

Electric Bolt Lock - Weatherproof

Type EBL-W2020

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Applications

Robust and secure locking in wet/outdoor applications

gates in exposed locations • external security doors • access control in perimeter fencing • washed-down process machinery • deck-mounted marine applications

Function

- energise-to-lock or spring-to-lock
- 2 bolt position switches (extended and retracted)
- integral manual override
- DC or AC supply
- 20mm bolt stroke

Standard features

- IP65 design basis
- flat-ended bolt or chamfered for slam-shut operation
- slam-shut/lock when closed (spring to lock version only)
- body mounting, installation in any attitude
- high performance, maintenance-free bearings
- coil insulation class F, maximum voltage 250V
- cable and gland connection

Options on request

- alternative body material
- different bolt lengths
- alternative switch arrangements

Standards

- ISO 9001
- solenoid design and tested to VDE 0580



Fig. 1 Standard EBL-W2020

Type EBL-W2020			
Operating mode- Duty rating ED		S1 100%	
Stroke s (mm)		Magnetic force F_M (N)	Spring return force (N)
	0	21	7.25
	20	14.2	1.65
Rated Power P_{20}	(W)	20	
Weight (kg)	Open (O)	1.34	
Static bolt side load, max allowable	(N)	3000	

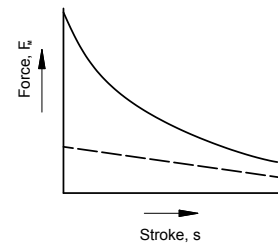


Fig. 2 Force characteristic

Table Notes

0mm is completion of energised stroke, i.e. the retracted position

Force figures F_M are net, ie spring accounted for

The lock will not withdraw if a side-load is present

Table Basis

The terms used are defined in Technical Definitions GXX

Magnetic forces F_M stated are based on

- 24v 100% duty coil
- working in the Hot condition
- 90% of the rated voltage
- 35°C ambient temperature
- armature in horizontal attitude
- heat-insulated mounting

Duty Rating ED, % of energised time/cycle:

$$100\% : \text{continuous duty} \quad \frac{t(\text{on})}{t(\text{on}) + t(\text{off})} \times 100$$

Rated Power P_{20} stated with coil at 20°C

Values given may vary by up to 10% owing to inherent and manufacturing tolerances

Type EBL-W2020 shotbolts incorporate solenoid GFCX050X00E14. For solenoid performance and other details refer to data sheet 'GFC'

Supply Voltage

Standard Voltages available : 12V and 24V dc

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

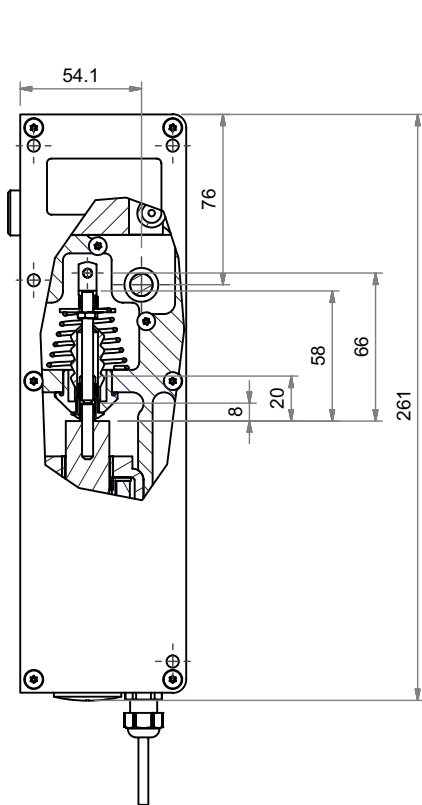


Fig. 3 Energise-to-lock (EL)

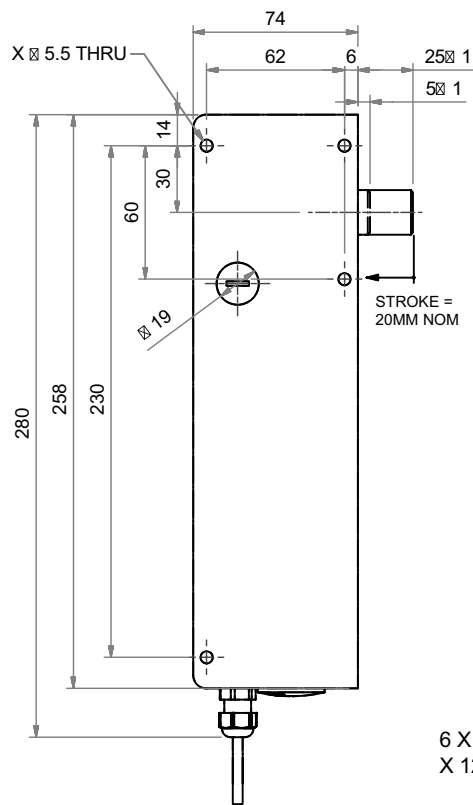


Fig. 4 Spring-to-lock (SL)

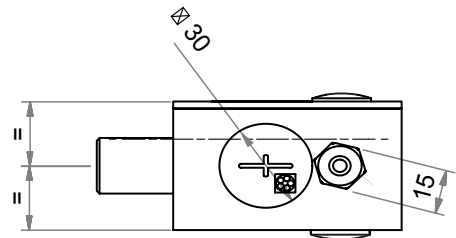
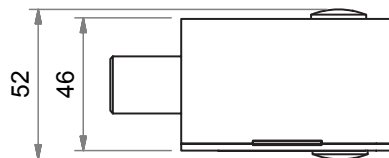
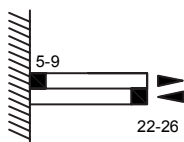
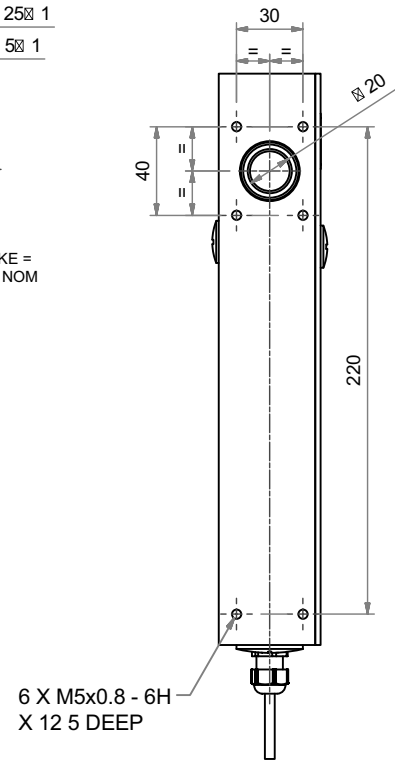


Fig. 5 Dimensions + bolt position switch settings

Switch

Both energise-to-lock and spring-to-lock versions incorporate two snap action switches:

- snap action switch rating 125V ac, 12V dc, 2A - see Fig. 5

The switches are set as standard at 5-9mm on 'bolt in' position, 22-26mm on 'bolt out' position

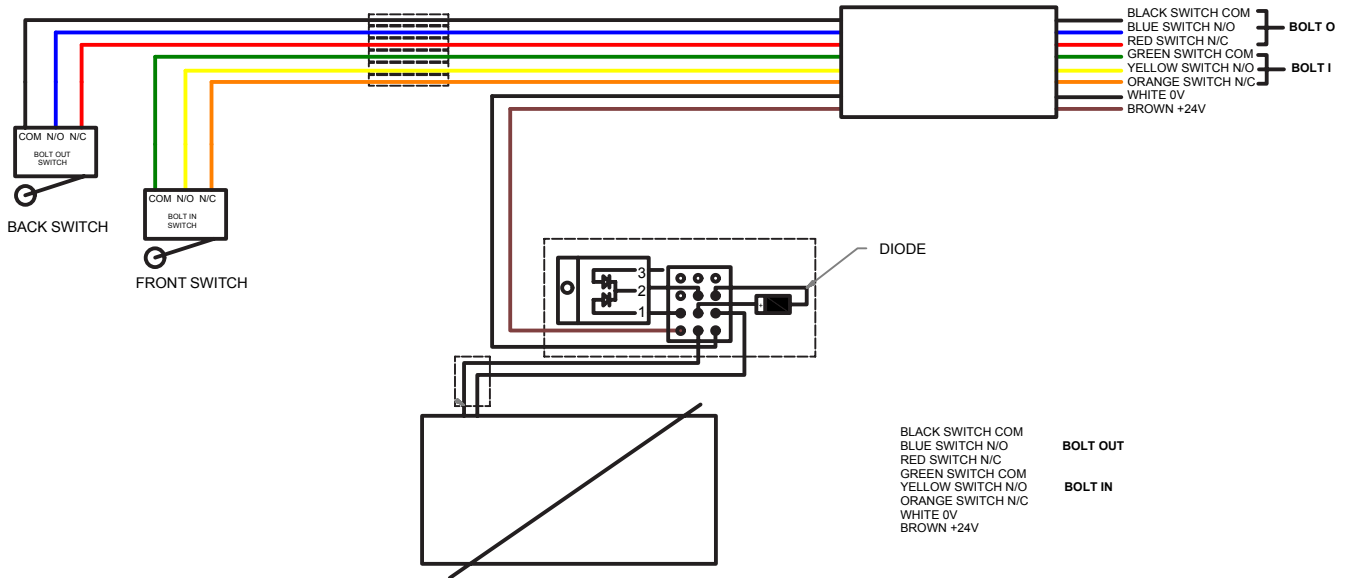


Fig. 6 Wiring diagram

Order codes table:

Order Example	60, 61	GFCX 050	SA	FL	24V 100%
Order code: 60 - A0101057 61 - A0101058					
Group and function type	60 - Energise-to-lock 61 - Spring-to-lock				
Solenoid type		GFCX 050			
Switch type			SA- snap action		
Bolt design				FL - Flat end	
Voltage % duty rating					24V 100%

Ancillary Items	Order Code
Manual override key fig. 8	P0200478



Fig. 7 Override key

Need more information or advice?

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