

GEZE chain drive Powerchain

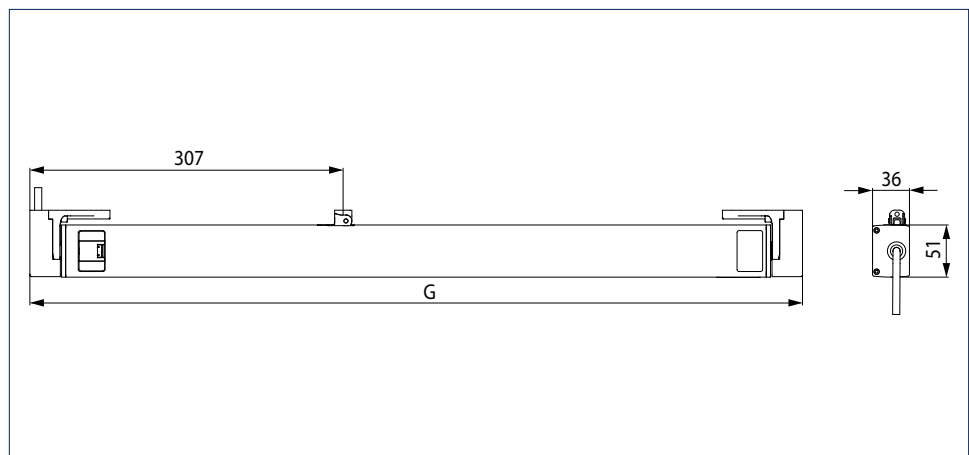
Powerful chain drive for large and heavy window elements

The GEZE Powerchain is suitable wherever large forces and very large opening widths are required. In addition, it facilitates fast opening speeds particularly for the RWA case, even with very heavy windows. The Powerchain offers a wide range of parameter setting possibilities e.g. for stroke and speed. The drive stroke (stroke variants 600, 800, 1200 mm) can be variably adjusted. Individual speeds can be set for ventilation and RWA mode. The integrated Syncro module allows up to 3 drives to be used without an external control unit being necessary. The drive is equipped with a DIP switch for changing between the modes of operation (Solo/Syncro, Master/Slave). Installation can be carried out quickly and easily using the GEZE Smart fix installation system.

GEZE Powerchain



GEZE Powerchain



G = Length

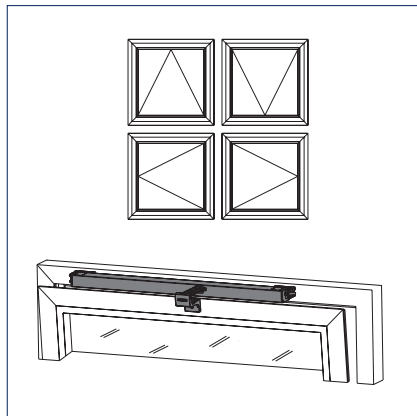
Application range

- Heavy and large window elements in the façade and roof area
- Bottom-hung, side-hung, top-hung, horizontally pivot-hung, vertically pivot-hung and skylight casements
- Inward-opening and outward-opening casements
- Natural ventilation, smoke and heat extraction system (RWA), natural smoke and heat exhaust ventilator (SHEV)
- Can be used in the exhaust air and fresh air system
- Synchronisation of up to 3 drives
- Can be used on timber, plastic and aluminium profile systems
- Casement or frame installation
- A system solution in combination with the locking drive Power lock

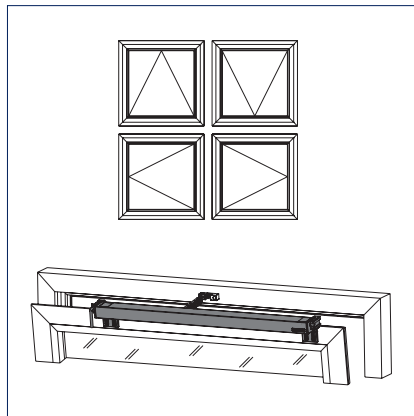
GEZE CHAIN DRIVES

Application range

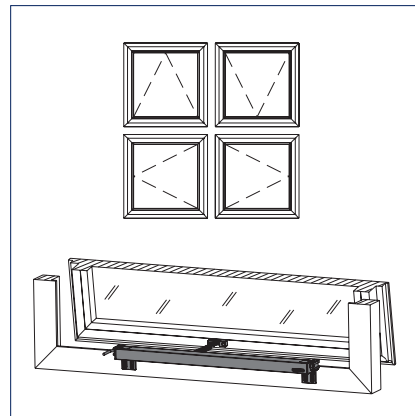
INWARD-OPENING frame installation



INWARD-OPENING casement installation



OUTWARD-OPENING frame installation



Technical data

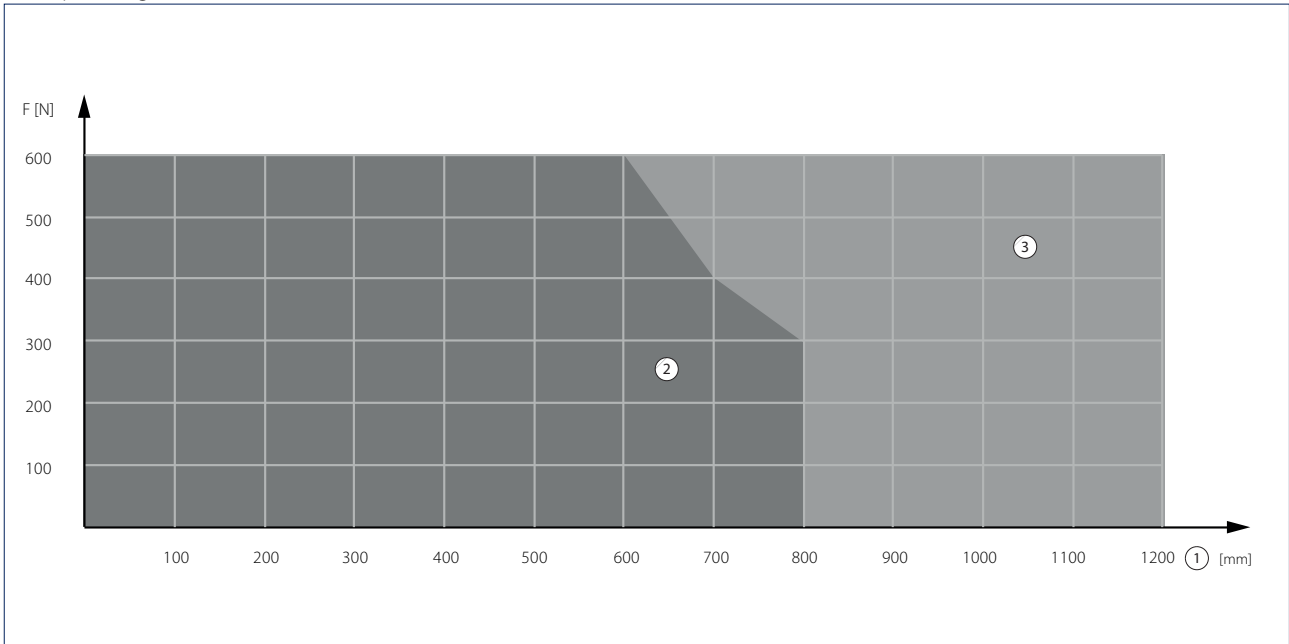
Product features	GEZE Powerchain
Length	Stroke 600: 756 mm, stroke 800: 856 mm, stroke 1200: 1056 mm (each with consoles)
Height	36 mm
Depth	51 mm
Space required on frame (min.)	Frame installation INWARD-OPENING: 50 mm, casement installation INWARD-OPENING: 30 mm, frame installation OUTWARD-OPENING: 50 mm
Possible stroke heights	600 mm, 800 mm, 1200 mm
Opening speed RWA	15 mm/s
Opening speed ventilation	5 mm/s
Closing speed	5 mm/s
Tensile force (max.)	600 N
Force of pressure (max.)	600 N (depending on stroke), see force-path diagram
Holding force (max.)	3000 N
Casement weight (max.)	150 kg*
Operating voltage	24 V ± 25 %
Current consumption	Ventilation (24 V): 1.2 A; RWA (18 V): 1.5 A
Power consumption (max.)	36 W
Duty rating	30 %
Length of power supply cable	2 m
Special length of power supply cable	5 m, 7,5 m
Cable dimensions	4 x 0.75 mm ²
Temperature range	-5 – 70 °C
Enclosure rating / protection class	IP 40 / III
Stroke length settable	•
Opening speed settable (ventilation)	•
Additional locking available	•
Type of additional locking	Locking drive
Type of stroke shortening	Synchronising unit, Factory setting
End position cut-off extended	electric, via internal path sensor
End position cut-off retracted	electric, electronic via current consumption
Overload cut-off	•
Complete opening within 60 s	yes, up to 800 mm stroke
SHEV tested	•
Synchronisation (max.)	3 drives

• = YES

*) Note on casement weight (max.):

The overall weight is limited by the hinges and depends on the details provided by the profile system manufacturer.

Force-path diagram



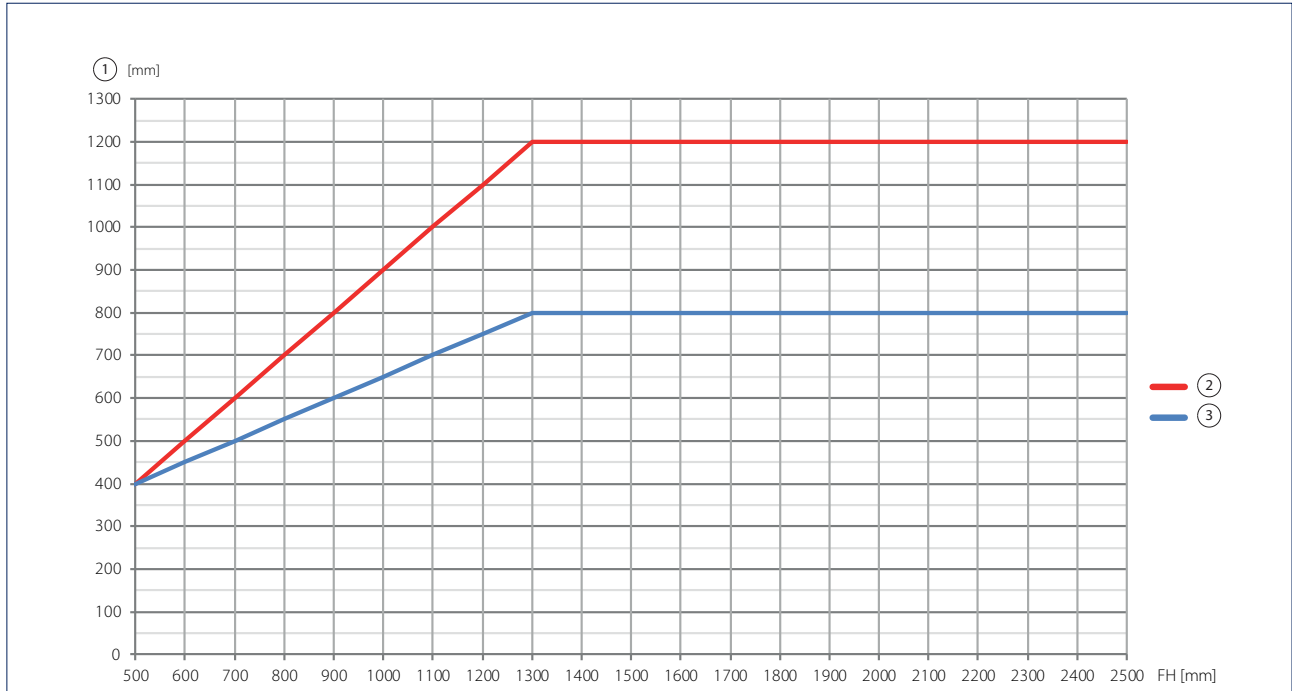
- F = Force
- 1 = Stroke
- 2 = Pressure
- 3 = Pull



GEZE Powerchain with safety scissors

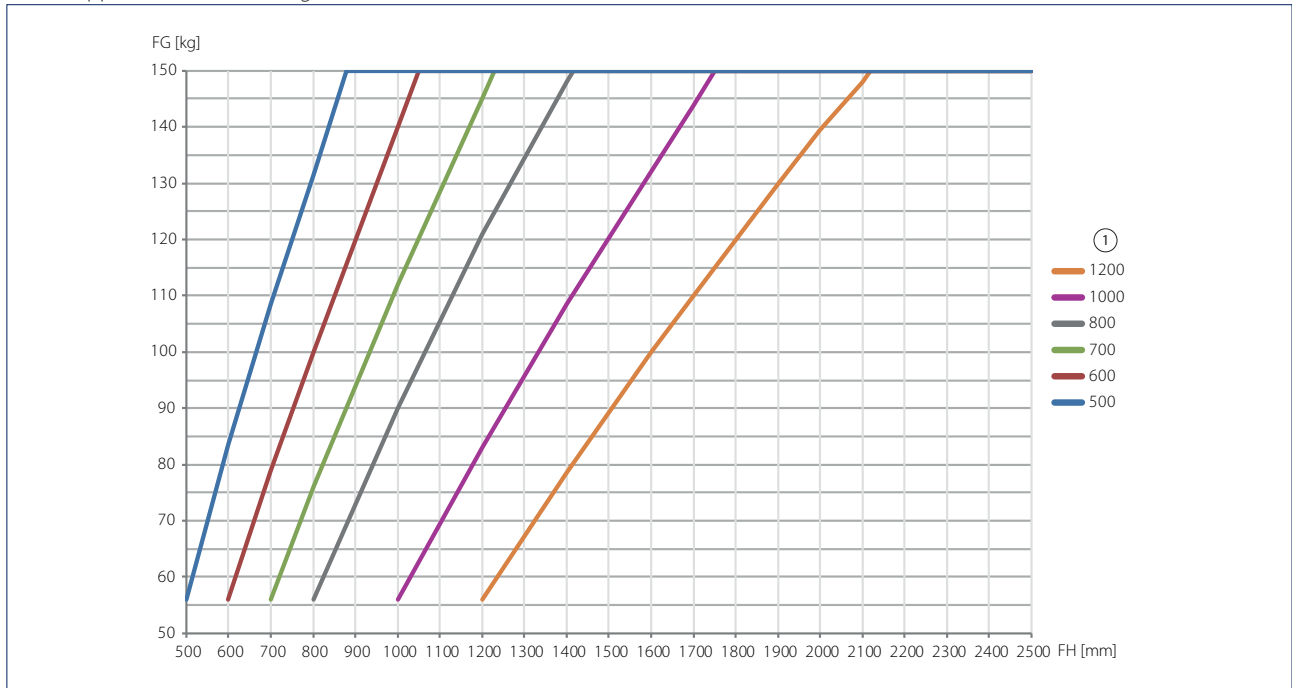
GEZE CHAIN DRIVES

Minimum casement heights frame installation INWARD-OPENING



FH = Casement height
 1 = Stroke
 2 = Alarm
 3 = Ventilation

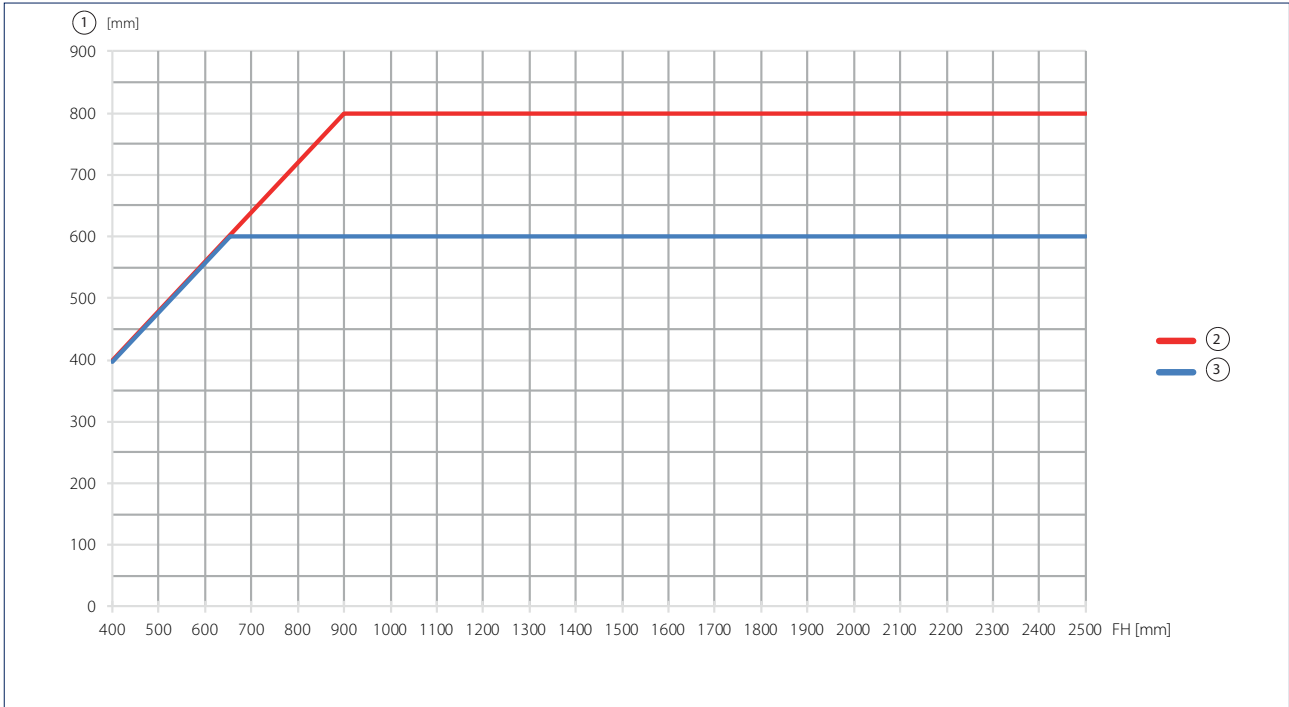
Area of application bottom-hung window frame installation INWARD



Area of application applies for one Solo drive, for Syncro 2 or Syncro 3 the casement weight can be doubled or tripled. The details provided by the profile system manufacturer must be heeded.

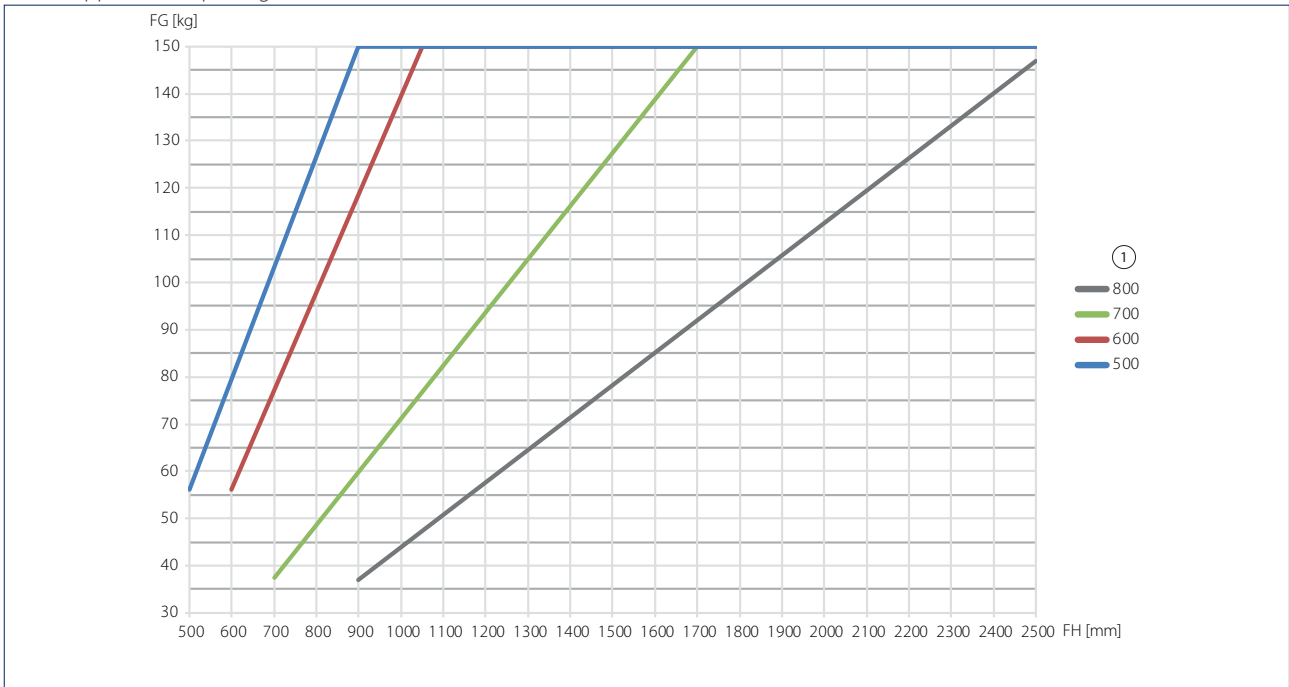
FG = Casement weight
 FH = Casement height
 1 = Stroke

Minimum casement heights frame installation OUTWARD-OPENING



- FH = Casement height
- 1 = Stroke
- 2 = Alarm
- 3 = Ventilation

Area of application top-hung window frame installation OUTWARD



Area of application applies for one Solo drive, for Syncro 2 or Syncro 3 the casement weight can be doubled or tripled. The details provided by the profile system manufacturer must be heeded.

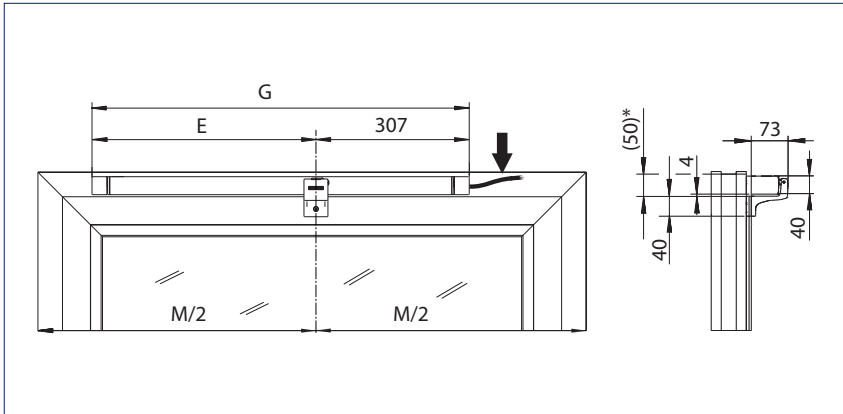
- FG = Casement weight
- FH = Casement height
- 1 = Stroke

GEZE CHAIN DRIVES

Space requirement for Powerchain

Stroke	E [mm]	G [mm]
600	449	756
800	549	856
1200	749	1056

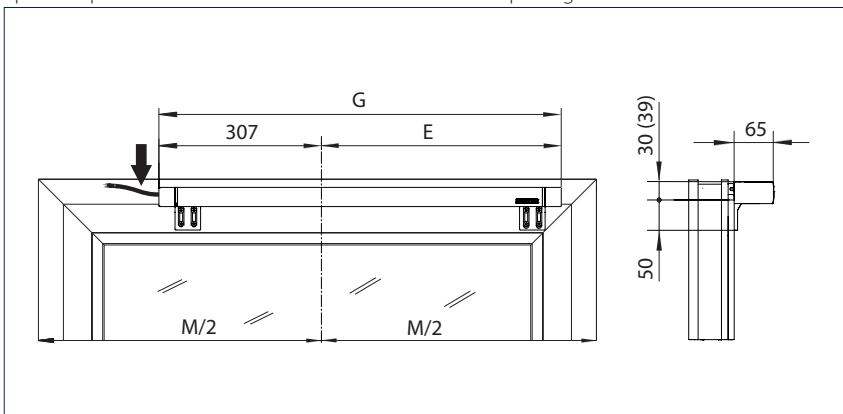
Space requirement for frame installation INWARD opening



See table for dimensions for E and G

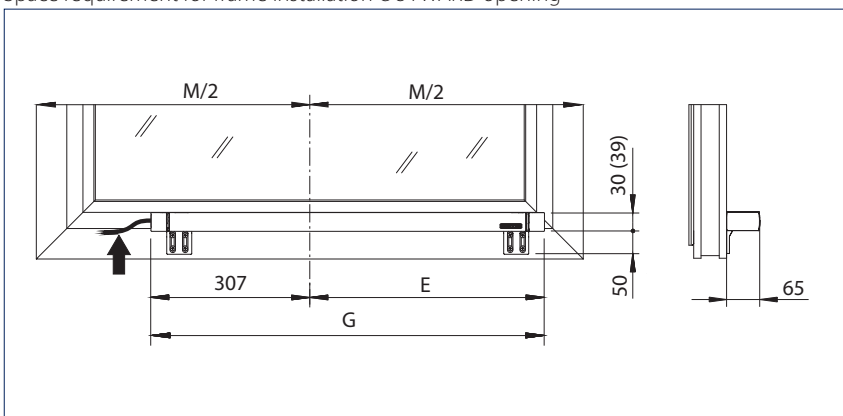
* = Swivelling range

Space requirement for casement installation INWARD opening



See table for dimensions for E and G

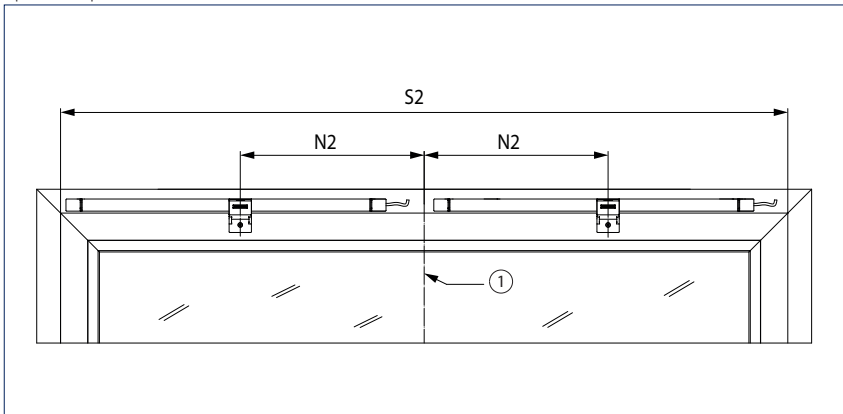
Space requirement for frame installation OUTWARD opening



See table for dimensions for E and G

Space requirement for Powerchain - Syncro 2

Space requirement for installation with two drives

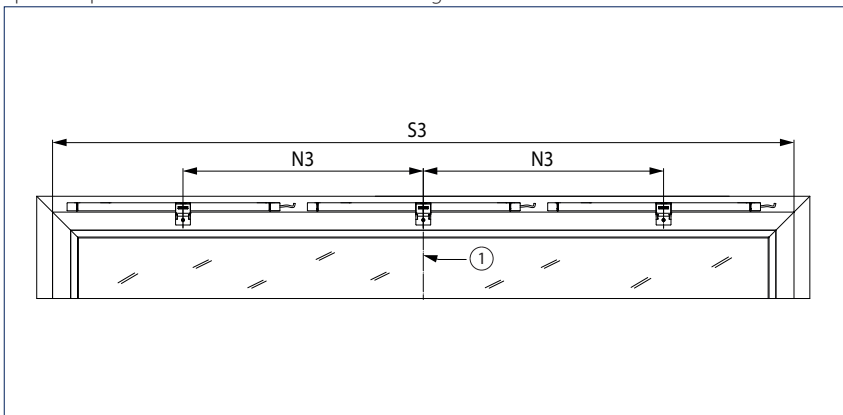


See table for dimensions for S2 and N2

1 = Centre of window

Stroke	N2 [mm]	S2 [mm]	ID no. EV1/ white RAL 9016	Quantity
600	400	1700	147080/147081	2
800	450	2000	147090/147091	2
1200	550	2600	147100/147101	2

Space requirement for installation with three right-hand drives



See table for dimensions for S3 and N3

1 = Centre of window

Stroke	N3 [mm]	S3 [mm]	ID no. EV1/ white RAL 9016	Quantity
600	796	2490	147080/147081	3
800	896	2890	147090/147091	3
1200	1096	3690	147100/147101	3

GEZE CHAIN DRIVES



Bracket set A
For bottom-hung, side-hung and top-hung windows, frame installation INWARD



Bracket set B
For bottom-hung, side-hung and top-hung windows, casement installation INWARD and frame installation OUTWARD

GEZE Powerchain - Order information

Description	Stroke	Version	ID.No.
GEZE Powerchain	600 mm	EV1	147080
	800 mm	EV1	147090
	1200 mm	EV1	147100
	600 mm	white RAL 9016	147081
	800 mm	white RAL 9016	147091
	1200 mm	white RAL 9016	147101
GEZE Powerchain - special version Can be configured: stroke, cable length, colour			147120
Accessories			
Bracket set A Powerchain		white RAL 9016	147111
		black	147110
Bracket set B Powerchain		white RAL 9016	147113
		black	147112
Choice of consoles for Powerchain Can be configured: type of opening, colour		acc. to RAL	147121