

WMU86X-N / WMU88X-N

# HEAVY DUTY CHAIN DRIVE 24V



## Description

- an elegant alternative to a spindle actuator
- for smoke and comfort ventilation
- approved according to EN 12101-2 with selected profiles (please contact us for further information)
- complete opening of the window within 60sec. (depending on the programming)
- strong actuator suitable for roof openings
- to be used together with  $\pm 24V$  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
- 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, this is 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

The actuator is an extremely strong chain actuator especially developed for large and heavy windows – an elegant alternative to traditional spindle actuators.

### 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.

### Opening speeds

Actuators connected to  $\pm 24$  VDC control units (e.g. WUC) have one chain speed – see the following page for opening speed.

Actuators connected to control units with MotorLink™ (e.g. WSC xxM) have three different speeds:

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

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Specifications	
Pressure force	see table of items
Tractive force	max. 1000N (programmable 300-1000N)
Locking force	5000N
Chain stroke	300, 500, 600 and 750mm
Opening speed	depending on variant – see table of items for data (“opening time”)
Window types	top hung, bottom hung, turning, pivot, roof window and light dome
Nominal voltage	24 VDC (max. 10% ripple)
Voltage	19-32 VDC
Open-circuit voltage	max. 32 VDC
Current consumption	see table of items
Operating conditions	-5°C - +74 °C max. 90% relative humidity (not condensing)
Switch-on-duration	ED 20% (max. 2min. per 10min.)
Material	anodised aluminium housing with zinc chromate passivated steel chain actuator with 5m grey silicone cable 3-core 0.75mm <sup>2</sup>
Colour	anodised aluminium, other RAL colours at an additional price
Size	80mm x 54mm (W x H), see table of items for length
Weight	300mm - 5.2kg, 500mm - 5.9kg, 600mm - 6.3kg, 750mm - 6.8kg
IP rating	IP54
Life span	The life span of the actuator depends on the load and chain stroke Recommended test case for EN approval: 10.000 ventilation openings 500mm 500N 1.000 smoke openings full stroke 500N 5 smoke openings with snow load 600N/1000N full stroke
Certification	ETL
Delivery includes	actuator with 5m connection cable
Note	we reserve the right to make technical changes

Item number composition					
WMU 8	x	x	-n	EN or UL	0xxx
					Chain stroke [mm]
					EN: For actuator approved according to EN 12101-2 the item number must contain EN UL: For ETL certified actuator the item number must contain UL
					Variant (1=single, 2=double, 3=triple, 4=quad)
					Power consumption [A]
					Pressure force [N] (6=600N, 8=1000N)

Accessories	Item no.
Electronically shortening of chain	WKK 8xx
Actuator bracket for WMU 8xx	WAB 836A
Actuator bracket for WMU 8xx	WAB 836B
Actuator bracket for WMU 8xx, heavy bracket (EN approved)	WAB 836H
Chain bracket for WMU 8xx	WAB 836E

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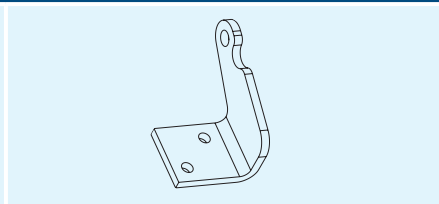
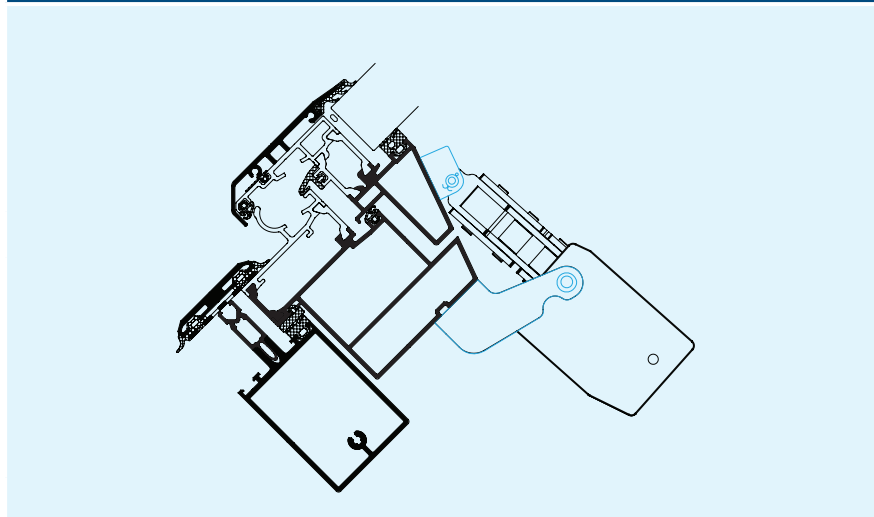
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Items					
Compressive force [N]	Current consumption [A]	Chain stroke [mm]	Opening time [s]	Length [mm]	Item no.
600	1	300	65	545	WMU 861-n* 0300
		500	107	645	WMU 861-n* 0500
	2	300	35	545	WMU 862-n** 0300
		500	54	645	WMU 862-n** 0500
		600	64	685	WMU 862-n* 0600
		750	80	765	WMU 862-n* 0750
	3	600	54	685	WMU 863-n** 0600
	4	750	58	765	WMU 864-n** 0750
1000	2	300	75	545	WMU 882-n* 0300
		500	130	645	WMU 882-n* 0500
		600	155	685	WMU 882-n* 0600
		750	195	765	WMU 882-n* 0750
	3	300	42	545	WMU 883-n** 0300
	4	500	55	645	WMU 884-n** 0500
		600	59	685	WMU 884-n** 0600
	5	750	59	765	WMU 885-n** 0750

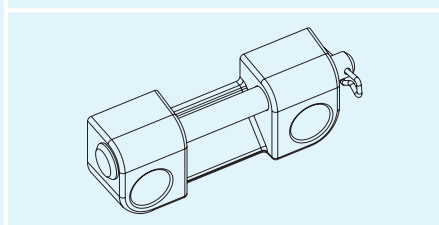
n\* = the actuator variant n is to be determined when ordering (1=single, 2=double, 3=triple, 4=quad)

\*\* = EN 12101-2 approved variant is available (single and double actuators) – contact us

## Installation suggestion 1



WAB 836B

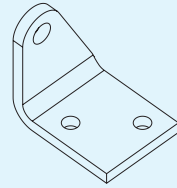
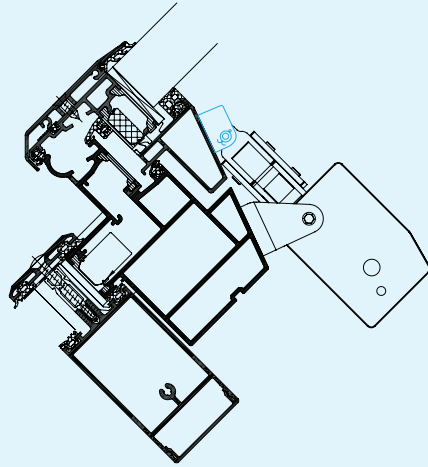


WAB 836E

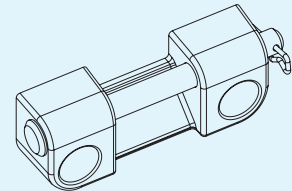
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## Installation suggestion 2

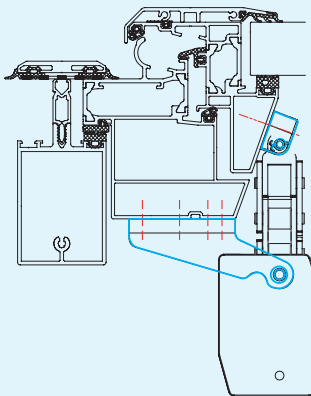


WAB 836A

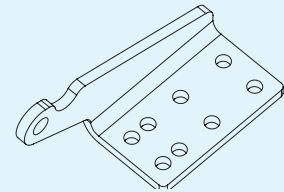
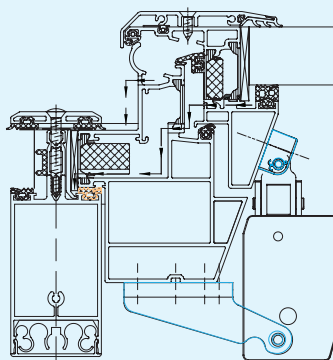


WAB 836E

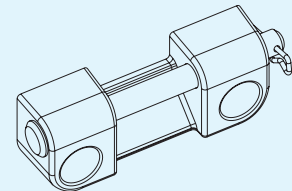
## Installation suggestion 3



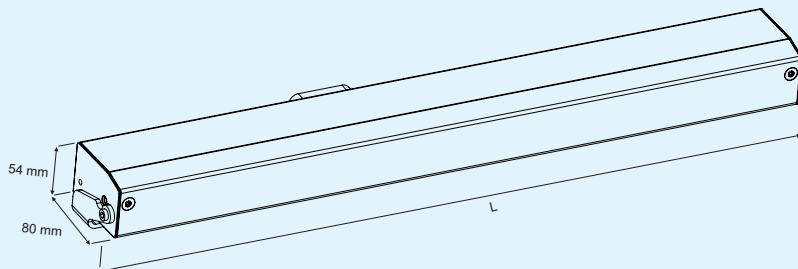
## Installation suggestion 4



WAB 836H



WAB 836E



L = Length, see table of items for data