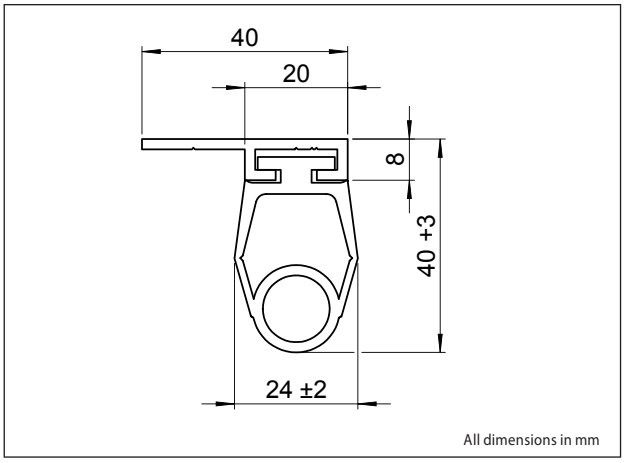
Safety Edge HSC ®
HSC 40-20-03 T



Intended use

Safety Edges are used for protecting against risks at shearing and crushing edges, for instance at machine guards, lifting tables, packaging machines, palletizing and depalletizing systems, automated guided vehicles (AGV's), theater stages and many others. They can be used in indoor and outdoor applications.

All Safety Edges of series HSC ® meet the requirements for safety components according to the Machinery Directive 2006/42/EC.

Please note : When using cooling agents, oils, acids etc. please contact manufacturer for more information.

Function

Except for dimensions and shapes, the Safety Edges have a generally identical design. They contain the following components:

- Haake Safety Contact chain ® HSC ® (N/C contacts)
- Aluminium profi les for mounting the sensor part at the machine body
- Double-insulated connection cables to the machine control system
- TPE hollow-chamber profi le and closure plugs

Upon actuation of the Safety Edge (sensor), the current flow is interrupted, based on the special geometry of the chain links inside the sensor. This interruption represents the OFF condition of the output signal switching device and thus transfers the safety output signal to the machine control system.

The Safety Edge meets the requirements for automatic reset, since after removing the operating force, it will return by itself into the ON condition.

If it is required to work with a manual reset, this has to be implemented according to DIN EN 1760-2 by the machine control system.

Due to the positive break of the supply (current circuit is broken), a separate safety control unit is not required. Safety Edge and control system together have to achieve the Performance Level that has been determined in the risk assessment.

Technical data

Operating temperature:	–20 ... +55 °C
Enclosure sealing:	IP65
Nominal voltage:	<50 V AC, 75 V DC (with safe separation from the supply system) A voltage source for SELV or PELV systems according to DIN VDE 0100-410 shall be used.
Nominal current:	max. 0,5 A, AC/DC The power supply shall be protected externally (fuse 0.5 A nominal value)!
Control category:	3 (to DIN EN ISO 13849-1)
Performance Level:	Possible up to d
Connection cable:	double-insulated, highly flexible single-core cables (FLKM)
Connection cable length:	max. 50 m
Safety Edge length:	max. 6 m (single unit)
Material of sensor:	TPE
Material of profi le:	Aluminium

Force-travel-diagram

SG = SB + SN

SB = 8.8 mm

SN = 9.9 mm

SG = 8.8 mm + 9.9 mm

SG = 18.7 mm

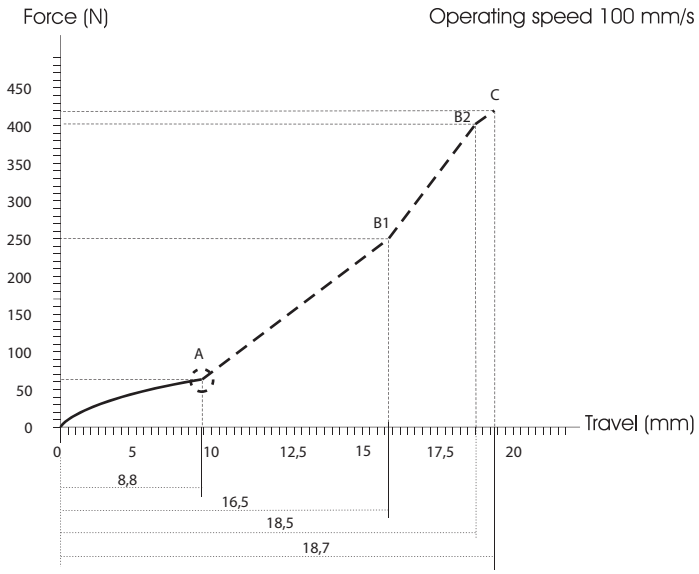
Actuating force F = 65 N

A: Switching point

SG: Total deformation

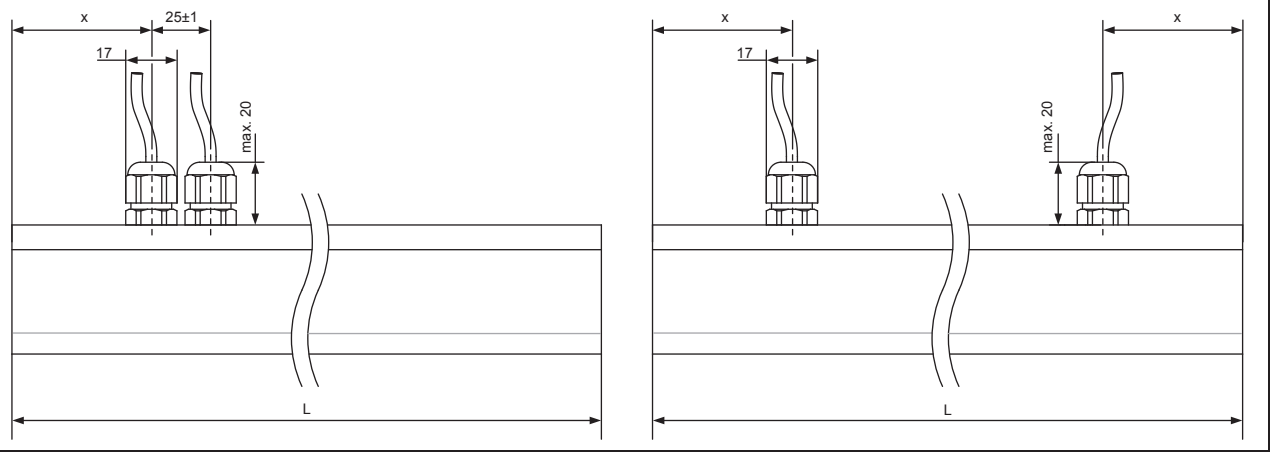
SB: Actuating travel

SN: Overtravel

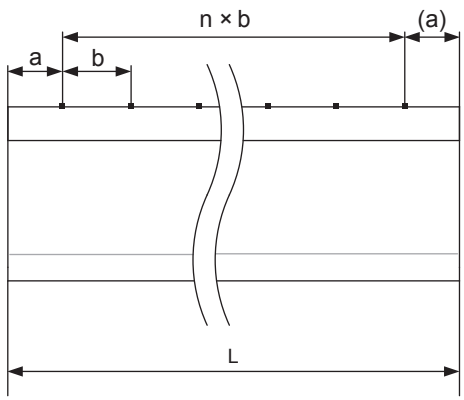


Distance dimensions (see also request form on page 3)

Measurements cable exits



Measurements mountings



General tolerances ISO 2768-m

Safety Edge HSC®

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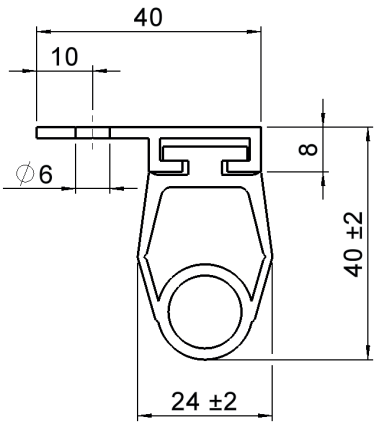
Anfrage

First and last name		E-Mail:	
Company:			
Street and no.:			
Postal code/ ZIP and city:		Country:	
Phone no.:		Mobil no.:	



all dimensions in mm

Length and Quantity

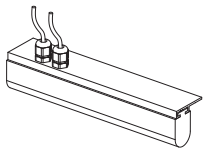
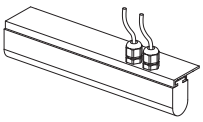
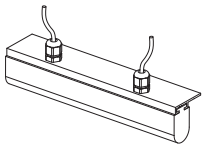
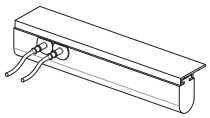
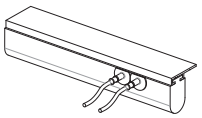
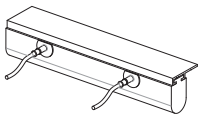
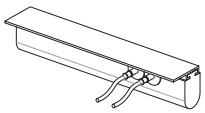
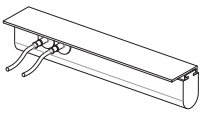
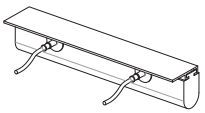
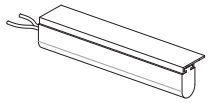
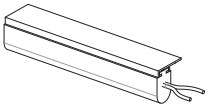
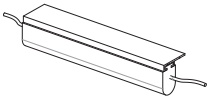
Length: _____ mm*	Qty.:

*max. length: 6000mm

Ambient conditions

At which type of machine will the bumper be mounted?		
Is there a medium present? If yes, which one (for instance acids, lyes, oils)?		
Where is the application site?	☐ indoor	☐ outdoor
What is the mounting orientation?	☐ horizontal	☐ vertical
What is the stopping travel?	_____ mm	

Type and position of cable exit

Top		
☐  Top left, x = 50 mm	☐  Top right, x = 50 mm	☐  Top left and right, x = 50 mm
At side		
☐  Front left, x = 50 mm	☐  Front right, x = 50 mm	☐  Front left and right, x = 50 mm
☐  Rear left, x = 50 mm	☐  Rear right, x = 50 mm	☐  Rear left and right, x = 50 mm
Frontal		
☐  Frontal left	☐  Frontal right	☐  Frontal left and right

Cable length

☐ 1.000 mm (standard)	☐ _____ mm (Upon request, surcharge)

*max. length: 50.000 mm (possible in 500 mm steps)

Mounting possibilities

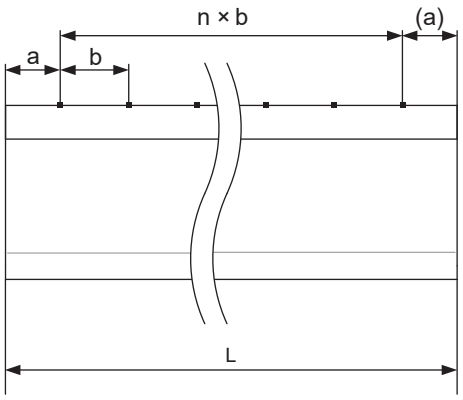
☐ No mounting possibilities (made by client)
☐ Boreholes ø = 6 mm
☐ Oblong holes 7.5 × 21 mm

Dimensions

Mounting dimensions are specified by variables a and b.

a is for first and last distances (symmetrical design) and
b is for intermediate distances.

☐ Selected by manufacturer	☐ Own distances a = ___ b = ___ mm



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Additional information

Please describe your safety application. Additional specifications can be named here.