



WMX 523 / 523 UL / 823 / 823 UL Chain actuator



Natural
ventilation



Smoke
ventilation



±24V control



MotorLink®



UL certification
– Actuators

1.51

Description

- optimized design for concealed installation in window profiles
- WMX 523 for comfort ventilation
- WMX 823 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 (version 0)
 - USA / Canada: order with UL certification (version U)
- 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 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.



Opening speeds

Actuators connected to ± 24 VDC control units (e.g. WUC) can be run with one speed – see the following page for opening 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 control always has highest priority.

Technical specifications

| | |
|---|---|
| Locking force | 3000 N |
| Permitted short pressure load when chain has run to end stop | 400 N |
| Short pressure capacity on motor | WMX 523: max. 150 N (e.g. at the beginning of opening: Sticky gasket, ice, wind pressure) WMX 823: max. 200 N (e.g. at the beginning of opening: Sticky gasket, ice, wind pressure) |
| Chain opening | 50 – 500 mm in increments of 10 mm, maximum opening depends on the window construction |
| Opening speed | WMX 523: 7 mm/s / WMX 823: 9 mm/s (programmable 3 mm/s - 9.5 mm/s) |
| Window type | For vertical or horizontal installation in the frame of inward and outward opening windows, window types and sizes must be agreed with the window supplier and WindowMaster |
| Window width | Min. 550 mm, maximum width depends on the window construction and the number of window actuators |
| Window height | Min. 700 mm, maximum height depends on the window construction and the number of window actuators |
| Nominal voltage | 24V DC (max. 10% ripple) |
| Voltage | 20-36V DC |
| Max. open-circuit voltage | Max. 36V DC |
| Current consumption | WMX 523: max. 0.5A / WMX 823: max. 1A |
| Working condition | -5°C - +74°C, max. 90% relative humidity (not condensing) |
| Switch-on-duration | ED 40% (max. 4 min. per 10 min) |
| Material | Lacquered zinc housing and zinc chromate passivated steel chain and a 100 mm cable with fast-in/fast-on connectors for connection to the extension cable WLL |
| Colour | Aluminium (RAL 9006), other RAL colours available at additional price |
| Size | 517 x 30.5 x 42 mm (W x H x D) |
| Weight | 1.3kg |
| IP rating | Surface mounted: IP 20, concealed: IP 32 |
| Certification | Actuators with "U" in the article no. are L certified accordingly to UL 325 and CAN/CSA-22.2 No. 247-14 and is supplied with UL approved cables UL STYLE 2464 (primary for U.S./Canada) |
| SHE test | WMX 823: In accordance with DIN 18232-3, section 3.6 (30 minutes at 300°C) and part B300 of BS EN 12101-2 WMX 523 / 823U: Not SHE tested |
| Life span | Tested with 10,000 opening and closing movements |
| Delivery includes | Actuator with 100 mm connection cable with fast-in/fast-on connector for WLL cable |
| To be ordered separately | Brackets and standard extension cables (WLL) |
| Note | We reserve the right to make technical changes |

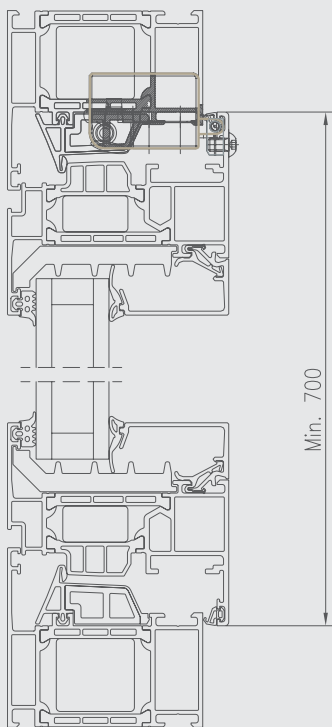
| Brackets and accessories | Item no. |
|---|--------------|
| Chain bracket with tight-fitting bolt, WMX, for sash or frame | WAB 801 |
| Chain bracket for integrated WMX, for sash | WAB 833 |
| Chain bracket with split, for sash or frame | WAB 860 |
| Chain bracket for Schüco systems, for sash | WAB 863 |
| Chain bracket for wooden windows, for sash | WAB 867 |
| Mounting profile for WMX 820 (tested in accordance with EN 12101-2) | WAB 909 0384 |
| See separate product sheets for further information. | |

| Product code composition <i>(actuator supplied in sealed plastic packaging)</i> | | | | | | |
|---|---|---|-----|---|---|--|
| WMX 523 WMX 823 | -n | x | xxx | x | x | 3 |
| | | | | | | Product version: 3 |
| | | | | | | Certification: 0 = CE, U = CE + UL |
| | | | | | | Actuator hardware version: S = standard, E = with connection for pressure safety strip (E: not UL actuator) |
| | | | | | | Chain opening: 50 – 500 mm, in increments of 10mm (050 = 50 mm) |
| | | | | | | Colour: G = grey |
| | | | | | | Actuator variant: 1= single, 2 = double, 3 = triple, 4 = quad |
| Explanation of product code structure | | | | | | |
| WMX 523-2G070E 03 | WMX 523 actuator, double synchronisation, grey, 70 mm chain opening, with connection for pressure safety strip, with CE certification, product version 3. | | | | | |

WMX 523 / 523 UL / 823 / 823 UL

Chain actuator

Installation suggestion



For questions regarding the concealed installation – contact WindowMaster

