MAGNET-SCHULTZ
SOLENOIDS AND SOLUTIONS
ENGINEERING SUCCESS

Electric Bolt Lock - Marine

Type EBL-M1212

Benefit from more than 100 years of experience. Use our unmatched end-to-end service: from off-the-shelf products to tailor-made designs - prototyped, tested and manufactured to your exact requirements.

Get free advice, a detailed quote or buy now

Email us at **sales@magnetschultz.co.uk** or call **+44(0)1483 794700**

Applications

Robust and secure locking in wet/outdoor applications -

doors • hatches • lockers •
grills • mechanisms • vents

Function

- energise-to-lock
- 2 bolt position switches (extended and retracted)
- adjustable door-closed sensor
- 12mm bolt stroke

Standard features

- IP65 design basis
- flying lead terminated with IP65 in-line connector
- V4A stainless steel bolt and facia plates
- corrosion resistant materials, robust construction
- installation in 3 possible orientations
- maintenance-free bearings, long life operation
- 24Vdc - stepped power control to solenoid
- rated for continuous energisation

Options on request

- spring-to-lock version
- other Voltages
- alternative mounting and keeper designs
- different bolt lengths

Standards

- solenoid design and tested to VDE 0580
- ISO 9001 2008

Fig. 1 EBL-M1212

T +44 (0)1483 794700 sales@magnetschultz.co.uk
www.magnetschultz.co.uk

Type EBL-M1212		Energise to Lock	
		Magnetic force on bolt FM (N), net of spring	Return spring force (N)
Bolt Position	retracted	3.4	2.3
	extended	5.6	3.3
Bolt stroke		12mm	
Operating mode - duty rating ED 1)		S2/S1 - 15%/100%	
Power consumption (P20)		36W/5.76W	
Total weight		0.8kg	
Bolt side load (static or dynamic) 2)		1250Nmax	

Table Notes

1: The shotbolt incorporates stepped power control to the solenoid. When enrgised, it operates at 15% rating for 0.3 seconds then steps to 100% rating at which it can be left energised continuously. Energisations should not exceed 3/minute.
2: Providing sideloads don't exceed 1250N the shotbolt will function normally. Higher side loads risk permanent damage to the bolt arrangement. **Note -** the bolt will not move if any sideload is present.

Table Basis

The terms used are defined in Technical Definitions GXX
Magnetic forces F_M stated are based on

- 24V 15%/100% duty coil
- working in the Hot condition
- 90% of the rated voltage
- 55ºC ambient temperature
- armature in horizontal attitude
- heat-insulated mounting

Duty Rating ED, % of energised time/cycle:
100% : continuous duty

$$\frac{t(on)}{t\,(on) + t\,(off)} \times 100$$

Rated Power P_{20} stated with coil at 20ºC
Values given may vary by up to 10% owing to inherent and manufacturing tolerances
Type EBL-M1212 shotbolts incorporate solenoid 'GFCX 030 X00 E13'. For solenoid perfomance and other details refer to data sheet 'GFCX 030 ... E13'.

Supply Voltage

Standard Voltage available : 24Vdc
Other Voltages upon request

Safety

The customer is responsible for ensuring that devices are suitable for their application and that, even if they should fail, safety in use is not compromised. We supply Technical Explanation documents to help users understand our products and assistance is always available from our technical department

Versions

Other locking devices are available – see respective data sheets

Also, special and modified versions, including

- ATEX / Explosionproof
- IP54 and IP65 protection
- special finishes
- long strokes

Contact our technical department for assistance

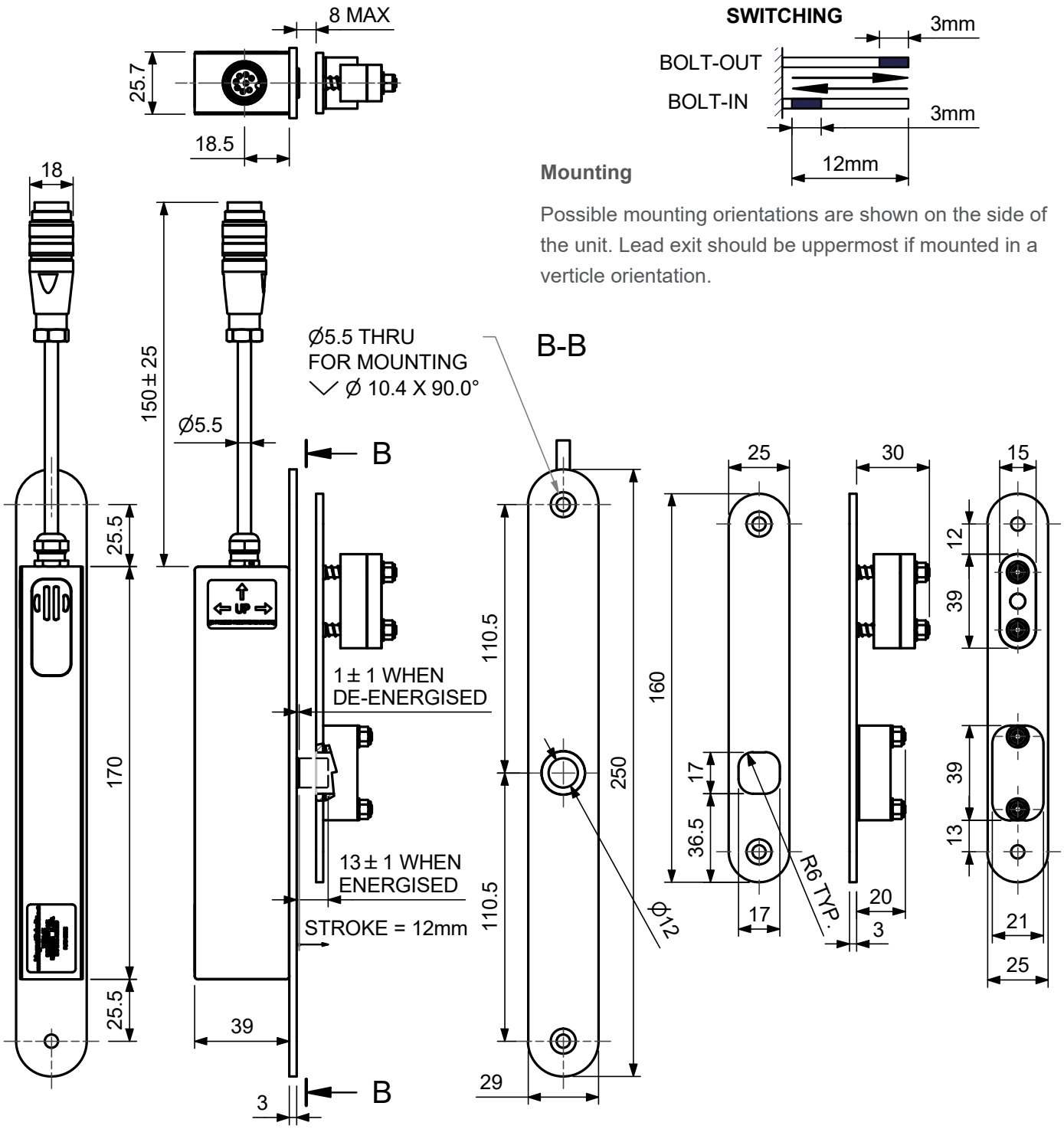

Fig. 2 Energise-to-lock version shown

Mounting

Possible mounting orientations are shown on the side of the unit. Lead exit should be uppermost if mounted in a verticle orientation.

Switches

Two snap action bolt postition switches rated: resistive load 1A @ 24Vdc
The switches are set to operate within 3mm of bolt-in and 3mm of bolt-out positions
Reed switch rated: switching current 0.3A @ 30Vdc

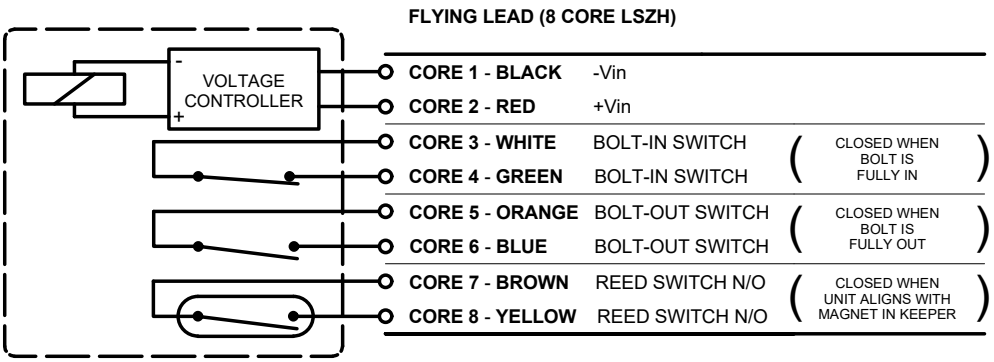

Fig. 3 Wiring diagram

Connector

The flying lead is terminated with an Amphenol C091 31H008 100 2 connector. Pin numbers correspond with core numbers as they are described above.

Order code example: EBL-M1212 EL SA FL 24V 100%

Product Group	Function	Switch type	Bolt end	Voltage	Duty
EBL-M1212	EL - energise to lock	SA - snap action	FL - flat	24V	100%