



**WMU 842 / 861 / 862 / 863 / 864 / 882 / 883 / 884 / 885 / 895**

*incl. UL-versions*

## Chain actuator up to 1500N



Natural  
ventilation



Smoke ventilation  
EN 12101



Smoke ventilation  
B300

24V

±24V control



MotorLink®



UL certification  
– Actuators

2.45

### Description

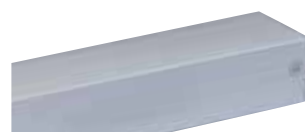
- the actuator is an extremely strong chain actuator especially developed for large and heavy roof openings and windows in the facades
- an elegant alternative to traditional spindle actuators
- for comfort ventilation
- for smoke ventilation when the actuator opens the window completely within 60sec. (opening time) – approved according to EN 12101-2 with selected profiles
- to be used together with ±24V control units or control units with MotorLink®
- can be used together with espagnolette WMB
- synchronization of up to 4 window actuators – no need for an external synchronization module
- genuine position feedback and 3 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
- actuators for US and Canada are UL certified and are supplied without cable except WMU 861 UL and WMU 882 UL - with 9' 10 1/8" UL approved cable, grey, 3-cores AWG 18

### Actuator variants

The actuator is available in four different versions: single WMU 86x/88x-1, double WMU 86x/88x-2, triple WMU 86x/88x-3 and quad WMU 86x/88x-4. The actuators 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.

### Pressure safety function

The risk of entrapment is reduced as the actuators are programmed to reverse if they encounter obstacles when closing. The set points determining when the actuators are to reverse are individually adjustable and can be adjusted after installation using the programming box WAT 100.



**Notice:** Cable is not supplied with actuators that are shipped to USA and Canada except WMU 861 UL and WMU 882 UL.

### Opening speed

Actuators connected to  $\pm 24$  VDC control units (e.g. WUC) can be run with one speed – see "Opening time" in the table of items.

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                     |  | Constant load | Snow load                           |
|------------------------------------|--|---------------|-------------------------------------|
|                                    | WMU 842  | max. 400N     | -                                   |
|                                    | WMU 86x  | max. 600N     | max. 600N (programmable 300-600N)   |
|                                    | WMU 88x  | max. 800N     | max. 1000N (programmable 300-1000N) |
|                                    | WMU 895  | max. 1000N    | max. 1500N (programmable 300-1500N) |
|                                    | – see also the diagrams force/stroke on the last page  |               |                                     |
| Tractive force                     | 500N (programmable up to 1000N)  |               |                                     |
| Locking force                      | 3000N  |               |                                     |
| Chain stroke                       | Depending on variant – see table of items "Chain stroke"<br>WMU 842/862/864/882/884/885/895: 3' 3 3/8" special version – please contact WindowMaster   |               |                                     |
| Opening speed                      | Depending on variant – see table of items "Opening time"   |               |                                     |
| Sound pressure level <sup>1)</sup> | $\leq 35$ dBA (operational speed: 0.16 in/s) WMU 842/862/864/882/884/885<br>$\leq 43$ dBA (operational speed: 0.51 in/s) WMU 842/862/864/882/884/885/895   |               |                                     |
| Window types                       | Top hung, bottom hung, turning, pivot, roof window and light dome  |               |                                     |
| Nominal voltage                    | 24V DC (max. 10% ripple)   |               |                                     |
| Voltage                            | 19 - 32V DC  |               |                                     |
| Open-circuit voltage               | Max. 32V DC  |               |                                     |
| Current consumption                | Depending on variant – see table of items "Current consumption"  |               |                                     |
| Operating conditions               | +23°F – +113°F max. 90% relative humidity (not condensing)   |               |                                     |
| Switch-on-duration                 | ED 20% (max. 4min. per 20min.)   |               |                                     |
| Material                           | Anodised aluminium housing with zinc chromate passivated steel chain<br>Europe: actuator with 16' 4 7/8" grey silicone cable 3-core AWG 19<br>US/Canada: actuator without cable except WMU 861 UL and WMU 882 UL - with 9' 10 1/8" UL approved cable, grey, 3-cores AWG 18 |               |                                     |
| Colour                             | Anodised aluminium. RAL colours at an additional price   |               |                                     |
| Size                               | 2 1/8" x 3 1/8" (H x D). Width depending on variant - see table of items "Width"   |               |                                     |
| Weight                             | Depending on variant – see table of items "Weight"   |               |                                     |
| IP rating                          | IP54   |               |                                     |
| Life span                          | Tested with 10,000 opening and closing movements   |               |                                     |

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.

### Technical specifications continued

|                          |   |
|--------------------------|---|
| <b>EN approval</b>       | Approved according to EN 12101-2 with selected profiles – please contact WindowMaster for further information<br>B300 tested according to EN 12101-2                              |
| <b>Certification</b>     | Actuators with "UL" in the article no. are UL certified accordingly to UL 325 and CAN/CSA-22.2 No. 247-14. The actuators are primarily used in US and Canada.                     |
| <b>Delivery includes</b> | Europe: actuator with 16' 4 7/8" connection cable<br>US/Canada: actuator without cable except WMU 861 UL and WMU 882 UL - with 9' 10 1/8" UL approved cable, grey, 3-cores AWG 18 |
| <b>Note</b>              | we reserve the right to make technical changes  |

### Description of product code composition

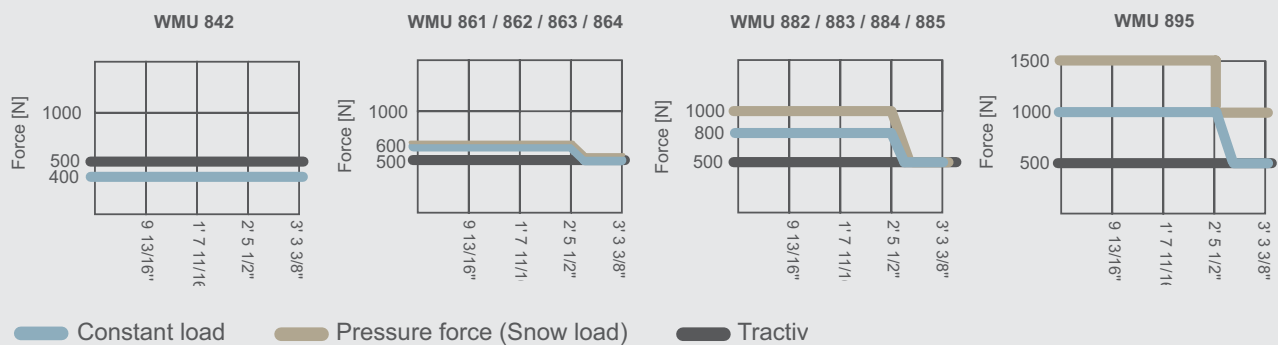
|       |   |   |    |    |      |   |
|-------|---|---|----|----|------|---|
| WMU 8 | x | x | -n | xx | xxxx | <b>0104</b>   |
|       |   |   |    |    |      | <b>Produkt version: 4</b>   |
|       |   |   |    |    |      | <b>Chain stroke:</b> 0300 = 11 13/16", 0500 = 1' 7 11/16", 0600 = 1' 11 5/8", 0750 = 2' 5 1/2", 1000 = 3' 3 3/8" *  |
|       |   |   |    |    |      | <b>Certification</b><br>EN: For actuator approved according to EN 12101-2 the item number must contain EN<br>EN 12101-2 approved actuator variants are only available as 'Single' and 'Double'.<br>UL: For UL certified actuator the item number must contain "UL".<br>The actuators are marked with the UL logo on the actuator label and are not supplied with cable except WMU 861 UL and WMU 882 UL.<br>WMU 895 is not available as UL certified version. |
|       |   |   |    |    |      | <b>Actuator variant:</b> 1=single, 2=double, 3=triple, 4=quad   |
|       |   |   |    |    |      | <b>Power consumption:</b> 1 = 1A, 2 = 2A, 3 = 3A, 4 = 4A, 5 = 5A  |
|       |   |   |    |    |      | <b>Pressure force:</b> 4 = 400N, 6=600N, 8=1000N, 9=1500N**   |

\* Special version – for further information please contact WindowMaster.

\*\* Pressure force at snowload

### Explanation of product code structure

|                               |  |
|-------------------------------|--|
| <b>WMU 861-1 0300 0104</b>    | WMU 861 actuator, pressure force 600N, power consumption 1A, single variant, not certified, chain stroke 11 13/16", product version 4.   |
| <b>WMU 883-2 UL 0500 0104</b> | WMU 883 actuator, pressure force 1000N, power consumption 3A, double variant, UL certified, chain stroke 1' 7 11/16", product version 4. |



**Notice:** 3' 3 3/8" is a special version – for further information contact WindowMaster

Items (see table 'Description of product code composition' for dermination of final item no.

| Pressure force [N] | Current consumption [A] | Chain stroke [ft and in] | Opening time [s] | Width [ft and in] | Weight [lb] | EN         | UL | Item no.           |
|--------------------|-------------------------|--------------------------|------------------|-------------------|-------------|------------|----|--------------------|
| 400                | 2                       | 2' 5 1/2"                | 60               | 2' 6 1/8"         | 14.9914 lb  | x          | x  | WMU 842-n* ** 0750 |
|                    |                         | 3' 3 3/8"****            | 60               | 2' 10 13/16"      | 16.0937 lb  | x          | x  | WMU 842-n* ** 1000 |
| 600                | 1                       | 11 13/16"                | 65               | 1' 9 7/16"        | 11.464 lb   | -          | x  | WMU 861-n* ** 0300 |
|                    |                         | 1' 7 11/16"              | 107              | 2' 1 3/8"         | 13.0073 lb  | -          | x  | WMU 861-n* ** 0500 |
|                    | 2                       | 11 13/16"                | 35               | 1' 9 7/16"        | 11.464 lb   | x          | x  | WMU 862-n* ** 0300 |
|                    |                         | 1' 7 11/16"              | 54               | 2' 1 3/8"         | 13.0073 lb  | x          | x  | WMU 862-n* ** 0500 |
|                    |                         | 1' 11 5/8"               | 64               | 2' 2 15/16"       | 13.8891 lb  | -          | x  | WMU 862-n* ** 0600 |
|                    |                         | 2' 5 1/2"                | 80               | 2' 6 1/8"         | 14.9914 lb  | -          | x  | WMU 862-n* ** 0750 |
|                    | 3                       | 3' 3 3/8"****            | 110              | 2' 10 13/16"      | 16.0937 lb  | -          | x  | WMU 862-n* ** 1000 |
|                    |                         | 1' 11 5/8"               | 54               | 2' 2 15/16"       | 11.464 lb   | x          | x  | WMU 863-n* ** 0600 |
|                    | 4                       | 2' 5 1/2"                | 58               | 2' 6 1/8"         | 14.9914 lb  | x          | x  | WMU 864-n* ** 0750 |
|                    |                         | 3' 3 3/8"****            | 80               | 2' 10 13/16"      | 16.0937 lb  | -          | x  | WMU 864-n* ** 1000 |
| 1000               | 2                       | 11 13/16"                | 75               | 1' 9 7/16"        | 11.464 lb   | -          | x  | WMU 882-n* ** 0300 |
|                    |                         | 1' 7 11/16"              | 130              | 2' 1 3/8"         | 13.0073 lb  | -          | x  | WMU 882-n* ** 0500 |
|                    |                         | 1' 11 5/8"               | 155              | 2' 2 15/16"       | 13.8891 lb  | -          | x  | WMU 882-n* ** 0600 |
|                    |                         | 2' 5 1/2"                | 195              | 2' 6 1/8"         | 14.9914 lb  | -          | x  | WMU 882-n* ** 0750 |
|                    | 3                       | 11 13/16"                | 42               | 1' 9 7/16"        | 11.464 lb   | x          | x  | WMU 883-n* ** 0300 |
|                    |                         | 4                        | 1' 7 11/16"      | 55                | 2' 1 3/8"   | 13.0073 lb | x  | x                  |
|                    | 1' 11 5/8"              |                          | 59               | 2' 2 15/16"       | 13.8891 lb  | x          | x  | WMU 884-n* ** 0600 |
|                    | 3' 3 3/8"****           |                          | 80               | 2' 10 13/16"      | 16.0937 lb  | -          | x  | WMU 884-n* ** 1000 |
|                    | 5                       | 2' 5 1/2"                | 59               | 2' 6 1/8"         | 14.9914 lb  | x          | -  | WMU 885-n* ** 0750 |
|                    |                         | 3' 3 3/8"****            | 80               | 2' 10 13/16"      | 16.0937 lb  | -          | -  | WMU 885-n* 1000    |
| 1500               | 5                       | 1' 11 5/8"               | 59               | 2' 6 1/2"         | 14.5505 lb  | x          | -  | WMU 895-n* ** 0600 |
|                    |                         | 2' 5 1/2"                | 59               | 2' 9 11/16"       | 15.6528 lb  | x          | -  | WMU 895-n* ** 0750 |
| 1000               | 5                       | 3' 3 3/8"****            | 59               | 3' 2 3/8"         | 16.3142 lb  | x          | -  | WMU 895-n* ** 1000 |

\* The actuator variant 'n' is to be determined when ordering: 1=single, 2=double, 3=triple or 4=quad.

\*\* The actuator can be supplied with certification according to EN 12101-2 or UL – see column EN and UL. See also the table 'Product code composition' for further details as well as determination of final item no.

\*\*\* Contact WindowMaster before ordering as application, mounting etc. of the actuator is to be confirmed by WindowMaster.

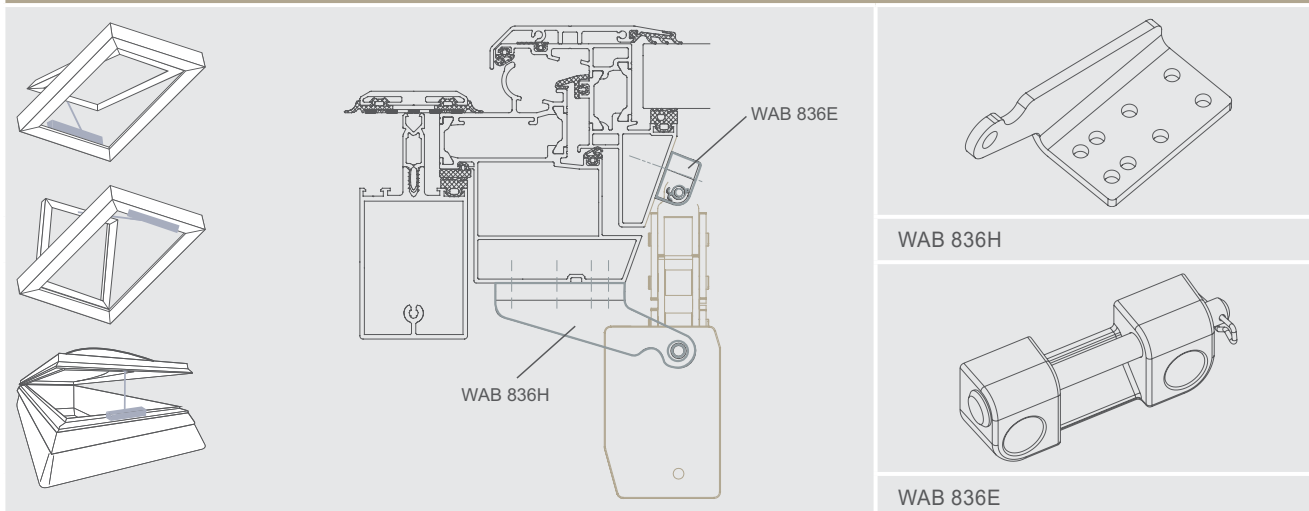
WMU 842 / 861 / 862 / 863 / 864 / 882 / 883 / 884 / 885 / 895

incl. UL-versions

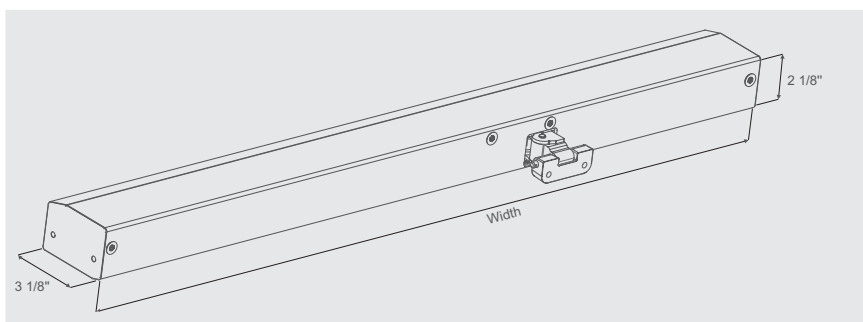
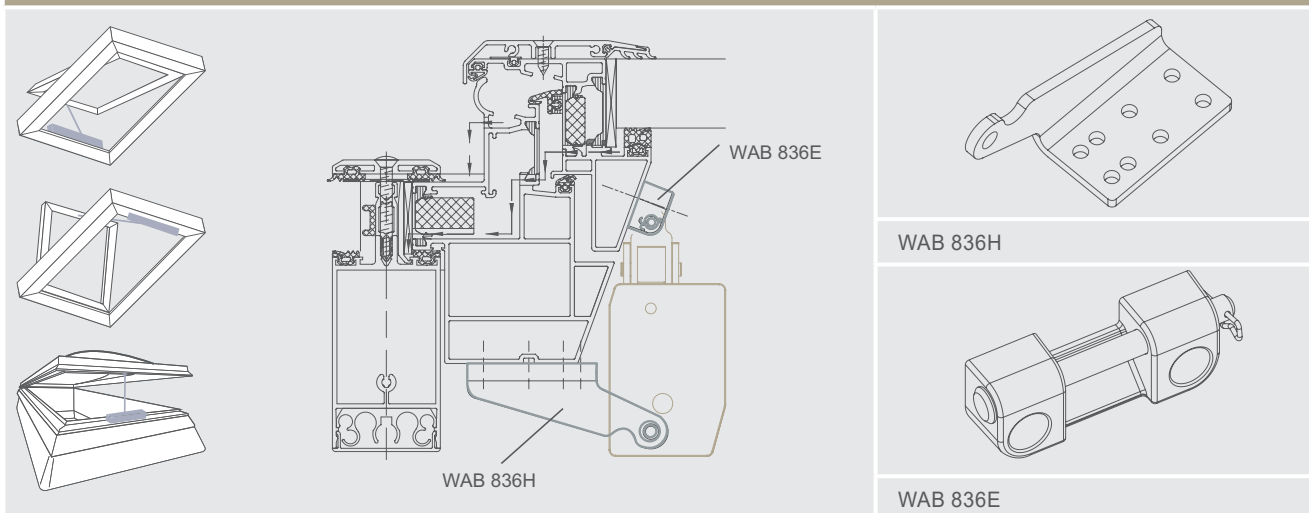
# Chain actuator up to 1500N

| Accessories  | Item no.           |
|--|--------------------|
| Electronically shortening of chain                         | WKK – WMU actuator |
| Actuator bracket for WMU 8xx, heavy bracket (EN approved)  | WAB 836H           |
| Chain bracket for WMU 8xx                                  | WAB 836E           |
| <b>See separate product sheets for further information</b> |                    |

## Installation suggestion 1 - Top-hung / bottom-hung / side-hung, outward opening window



## Installation suggestion 2 - Top-hung / bottom-hung / side-hung, outward opening window



Width (xxx) depending on variant – see table of items

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