



#### **WMU 836**

## **Chain actuator 300N**









Smoke ventilation B300





MotorLink®

UL certification

#### **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
- available with and without UL certification:
  - Europe: order without UL certification
  - USA / Canada: order with UL 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



Notice: Cable is not supplied when actuators are shipped to USA and Canada.

#### 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  $\pm 24$  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            | 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 0.75m² 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. |  |  |  |  |
| 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.   |  |  |  |  |
| 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

ХХ

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

#### Example of product code

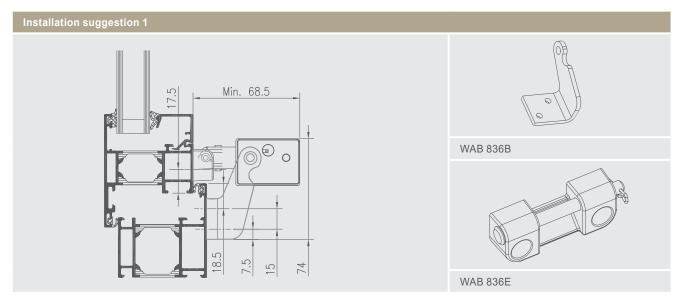
WMU 836-2 EN 0600 0103 WMU 836 actuator, double synchronisation, EN 12101-2 approved, 600mm chain stroke, product version 3

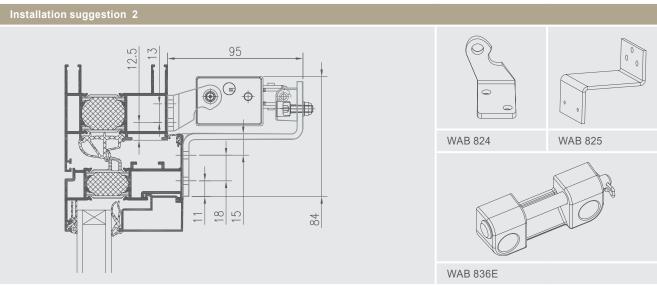
| Items              | Chain stroke<br>[mm] | Compressive force [N] *(only bottom hung window) | Length (L) [mm]<br>(incl. screws = 18mm) | Item no.<br>Europe | Item no.<br>USA/Canada |
|--------------------|----------------------|--|--|--------------------|------------------------|
| Single<br>actuator | 400                  | 300  | 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<br>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<br>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<br>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      |

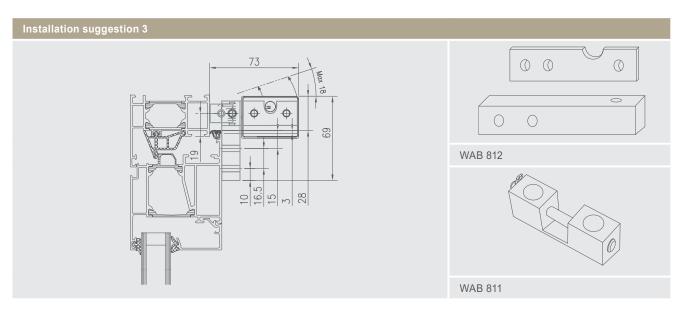
Actuators approved according to EN 12101-2 - contact WindowMaster

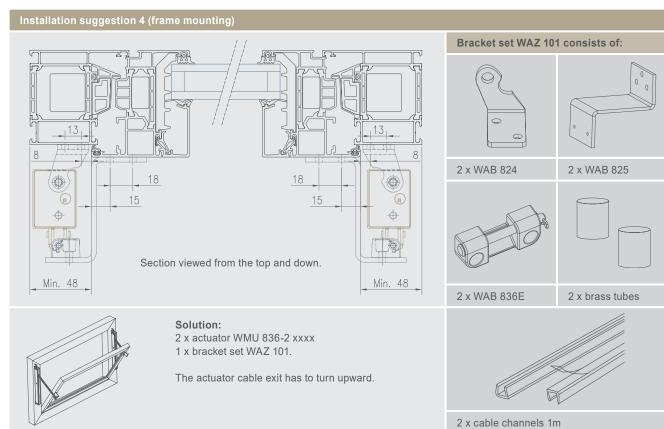
| Accessories  | Item no. |  |
|--|----------|--|
| Bracket set for frame mounting                       | WAZ 101  |  |
| Bracket set for sash mounting                        | WAZ 102  |  |
| Chain bracket for WMU 836 / 936                      | WAB 811  |  |
| Actuator bracket for WMU 836 / 936                   | 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. |          |  |

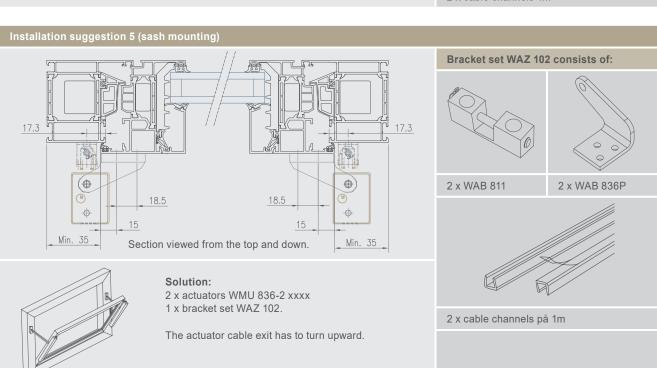
<sup>\* 1000</sup>mm is not supplied as EN-12101-2 approved actuator











### **WMU 836**

# **Chain actuator 300N**

