



White, RAL 9010

Grey, RAL 9006

Black, RAL 9005

Bronze, RAL 8019

WMU 831

UL-versions

Chain actuator 300N



Natural
ventilation

24V

±24V control



MotorLink®



TrueSpeed™



UL certification
– Actuators

2.25

Description

- Designed for surface mounting
- For comfort ventilation
- To be used with all window types
- To be used together with ±24V control units or control units with MotorLink®
- Can be used together with espagnolette WMB
- External safety edge can be connected directly to the actuator
- 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
- 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 with or without cable:
single actuator (-1), double actuator (-2), triple actuator (-3) and quad actuator (-4).

The synchro actuators (-2, -3 and -4) are equipped with a 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:

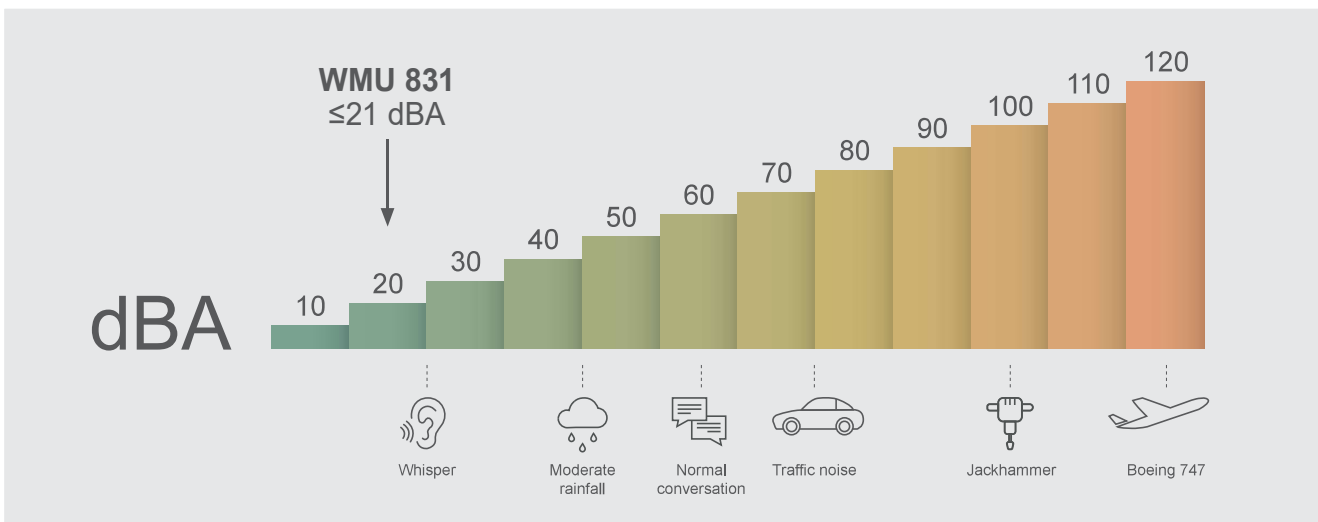
Actuators connected to ±24 VDC control units (e.g. WCC 103) can be run with one speed – see the following page for opening speed.

Three speeds:

Actuators connected to control units with MotorLink® (e.g. WCC 3x0) can be run with three different speeds:

- Automatically control speed – actuators run slowly and almost soundlessly.
- Manual control speed – actuators run faster and more audibly.
- H&S and safety control speed – actuators run fastest. H&S control always has highest priority.

Technical specifications	
Pressure force	300N
Traction force	300N
Locking force	3000N mounting front otherwise 2000N
Chain stroke	1' 3 3/4", 1' 7 11/16", 1' 11 5/8" depending on variant
Opening speed	1/16 - 1/2 in/s
Sound pressure level	≤21 dBA (operational speed: 1/16 in/s), ≤45 dBA (operational speed: 3/8 in/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	1A
Consumption of power	Max. 24W
Operating conditions	+23°F – +113°F, max. 90% relative humidity (not condensing)
Switch-on-duration	ED 40% (max. 4min. per 10min). If speed < 20% ED 100%.
Material	Aluminium housing with steel chain and 16' 4 7/8" UL approved cable, grey, 3-cores, AWG 18
Colour	Aluminium RAL 9006, white (RAL 9010), black (RAL 9005), bronze (RAL 8019). Other RAL colours available at an additional price
Size	1' 11 13/16" x 1 5/8" x 2 1/4" (L x H x D)/(L = 1' 11 13/16" + 11/16" = 2' 1/2" incl. screws)
Weight	5.5lbs
IP rating	IP32
Certification	Certified accordingly to UL 325 and CAN/CSA-22.2 No. 247-14. Actuators intended to comply with UL Standard 325 paragraph 34A.3 should satisfy one of the following criteria: a) Be intended for mounting at least 8 ft above the floor; b) Require constant contact on a control within view of the window to cause movement of the window; c) Have a maximum chain length of 7 7/8"; d) Be provided with external entrapment protection device. External entrapment protection device can be supplied by an alternative supplier; e) The actuators are used in a heat and smoke system.
Delivery includes	Actuator with 16' 4 7/8" cable and plug
To be ordered separately	Actuator, motor and chain bracket
Note	We reserve the right to make technical changes and correct typing errors



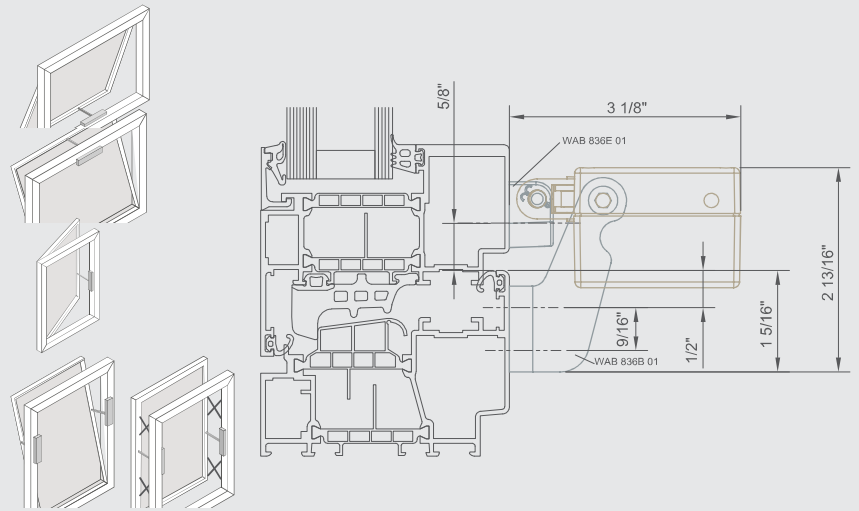
The sound pressure level was measured externally by The Danish Technological Institute. The measurements have been carried out in a large regular room size 7 x 14 x 2.4 m (W x L x H) with the ceiling covered with a standard sound absorbent material. The A-weighted sound pressure levels have been measured at a distance of 1 meter away from the surface of the actuators and at the height of 1.6 meters from the floor. The actuators were not installed on any window profile nor added any load. The full opening and full closing sound of the actuators have been measured and the result represents the average of the measurements.

Description of product code composition					
WMU 831	-n	x	xx	xxxx	02
				Product version: 2	
				Stroke: 0400 = 1' 3 3/4", 0500 = 1' 7 11/16", 0600 = 1' 11 5/8" & S = Cable (0400=400mm)	
				Certification: UL = approved according to UL 325	
				Color: B = Black, G = Grey, K = Bronze, W = White	
Actuator variant: 1 = single, 2 = double, 3 = triple, 4 = quad					
Example of product code					
WMU 831-2G UL 600S 02 WMU 831 actuator, double synchronisation, Grey, UL approved incl. cable, 1' 11 5/8" chain stroke, product version 2					

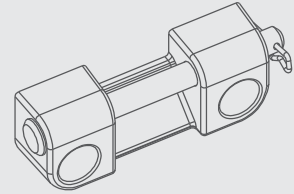
Items 1A<60sec	Chain stroke [ft and in]	Pressure force [N] (only bottom hung window)	Length (L) [ft and in] (incl. screws = 3/4")	Item no.
Single actuator	1' 3 3/4"	300	2' 1/2"	WMU 831-1x' UL 400S 02
	1' 7 11/16"			WMU 831-1x' UL 500S 02
	1' 11 5/8"			WMU 831-1x' UL 600S 02
Double actuator	1' 3 3/4"			WMU 831-2x' UL 400S 02
	1' 7 11/16"			WMU 831-2x' UL 500S 02
	1' 11 5/8"			WMU 831-2x' UL 600S 02
Triple actuator	1' 3 3/4"			WMU 831-3x' UL 400S 02
	1' 7 11/16"			WMU 831-3x' UL 500S 02
	1' 11 5/8"			WMU 831-3x' UL 600S 02
Quad actuator	1' 3 3/4"			WMU 831-4x' UL 400S 02
	1' 7 11/16"			WMU 831-4x' UL 500S 02
	1' 11 5/8"			WMU 831-4x' UL 600S 02
* B = Black, G = Grey, K = Bronze, W = White				

Accessories	Item no.
Actuator bracket for WMU 852/ 851/ 831, stainless steel	WAB 852A 01
Actuator bracket for WMU 852/ 851/ 831, white RAL 9010	WAB 852A 1101
Actuator bracket for WMU 852/ 851/ 831, black RAL 9005	WAB 852A 2101
Actuator bracket for WMU 852/ 851/ 831, alu EV1 & stainless steel	WAB 852i 01
Actuator bracket for WMU 852/ 851/ 831, white RAL 9010	WAB 852i 1101
Actuator bracket for WMU 852/ 851/ 831, black RAL 9005	WAB 852i 2101
Z-Bracket for inward opening windows	WAB 827
Actuator bracket for WMU 836 / 852 / 851 / 831 / 936 / 866	WAB 836B
Actuator bracket for WMU 836 / 852 / 851 / 831 / 936 / 866	WAB 836H
Chain bracket for WMU 836 / 852 / 851 / 831 / 936, grey RAL 9006	WAB 836E 01
Chain bracket for WMU 836 / 852 / 851 / 831 / 936, white RAL 9010	WAB 836E 1101
Chain bracket for WMU 836 / 852 / 851 / 831 / 936, black RAL 9005	WAB 836E 2101
See separate product sheets for further information.	

Installation suggestion 1 - Outward opening

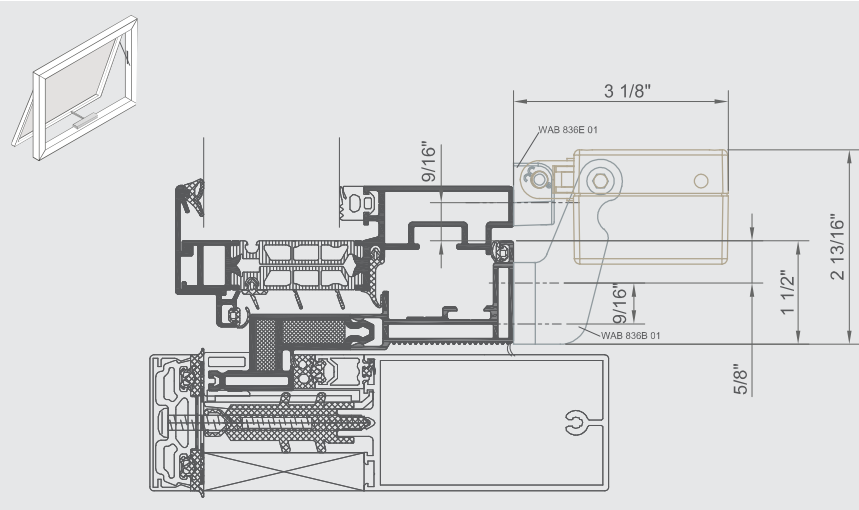


WAB 836B

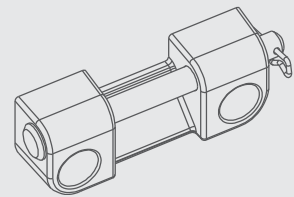


WAB 836E

Installation suggestion 2 - Outward opening (friction hinge)

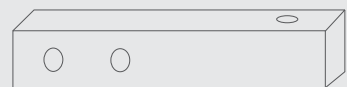
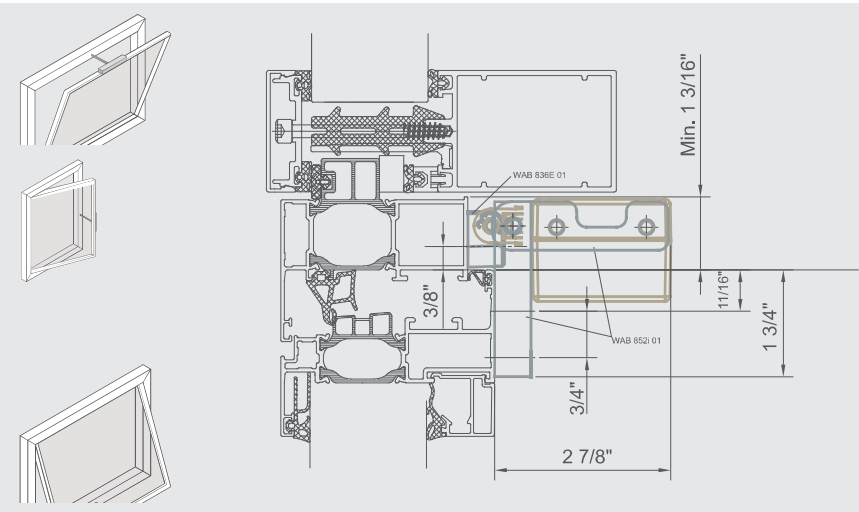


WAB 836B

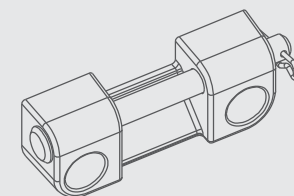


WAB 836E

Installation suggestion 3 - Inward opening (sash mounting)

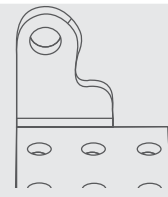
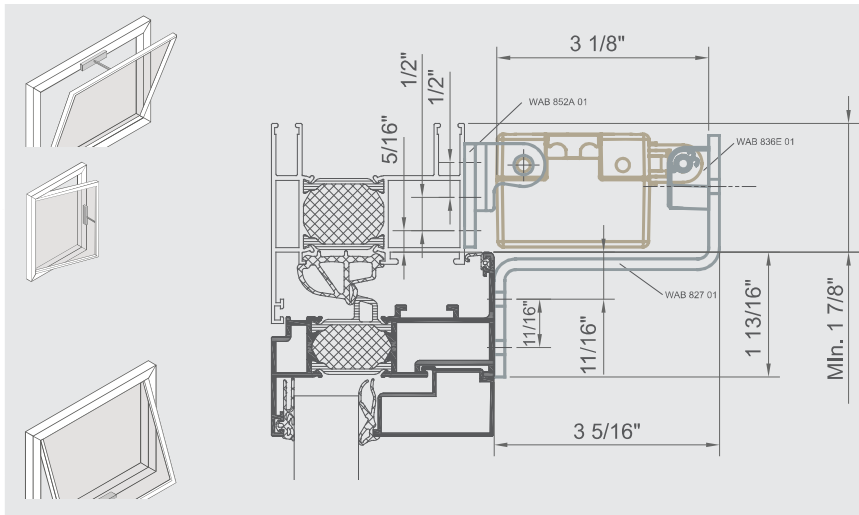


WAB 852i

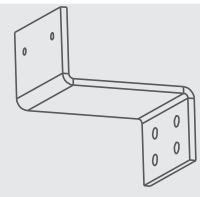


WAB 836E

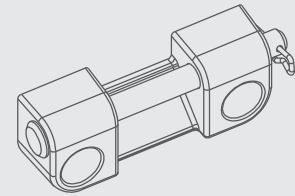
Installation suggestion 4 - Inward opening (frame mounting)



WAB 852A

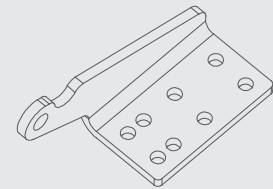
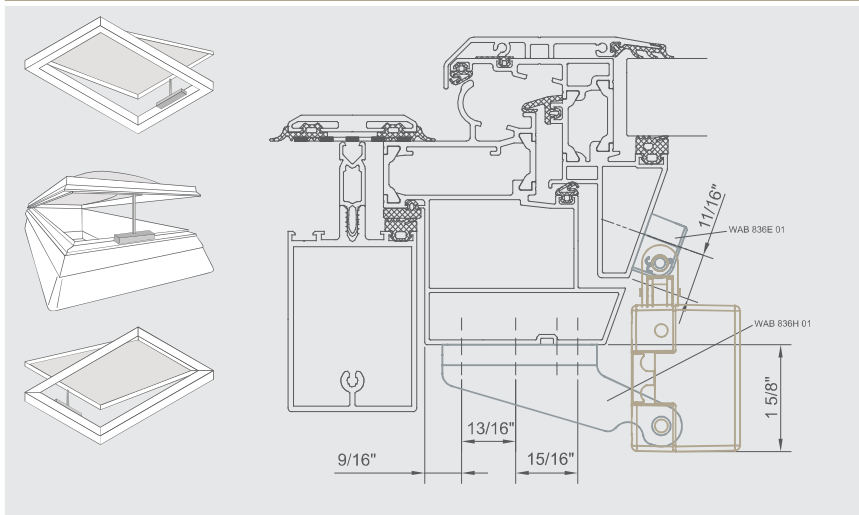


WAB 827

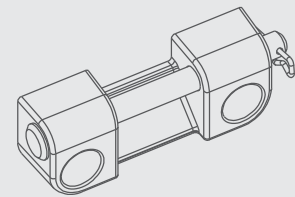


WAB 836E

Installation suggestion 5 - Outward roof opening

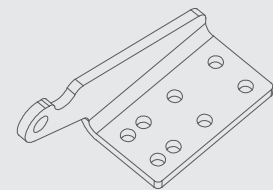
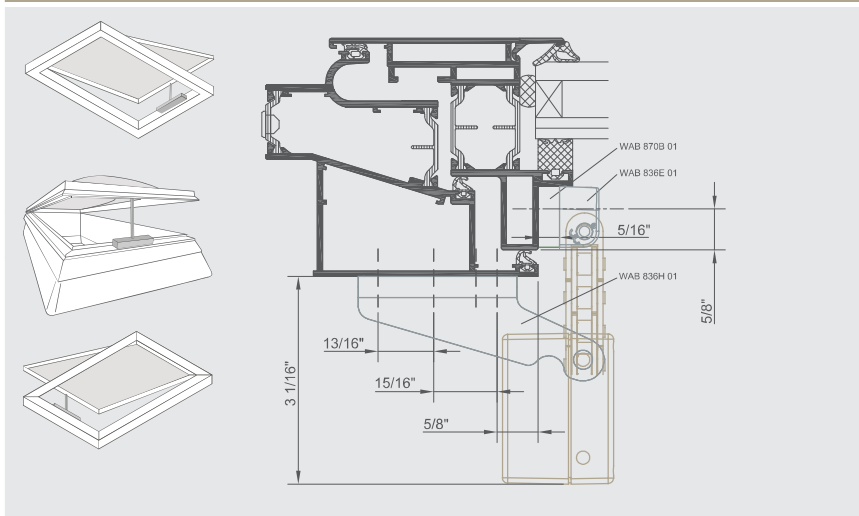


WAB 836H

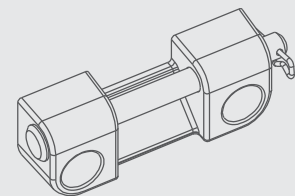


WAB 836E

Installation suggestion 6 - Outward roof opening



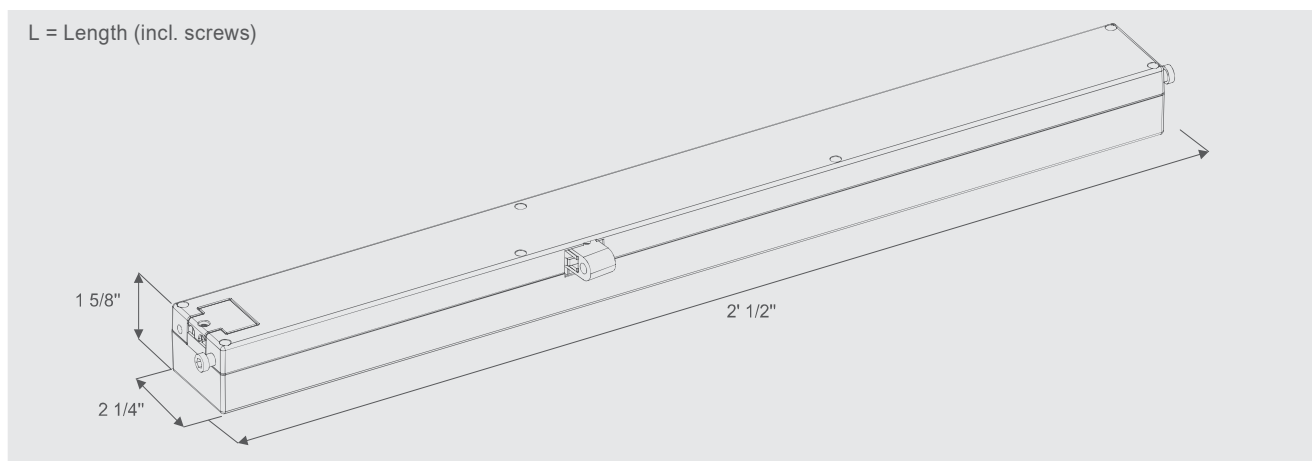
WAB 836H



WAB 836E

WMU 831

Chain actuator 300N



All dimensions are originally in metric units and converted into imperial units.
For exact measurements please refer to documentation with metric values.