



WMU 836 Chain actuator 300N



Natural
ventilation



Smoke ventilation
EN 12101-2



Smoke
ventilation B300

24V

±24V control



MotorLink®



UL certification
– Actuators

2.11

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 ±24V control units or control units with MotorLink®
- can be used together with espagnolette WMB
- 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: 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 speed

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:

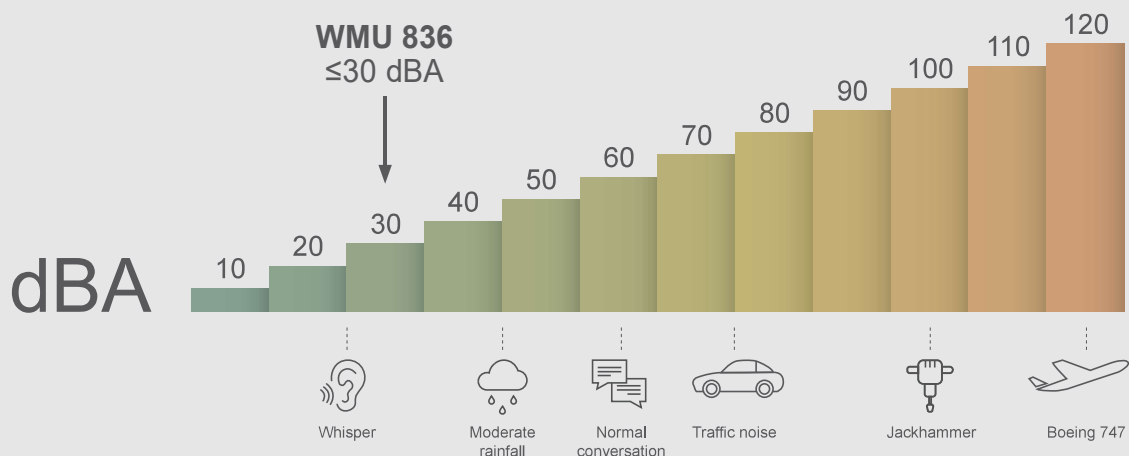
Actuators connected to ±24 VDC control units (e.g. WUC) can be run with one speed – see the following page for opening speed.

Three speeds:

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

- 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 | See variant table and stroke / force diagram |
| Traction force | 300N |
| Locking force | 3000N |
| Chain stroke | 400, 600, 800 and 1000mm |
| Opening speed | 4,5 - 14 mm/s |
| Sound pressure level | ≤30 dBA (operational speed: 4,5 mm/s), ≤45 dBA (operational speed: 13 mm/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: with 5m UL approved cable, grey, 3-cores 0.82 mm ² |
| 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 |
| EN approval | Approved according to EN 12101-2 with selected profiles – please contact WindowMaster for further information B300 tested according to EN 12101-2 |
| Certification | Actuators with "UL" in the article no. are UL certified accordingly to UL 325 and CAN/CSA-22.2 No. 247-14. Primarely used in USA and Canada. |
| Delivery includes | 5m cable |
| To be ordered separately | Actuator bracket and chain bracket |
| Note | We reserve the right to make technical changes and correct typing errors |



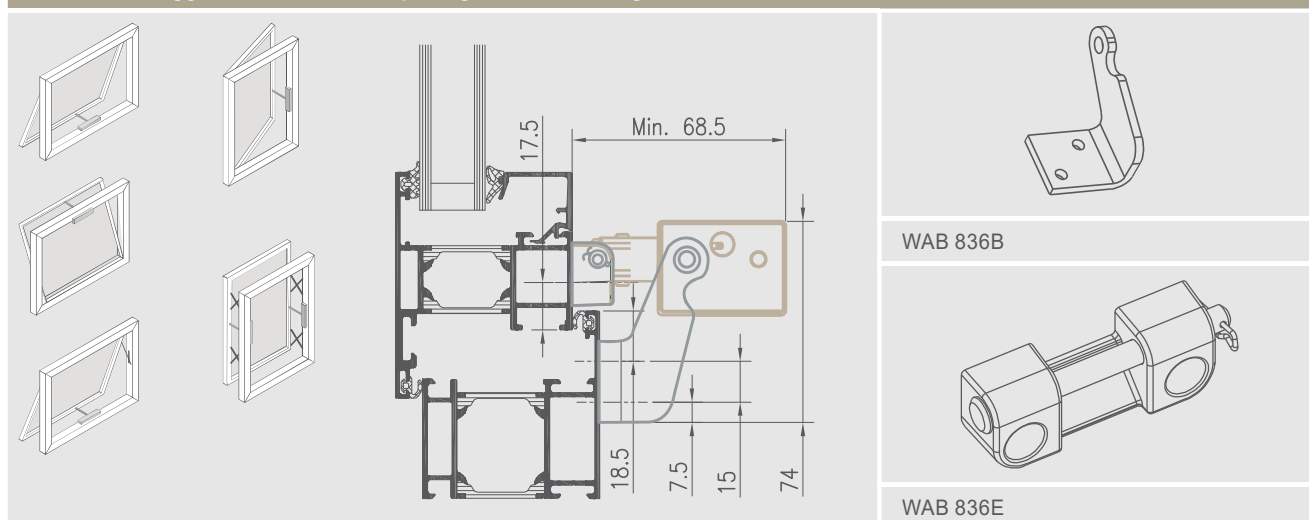
The sound pressure level was measured externally by The Danish Technological Institute. The measurements have been carried out in a large regular room size 7 x 14 x 2.4 m (W x L x H) with the ceiling covered with a standard sound absorbent material. The A-weighted sound pressure levels have been measured 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 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 UL 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 | | |

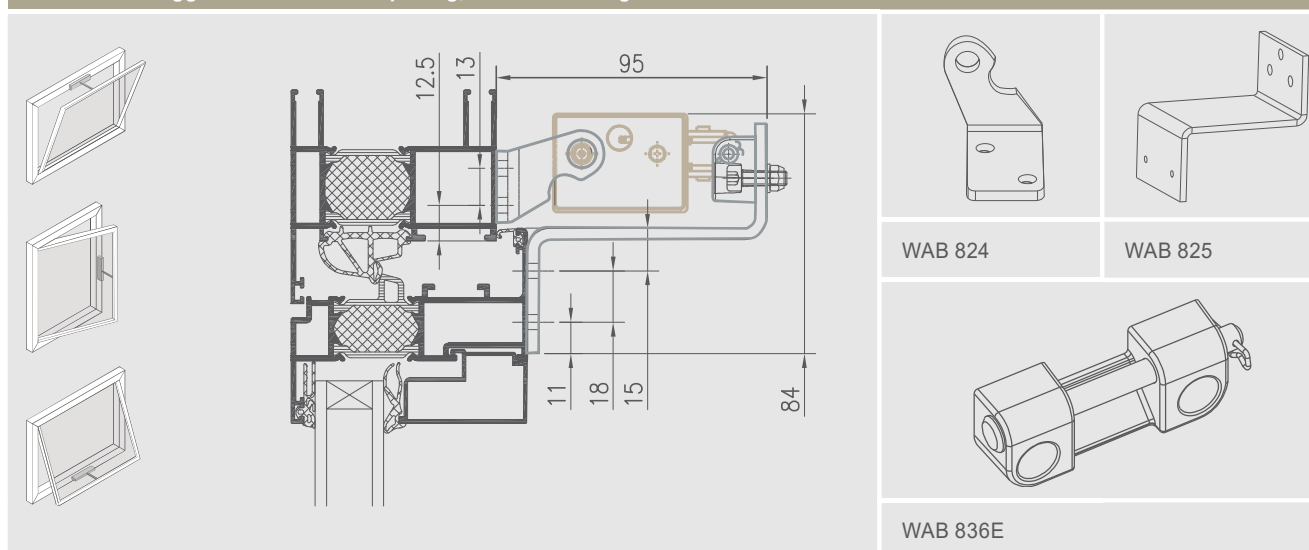
| Items | Chain stroke [mm] | Compressive force [N] * (only bottom hung window) | Length (L) [mm] (incl. screws = 18mm) | Item no. Europe | Item no. USA/Canada |
|---|-------------------|--|--|--------------------|------------------------|
| Single actuator | 400 | 300 | 568 | WMU 836-1 0400 | WMU 836-1 UL 0400 |
| | 600 | 170 | 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 | 170 | 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 | 170 | 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 | 568 mm | WMU 836-4 0400 | WMU 836-4 UL 0400 |
| | 600 mm | 170 | 668 mm | WMU 836-4 0600 | WMU 836-4 UL 0600 |
| | 800 mm | 0* | 768 mm | WMU 836-4 0800 | WMU 836-4 UL 0800 |
| | 1000 mm | 0* | 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. | |

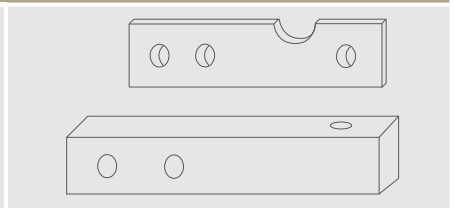
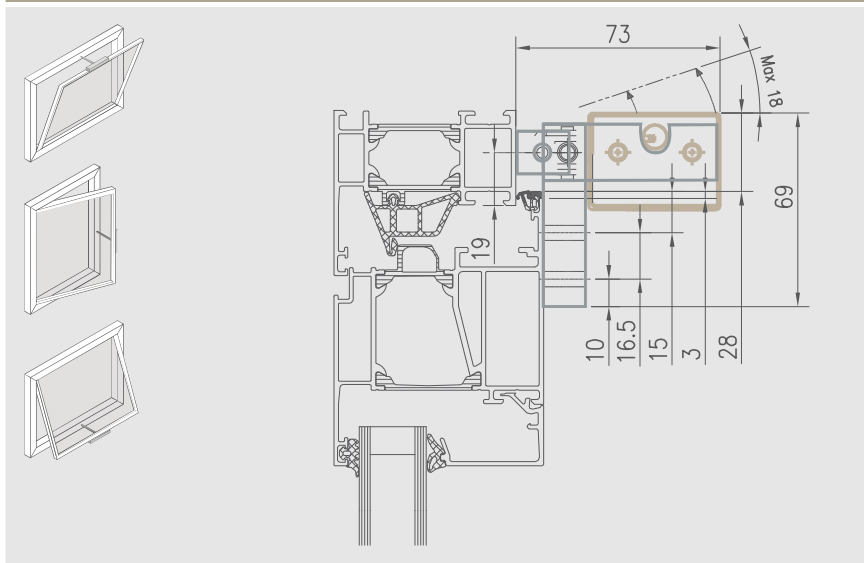
Installation suggestion 1 - Outward opening, frame mounting



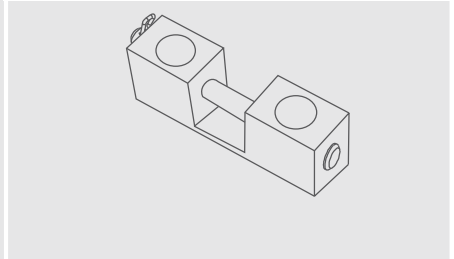
Installation suggestion 2 - Inward opening, frame mounting



Installation suggestion 3 - Inward opening, sash mounting

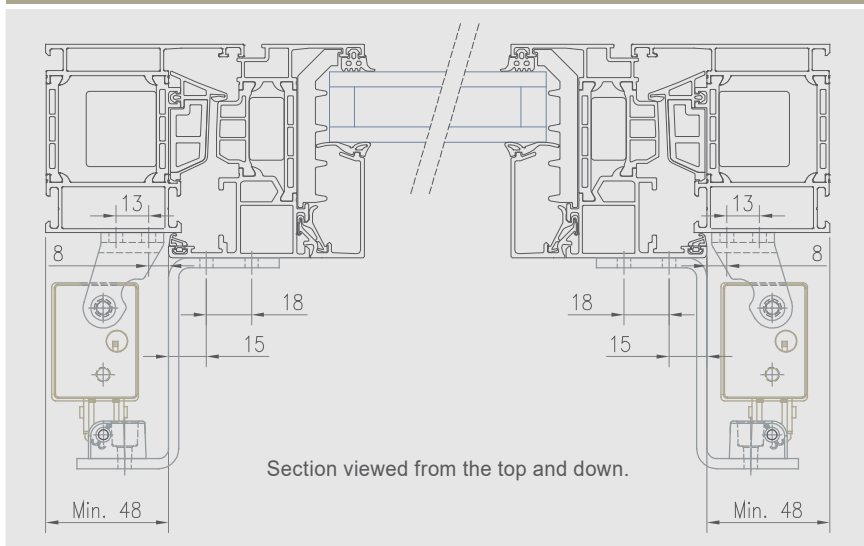


WAB 812

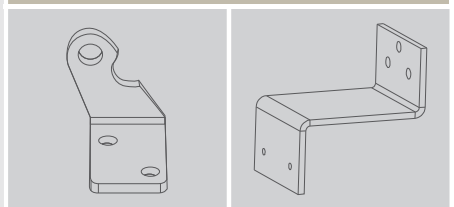


WAB 811

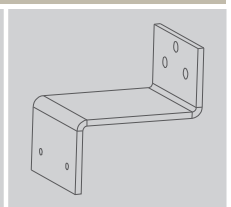
Installation suggestion 4 (frame mounting)



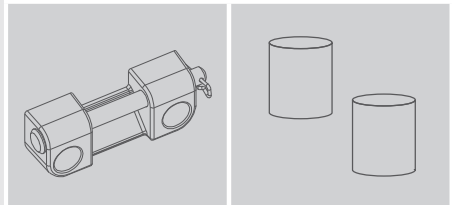
Bracket set WAZ 101 consists of:



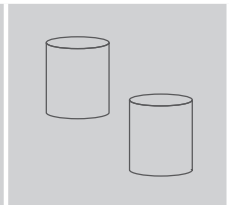
2 x WAB 824



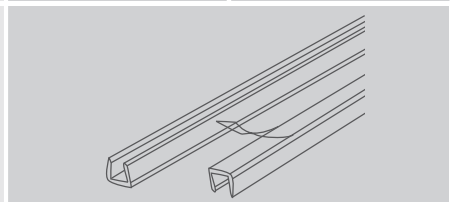
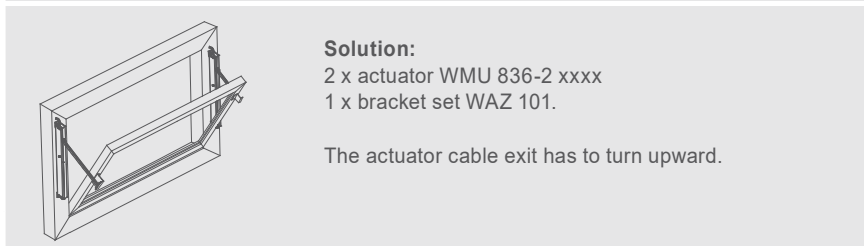
2 x WAB 825



2 x WAB 836E



2 x brass tubes



2 x cable channels 1m

WMU 836

Chain actuator 300N

Installation suggestion 5 (sash mounting)

Section viewed from the top and down.

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 på 1m

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

| Stroke [mm] | Pressure force [N] | Traction force [N] |
|-------------|--------------------|--------------------|
| 0 - 400 | 300 | 300 |
| 400 - 600 | 170 | 300 |
| 600 - 1000 | 100 | 300 |