



## WMX 813 / 813 UL

# Chain actuator



Natural  
ventilation



Smoke ventilation  
B300



±24V control



MotorLink®



TrueSpeed™



UL certification  
– Actuators

1.43

### Description

- optimized design for concealed installation
- for smoke and comfort ventilation
- 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
- external safety edge can be connected directly to the actuator (actuator version 'E')
- available with and without UL certification:
  - Europe: order without UL certification
  - USA / Canada: order with UL certification (version UL)
- 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

### 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 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.



Version S



Version E1 UL

**Opening speeds**

Actuators connected to  $\pm 24$  VDC control units (e.g. WUC) can be run with one speed.

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

**Technical specifications**

<b>Pressure force</b>	See diagram
<b>Traction force</b>	See diagram
<b>Locking force</b>	2000N
<b>Chain opening</b>	50 – 1000mm in increments of 10mm, maximum opening depends on the window construction
<b>Opening speed</b>	WMX 813: 1-17 mm/s (TrueSpeed™) WMX 813 UL: 1-11mm/s (TrueSpeed™)
<b>Window type</b>	Concealed installation
<b>Nominal voltage</b>	24V DC (max. 10% ripple)
<b>Voltage</b>	20-36V DC
<b>Max. open-circuit voltage</b>	max. 36V DC
<b>Current consumption</b>	max. 1A
<b>Working condition</b>	-5°C - +74°C, max. 90% relative humidity (not condensing)
<b>Switch-on-duration</b>	ED 40% (max. 4 min. per 10 min)
<b>Colour</b>	Black anodized aluminium, black RAL 9005. RAL colours available at additional price
<b>Size</b>	22 x 33mm ( H x D), length (L) depending on chain stroke – see table.
<b>Weight</b>	400mm stroke: 1.28 kg; 600mm stroke: 1.42 kg; 800mm stroke: 1.63 kg; 1000mm stroke: 1.84 kg;
<b>IP rating</b>	concealed: IP 32
<b>Certification</b>	Actuators with 'U' in the article no. are UL certified accordingly to UL 325 and CAN/CSA-22.2 No. 247-14 and are supplied with UL approved cables UL STYLE 2464. Actuators intended to comply with UL Standard 325 paragraph 34A.3 should satisfy one of the following criteria: a) Be intended for mounting at least 2.44 m (8 ft) above the floor; b) Require constant contact on a control within view of the window to cause movement of the window; c) Have a maximum chain length of 200mm; d) Be provided with external entrapment protection device. External entrapment protection device can be supplied by an alternative supplier; e) The actuators are used in a heat and smoke system.
<b>SHE test</b>	WMX 813 UL: not SHE tested WMX 813: tested in accordance with DIN 18232-3, section 3.6 (30 minutes at 300°C) and part B300 of BS EN 12101-2
<b>Life span</b>	Tested with 10,000 opening and closing movements
<b>Delivery includes</b>	WMX 813 S: Actuator with 5m connection cable (3-core cables 0.34mm <sup>2</sup> ) with fast-in/fast-on connector for WLL cable WMX 813 E1 UL: Actuator with 5m connection cable (3-core cables 0.34mm <sup>2</sup> ) with fast-in/fast-on connector for WLL cable, and 2m cable (2-core cables 0.34mm <sup>2</sup> ) with connection for pressure safety strip Actuators with 'U' in the article no. are supplied with UL approved cables.
<b>To be ordered separately</b>	Brackets and standard extension cables (WLL)
<b>Note</b>	We reserve the right to make technical changes

Chain stroke [mm]	Length (L) [mm]
199	499
400	499
600	599
800	699
1000	799

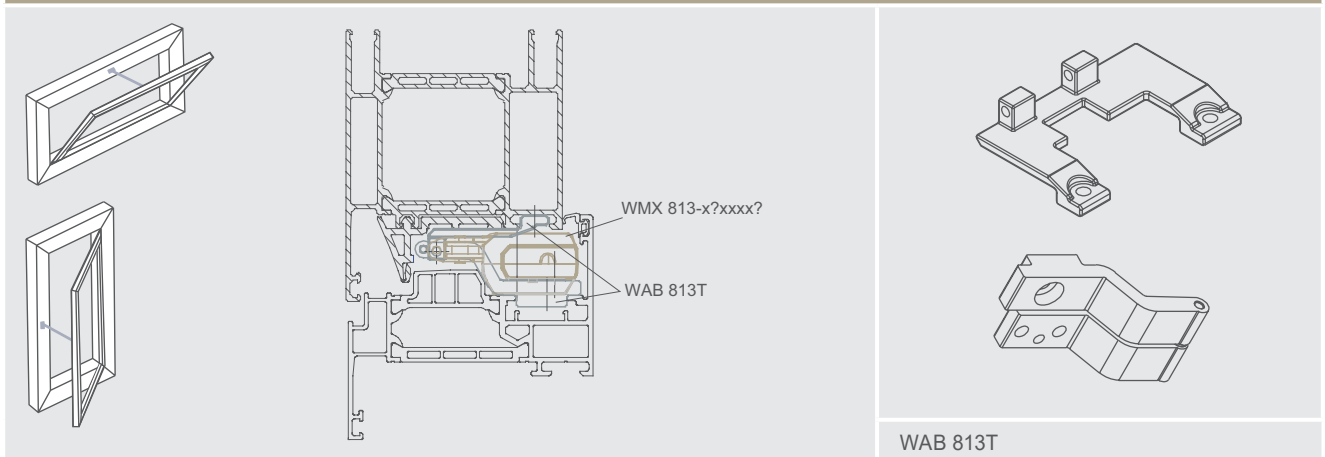
#### Product code composition

WMX 813	-n	x	yyyy	zz	v	1
						<b>Product version: 1</b>
						<b>Certification: 0= CE, U = CE + UL</b>
						<b>Actuator hardware version: S = standard, E1 = with connection for pressure safety strip</b>
						<b>Chain opening: 50 – 1000mm, in increments of 10mm (0050 = 50mm)</b>
						<b>Colour: B = black</b>
<b>Actuator variant: 1= single, 2 = double, 3 = triple, 4 = quad</b>						

#### Explanation of product code structure

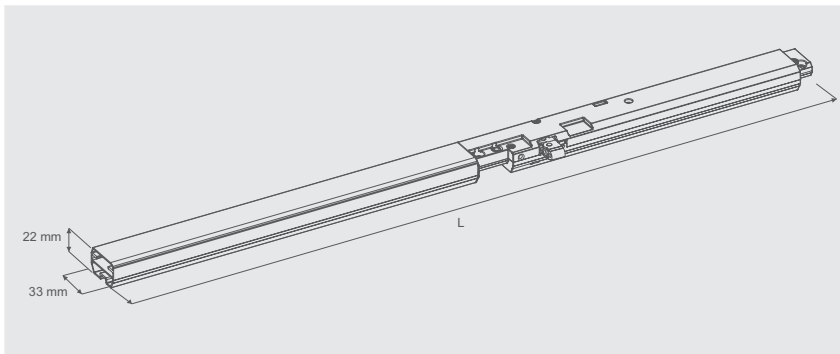
**WMX 813-2B0070S 01** WMX 813 actuator, double synchronisation, black, 70mm chain opening, with CE certification, product version 1.

#### Installation suggestion 1 - Inward Opening



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

