GEZE chain drive E840 / 230 V AC

Microprocessor controlled drive for surface-mounted or concealed installation

The E840 electrically operated chain drive is an elegant and technically perfected solution for the direct opening of bottom hung, top hung and side hung windows for daily ventilation.

GEZE E840

PRODUCT FEATURES

- Elegant diecast zinc housing with very sophisticated design
- Suitable for mounting on the surface of the profile and concealed interior installation
- Microprocessor controlled drive,
  available as Solo and Synchronous version with real synchronised control
- Electrically controlled soft start and soft stop

ORDER INFORMATION – GEZE ELECTRICALLY OPERATED CHAIN DRIVE E840 / 230 V

Description		Version	Id. No.	Id. No.
				Syncro set
Electrically operated chain drive E840 / 230 V AC	Stroke 200 mm	EV1	129645	129647
		to RAL	129646	129648
	Stroke 300 mm	EV1	129655	129657
		to RAL	129656	129658
	Stroke 400 mm	EV1	129665	129667
		to RAL	129666	128668
Drive fixture type A E820/E840			129430	
Bracket type A E820/E840			129675	
Drive fixture type B E820/E840			129676	
Bracket type B E820/E840			129677	
Electrically operated chain drive E840 Syncro3 Set 230 V AC			132613	
Electrically operated chain drive E840 Syncro4 Set 230 V AC			132614	
Electrically operated chain drive E840 24 V DC special version			132615	

Accessories for GEZE electrically operated chain drives E840

Drive fitting type A E 820/E 840

GEZE drive fitting type A E820/E840
for installation on frames and casements of bottom hung, top hung and side hung windows that open inwards and outwards

Bracket type A E 820/E 840

GEZE bracket type A E820/E840
combined with drive fitting type A
for installation on frames and casements of bottom hung, top hung and side hung windows that open inwards and outwards

Drive fitting type B E 820/E 840

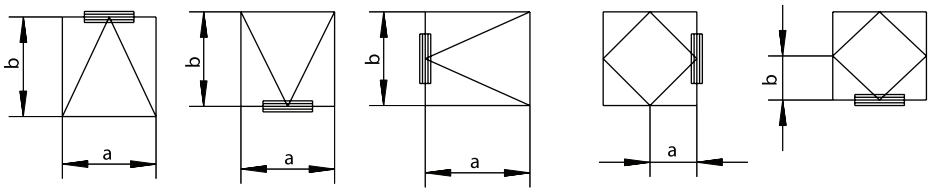
GEZE drive fitting type B E820/E840
for installation on the frame of bottom hung windows that open inwards

Bracket type B E 820/E 840

GEZE bracket type B E820/E840
combined with drive fitting type B for frame installation on bottom hung windows that open inwards
without drive fitting for frame installation on inward-opening bottom hung and top hung windows and outward-opening side hung windows

Area of application

- For inward and outward-opening bottom hung, top hung, side hung, vertically pivoted and horizontally pivot hung windows made of lightweight metal, wood and plastic



Bottom hung window | Top hung window | Side hung window | Vertically-pivoted casement window | Horizontally pivot hung window

General application data		
	Individual operation	**Synchronous operation (2 drives)**
Max. casement area	1.5 m²	3 m²
Min. casement width (a)	565 mm	1230 mm
Max. casement width (a)	1230 mm	2400 mm
Projection height	0-21 mm	0-21 mm
Max. casement weight	See the respective application for the calculation equation	
Min. casement height (b)	depending on the type of installation and bracket	

- With larger casement areas, an additional locking bracket is required (can only be used for bottom hung casements)
- Smaller casement widths are possible, the drives then project beyond the edge of the casement
- 2 Syncro drives, 3 or 4 Syncro drives on request

Calculation of the area of application depending on casement weight and casement dimensions
Permissible wind loads must be taken into consideration!

Equation for calculating opening and closing force:

$$\mathbf{F = \frac{p \times stroke \times 0.54}{b}}$$ F max. = 250 N per drive

Example for E820 in individual operation:

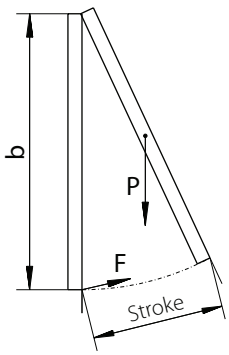
P = 25 kg = approx. 250 N
Stroke = 400 mm
b = 1000 mm

$$F = \frac{250 \times 400 \times 0.54}{1000}$$ **F = 54 N**

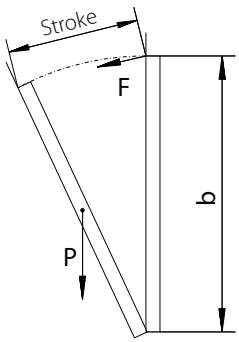
Casement panel weight:
max. 30 kg/m² (drive cannot be swivelled)
max. 40 kg/m² (drive can be swivelled)

Key	
F	Opening and closing force required (N)
P	Casement weight (kg)
Stroke	Casement path/drive stroke (mm)
b	Casement height (mm)

Top hung window



Bottom hung window



Combination of brackets/type of installation

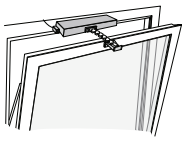
Bracket for	**bottom hung** window INWARD-OPENING Frame-Installation	**bottom hung** window OUTWARD-OPENING Frame-Installation	**bottom hung** window INWARD-OPENING Casement Installation	**Top hung** window INWARD-OPENING Frame-Installation	**Top hung** window OUTWARD-OPENING Frame-Installation	**Top hung** window INWARD-OPENING Casement Installation	**Side hung** window INWARD-OPENING Frame-Installation	**Side hung** window OUTWARD-OPENING Frame-Installation	**Side hung** window INWARD-OPENING Casement Installation
Drive fitting type A	○	● type A	● type A	○	● type A	● type A	○	● type A	● type A
Drive fitting type B	● type B	○	○	○	○	○	○	○	○
without drive fitting	● type B	○	○	● type B	○	○	● type B	○	○

Where there are several alternatives available, selection depends on the window size, structural circumstances and chain stroke chosen.

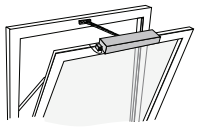
● = yes ○ = no

Fitting variations

Bottom hung INWARD-OPENING (EW)

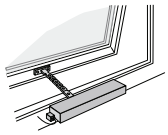


Frame installation (RM)



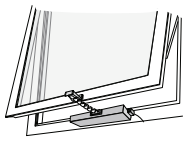
Casement installation (FM)

Top hung OUTWARD-OPENING (AW)

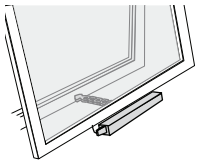


Frame installation (RM)

Top hung INWARD-OPENING (EW)



Frame installation (RM)



Casement installation (FM)

Electrically operated chain drive E840 – minimum casement heights

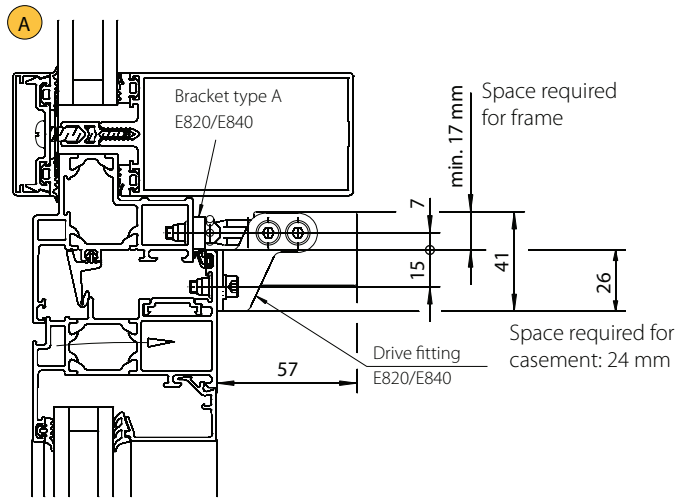
Depending on the type of installation and the drive fittings and brackets to be used, the following minimum casement heights can be achieved (depending on the projection (Ü))

Stroke (mm)	Bottom hung/side hung EW RM				Bottom hung/side hung AW FM				Bottom hung/side hung EW FM				Top hung EW RM		Top hung AW RM				Top hung EW FM			
	C		Side hung = ○ D		A		B		A		B		D		A		B		A		B	
Ü (mm)	≤10	≤21	≤10	≤21	≤10	≤21	≤10	≤21	≤10	≤21	≤10	≤21	≤10	≤21	≤10	≤21	≤10	≤21	≤10	≤21	≤10	≤21
200	500	550	350	400	350	400	350	400	350	400	350	400	350	400	700	750	350	400	350	400	700	750
300	500	550	350	400	350	400	350	400	350	400	350	400	350	400	700	750	350	400	350	400	700	750
400	500	550	350	400	350	400	350	400	350	400	350	400	350	400	700	750	350	400	350	400	700	750

● = yes ○ = no

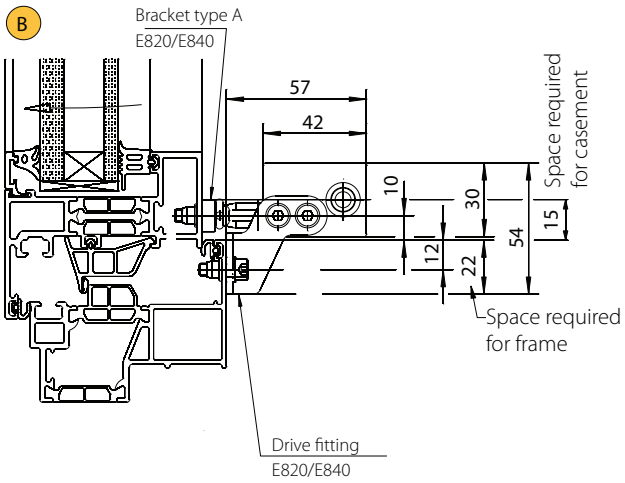
Minimum casement heights are applicable for bottom, top and side hung windows. On horizontally and vertically pivot hung windows, FH corresponds to the distance from the main closing edge to the hinge axis. For the assignment of A, B, C and D see the following fitting dimensions.

Fitting dimensions drive fitting type A with bracket type A

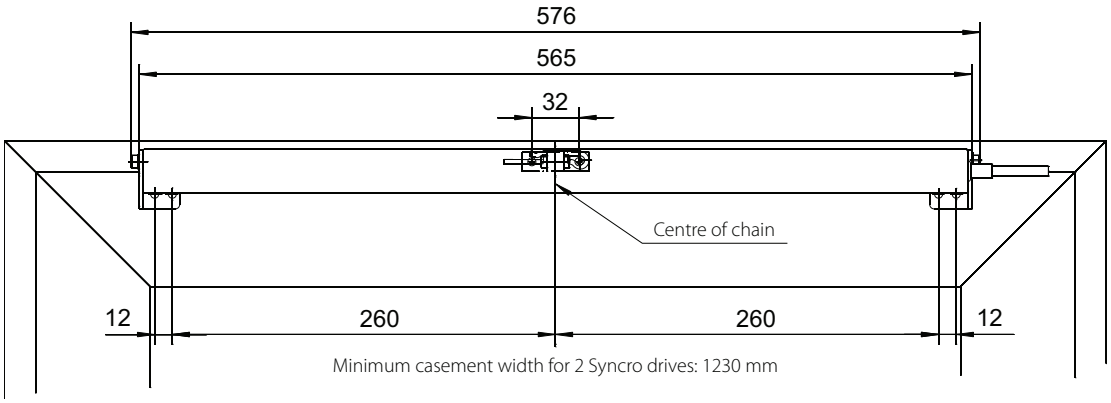


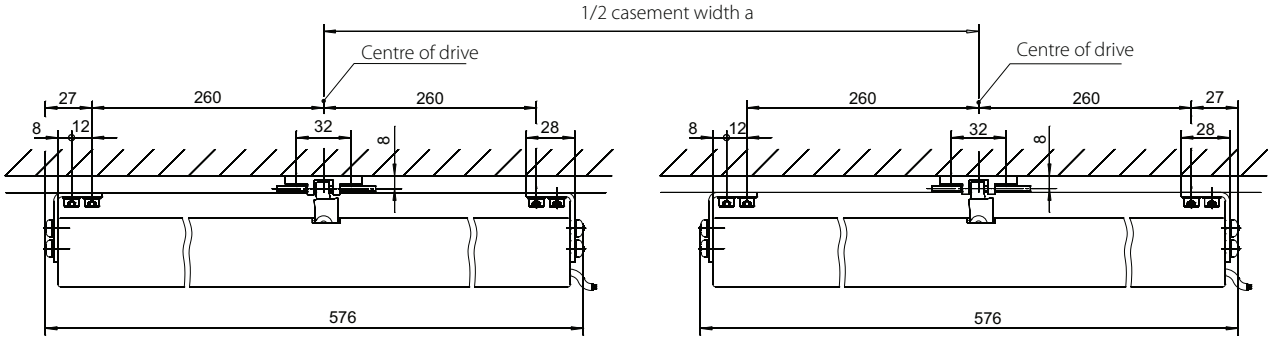
Drive standard installation
Example: Casement installation on bottom hung window that opens inwards

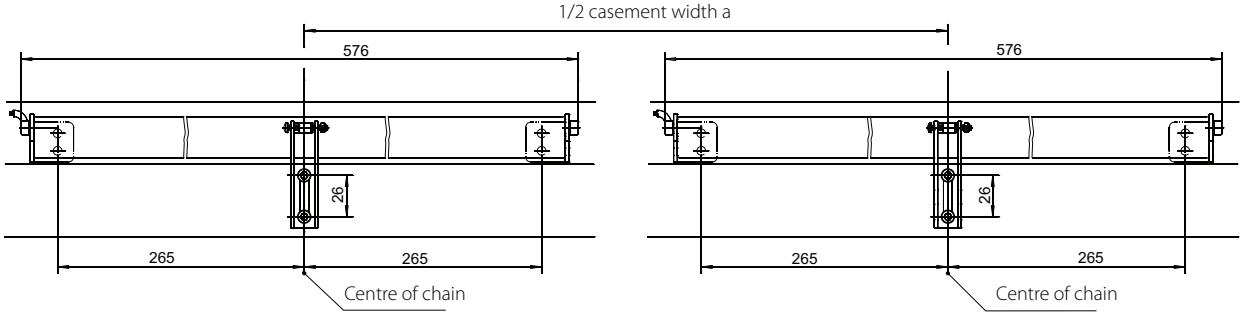
Fitting dimensions drive fitting type A with bracket type A



Drive turned
Example: Frame installation on top hung window that opens outwards

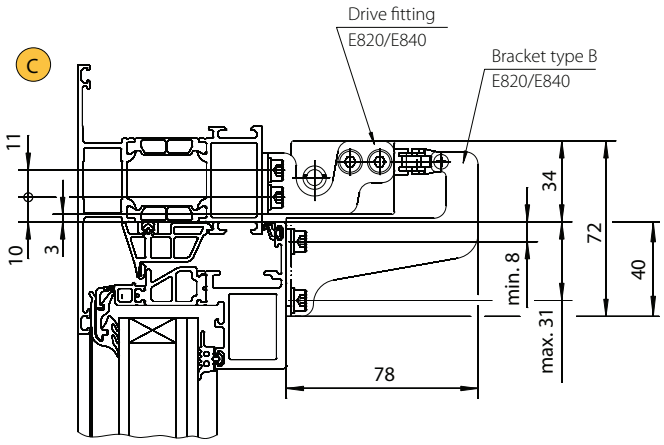






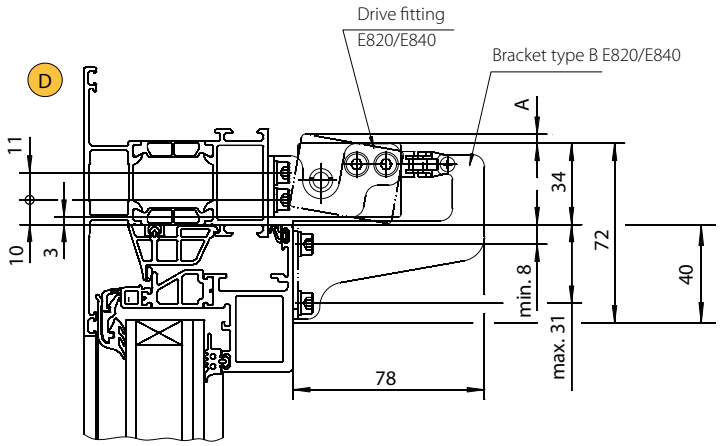
ELECTRICALLY OPERATED CHAIN DRIVE GEZE E840

Fitting dimensions drive fitting type B with bracket type B

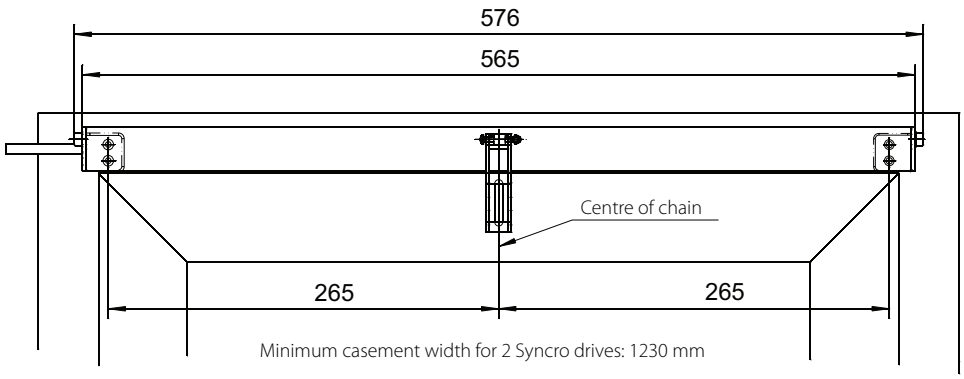


Fixed drive
Example: Frame installation on bottom hung window that opens inwards

Fitting dimensions drive fitting type B with bracket type B



Drive can be swivelled on the frame
Example: Frame installation on bottom hung window that opens inwards



Minimum casement width for 2 Syncro drives: 1230 mm