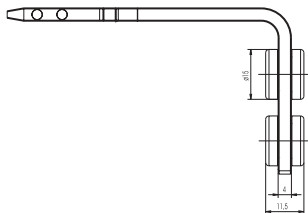
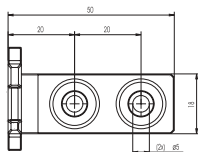
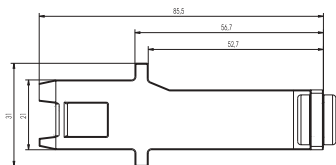




**118 HVE 02**  
**118 HVE 02 01**  
**118 HVB 02**  
**118 HVB 03**

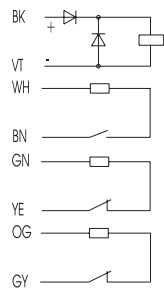
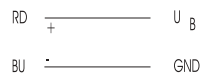
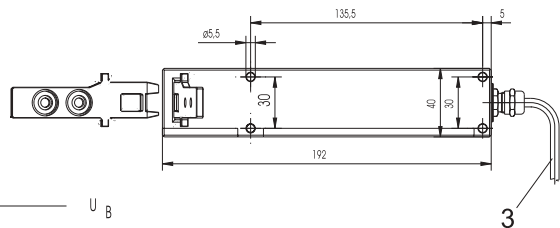
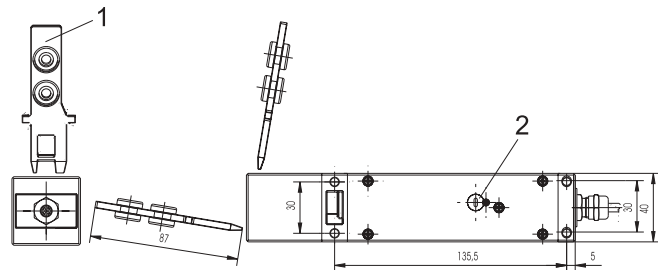
- (D)** Betriebsanleitung  
Verriegelungseinheit
- (GB)** Operating instructions  
Lock monitor unit
- (F)** Notice d'utilisation  
Unité de verrouillage
- (I)** Istruzioni d'impiego  
Finecorsa con blocco

# 118 HVB 03

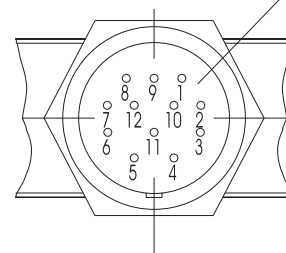
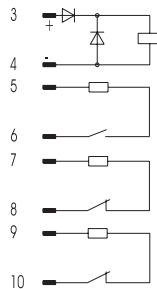
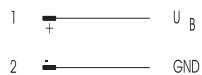
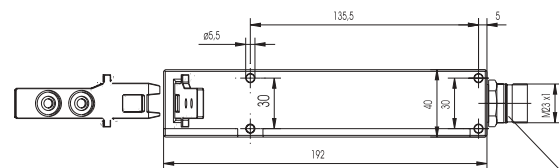
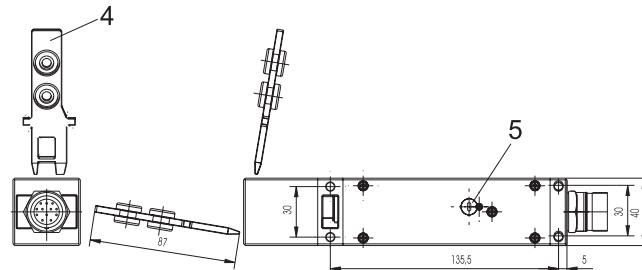


Datum: 23.09.2004

### 118 HVE 02



### 118 HVE 02 01



# 1 Technical Specification

## 1.1 General

### 118 HVE 02

1. Activator 118 HVB 02
2. Safety screw for emergency release
3. Cable 10 x 0.23 mm<sup>2</sup>; Ø 6,1 UL

### 118 HVE 02 01

4. Activator 118 HVB 02
5. Safety screw for emergency release
6. Connector

## 1.2 Terminal assignment

### Model 118 HVE 02

<i>Cable</i>	<i>Assignment</i>
RD	Supply voltage
BU	GND
BK	Solenoid (+)
VT	Solenoid (-)
WH, BN	Actuator sensor, N/O contact
GN, YE	Actuator sensor N/C contact
OG, GY	Solenoid sensor

**Model 118 HVE 02 01**

<i>Pin</i>	<i>Assignment</i>
1	Supply voltage
2	GND
3	Solenoid (+)
4	Solenoid (-)
5, 6	Actuator sensor, N/O contact
7, 8	Actuator sensor, N/C contact
9, 10	Solenoid sensor

**1.3 Model Numbering system**

The following example and table demonstrates the numbering system of the Shot Bolt unit:

- Example:
- 118 HVE 02 01
- 118 abc de ef

<i>Notation</i>	<i>Reference</i>		<i>Meaning</i>
ab	Device type	HV	Shot Bolt Category 4 acc. to EN 954-1
c	Device type	E	Lock monitor unit - base model
		B	Actuator
de	Serial number	02	has no significance
ef	Connection	01	Connector

## 1.4 Electrical and mechanical specifications

Supply voltage	24 V DC
Current input	350 mA
Temperature range	-20 °C ... +55 °C
Material	fiberglass reinforced Ultradur
Protection class IEC 529	IP 67
max. switch-on duration of the solenoid	3 minutes
Locking principle	Locking mechanism spring loaded, no power required
Door radius	min. 190 mm
max. locking force (locked)	1000 N
max. permissible side force for release	60 N

## 2 Intended use

The shot bolt system safeguards machines and systems that continue to turn after deactivation of the safety outputs and so require mechanical locking of the guard.

### 2.1 Standards and Guidelines

The system comprising shot bolt unit 118 HVE 02 or 118 HVE 02 01, actuator 118 HVB 02 or 118 HVB 03 and elobau shot bolt control unit 462 M21 H31 01 is designed according to EN 954-1 category 4.

## 2.2 Safety/hazards

- Ensure that shot bolt system is only installed and commissioned by specially qualified and authorised personnel.
- Operate shot bolt system only if it is completely undamaged.
- Ensure that the shot bolt system is only used for protection against safety hazards.
- Ensure that all relevant safety instructions and regulations for the machine concerned are always followed.
- Ensure that all applicable European directives and national statutory requirements/directives are followed.
- Keep ferrous swarf away.

## 3 Function

The interlock comprises the shot bolt unit 118 HVE 02, the actuator 118 HVB 02 and the shot bolt control unit 462 M21 H31 01.

The guard is locked when the actuator is inserted into the shot bolt unit, where it is held mechanically by the spring loaded mechanism. After switch off, the solenoid will release the actuator either by means of a pre set time delay or by means of a signal from a zero speed monitor. The guard is then unlocked.

## 4 Mounting



**Danger**

### **Danger of fatal electric shock**

- Ensure that interlock is only installed and commissioned by qualified and authorised personnel.

- Do not install interlocking unit and actuator in strong magnetic fields.
- Mount the actuator onto the machine guard.
- Mount the shot bolt unit onto the machine.
- Make the necessary electrical connections (see Technical Specification).

To change direction of actuation:

- Rotate shot bolt unit by 90° before mounting.

## 5 Commissioning



### **Danger of fatal electric shock**

- Ensure that interlock is only installed and commissioned by qualified and authorised personnel.

Once the Shot Bolt Control unit is powered up and all sensors are actuated the shot bolt system is functional.

### 5.1 Manual Emergency Unlock

To unlock in an emergency:

- Remove safety screw.
- Using a Phillips screwdriver turn auxiliary unlock clockwise.

## 6 Maintenance

### 6.1 Measures

The shot bolt system unit is maintenance free.

### 6.2 Disposal

- Dispose of used parts and unwanted packaging in accordance to the regulations of the country in which the device is installed.

Datum: 23.09.2004

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