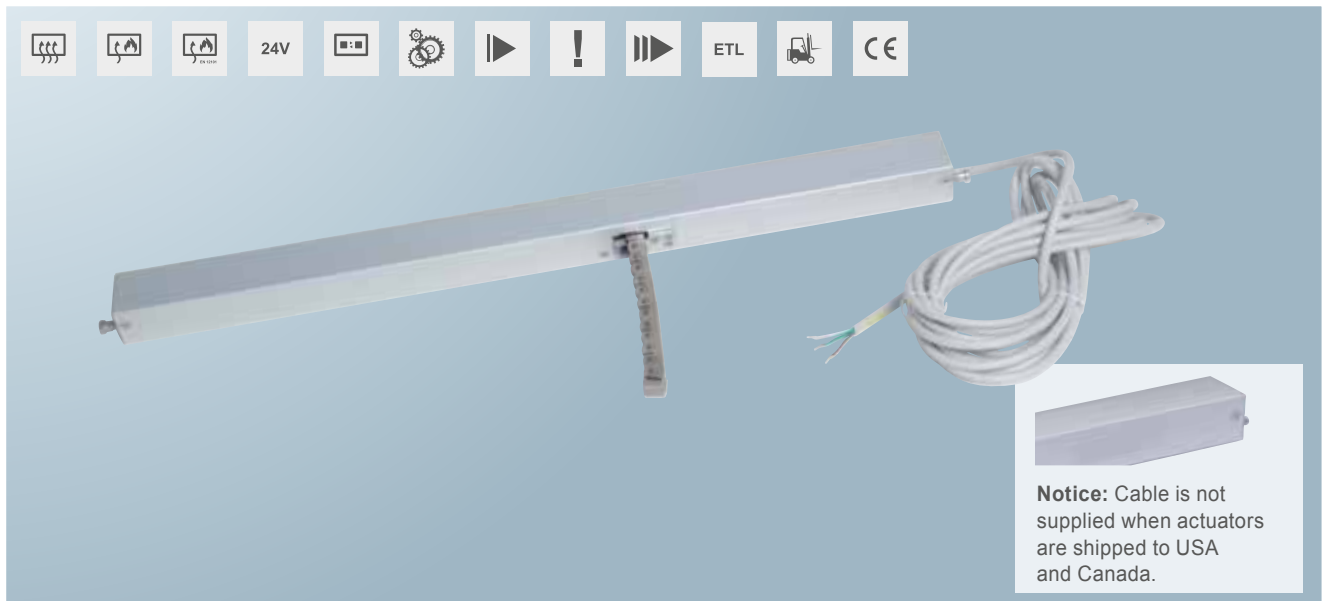


WMU 836

Chain actuator 300N



Description

- designed for surface mounting
- for comfort ventilation
- for smoke ventilation DIN 18232-3
- for smoke ventilation EN 12101-2: The EN-actuators are approved according to EN 12101-2 with selected profiles
- to be used with all window types
- to be used together with $\pm 24V$ control units or control units with MotorLink®
- can be used together with espagnolette WMB
- available with and without ETL certification:
 - Europe: order without ETL certification
 - USA / Canada: order with ETL certification (version UL) – the UL actuator is supplied without cable
- synchronization of up to four window actuators – no need for an external synchronization module
- genuine position feedback and three speeds when using control unit with MotorLink®
- soft close function
- the electronics in this actuator can be programmed to suit specific requirements – i.e. pressure- and traction force, stroke, speed/sound level – with the WAT 100 programming box, also possible following installation
- built-in electronic load switch-off/end stop
- electronic actuator with micro controller
- the actuator has an integrated reverse function to ensure a prolonged life span of the window gaskets
- easy mounting

Actuator variants

The actuator is available in four different versions: single actuator (-1), double actuator (-2), triple actuator (-3) and quad actuator (-4).

The synchro actuators (-2, -3 and -4) are equipped with a patented synchronization function, in which the actuators communicate directly with each other, which ensures the actuators operate at exactly the same speed and position. On large windows up to four actuators can be mounted on the same window – with no need for an external synchronization module.

Opening speeds

The number of window actuator running speeds (up to three) depends on the type of control unit to which the window actuator is connected.

One speed:

Actuators connected to ± 24 VDC control units (e.g. WUC) can be run with one speed – see the following page for opening speed.

Three speeds:

Actuators connected to control units with MotorLink® (e.g. WCC) can be run with three different speeds:

- slow speed for soundless automatic control of the windows
- faster speed for audible manual (keypads) control of the windows
- fast speed for smoke ventilation and security functions

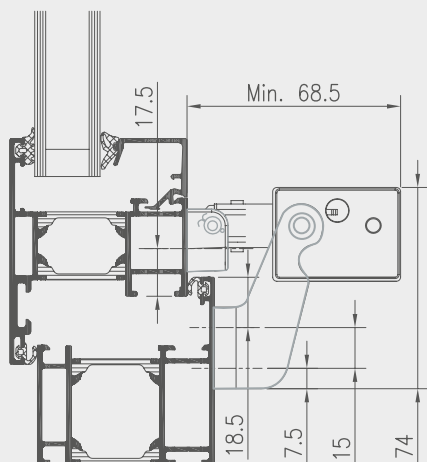
Technical specifications	
Pressure force	See variant table and stroke / force diagram
Traction force	300N
Locking force	3000N
Chain stroke	400, 600, 800 and 1000mm
Opening speed	11 - 14mm/s
Window types	Tophung, bottomhung, pivot and turning window - vent size should be confirmed with the window supplier and WindowMaster
Nominal voltage	24 VDC (max. 10% ripple)
Voltage	20 - 36 VDC
Open circuit voltage	Max. 36 VDC
Current consumption	Max. 1,0A
Consumption of power	Max. 24W
Operating conditions	-5°C - +74°C, max. 90% relative humidity (not condensing)
Switch-on-duration	ED 40% (max. 4min. per 10min)
Material	Anodised aluminium housing with stainless steel chain WMU 836: with 5m grey silicone cable 3-cores 0.75m ² WMU 836 UL: without cable
Colour	Anodized aluminium. RAL colours available at an additional price
Size	34 x 47mm (H x D), length (L) depending on chain stroke – see table
Weight	400mm: 2.2kg, 600mm: 2.6kg, 800mm: 3.0kg, 1000mm: 3.4kg
IP rating	IP32
Fire test	Testet according to DIN 18232-3, part 3.6 (30 min./300°)
EN approval	Approved according to EN 12101-2 section 7.5 with selected profiles – please contact WindowMaster for further information. The EN actuator opens the window completely within 60 sec.
ETL certification	Actuators with "UL" in the article no. are ETL certified accordingly to UL 325 and CAN/CSA-22.2 No. 247-92. Primarely used in USA and Canada.
Life span	Tested with 10,000 opening and closing movements
Delivery includes	WMU 836: actuator with 5m cable WMU 836 UL: actuator without cable
To be ordered separately	Actuator bracket and chain bracket
Note	We reserve the right to make technical changes

Description of product code composition				
WMU 836	-n	xx	xxxx	0103
			Product version: 3	
			Stroke: 0400 = 400mm, 0600 = 600mm, 0800 = 800mm, 1000* = 1000mm	
		Certification EN: For actuator approved according to EN 12101-2 the item number must contain EN. Notice: Are supplied with strokes of 400mm, 600mm and 800mm. UL: For ETL certified actuator the item number must contain UL.		
	Actuator variant: 1 = single, 2 = double, 3 = triple, 4 = quad			
* 1000mm is not supplied as EN-12101-2 approved actuator				
Example of product code				
WMU 836-2 EN 0600 0103		WMU 836 actuator, double synchronisation, EN 12101-2 approved, 600mm chain stroke, product version 3		

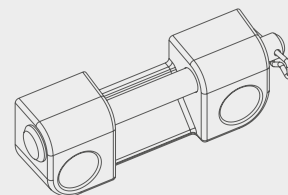
Items	Chain stroke [mm]	Compressive force [N] * (only bottom hung window)	Length (L) [mm] (incl. screws = 18mm)	Item no. Europe	Item no. USA/Canada
Single actuator	400	250	568	WMU 836-1 0400	WMU 836-1 UL 0400
	600	300	668	WMU 836-1 0600	WMU 836-1 UL 0600
	800	0*	768	WMU 836-1 0800	WMU 836-1 UL 0800
	1000	0*	868	WMU 836-1 1000	WMU 836-1 UL 1000
Double actuator	400	300	568	WMU 836-2 0400	WMU 836-2 UL 0400
	600	300	668	WMU 836-2 0600	WMU 836-2 UL 0600
	800	0*	768	WMU 836-2 0800	WMU 836-2 UL 0800
	1000	0*	868	WMU 836-2 1000	WMU 836-2 UL 1000
Triple actuator	400	300	568	WMU 836-3 0400	WMU 836-3 UL 0400
	600	300	668	WMU 836-3 0600	WMU 836-3 UL 0600
	800	0*	768	WMU 836-3 0800	WMU 836-3 UL 0800
	1000	0*	868	WMU 836-3 1000	WMU 836-3 UL 1000
Quad actuator	400 mm	300 N	568 mm	WMU 836-4 0400	WMU 836-4 UL 0400
	600 mm	300 N	668 mm	WMU 836-4 0600	WMU 836-4 UL 0600
	800 mm	0 N*	768 mm	WMU 836-4 0800	WMU 836-4 UL 0800
	1000 mm	0 N*	868 mm	WMU 836-4 1000	WMU 836-4 UL 1000
Actuators approved according to EN 12101-2 – contact WindowMaster					

Accessories	Item no.
Bracket set for frame mounting	WAZ 101
Bracket set for sash mounting	WAZ 102
Chain bracket for WMU 836 / 936	WAB 811
Actuator bracket for WMU 836 / 936	WAB 812
Actuator bracket for WMU 836	WAB 824
Z-Bracket for inward opening windows	WAB 825
Actuator bracket for WMU 836 / 936 / 866	WAB 836A
Actuator bracket for WMU 836 / 936 / 866	WAB 836B
Chain bracket for WMU 836 / 936	WAB 836E
Actuator bracket for WMU 836 – sash mounting	WAB 836P
Shortening electronically of chain	WKK
See separate product sheets for further information.	

Installation suggestion 1

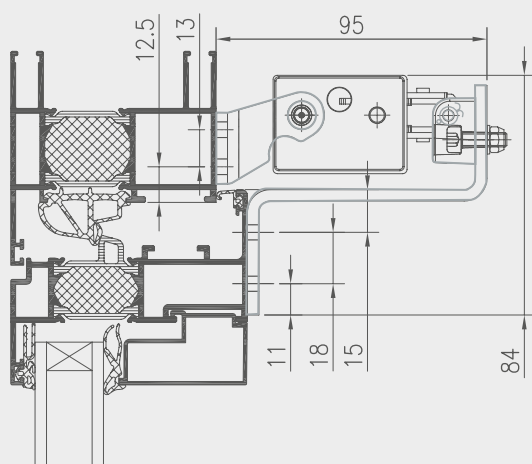


WAB 836B

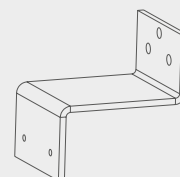


WAB 836E

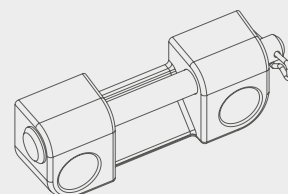
Installation suggestion 2



WAB 824

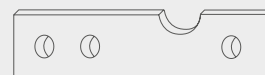
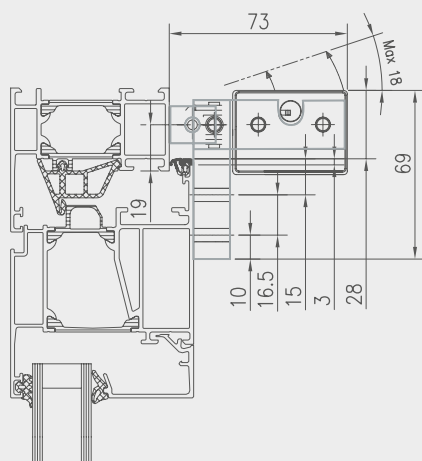


WAB 825

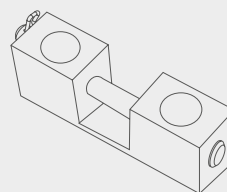


WAB 836E

Installation suggestion 3

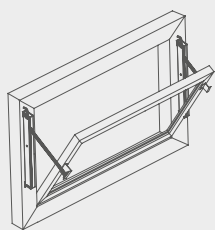
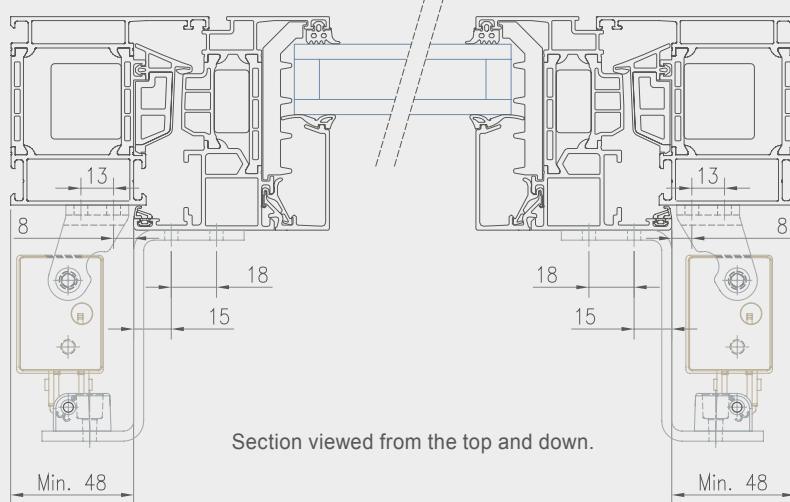


WAB 812



WAB 811

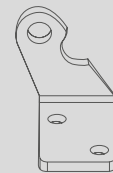
Installation suggestion 4 (frame mounting)



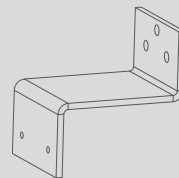
Solution:
2 x actuator WMU 836-2 xxxx
1 x bracket set WAZ 101.

The actuator cable exit has to turn upward.

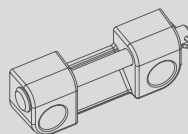
Bracket set WAZ 101 consists of:



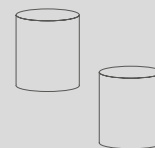
2 x WAB 824



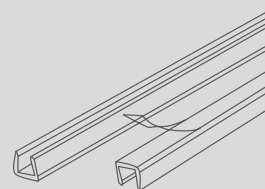
2 x WAB 825



2 x WAB 836E

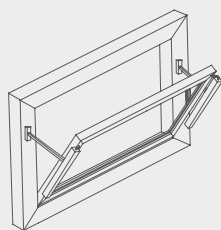
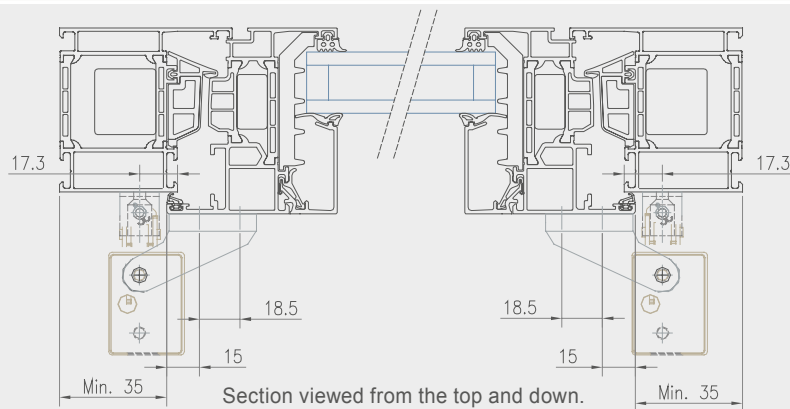


2 x brass tubes



2 x cable channels 1m

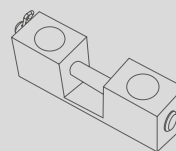
Installation suggestion 5 (sash mounting)



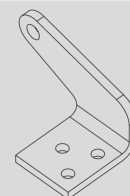
Solution:
2 x actuators WMU 836-2 xxxx
1 x bracket set WAZ 102.

The actuator cable exit has to turn upward.

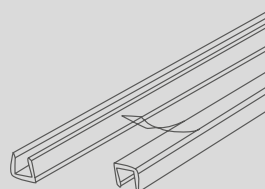
Bracket set WAZ 102 consists of:



2 x WAB 811



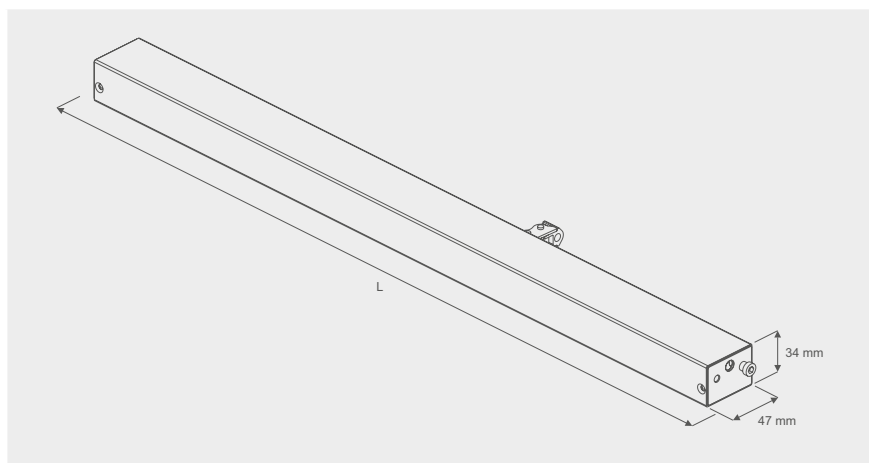
2 x WAB 836P



2 x cable channels pã 1m

WMU 836

Chain actuator 300n



L = Length (incl. screws) – see table of items

