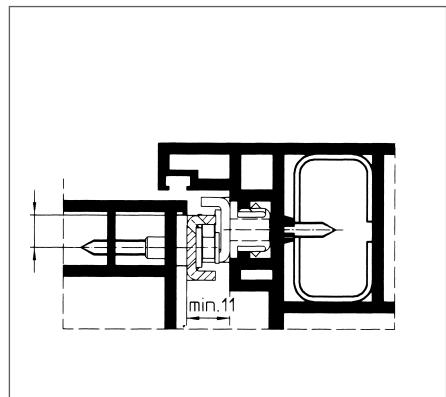
### Mounting example: Timber



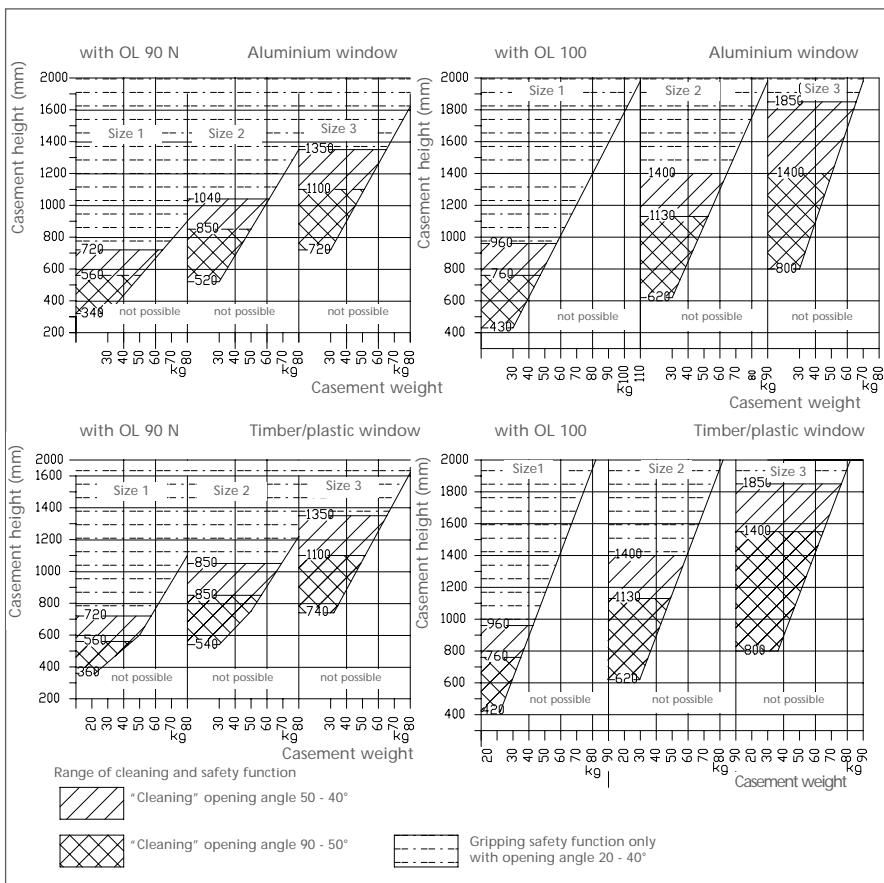
### Aluminium



### Plastic



## Application range



## Ordering information

Description	Finish	ID No.
GEZE FPS 340, size 1	galvanized steel	030249
GEZE FPS 520, size 2	galvanized steel	030250
GEZE FPS 720, size 3	galvanized steel	030251
FPS accessories, mounting parts for aluminium framed windows		030252
FPS accessories, mounting parts for timber / plastic framed windows		030253
FPS accessories, mounting parts for plastic framed windows		070182
Casement shim	4 mm	009324
	5 mm	009325
	7 mm	013305
	8 mm	025635
	9 mm	009321
Frame shim	3 mm for aluminium windows	009326
	5 mm for aluminium windows	009328
	3 mm for plastic windows	029334
	5 mm for plastic windows	029335
Angled rebate plastic windows		030383
Mounting templates		024741

# GEZE E 212 / E 205

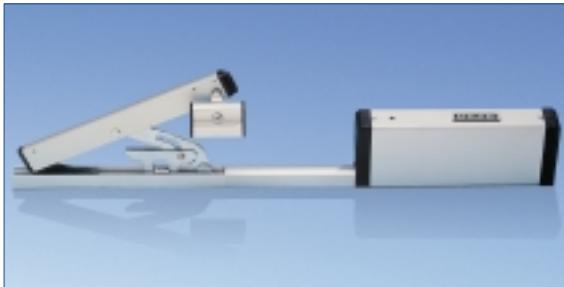
## Electric drives for surface-mounted slimline fanlight opener

### Product features

- ▶ Simple stroke adjustment via status display
- ▶ Integrated motor protection (thermal latch integrated in winding)
- ▶ With integrated, adjustable limit switches
- ▶ Mounting vertically, horizontally, on the left or right side of casement with coverable screws, situated on the outside
- ▶ Designed for short-time operation
- ▶ Suited for dry rooms

### GEZE E 212

- ▶ Dimensions (W x H x D): 33 x 80 x 210 mm
- ▶ No subsequently stroke adjustment is necessary if OL 90 N is used, cause stroke is factory-set to 52 mm
- ▶ Connections for 8 mm rods
- ▶ With coupling with locking driver ID No. 050487 also usable for concealed locking device.  
The couplings are connected to the electric drive via an auxiliary connecting piece.



GEZE E 212 with scissor stay OL 90N

### GEZE E 205

- ▶ Dimensions (W x H x D): 52 x 70 x 360 mm
- ▶ Connections for 10 and 12 mm rods
- ▶ Also suitable for group and multi-unit control

### Technical information

Installation drawing		
E 212	horizontal:	vertical:
with OL 90 N	40444-EP-0003	40444-EP-004
with OL 95	40445-EP-0953	40445-EP-0954
with OL 100	40408-EP-030	40408-EP-029

### Connection diagram

E 212 R:	45109-9-0950
E 212 R1:	45109-9-0959

### Installation drawing

Installation drawing		
E 205	horizontal:	vertical:
mit OL 90 N	40444-EP-019	40444-EP-020
mit OL 100	40408-EP-003	40408-EP-002

### Connection diagram

E 205 / 230 V:	45106-9-0954
----------------	--------------

### Note:

With using electric motors on bottom-hung casements, safety scissors (e.g. GEZE FPS gripping and cleaning scissor) which restrict the travel of the casement when the scissor is disengaged and which also guarantee a permanent connection of casement and frame must be fitted in addition to to fanlight system fitting.

The guidelines for power-operated windows, doors and gates (BGR 232, Germany) have to be observed.

For additional information regarding mounting, commissioning and maintenance etc., please refer to the appropriate installation drawings and connection diagrams.

Technical data	E 212	E 205
Connection voltage	230 V AC	230 V AC
Power consumption	0,4 A	0,6 A
Stroke, adjustable	max. 70 mm	42-66 mm
Pushing-and-pulling force	1400 N	2000 N
Operating time	only approx. 30 sec for 52 mm	45 sec for 70 mm
Output	90 VA	138 VA
Protection class	IP 52	IP 54
Short-time service / continuous duty	ED 25%, 5 minutes	ED 25%, 7 minutes
Connection cable	with connector plug	5 x 0,75 mm <sup>2</sup> , approx. 2 m

## Control units

### Central control unit E 202 Z1 / 230 V AC

for group, single and multi-unit control via central switch (ID No. 008425) and / or local switch

- ID No. 059167



E 27



E 33

### Change-over switch E27 for flush mounting

(standard socket)

- ID No. 048942



E 27



E 33

### Change-over switch E33 for surface mounting

- ID No. 048941



E 27



E 33

### Vent switch (flush and surface-mounted)

- E 50/1 ID No. 006571

- E 50/2 ID No. 006571

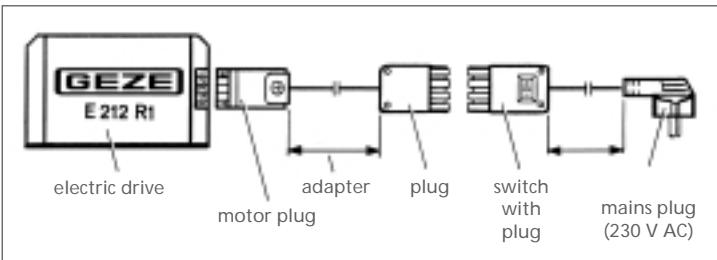
(available with LED 'OPEN' for E 205 only)

### Vent switch E 50/3

- E 50/3 ID No. 006586

- E 50/4 ID No. 006587

(available with LED 'OPEN' for E 205 only)



GEZE synchronising unit for E 212 R1

### Synchronising unit for E 212 R1

- ID No. 026762

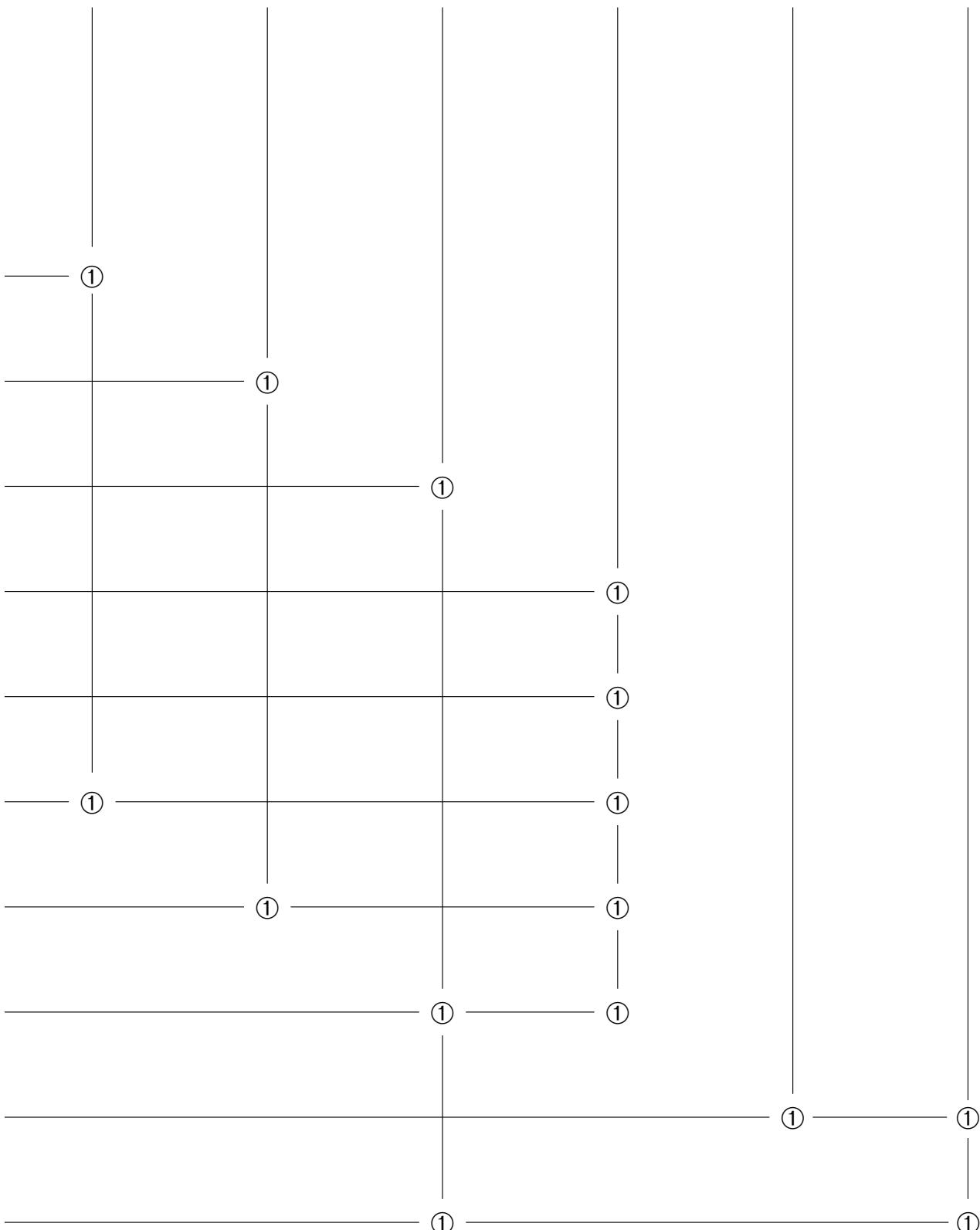
## GEZE Electric drives – Ordering information

Description	Finish	ID No.
GEZE E 212 R1 with 1 relay for group control via one change-over switch Single-unit control	silver	020835
	white RAL 9016	020839
	RAL colour	020838
GEZE E 212 R with 2 relays for group control via any number of vent switches Multi-unit control	silver	005428
	white RAL 9016	015435
	RAL colour	006683
GEZE E 205 / 230 V AC	silver	004825
	white RAL 9016	027099
	RAL colour	027098

**GEZE OL 90 N Slimline fanlight opener**  
Application/combinations of packaging units

Application	Packaging units			
	ID No.	ID No.	ID No.	
	Scissor	Hand lever with corner transmission	Corner operating gear Fz 90 left	
Rectangular window with hand lever, left or right	silver white RAL 9016	030373 030377	silver white RAL 9016	030611 030615
Rectangular window with corner transmission gear, left			galvanized black	030809 030810
Rectangular window with corner transmission gear, right				
Rectangular window with vertical gear, left or right				
Rectangular window with gear, horizontal, left or right				
Rectangular window with anti-unhinge feature with hand lever, left or right				
Rectangular window with anti-unhinge feature with corner transmission gear, left				
Rectangular window with anti-unhinge feature with corner transmission gear, right				
Rectangular window with anti-unhinge feature with vertical gear, left or right				
Rectangular window with anti-unhinge feature with gear, horizontal, left or right				
Angular window with hand lever, left or right				
Angular window with gear, left or right				

Packaging units											
ID No..	ID No.	ID No.	ID No.	ID No.	ID No.	ID No.	ID No.	ID No.	ID No.	ID No.	ID No.
Corner operating gear Fz 90 right  galvanized black	030811 030812	Vertical gear Fz 91 with corner transmission  galvanized black	030817 030818	Gear Fz 92  silver/white	030778	Scissor with anti-unhinge feature  silver white RAL 9016	030498 030502	Hand lever with flexible corner transmission  silver white RAL 9016	076911 076915	Scissor with sliding casement bracket  silver white RAL 9016	scissor with related case- ment bracket
											



<b>GEZE GmbH</b> P.O. Box 1363 71226 Leonberg Germany	<b>GEZE subsidiaries</b>	<b>Italy</b>	<b>Scandinavia</b> Sweden	<b>Asia</b>
<b>GEZE GmbH</b> Reinhold-Vöster-Straße 21-29 71229 Leonberg Germany Telefon +49 (0) 7152-203-0 Telefax +49 (0) 7152-203-310	<b>Germany</b>  <b>GEZE Sonderkonstruktionen GmbH</b> Planken 1 97944 Boxberg-Schweigern Tel. +49 (0) 7930-9294-0 Fax +49 (0) 7930-9294-10 E-mail: sk.de@geze.com	<b>GEZE Italia Srl</b> Via Giotto 4 20040 Cambiago (MI) Tel. +39 02 95 06 95-11 Fax +39 02 95 06 95-33 E-Mail italia.it@geze.it	<b>GEZE Scandinavia AB</b> Mallslingen 10 Box 7060 18711 Täby Tel. +46 (0) 8-7323-400 Fax +46 (0) 8-7323-499 E-mail: svige.se@geze.com	<b>GEZE Asia Pacific Ltd.</b> Unit 630, Level 6, Tower 2 Grand Central Plaza 138 Shatin Rural Committee Road Shatin, New Territories Hong Kong Tel. +852 (0) 237-57382 Fax +852 (0) 237-57936 E-mail: info@geze.com.hk
<b>GEZE Online:</b> <a href="http://www.geze.com">www.geze.com</a>		<b>GEZE Engineering Roma Srl</b> Via Lucrezia Romana 91 00178 Roma Tel. +39 06-7265311 Fax +39 06-72653136 E-mail: gezeroma@libero.it	<b>Norway</b>	<b>GEZE Industries (Tianjin) Co., Ltd.</b> Shuangchenzhong Road Beichen Economic Development Area (BEDA) Tianjin 300400, P.R. China Tel. +86 (0) 22-26973995-0 Fax +86 (0) 22-26972702 E-mail: geze@public1.tpt.tj.cn
<b>GEZE branch offices</b>		<b>GEZE Engineering Bari Srl</b> Via Treviso 58 70022 Altamura (Bari) Tel. +39 080-3115219 Fax +39 080-3164561 E-mail: gezebari@libero.it	<b>Austria</b>	<b>GEZE Finland</b> Branch office of GEZE Scandinavia AB Postbox 20 158 71 Hollola Tel. +358 (0) 10-400 51 00 Fax +358 (0) 10-400 51 20 E-mail: finland.se@geze.com
<b>GEZE GmbH</b> Niederlassung Nord/Ost Bühringstraße 8 13086 Berlin (Weissensee) Tel. +49 (0) 30-47 89 90-0 Fax +49 (0) 30-47 89 90-17 E-mail: berlin.de@geze.com	<b>Germany</b>  <b>GEZE Service GmbH</b> Niederlassung Berlin Bühringstraße 8 13086 Berlin (Weissensee) Tel. +49 (0) 30-470217-30 Fax +49 (0) 30-470217-33	<b>GEZE Europe</b> <b>GEZE Benelux</b>	<b>Poland</b>	<b>GEZE Industries (Tianjin) Co., Ltd.</b> Branch Office Shanghai Dynasty Business Center Room 401-402 No. 457 WuRuMuQi North Road 200040 Shanghai, P.R. China Tel. +86-(0)21-52 34 09-60/-61/-62 Fax +86-(0)21-52 34 09-63 E-mail: gezesh@geze.com.cn
<b>GEZE GmbH</b> Niederlassung West Nordsternstraße 65 45329 Essen Tel. +49 (0) 201-83082-0 Fax +49 (0) 201-83082-20 E-mail: essen.de@geze.com	<b>GEZE Benelux B.V.</b> Leemkuil 1 Industrieterrein Kapelbeemd 5626 EA Eindhoven Tel. +31 (0) 40-26290-80 Fax +31 (0) 40-26290-85 E-mail: benelux.nl@geze.com	<b>GEZE France</b>  <b>GEZE France S.A.R.L.</b> ZAC de l'Orme Rond RN 19 77170 Servon Tel. +33 (0) 1-60626070 Fax +33 (0) 1-60626071 E-mail: france.fr@geze.com	<b>GEZE Switzerland</b>	<b>GEZE Denmark</b> Branch office of GEZE Scandinavia AB Møllehusene 3, 3. th. 4000 Roskilde Tel. +45 (0) 46-323324 Fax +45 (0) 46-323326 E-mail: denmark.se@geze.com
<b>GEZE GmbH</b> Niederlassung Mitte Adenauerallee 2 61440 Oberursel (b. Frankfurt) Tel. +49 (0) 6171-63610-0 Fax +49 (0) 6171-63610-1 E-mail: frankfurt.de@geze.com	  <b>GEZE Great Britain</b>	  <b>GEZE UK Ltd.</b> Blenheim Way Fradley Park Lichfield Staffordshire WS13 8SY Tel. +44 (0) 1543-443000 Fax +44 (0) 1543-443001 E-mail: info@geze-uk.com	<b>GEZE Middle East</b> <b>U.A.E.</b>	<b>GEZE Industries (Tianjin) Co., Ltd.</b> Branch Office Beijing The Grand Pacific Building B Tower Room 201 8 A, Guanghua Road Chaoyang District 100026 Beijing, P.R. China Tel. +86-(0)10-65 81 57-32/-42/-43 Fax +86-(0)10-65 81 57 33 E-mail: gezegz@public2.sta.net.cn
<b>GEZE GmbH</b> Niederlassung Süd Reinhold-Vöster-Straße 21-29 71229 Leonberg Tel. +49 (0) 7152-203-594 Fax +49 (0) 7152-203-438 E-mail: leonberg.de@geze.com	  <b>GEZE Spain</b>	  <b>GEZE Iberia S.R.L.</b> Pol. Ind. El Pla C/ Comerc, 2-22, Nave 12 08980 Sant Feliu de Llobregat (Barcelona) Tel. +34-(0) 9-02 19 40 36 Fax +34-(0) 9-02 19 40 35 E-mail: iberia.es@geze.com	  <b>GEZE Middle East</b> <b>U.A.E.</b>	<b>GEZE Asia Sales Ltd.</b> No. 88-1-408, East Road Free Trade Zone of Tianjin Port Tianjin, P.R. China Tel. +86 (0)22-26 97 39 95-0 Fax +86 (0)22 26 97 27 02 E-mail: geze@public1.tpt.tj.cn

