



WMD 820 Door actuator 250N



Natural
ventilation



Smoke ventilation $\pm 24V$ control
B300

24V



MotorLink®

2.12

Description

- Designed for doors and surface mounting
- For replacement air for windows and doors
- Can be used together with espagnolette WMB
- Synchronization of up to two actuators – no need for an external synchronization module
- Genuine position feedback 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
Output for electronic lock 24V DC / max. 1A
Potential free feedback for fully open (special version)
- Please check/verify that loads acting on the WMD 820 conforms to the load constraints of the WMD 820
- Test before commissioning

Actuator variants

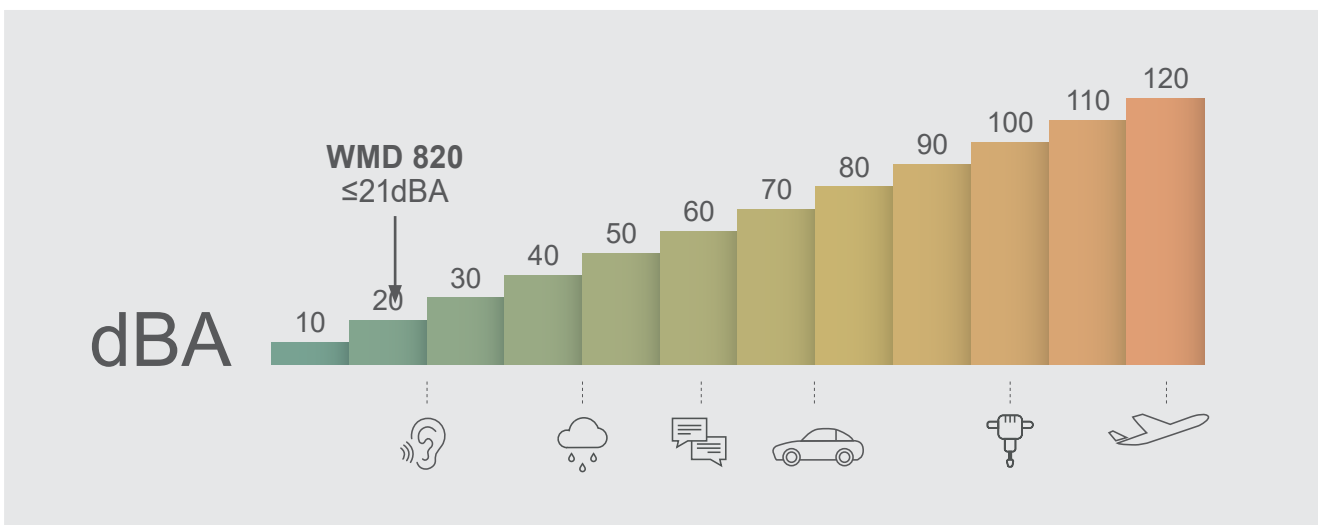
The actuator is available in several different versions inward or outward opening versions: Single actuator (-1); double actuator (-2); four actuators, 2 times double with sequential control (-4).

The synchro actuators (-2 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 two actuators can be mounted on the same window – with no need for an external synchronization module.

Opening speeds

The number of actuator running speeds depends on the type of control unit to which the actuator is connected.

Technical specifications	
Traction force on the arm roller	250N
Locking force	2000N
Maximum opening angle	OU 90° / IN 98°
Opening speed	< 60 sec
Sound pressure level	≤21 dBA (operational speed: 0,2°/s), ≤39 dBA (operational speed: 2°/s)
Window & Door types	Side hung windows & doors – vent or door size should be confirmed with both the window supplier and WindowMaster
Nominal voltage	24 VDC (max. 10% ripple)
Voltage	20 - 36 VDC
Open circuit voltage	Max. 36 VDC
Potential free output	F version, 18Ω, max 100 mA
Current consumption	Max. 1A
Electronic lock	S version, output 24V DC / max. 1A
Consumption of power	Max. 24W
Operating conditions	-5°C - +74°C, max. 90% relative humidity (not condensing)
Switch-on-duration	ED 40% (max. 4min. per 10min)
Material	Anodised aluminium housing with stainless steel chain With 5m grey silicone cable 5-cores 0.34m ²
Colour	Anodized aluminium. RAL colours available at an additional price
Size	34 x 76mm (H x D), length (L) 668mm – (688mm incl. brackets) / (D = 81mm incl. arm roll)
Weight	3.5kg
IP rating	IP32
Fire test	Tested according to B300, part 3.6 (30 min. / 300°)
Certification	B300 tested according to EN 12101-2
Life span	Tested with 10,000 opening and closing movements
Delivery includes	Actuator with 5m cable
To be ordered separately	Brackets
Note	We reserve the right to make technical changes



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.

Items	Maximum opening angle	Initial pressure force [N]	Length (L) [mm] without brackets	Item no.
One actuator on a door				
Single actuator	98°	250	668	WMD 820-1G IN 1S 01
				WMD 820-1G IN 2S 01
				WMD 820-1G IN 1E 01
				WMD 820-1G IN 1F 01
	90°			WMD 820-1G OU 1S 01
				WMD 820-1G OU 2S 01
				WMD 820-1G OU 1E 01
				WMD 820-1G OU 1F 01
Two actuators on a double door (sequential control)				
First actuator a double door				
Single actuator	98°	250	668	WMD 820-2G IN 1S 01
	90°			WMD 820-2G OU 1S 01
Second actuator on a double door				
Single actuator	98°	250	668	WMD 820-2G IN 2S 01
				WMD 820-2G IN 2E 01
				WMD 820-2G IN 2F 01
	90°			WMD 820-2G OU 2S 01
				WMD 820-2G OU 2E 01
				WMD 820-2G OU 2F 01
Four actuators on a double door (sequential control)				
First two actuators on a double door				
Double actuator	98°	250	668	WMD 820-4G IN 1S 01
	90°			WMD 820-4G OU 1S 01
Second two actuators on a double door				
Double actuator	98°	250	668	WMD 820-4G IN 2S 01
				WMD 820-4G IN 2F 01
				WMD 820-4G IN 2E 01
	90°			WMD 820-4G OU 2S 01
				WMD 820-4G OU 2F 01
				WMD 820-4G OU 2E 01
Two actuators on a window (synchro)				
Double actuator	98°	250	668	WMD 820-2G IN 0S 01
				WMD 820-2G IN 0E 01
				WMD 820-2G IN 0F 01
	90°			WMD 820-2G OU 0S 01
				WMD 820-2G OU 0E 01
				WMD 820-2G OU 0F 01

Actuators approved according to EN 12101-2 – contact WindowMaster

Description of product code composition

WMD 820	-nG	XX	X	X	01	
					Product version: 1	
					S= Standard, E= Entrapment, F= Feedback	
					0= No delay, 1= Short delay, 2= Long delay	
					Inward (IN) or Outward (OU)	
					Actuator variant: 1 = single, 2 = double, 4 = 2 x double (sequential) & G = grey	

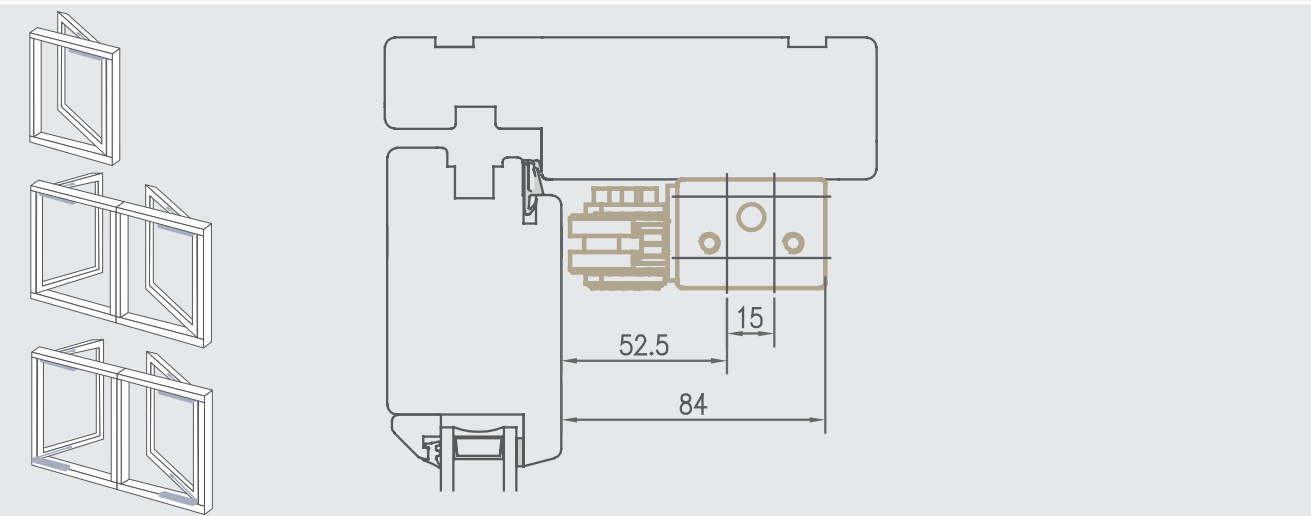
Example of product code

WMD 820-1G IN 1S 01 WMD 820 actuator, single, grey, IN inwards, short delay, standard, product version 1

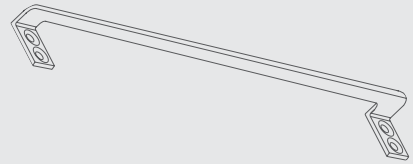
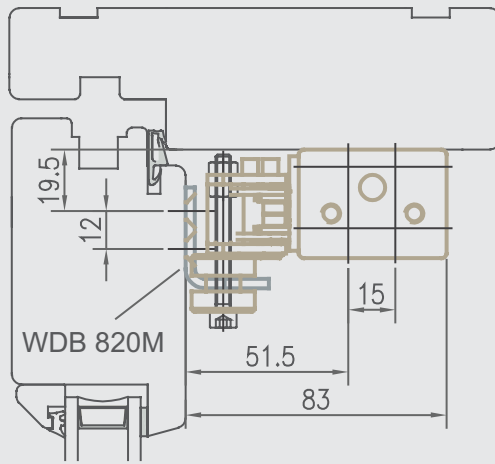
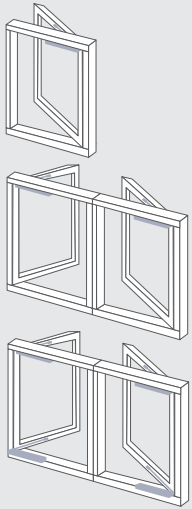
Accessories	Item no.
Actuator bracket for WMD 820	WDB 820B
Actuator bracket inwards for WMD 820	WAB 825
Actuator bracket outwards for WMD 820	WDB 820M
Actuator bracket Z-bracket inwards for WMD 820	WDB 820L
Actuator bracket Z-bracket inwards for WMD 820	WDB 820R

See separate product sheets for further information.

Installation suggestion 1 - Side-hung, outward opening

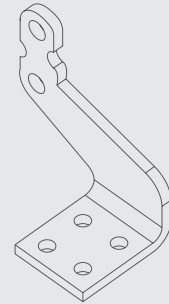
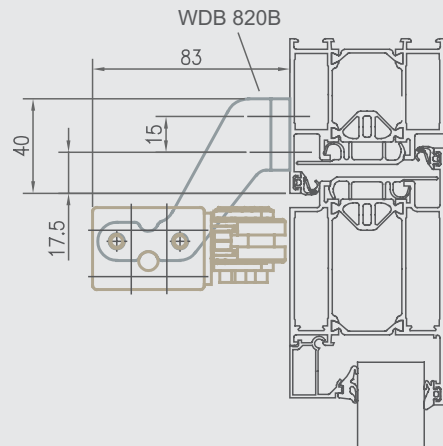
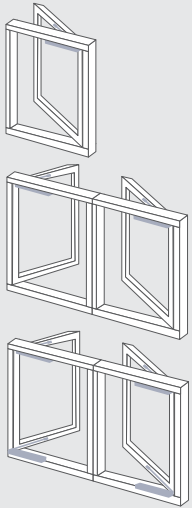


Installation suggestion 2 - Side-hung, outward opening



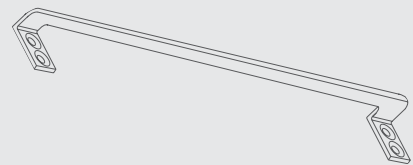
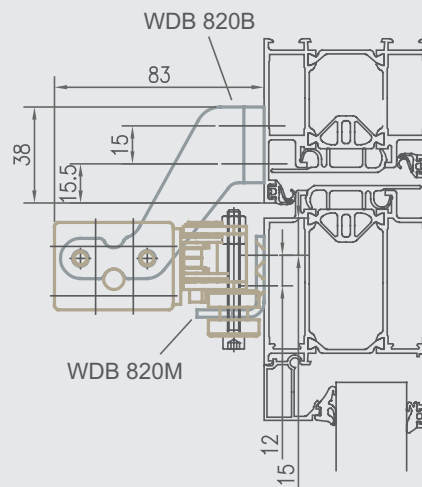
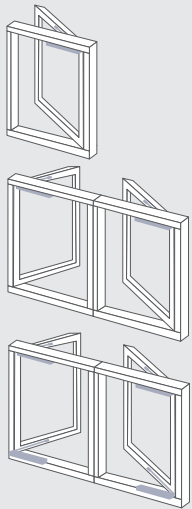
WDB 820M

Installation suggestion 3 - Side-hung, outward opening

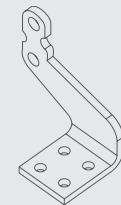


WDB 820B

Installation suggestion 4 - Side-hung, outward opening



WDB 820M

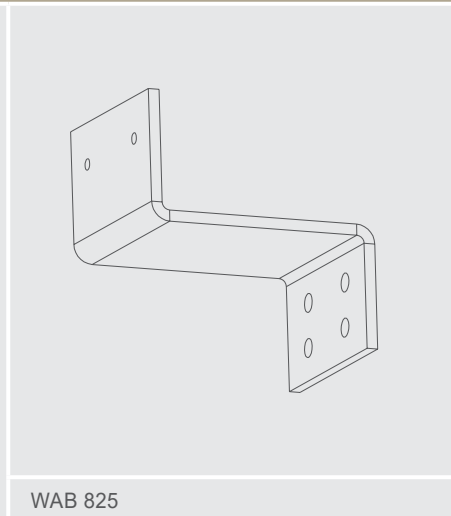
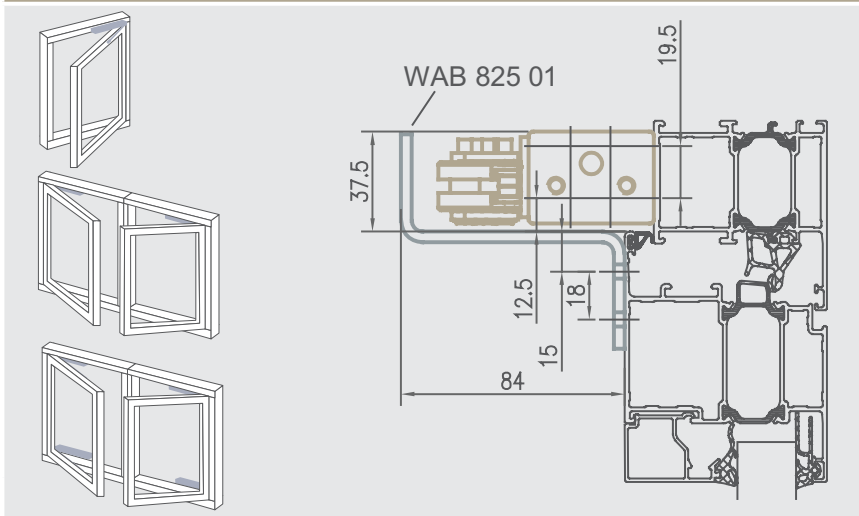


WDB 820B

WMD 820

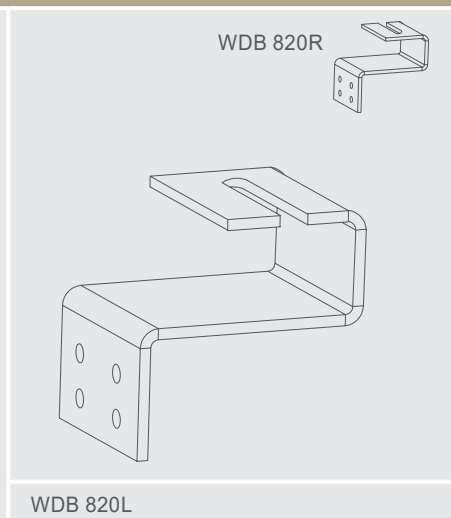
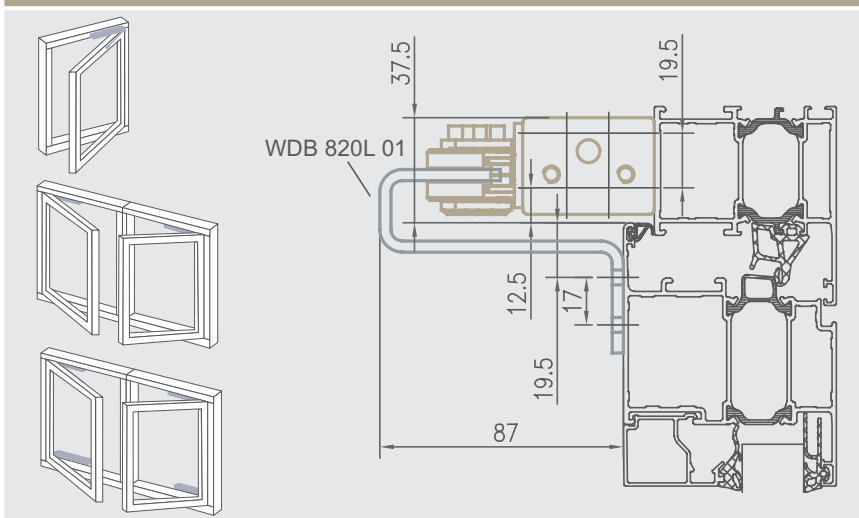
Door actuator 250N

Installation suggestion 5 - Side-hung, inward opening



WAB 825

Installation suggestion 6 - Side-hung, inward opening



WDB 820L

