

WMX504-N / WMX804-N

# CHAIN DRIVE ACTUATOR 24V



## Description

- designed for surface mounting
- WMX504 for comfort ventilation
- WMX804 for smoke and comfort ventilation
- to be used with all window types
- to be used together with  $\pm 24V$  control units or control units with MotorLink™
- can be used together with espagnolette WMB
- external safety edge can be connected directly to the actuator (actuator version 'E')
- 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
- 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 WMX 804-1, double WMX 804-2, triple WMX 804-3 and quad WMX 804-4.

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

# CHAIN DRIVE ACTUATOR 24V

Specifications	
Permitted constant pressure load	45N by 10,000 opening and closing movements (up to 150 N for special version with shorter chain lengths)
Permitted constant tractive load	WMX 504: 150N by 10,000 opening and closing movements WMX 804: 200N by 10,000 opening and closing movements
Locking force	3000N
Permitted short pressure load when chain has run to end stop	100N
Short pressure capacity on motor	max. 150N (e.g. at the beginning of opening: sticky gasket, ice, wind speed)
Chain opening	50 – 250mm in increments of 10mm, maximum opening depends on the window construction
Opening speed	7.5mm/s (programmable from 3mm/s to 9.5mm/s)
Window types	window types and sizes must be agreed with the window supplier and Smoke Control Solutions Ltd
Window width	min. 365mm, maximum width depends on the window construction and the number of window actuators
Window height	min. 300 / 400mm ( see installation suggestions 1 / 3), maximum height depends on the window construction and the number of window actuators
Nominal voltage	24 VDC (max. 10% ripple)
Voltage	20 - 36 VDC
Current consumption	WMX 504: max. 0.5A / WMX 804: max. 1A
Operating condition	-5°C - +74°C, max. 90% relative humidity (not condensing)
Switch-on-duration	ED 40% (max. 4min. per 10min)
Material	lacquered zinc housing with 10mm zinc cromate passivated steel chain and a 1,9m 3-core 0,34mm <sup>2</sup> cable with fast-in/fast-on connectors for connection to the extension cable WLL
Colour	grey (RAL 9006) or white (RAL 9010), other RAL colours available at additional price
Size	332 x 29 x 42mm (W x H x D)
Weight	1.0kg
IP rating	IP20 - when surface mounted / IP32 - when concealed
Fire test	WMX 804: tested in accordance with DIN 18232, part 3.6 (30 minutes at 300°C)
Life span	tested with 10,000 opening and closing movements
Delivery includes	actuator with 1.9m cable
To be ordered separately	brackets
Note	we reserve the right to make technical changes

Brackets	Item no.
Chain bracket with split	WAB 860
Window fitting for wooden windows	WAB 867
Multi bracket	WAB 801
Actuator bracket WAB 804 RAL 9006 (aluminium)	WAB 804 0101
Actuator bracket WAB 804 – RAL 9010 (white)	WAB 804 1101
Z bracket for actuator WMX 804/WMX 824	WAB 805
Z bracket for actuator WMX 804 – for windows with offset sash min. 15mm	WAB 807

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# CHAIN DRIVE ACTUATOR 24V

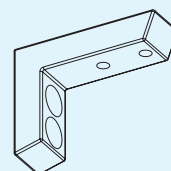
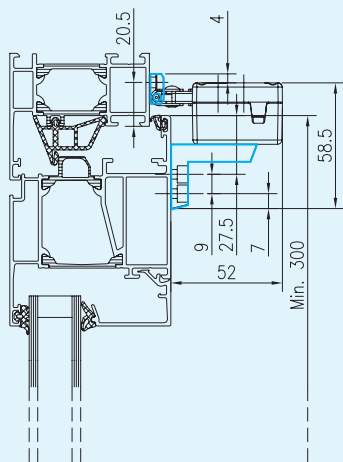
Product code composition						
WMX504 WMX804	n	y	xxx	z	v	3
						Product version: 3
						Certification: 0 = CE, U = CE + UL/ETL
						Actuator hardware version: S = standard, E = with connection for pressure safety
						Chain opening: 50 – 250mm, in increments of 10mm (050 = 50mm)
Colour: G = grey, W = white						
Actuator variant: 1 = single, 2 = double, 3 = triple, 4 = quad						

### Explanation of product code structure

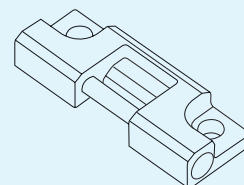
WMX 504-2G070E 03

WMX 504 actuator, double synchronisation grey, 70mm chain opening, with connection for pressure safety, with CE certification, product version 3

### Installation suggestion 1

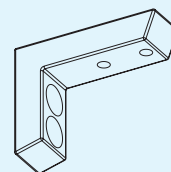
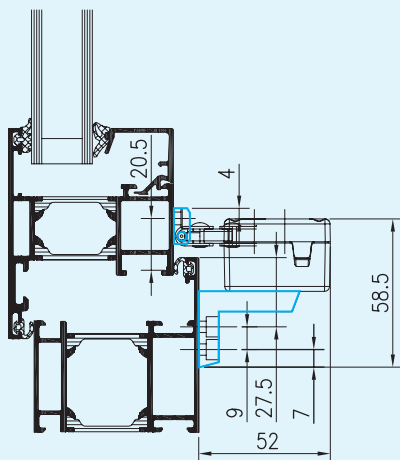


WAB 804 0101

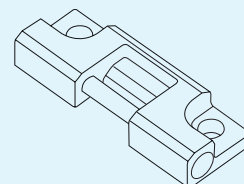


WAB 801

### Installation suggestion 2



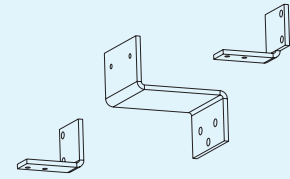
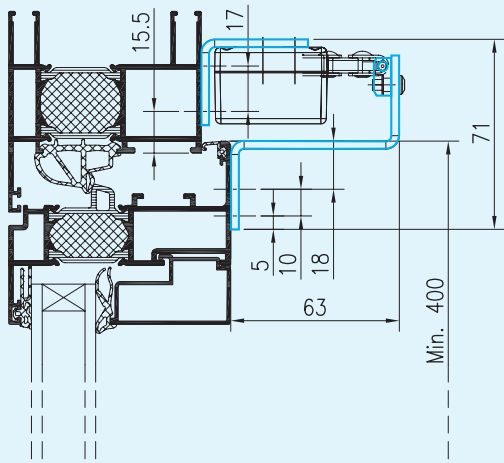
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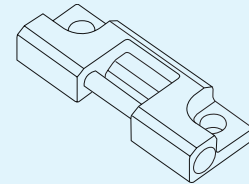
WAB 801

# CHAIN DRIVE ACTUATOR 24V

## Installation suggestion 3

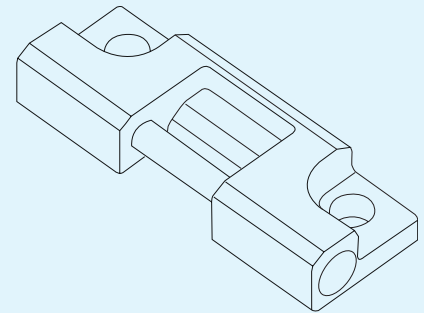
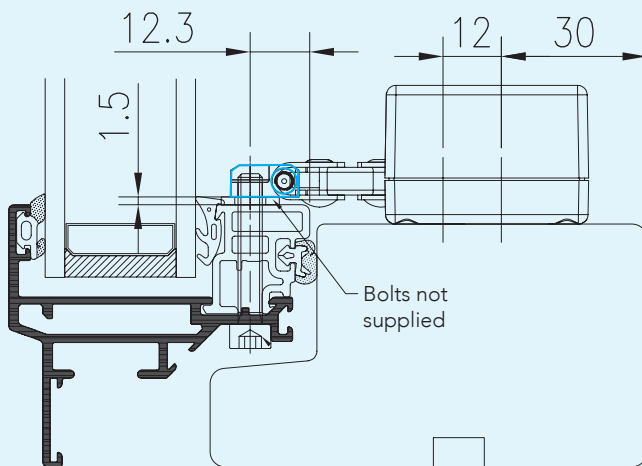


WAB 805



WAB 801

## Installation suggestion 4



WAB 801

