

### THE VORTEX TECHNOLOGY

The Vortex is a hybrid locking solution (magnetic and mechanical) smaller than a traditional electromagnetic lock. It guarantees an extremely strong locking (up to ten times more powerful than traditional maglocks on the market). Its tested holding force is 15000N. This hybrid lock exclusively is found in a "pin" set carved in a high resistance alloy. This pin is captured inside a hole through the Vortex action of electromagnetic forces. The locking is then secured by the kinetic within the magnetic block.

In case of forced door attempts, the mechanical locking is activated. The "pin" is inexorably trapped inside the hole thanks to the ball bearing included in it. This innovation makes the Vortex part of 6++ grade standing for the level of holding force which reaches up to 15000N (1,500kgf) and more.

### UNIQUE EARLY WARNING TECHNOLOGY

The Vortex is fitted with a pressure/traction sensor. This EW mechanism allows the Vortex to trigger an alarm BEFORE the access is breached. This is a unique system in the locking world.



### TECHNICAL DATA

- Mounting: Surface
- Power: 12/24V DC
- Current: 330/170 mA
- Locking monitoring (LSS): Built-in reed contact
- Early Warning Alarm EW Technology: Fitting with EW pressure sensors and buzzer able to send an alarm before access forced open.
- Built-in MOV surge protection
- <sup>2</sup>Environmental protection/IP Rating: IP43 (fixed under header)
- Sizes (L x H x W): 218 x 36 x 30 mm
- Weight: ~1.3 kg
- Environmental/Temperature: -20°C to +60°C

<sup>2</sup> Electrical connections shall be protected according to the installation environment.

### <sup>1</sup>MAIN FEATURES

- Security/Holding Force: Grade 6++ (15000N)
- Category of use: Grade 3 (High frequency - Public Use)
- Durability/reliability: Grade 9 (> 1 000 000 cycles)
- Corrosion resistance/humidity/IP protection: Grade 3 (EN 1670, EN ISO 9227)

<sup>1</sup> See chapter 7 Norm EN 13637

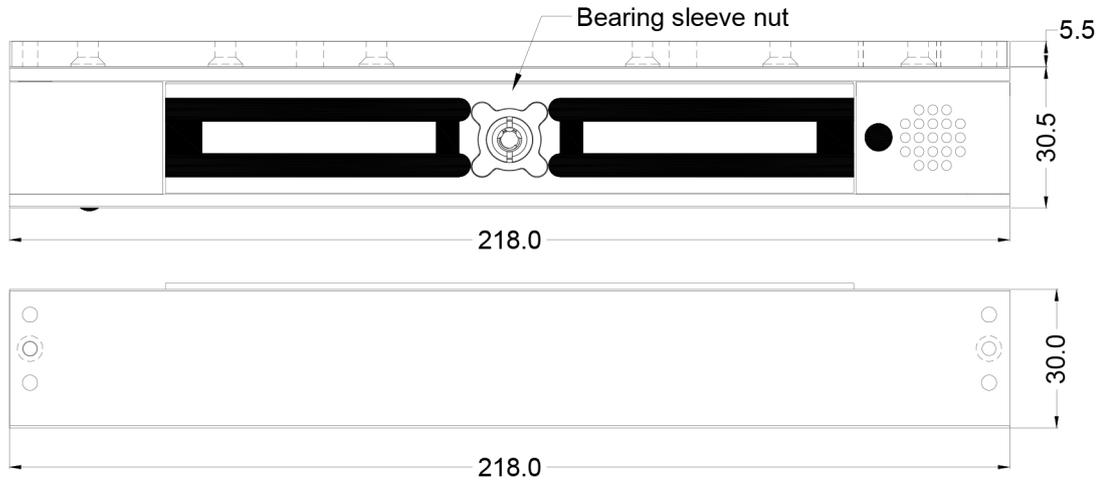
### STANDARDISED LABEL

Our main B+M products features are displayed on the products with a certified sticker responding to the EN 13637.

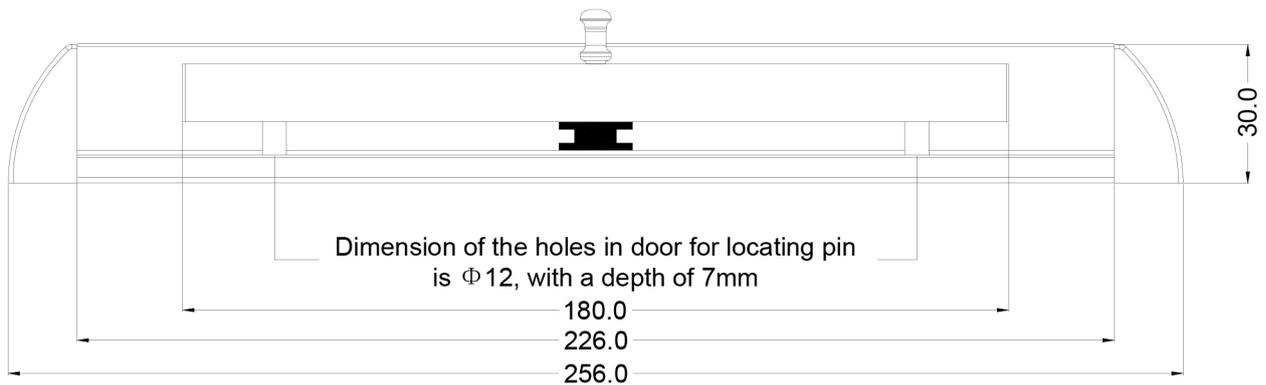
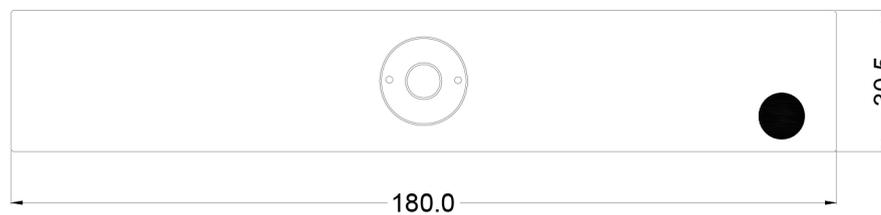
3	9	9		1	2	6++	6++	0	0	D
Ref: EN 13637: + Corrosion EN ISO 9227: Grade 3										

## TECHNICAL DESIGNS:

### 1. DIMENSIONS



Armature plate



### 2. WIRING

#### BM 2400 Wiring

NO - DSS (BLUE)		NO - DSS (BLUE)	30 VDC max 0.3 A max, 10 W max
Buzzer Enabled - Close (BROWN)		NO (PURPLE)	EW, 50VDC, 0.3A max
Buzzer Disabled - Open (WHITE)		COM (ORANGE)	
NO-LSS (YELLOW)		NC (PINK)	30 VDC max 0.3 A max, 10 W max
12/24 VDC 12VDC/0.36A, 24VDC/0.18A	+(RED)	- (BLACK)	