

## SAFETY BUMBERS

### BU-SAFETYBUMPER

Safety bumper

- Made by customer-specific dimensions
- Maximum width 3000mm, depth 0,5 x length
- Safety class 3 (PL e) with a control unit



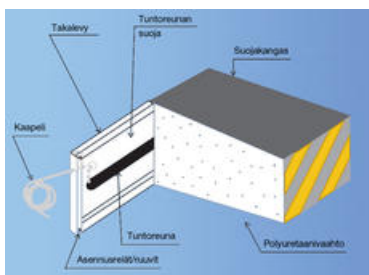
### PRODUCT DESCRIPTION

Bumpers are normally used as shockproof means of transport and self-propelled machines which may inadvertently run over the staff. Their job is to absorb the shock in case of a crushing incident, and to produce a signal for the immediate arrest of the machines (for example AGV). It consists of a block of foam shaped to the customer's design with embedded sensors. The safety bumper are compliant with EN 13856-3. The mats in combination with PS3 control module can reach the CAT 3 - PL "e" as indicated in the ISO 13849-1 standard.

Safety bumper design is largely based on stopping time the machine. Compression distance has to be greater than the distance travelled after the initial contact. This way the bumper ensures that no personnel damage occur in the case of an accident.



Grein safety bumper features two copper strips that do not contact under normal operation (NO). The control unit monitors any contacts between the strips and gives a stopping signal after collision. The control unit also monitors cable breakage.



### TECHNICAL SPECIFICATIONS

Actuating force	5-7 kg
Activating distance	10-30 mm (depending on bumper dimensions)
Maximum width	3000 mm
Supply voltage	24 V DC
Current max.	100 mA
Cable	4-wire
Protection rating	IP54

Temperature range	-10 °C...+50 °C
Fastening	Zinc-coated steel
Safety class	3 according to EN ISO 13849-1
PL	e according to EN ISO 13849-1

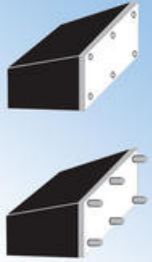
Features:

Compression before activation	10 % of bumper depth
Max. compression	60 % of bumper depth
Uncompressed part of bumper	30 % of bumper depth
Max. height	0,5 x depth
Max. width	3000 mm

Ordering reference:

BU 1500/400/200	
BU	Bumper
1500	Width
400	Depth
200	Height

Mounting options



SPECIFICATIONS

IP Class	IP54
Temperature range from	-10 °C
Temperature range to	50 °C

