

# EMG Electromagnetic Locks Global



dormakaba Electromagnetic Locks Global

# **Contents**

EMG Introduction	04
EMG Surface Mounted	08
EMG Mortise Mounted	16
EMG Weather Resistant	22
Mountina Brackets	26

### Area of use

EMG electromagnetic locks offer a simple and economical locking solution for access control systems in commercial, public and residential buildings. A wide range of maglock types and mounting brackets ensure the right fit on many door types and applications.

Maglocks can be easily installed. As the electrified locks are installed on door frames, there is no need to wire the door leafs. Good upgrade option for existing doors with traditional mechanical hardware.

All maglocks operate in fail-safe mode, ensuring safe passage at emergency doors in case of a power outage. Safe operation with pre-load applied.

EMG maglocks offer different monitoring options with lock and door status signals and a bi-colored LED lens.

Maglocks are suitable for long lifetime applications, as the holding force is generated by an electromagnetic field and not by mechanically interacting components that could wear out.

### Certificates

Certification	CE, RoHS, UKCA	
Performance test	Yes (holding force, durability 350.000 cycles)	P
Fire resistance test	Yes	<b>b</b>
Corrosion resistance test	Yes (48h)	<b>\line\$</b>

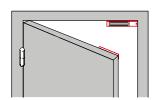
# LED design

Big LED lens in oblong design. High luminosity.

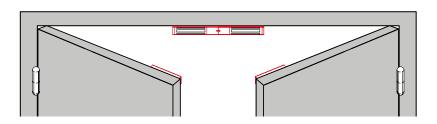
Green light	locked
Red light	not locked
Not illuminated	no power supply



# Typical mounting applications

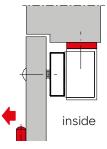


Single swing door

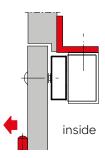


Double swing door

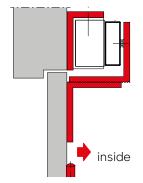
Regular installation



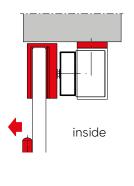
L-bracket for narrow door frame



LZ bracket for inswing doors

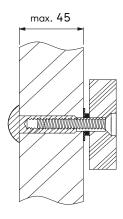


**U-bracket for frameless** glass doors

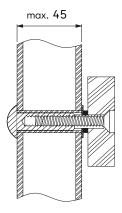


# Mounting of the armature plate

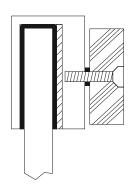
Wooden door



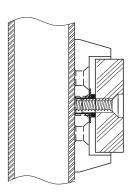
Aluminum or **PVC** door



Glass door 10 to 12.5 mm **U** bracket



Armature plate holder when door thickness > 45 mm or the door cannot be drilled through



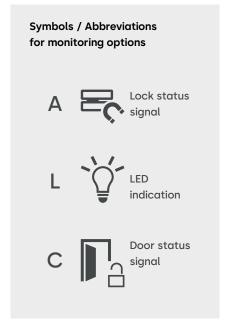
# Terminology

EMG - Electro-Magnetic Locks - New Standard Range Global

Maglock	Holding force	Туре	Signals						
series	series (lbf, pound force)		Lock Status	LED	Door Status				
EMG	300 600 1200	Single () Double (-2) Mortise (M) Weather (W)	А	L	С				

### **EMG Brackets**

Maglock series	Holding force (lbf, pound force)	Type Mounting accessories (optional)				
EMG-B	300 600 1200	L LC LZ LZC U UU UUR AH AHC AB W L W LZ	bracket for outswing doors with narrow frame covered L bracket bracket for inswing doors covered LZ bracket bracket for frameless glass doors bracket for full glass application (door and frame) bracket for right door leaf of double full glass doors (UU for left door) armature plate holder for door thicknesses greater than 45 mm armature plate holder for maglock types with door status signal (C) armature base as alternative to AH/AHC L bracket for weather resistant maglock types LZ bracket for weather resistant			
			maglock types			



Combination Matrix	Brackets	EMG-B 300 L	EMG-B 300 LZ	EMG-B 300 U	EMG-B 600 L	EMG-B 600 LC	EMG-B 600 LZ	EMG-B 600 LZC	EMG-B 600 U	EMG-B 600 UU	EMG-B 600 UUR	EMG-B 600 AH	EMG-B 600 AHC	EMG-B 600 AB	EMG-B 1200 L	EMG-B 1200 LC	EMG-B 1200 LZ	EMG-B 1200 LZC	EMG-B 1200 U	EMG-B 1200 AH	EMG-B 1200 AHC	EMG-B 1200 AB	EMG-B 600-W L	EMG-B 600-W Z	EMG-B 1200-W L	EMG-B 1200-W Z
Maglocks																										
EMG 300		•	•	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EMG 300 AL		•	•	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EMG 300-2		•	•	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EMG 300-2 AL		•	•	•	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EMG 300-M		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EMG 300-M A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EMG 600		-	-	-	•	•	•	•	•	•	-	•	-	•	-	-	-	-	-	-	-	-	-	-	-	-
EMG 600 AL		-	-	-	•	•	•	•	•	•	-	•	-	•	-	-	-	-	-	-	-	-	-	-	-	-
EMG 600 ALC		-	-	-	•	•	•	•	•	•	-	-	•	•	-	-	-	-	-	-	-	-	-	-	-	-
EMG 600-2		-	-	-	•	•	•	•	•	•	•	•	-	•	-	-	-	-	-	-	-	-	-	-	-	-
EMG 600-2 AL		-	-	-	•	•	•	•	•	•	•	•	-	•	-	-	-	-	-	-	-	-	-	-	-	-
EMG 600-2 ALC		-	-	-	•	•	•	•	•	•	•	-	•	•	-	-	-	-	-	-	-	-	-	-	-	-
EMG 600-M		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EMG 600-M A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EMG 600-W A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	•	•	-	-
EMG 1200		-	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	•	-	-	-	-
EMG 1200 AL		-	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	•	-	-	-	-
EMG 1200 ALC		-	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	•	•	-	•	•	-	-	-	-
EMG 1200-2		-	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	•	-	-	-	-
EMG 1200-2 AL		-	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	•	•	•	-	•	-	-	-	-
EMG 1200-2 ALC		-	-	-	-	-	-	-	-	-	-	-	-	-	•	•	•	•	•	-	•	•	-	-	-	-
EMG 1200-M		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EMG 1200-M A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EMG 1200-W A		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	•	•
EMG 1500-W A		-	_	-	_	-	-	-	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_	-	•	•

<sup>•</sup> Yes - No



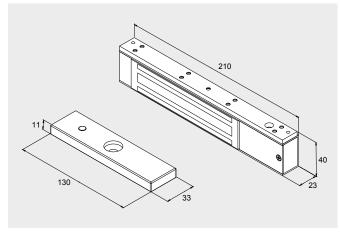
# **EMG Surface Mounted**

		Holding	Swing	g door		Monitoring							
Тур	Typ Article No.	force (lbf)	Single	Double	without	lock status A	LED lens L	door status C					
EMG 300	1100003130100		•		•								
EMG 300 AL	1100003130102	700	•			•	•						
EMG 300-2	1100003130104	300		•	•								
EMG 300-2 AL	1100003130106	]		•		•	•						
EMG 600	1100003130201		•		•								
EMG 600 AL	1100003130203		•			•	•						
EMG 600 ALC	1100003130205	1	•			•	•	•					
EMG 600-2	1100003130211	600		•	•								
EMG 600-2 AL	1100003130213			•		•	•						
EMG 600-2 ALC	1100003130215			•		•	•	•					
EMG 1200	1100003130301		•		•								
EMG 1200 AL	1100003130303	]	•			•	•						
EMG 1200 ALC	1100003130305	1200	•			•	•	•					
EMG 1200-2	1100003130311	1200		•	•								
EMG 1200-2 AL	1100003130313	]		•		•	•						
EMG 1200-2 ALC	1100003130315	]		•		•	•	•					

### EMG 300 / EMG 300 AL

Single electromagnetic lock for interior application with low security level. Aluminum housing.

Typical use case: single leaf swing doors (lightweight, glass), cabinets. Top mounting bracket and mounting material for regular installation included. Other bracket options described in chapters "EMG Introduction" and "Mounting Brackets".



Size L x H x W (mm) Maglock 210 x 40 x 23 – height including 5 mm top-bracket Armature plate 130 x 33 x 11

	EMG 300
Holding force	up to 300 lbf
Voltage	24 V DC (default)   12 V DC selectable
Current input at 12 V DC	300 mA ±10%
Current input at 24 V DC	150 mA ±10%
Operating temperature	-10 to 55°C   14 to 131°F
Operating principle	Fail-safe (unlocked if power is off)
LED colors*	Green = locked   Red = not locked   Off = no power supply

<sup>\*</sup> applicable for AL type





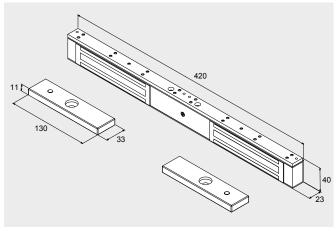
**EMG 300 AL** Article No. 1100003130102



# EMG 300-2 / EMG 300-2 AL

Double electromagnetic lock for interior application with low security level. Aluminum housing.

Typical use case: double leaf swing doors (lightweight, glass). Top mounting bracket and mounting material for regular installation included. Other bracket options described in chapters "EMG Introduction" and "Mounting Brackets".



Size L x H x W (mm) Maglock 420 x 40 x 23 – height including 5 mm top-bracket Armature plate (2x) 130 x 33 x 11

	EMG 300-2
Holding force	2 x up to 300 lbf
Voltage	24 V DC (default)   12 V DC selectable
Current input at 12 V DC	2 x 300 mA ±10%
Current input at 24 V DC	2 x 150 mA ±10%
Operating temperature	-10 to 55°C   14 to 131°F
Operating principle	Fail-safe (unlocked if power is off)
LED colors*	Green = locked   Red = not locked   Off = no power supply

<sup>\*</sup> applicable for AL type

EMG 300-2 Article No. 1100003130104



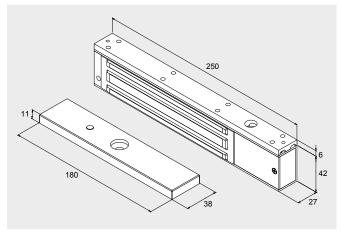
**EMG 300-2 AL** Article No. 1100003130106



# EMG 600 / EMG 600 AL / EMG 600 ALC

Single electromagnetic lock for interior application with low to medium security level. Aluminum housing.

Typical use case: single leaf swing doors (standard, glass). Top mounting bracket and mounting material for regular installation included. Other bracket options described in chapters "EMG Introduction" and "Mounting Brackets".



Size L x H x W (mm) Maglock 250 x 48 x 27 – height including 6 mm top-bracket Armature plate 180 x 38 x 11 | 190 x 38 x 11 (ALC type)

	EMG 600
Holding force	up to 600 lbf
Voltage	24 V DC (default)   12 V DC selectable
Current input at 12 V DC	480 mA ±10%
Current input at 24 V DC	240 mA ±10%
Operating temperature	-10 to 55°C   14 to 131°F
Operating principle	Fail-safe (unlocked if power is off)
LED colors*	Green = locked   Red = not locked   Off = no power supply

<sup>\*</sup> applicable for AL and ALC types

EMG 600 Article No. 1100003130201



**EMG 600 AL** Article No. 1100003130203



EMG 600 ALC

Article No. 1100003130205

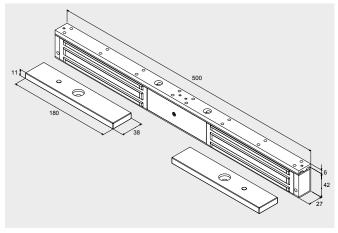
Lock status signal

LED indication

Door status signal

### EMG 600-2 / EMG 600-2 AL / EMG 600-2 ALC

Double electromagnetic lock for interior application with low to medium security level. Aluminum housing. Typical use case: double leaf swing doors (standard, glass). Top mounting bracket and mounting material for regular installation included. Other bracket options described in chapters "EMG Introduction" and "Mounting Brackets".



Size L x H x W (mm)
Maglock 500 x 48 x 27 – height including 6 mm top-bracket
Armature plate 180 x 38 x 11   190 x 38 x 11 (ALC type)

	EMG 600-2
Holding force	2 x up to 600 lbf
Voltage	24 V DC (default)   12 V DC selectable
Current input at 12 V DC	2 x 480 mA ±10%
Current input at 24 V DC	2 x 240 mA ±10%
Operating temperature	-10 to 55°C   14 to 131°F
Operating principle	Fail-safe (unlocked if power is off)
LED colors*	Green = locked   Red = not locked   Off = no power supply

<sup>\*</sup> applicable for AL and ALC types

EMG 600-2 Article No. 1100003130211



**EMG 600-2 AL** Article No. 1100003130213



EMG 600-2 ALC Article No. 1100003130215

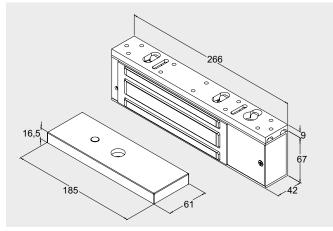


# EMG 1200 / EMG 1200 AL / EMG 1200 ALC

Single electromagnetic lock for interior application with medium to high security level. Aluminum housing.

Typical use case: single leaf swing doors. Top mounting bracket and mounting material for regular installation included.

Other bracket options described in chapters "EMG Introduction" and "Mounting Brackets".



Size L x H x W (mm) Maglock 266 x 76 x 42 – height including 9 mm top-bracket Armature plate 185 x 61 x 16.5 | 201 x 61 x 16.5 (ALC type)

	EMG 1200
Holding force	up to 1200 lbf
Voltage	24 V DC (default)   12 V DC selectable
Current input at 12 V DC	420 mA ±10%
Current input at 24 V DC	210 mA ±10%
Operating temperature	-10 to 55°C   14 to 131°F
Operating principle	Fail-safe (unlocked if power is off)
LED colors*	Green = locked   Red = not locked   Off = no power supply

<sup>\*</sup> applicable for AL and ALC types

**EMG 1200** Article No. 1100003130301



**EMG 1200 AL** Article No. 1100003130303







EMG 1200 ALC Article No. 1100003130305







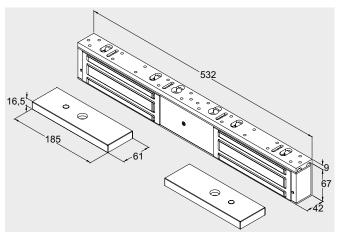


### EMG 1200-2 / EMG 1200-2 AL / EMG 1200-2 ALC

Double electromagnetic lock for interior application with medium to high security level. Aluminum housing.

Typical use case: double leaf swing doors. Top mounting bracket and mounting material for regular installation included.

Other bracket options described in chapters "EMG Introduction" and "Mounting Brackets".



Size L x H x W (mm) Maglock  $532 \times 76 \times 42$  – height including 9 mm top-bracket Armature plate  $185 \times 61 \times 16.5$  |  $201 \times 61 \times 16.5$  (ALC type)

	EMG 1200-2
Holding force	2 x up to 1200 lbf
Voltage	24 V DC (default)   12 V DC selectable
Current input at 12 V DC	2 x 420 mA ±10%
Current input at 24 V DC	2 x 210 mA ±10%
Operating temperature	-10 to 55°C   14 to 131°F
Operating principle	Fail-safe (unlocked if power is off)
LED colors*	Green = locked   Red = not locked   Off = no power supply

<sup>\*</sup> applicable for AL and ALC types

**EMG 1200-2** Article No. 1100003130311



**EMG 1200-2 AL** Article No. 1100003130313



EMG 1200-2 ALC Article No. 1100003130315







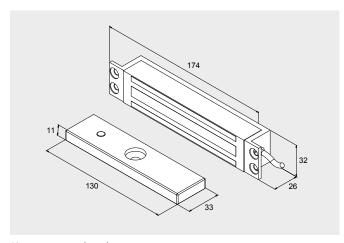


# **EMG Mortise Mounted**

		Holding	Monitoring	
Тур	Article No.	force (lbf)	without	lock status A
EMG 300-M	1100003130108	300	•	
EMG 300-M A	1100003130109	300		•
EMG 600-M	1100003130217	600	•	
EMG 600-M A	1100003130218	600		•
EMG 1200-M	1100003130317	1200	•	
EMG 1200-M A	1100003130318	1200		•

# EMG 300-M / EMG 300-M A

Single mortise mounted maglock for low security applications. Aluminum housing. Typical use case: interior sliding doors. Mounting material included.



	EMG 300-M
Holding force	up to 300 lbf
Voltage	24 V DC (default)   12 V DC selectable
Current input at 12 V DC	300 mA +10%
Current input at 24 V DC	150 mA +10%
Operating temperature	-10 to 55°C   14 to 131°F
Operating principle	Fail-safe (unlocked if power is off)

Size L x H x W (mm) Maglock 174 x 32 x 26 Armature plate 130 x 33 x 11

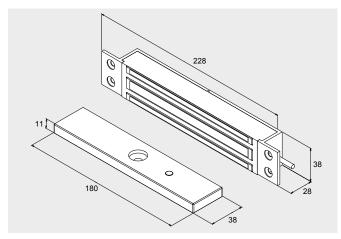
# EMG 300-M Article No. 1100003130108





# EMG 600-M / EMG 600-M A

Single mortise mounted maglock for medium security applications. Aluminum housing. Typcial use case: interior sliding doors. Mounting material included.



	EMG 600-M
Holding force	up to 600 lbf
Voltage	24 V DC (default)   12 V DC selectable
Current input at 12 V DC	480 mA ±10%
Current input at 24 V DC	240 mA ±10%
Operating temperature	-10 to 55°C   14 to 131°F
Operating principle	Fail-safe (unlocked if power is off)

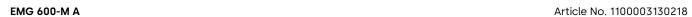
Size L x H x W (mm)

Maglock 228 x 38 x 28

Armature plate 180 x 38 x 11

**EMG 600-M** Article No. 1100003130217

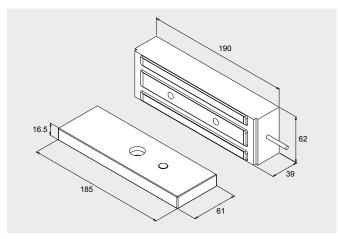






# EMG 1200-M / EMG 1200-M A

Single mortise mounted maglock for medium to high security applications. Aluminum housing. Mounting material included.



	EMG 1200-M
Holding force	up to 1200 lbf
Voltage	24 V DC (default)   12 V DC selectable
Current input at 12 V DC	420 mA ±10%
Current input at 24 V DC	210 mA ±10%
Operating temperature	-10 to 55°C   14 to 131°F
Operating principle	Fail-safe (unlocked if power is off)

Size L x H x W (mm)

Maglock 190 x 62 x 39

Armature plate 185 x 61 x 16.5











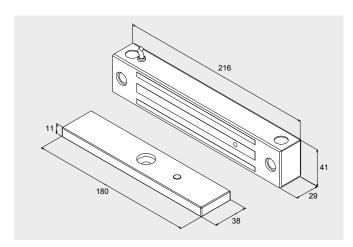
### **EMG Weather Resistant**

		Holding	Monitoring
Тур	Article No.	force (lbf)	lock status A
EMG 600-W A	1100003130219	600	•
EMG 1200-W A	1100003130319	1200	•
EMG 1500-W A	1100003130320	1500	•

### **EMG 600-W A**

Single weather resistant maglock for low to medium security outdoor applications. Stainless steel housing.

Typical use case: exterior doors or gates. Mounting bracket and installation material included. Other bracket options described in chapters "EMG Introduction" and "Mounting Brackets".



	EMG 600-W A
Holding force	up to 600 lbf
Voltage	24 V DC (default)   12 V DC selectable
Current input at 12 V DC	480 mA ±10%
Current input at 24 V DC	240 mA ±10%
Operating temperature	-10 to 55°C   14 to 131°F
Operating principle	Fail-safe (unlocked if power is off)

Size L x H x W (mm)

Maglock 216 x 41 x 29

Armature plate 180 x 38 x 11

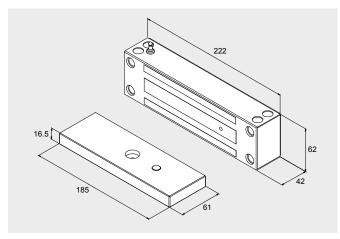
**EMG 600-W A** Article No. 1100003130219



### **EMG 1200-W A**

Single weather resistant maglock for medium security outdoor applications. Stainless steel housing.

Typical use case: exterior doors or gates. Mounting bracket and installation material included. Other bracket options described in chapters "EMG Introduction" and "Mounting Brackets".



	EMG 1200-W A
Holding force	up to 1200 lbf
Voltage	24 V DC (default)   12 V DC selectable
Current input at 12 V DC	420 mA ±10%
Current input at 24 V DC	210 mA ±10%
Operating temperature	-10 to 55°C   14 to 131°F
Operating principle	Fail-safe (unlocked if power is off)

Size L x H x W (mm)

Maglock 222 x 62 x 42

Armature plate 185 x 61 x 16.5

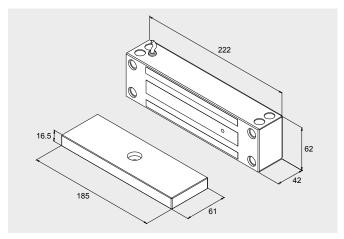
### **EMG 1200-W A** Article No. 1100003130319



### **EMG 1500-W A**

Single weather resistant maglock for high security outdoor applications. Stainless steel housing.

Typical use case: exterior doors or gates. Mounting bracket and installation material included. Other bracket options described in chapters "EMG Introduction" and "Mounting Brackets".



	EMG 1500-W A
Holding force	up to 1500 lbf
Voltage	24 V DC (default)   12 V DC selectable
Current input at 12 V DC	480 mA ±10%
Current input at 24 V DC	240 mA ±10%
Operating temperature	-10 to 55°C   14 to 131°F
Operating principle	Fail-safe (unlocked if power is off)

Size L x H x W (mm) Maglock 222 x 62 x 42 Armature plate 185 x 61 x 16.5

**EMG 1500-W A** Article No. 1100003130320



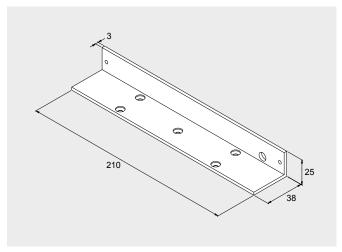


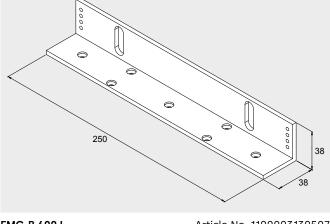
# **Mounting Brackets**

The bracket terminology is described in the chapter "EMG Introduction".

The combination matrix indicates which brackets are suitable for which maglock types.

### L Brackets / LC Bracket



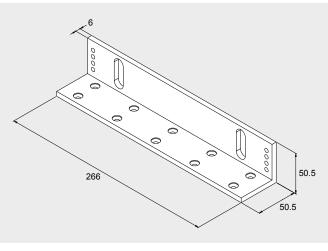


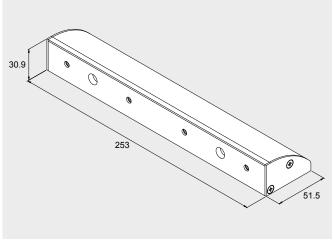
EMG-B 300 L

Article No. 1100003130501

EMG-B 600 L

Article No. 1100003130507



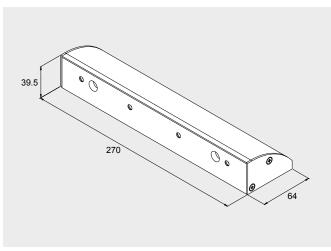


EMG-B 1200 L

Article No. 1100003130523

**EMG-B 600 LC** 

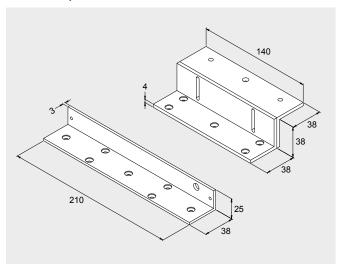
Article No. 1100003130509

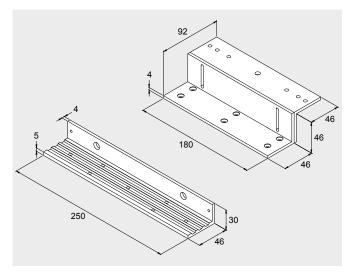


EMG-B 1200 LC

Article No. 1100003130525

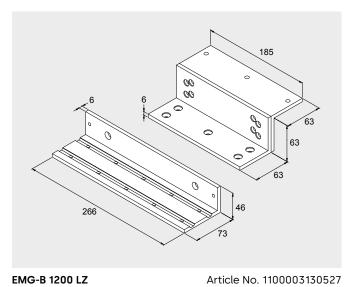
### LZ Brackets / LZC Bracket

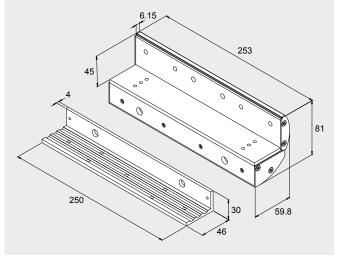




EMG-B 300 LZ Article No. 1100003130503



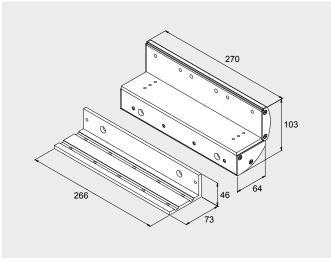




EMG-B 1200 LZ

EMG-B 600 LZC

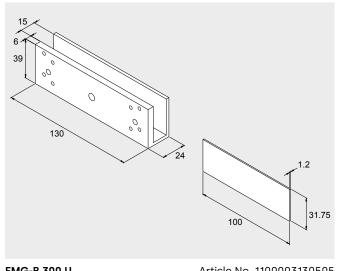


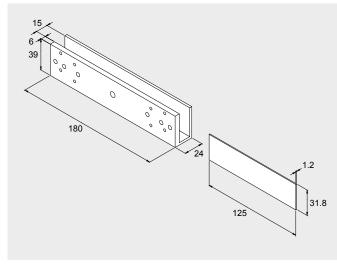


EMG-B 1200 LZC

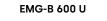
Article No. 1100003130529

### U Brackets / UU Bracket

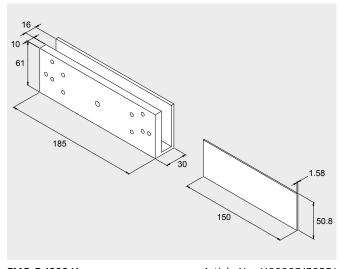


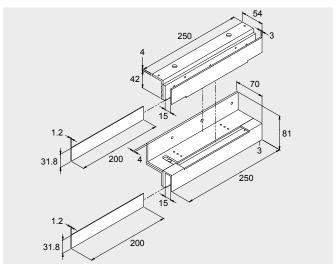


Article No. 1100003130505 EMG-B 300 U



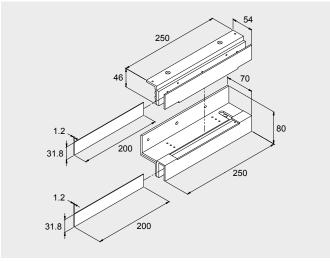
Article No. 1100003130515





EMG-B 1200 U Article No. 1100003130531

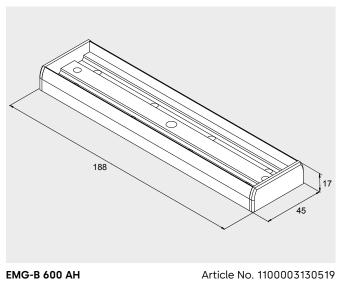


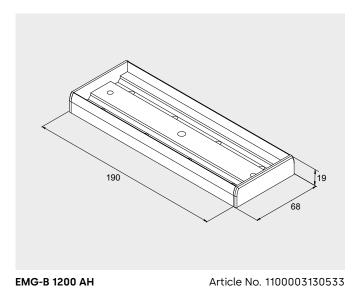


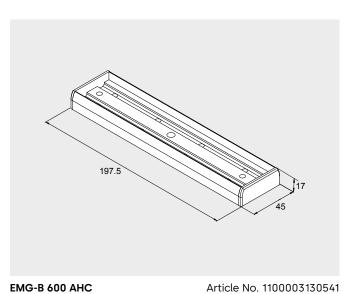
EMG-B 600 UUR

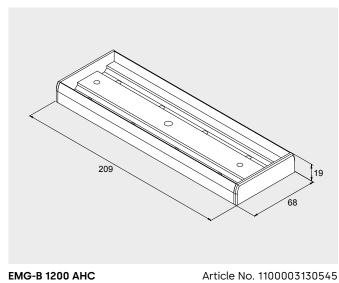
Article No. 1100003130543

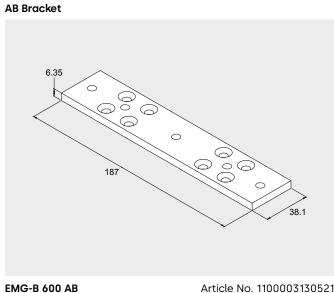
### AH / AHC Brackets

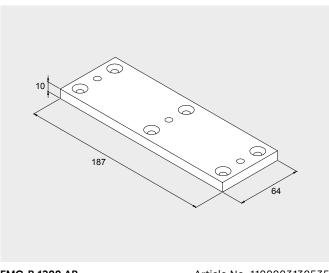






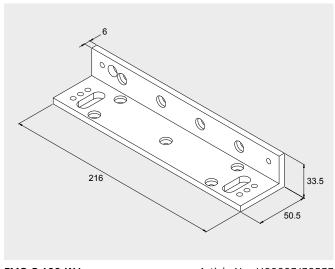


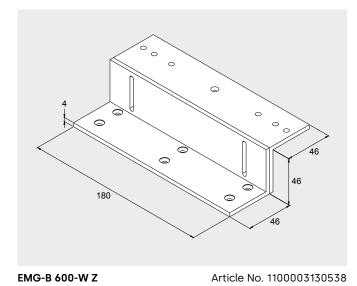




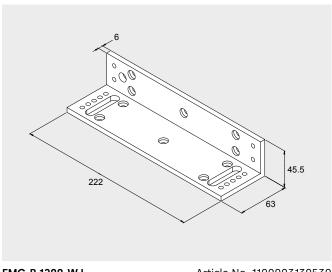
Article No. 1100003130521 EMG-B 1200 AB Article No. 1100003130535

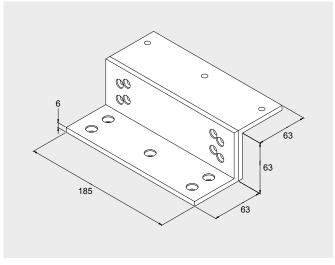
### W Brackets





**EMG-B 600-W L** Article No. 1100003130537





**EMG-B 1200-W L** Article No. 1100003130539 **EMG-B 1200-W Z** Article No. 1100003130540



We are committed to foster a sustainable development along our entire value chain in line with our economic, environmental and social responsibilities toward current and future generations.

At dormakaba, we are dedicated to find sustainable solutions that reduce the environmental impact of both our operations and our products. To ensure transparency regarding our products' environmental impacts, we offer credentials such as Environmental Product Declarations (EPD), Health Product Declarations (HPD), and Recycled Content Certificates. These sustainability-related credentials provide insights into energy efficiency, material composition, recyclability, and compliance, empowering our customers to make informed choices and support their own sustainability objectives.

Download our sustainability-related product declarations and certifications here: https://www.dormakabagroup.com/en/sustainability/product-declarations

### Our offering

### **Access Automation Solutions**

Entrance Automation Entrance Security



### **Access Control Solutions**

Electronic Access & Data Escape and Rescue Systems Lodging Systems



### **Access Hardware Solutions**

Door Closers Architectural Hardware Mechanical Key Systems



### Services

Technical Support Installation and commissioning Maintenance and Repair





EN, 04/2025 Subject to change without notice.

