

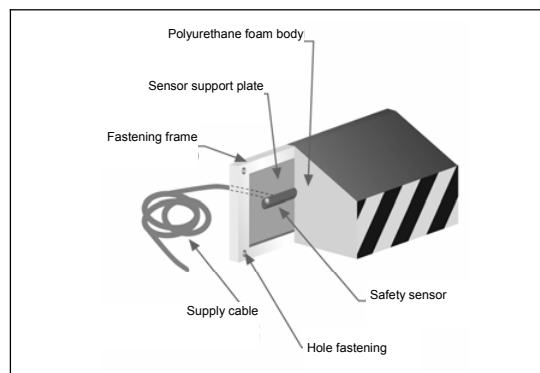
## SENSITIVE SHOCK ABSORBER

The sensitive shock absorber is used to protect people from shocks against vehicles or moving parts, such as AGV, elevators, fork lifts, automatic stores...

With a minimum compression of the shock absorber, after a pre-run, the internal contact of the sensor closes (NO to NC) and the control unit produces immediately a stop signal eliminating the danger situation. After the pre-run, the shock absorbers allows an "overrun" compression, variable according to the shock absorber depth, to release the shock.

The shock absorbers are made of polyurethane foam, stuck onto a frame, and covered by a protection fabric. Inside, a sensitive element "sensor" is present, on a supporting plate.

The supply cable is a 4 poles cable 4\*0,35mm<sup>2</sup> FROR 300/500 standard length 3 m. We can supply different lengths, upon request.



The shock absorber coating can be:

- 1 Fabric (standard)
- 2 PVC (for externals)
- 3 Anti-spark (fire protection)
- 4 Painted (impermeable)

In the standard version, the shock absorber is supplied with a black fabric coating, front side with yellow and black stripes. Upon request, other colours or coatings can be supplied.

### DIMENSIONING OF THE SENSITIVE SHOCK ABSORBER

To find out the correct depth of the shock absorber, see the following data:

**Pre-run** (up to commutation point):

**$S_B = 20\%$  of shock absorber depth**

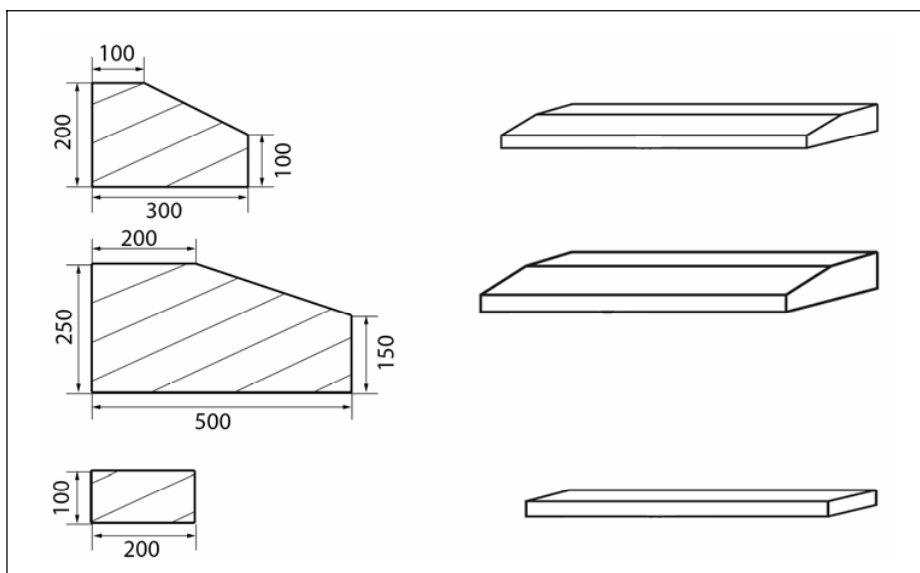
**Overrun** (max.deformation):

**$S_V = 50\%$  of shock absorber depth**

**Part not to be deformed: 30% of shock absorbed depth**

The choice of the shock absorber depth is made considering the stop space and the overrun  $S_V$  if required.

Available shapes



Upon request, different shapes and dimensions are available. For chock absorbers with special shape, contact our technical Office.

The shock absorbers are available with max. length 3000 mm. For larger size, they can be divided into several parts.

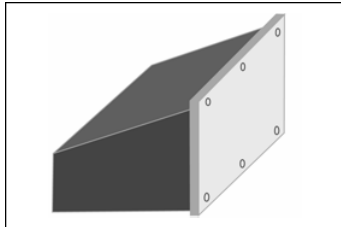
## FASTENING OF SENSITIVE SHOCK ABSORBER

The shock absorber is fastened to the machine by a frame, featuring one of the three configurations :

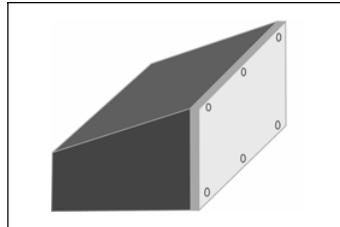
A- Plate protruding from the shock absorber, holes Ø 8,5 mm for fastening to the machine through screws and bolts;  
Plate width upon customer's request (drawing A)

B- Plate along the shock absorber, with threaded holes (specify the thread) for fastening through screws from inside (drawing B)

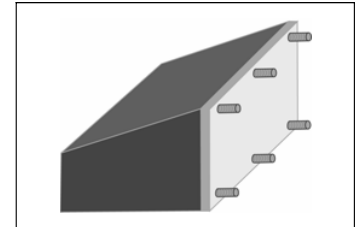
C- Plate long the shock absorber, with bolt screws M6 length 30 mm, for fastening through nuts from inside (drawing C)



A



B



C

### Technical features:

Description	Shock absorber. Fabric coating	Shock absorber. PVC coating, Anti-spark, painted
Pre-run	20% depth of shock absorber	
Overrun	50% depth of shock absorber	
Without deformation	30% depth of shock absorber	
Operative pressure	< 150 N $\phi$ mm 80 < 300 N test subject 45x400 mm	
Max. length	3000mm	
Response time	<200 ms devices Gamma System	
Mech. lifetime internal contact	10000 operations	
Max. operation voltage	24 Vcc/ca	
Supply cable	4x0,35mm <sup>2</sup> standard length 3000mm	
Outlet contact	NO	
Reference temperature	-10°C + 60°C	
Protection	IP 54	IP65
Chemical resistance	Oil, hydrocarb., diesel	Oil, hydrocarb., diesel, solvents, atmospheric agents, anti-flame
Reference standard	Test according to EN 1760/3	
Safety category	Cat. 2 combined with control units type GP02/E and GP02/E-S2 Cat. 3 combined with control units type GP03 and GP03/S2	

## HOW TO ORDER A SENSITIVE SHOCK ABSORBER

When ordering, always supply a drawing of the shock absorber: height, width, depth. Indicate the coating material (ex. fabric), type of fastening

plate (ex. version B) and cable length, if different from the standard one.