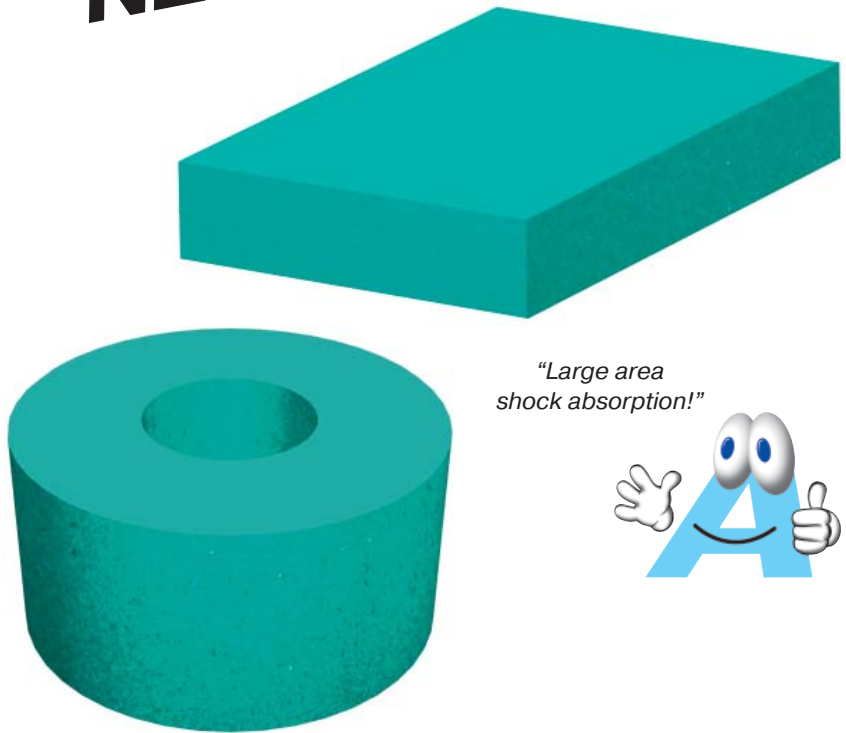


SLAB damping plates of the **SL-030, SL-100 and SL-300 series** are visco-elastic PUR materials that are manufactured according to a patented formula and which were especially designed to absorb shock loads. At the same time, the resulting structure-borne noise is effectively reduced.

This material is characterized by its very high inner damping. The rebound elasticity is around $< 30\%$ (Tolerance $\pm 10\%$) following DIN 53573. The result makes this product an alternative to hydraulic end-of-travel damping, if the load doesn't need to be stopped accurately and the energy doesn't have to be reduced by 100%.

The densities of
 SL-030 = 270 kg/m^3
 SL-100 = 500 kg/m^3 and
 SL-300 = 800 kg/m^3
 cover a wide spectrum of the energy absorption to the applied area. This enables a relatively independent choice of applied area.

NEW



"Large area shock absorption!"



Impact velocity range: max. 5 m/s

Compression set: $\leq 5\%$, at 50 % of compression, 23 °C, 70 h, 30 min after unloading, according to EN ISO 1856

Environment: Resistant against ozone and UV radiation; food-graded according to ENV 1186-3 (also see chemical resistancy page 98)

Material: Mixed cellular polyether urethane

Standard density: 270 kg/m^3 , 500 kg/m^3 and 800 kg/m^3 , according to DIN 53420

Impact resilience: $< 30\%$, tolerance $\pm 10\%$, according to DIN 53573

Fire rating: B2, normally flammable according to DIN 4102

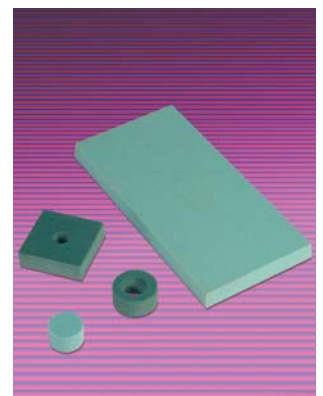
Operating temperature range: -30 °C to $+70\text{ °C}$, short-term higher temperature potential up to 110 °C

Delivery form: Thickness: 12.5 mm and 25 mm. Rolls: 1.5 m wide, 5.0 m long. Strips: Up to the maximum width and length. Other dimensions (also thickness), colours, shapes and cut-out parts on request.

Possibilities for cutting: Water jet cutting, stamping, splitting, sawing, drilling, etc.

Mounting style: Bonding (see adhesive recommendation page 97), clamps, screws, etc.

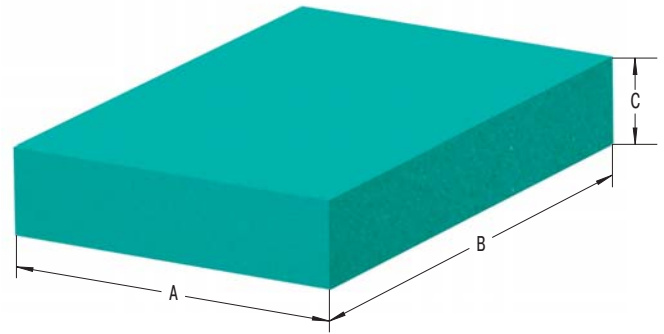
On request: Available with compact polyurethane wearing surface, shore hardness: 82 shore Sh A



Ordering Example

ACE-SLAB _____
 Material Type _____
 Material Thickness _____
 Customers Specific Dimension/Shape _____
 (D-Number is assigned by ACE)

SL-030-12-Dxxxx



The chosen damping plate should be tested by the customer on the specific application.

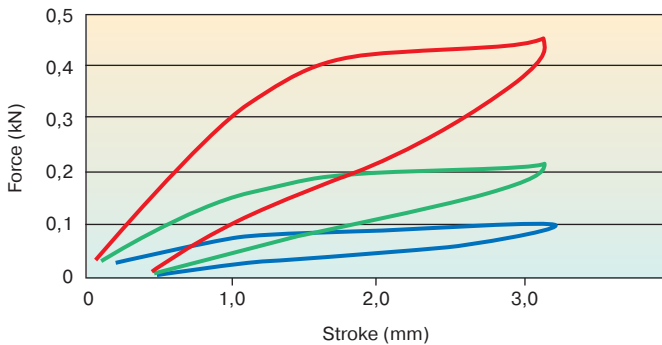
Dimensions and Capacity Chart (Sample Plates MP1 to MP3)

| Type Part Number | ¹ W ₃ max. Nm/Cycle | ¹ Stroke Utilization mm | A | B | C | Area mm ² | Density kg/m ³ | Return Time s | Weight kg |
|---------------------|--|---------------------------------------|------|------|------|-------------------------|------------------------------|------------------|--------------|
| SL-030-12-D-MP1 | 2.3 (5.0) | 3 (6) | 50 | 50 | 12.5 | 2 500 | 270 | approx. 3 (4) | 0.008 |
| SL-030-12-D-MP2 | 4.3 (9.5) | 3 (6) | 70.7 | 70.7 | 12.5 | 5 000 | 270 | approx. 3 (4) | 0.017 |
| SL-030-12-D-MP3 | 9.5 (19.5) | 3 (6) | 100 | 100 | 12.5 | 10 000 | 270 | approx. 3 (4) | 0.034 |

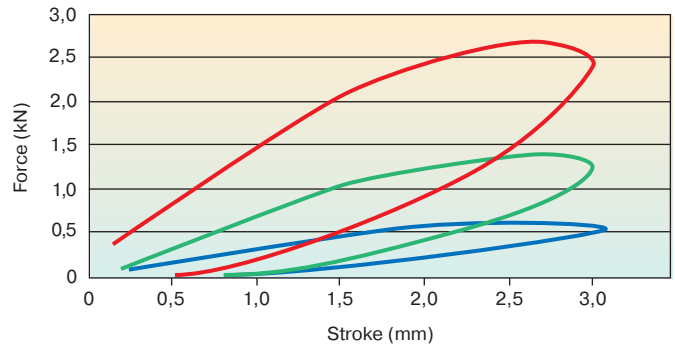
¹ Energy absorption and stroke utilization as well as the below illustrated dynamic curve progression refer to a calculated free falling mass with an impact velocity of 1 m/s. For differing application data, these values can only be used as a reference. The energy absorption depends on the **individual impact surface** and stroke utilization. The longer the load duration the more the reduction in energy absorption (material fatigue).

Characteristics of Type SL-030-12

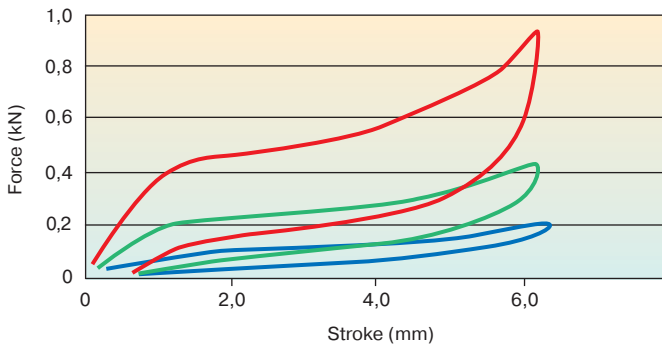
Force-Stroke Static
Stroke Utilization 3 mm, 25 %



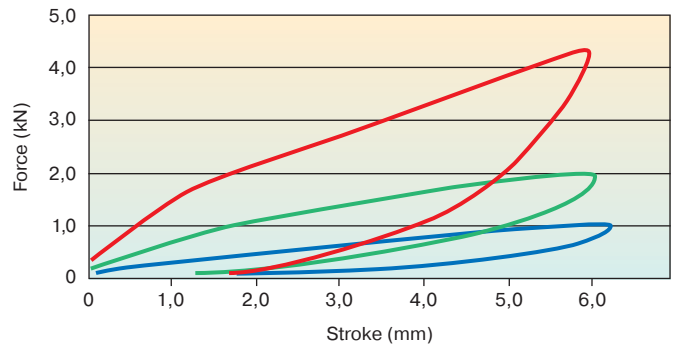
Force-Stroke Dynamic
Stroke Utilization 3 mm, 25 %



Force-Stroke Static
Stroke Utilization 6 mm, 50 %



Force-Stroke Dynamic
Stroke Utilization 6 mm, 50 %

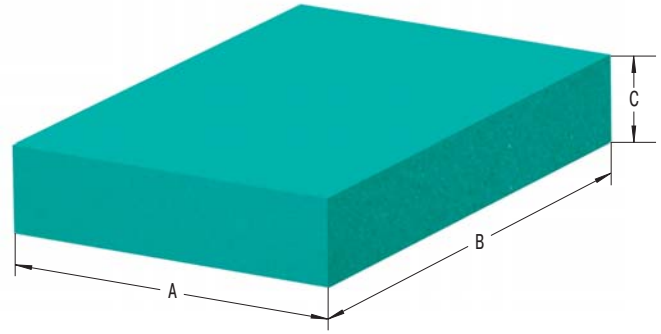
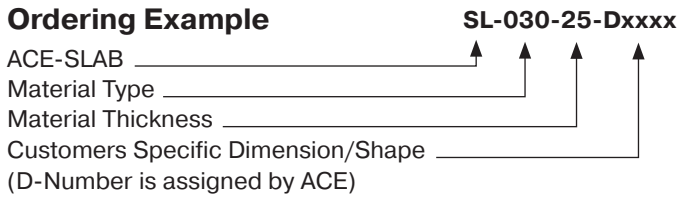


Load data: static, between two level plates,
deformation velocity 1 % of the plate thickness / sec.

— Area 10 000 mm²
 — Area 5 000 mm²
 — Area 2 500 mm²

Load data: dynamic, free-falling mass,
impact velocity about 1 m/s.

Ordering Example



The chosen damping plate should be tested by the customer on the specific application.

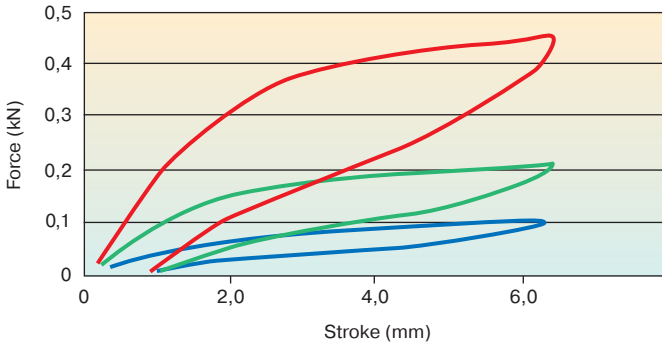
Dimensions and Capacity Chart (Sample Plates MP1 to MP3)

| Type Part Number | ¹ W ₃ max. Nm/Cycle | ¹ Stroke Utilization mm | A | B | C | Area mm ² | Density kg/m ³ | Return Time s | Weight kg |
|---------------------|--|---------------------------------------|------|------|----|-------------------------|------------------------------|------------------|--------------|
| SL-030-25-D-MP1 | 3.5 (6.0) | 6 (12) | 50 | 50 | 25 | 2 500 | 270 | approx. 4 (5) | 0.017 |
| SL-030-25-D-MP2 | 5.7 (11.5) | 6 (12) | 70.7 | 70.7 | 25 | 5 000 | 270 | approx. 4 (5) | 0.034 |
| SL-030-25-D-MP3 | 11.5 (21.5) | 6 (12) | 100 | 100 | 25 | 10 000 | 270 | approx. 4 (5) | 0.068 |

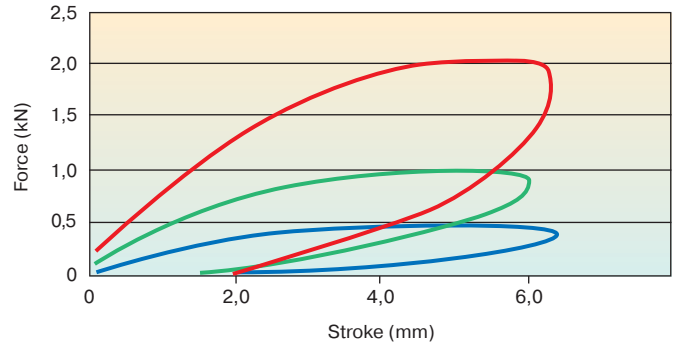
¹ Energy absorption and stroke utilization as well as the below illustrated dynamic curve progression refer to a calculated free falling mass with an impact velocity of 1 m/s. For differing application data, these values can only be used as a reference. The energy absorption depends on the individual impact surface and stroke utilization. The longer the load duration the more the reduction in energy absorption (material fatigue).

Characteristics of Type SL-030-25

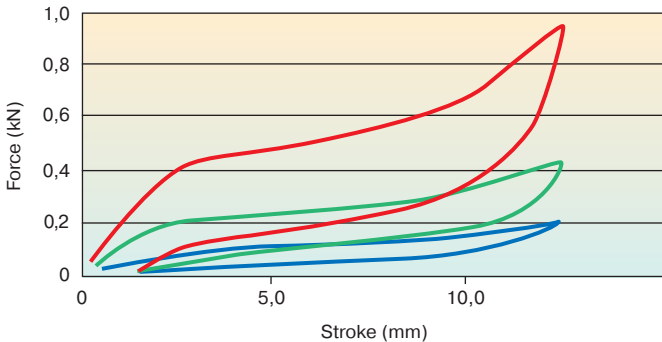
Force-Stroke Static
Stroke Utilization 6 mm, 25 %



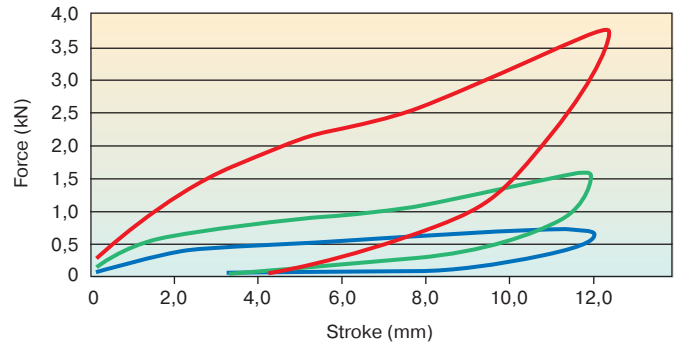
Force-Stroke Dynamic
Stroke Utilization 6 mm, 25 %



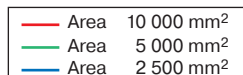
Force-Stroke Static
Stroke Utilization 12 mm, 50 %



Force-Stroke Dynamic
Stroke Utilization 12 mm, 50 %



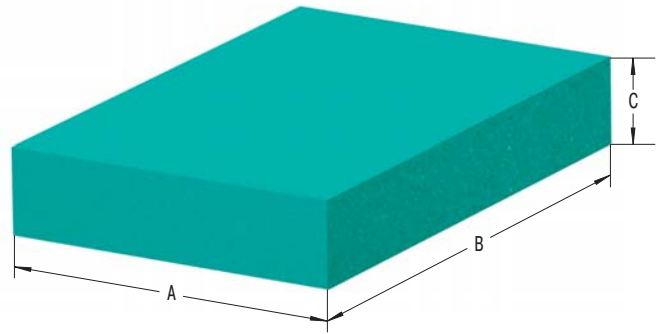
Load data: static, between two level plates, deformation velocity 1 % of the plate thickness / sec.



Load data: dynamic, free-falling mass, impact velocity about 1 m/s.

Ordering Example

ACE-SLAB _____ **SL-100-12-Dxxxx**
 Material Type _____
 Material Thickness _____
 Customers Specific Dimension/Shape _____
 (D-Number is assigned by ACE)



The chosen damping plate should be tested by the customer on the specific application.

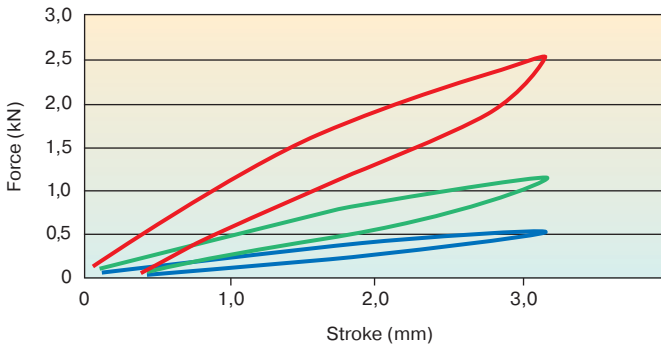
Dimensions and Capacity Chart (Sample Plates MP1 to MP3)

| Type Part Number | ¹ W ₃ max. Nm/Cycle | ¹ Stroke Utilization mm | A | B | C | Area mm ² | Density kg/m ³ | Return Time s | Weight kg |
|---------------------|--|---------------------------------------|------|------|------|-------------------------|------------------------------|------------------|--------------|
| SL-100-12-D-MP1 | 4.5 (13.0) | 3 (6) | 50 | 50 | 12.5 | 2 500 | 500 | approx. 3 (4) | 0.016 |
| SL-100-12-D-MP2 | 11.5 (29.0) | 3 (6) | 70.7 | 70.7 | 12.5 | 5 000 | 500 | approx. 3 (4) | 0.031 |
| SL-100-12-D-MP3 | 23.0 (75.0) | 3 (6) | 100 | 100 | 12.5 | 10 000 | 500 | approx. 3 (4) | 0.063 |

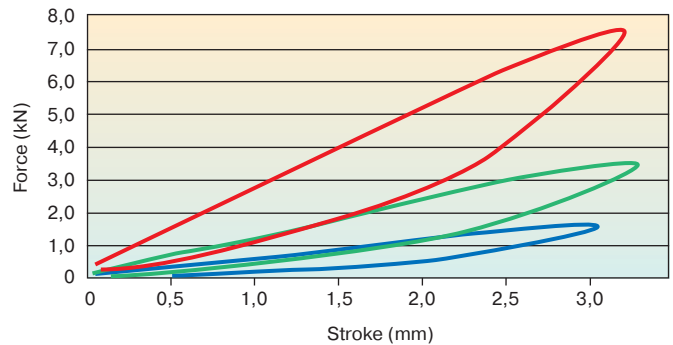
¹ Energy absorption and stroke utilization as well as the below illustrated dynamic curve progression refer to a calculated free falling mass with an impact velocity of 1 m/s. For differing application data, these values can only be used as a reference. The energy absorption depends on the **individual impact surface** and stroke utilization. The longer the load duration the more the reduction in energy absorption (material fatigue).

Characteristics of Type SL-100-12

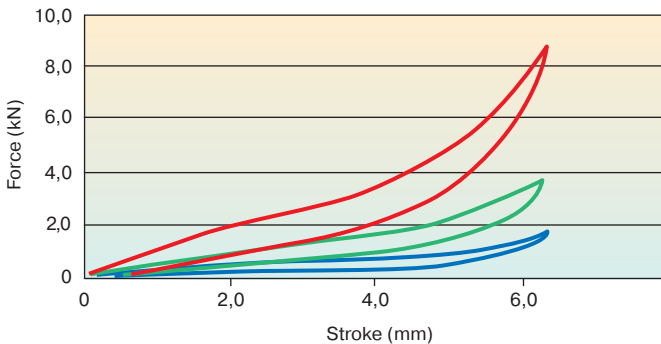
Force-Stroke Static
Stroke Utilization 3 mm, 25 %



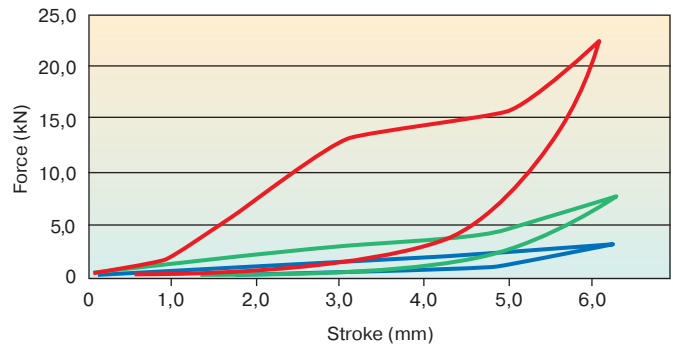
Force-Stroke Dynamic
Stroke Utilization 3 mm, 25 %



Force-Stroke Static
Stroke Utilization 6 mm, 50 %



Force-Stroke Dynamic
Stroke Utilization 6 mm, 50 %

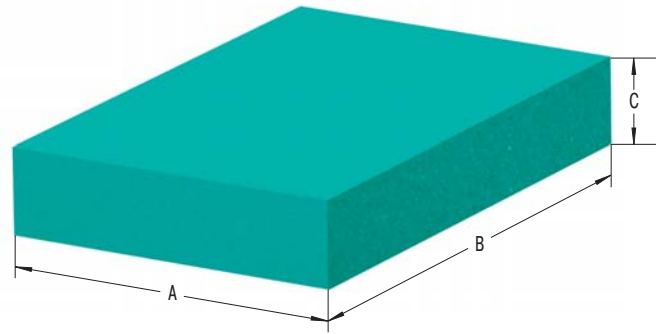
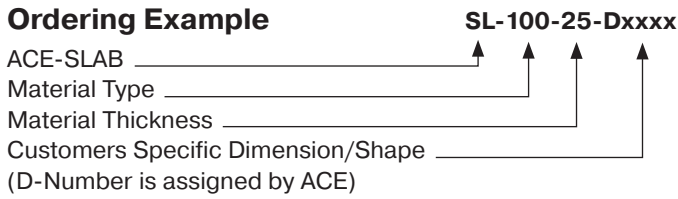


Load data: static, between two level plates, deformation velocity 1 % of the plate thickness / sec.

— Area 10 000 mm²
 — Area 5 000 mm²
 — Area 2 500 mm²

Load data: dynamic, free-falling mass, impact velocity about 1 m/s.

Ordering Example



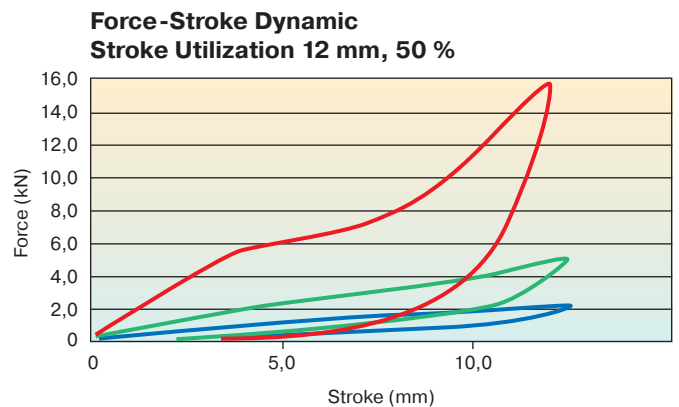
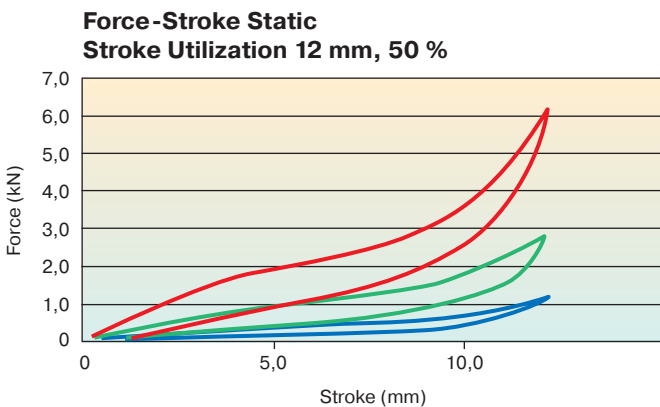
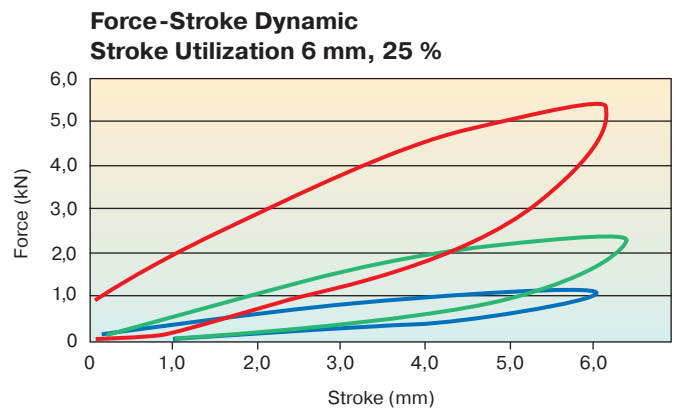
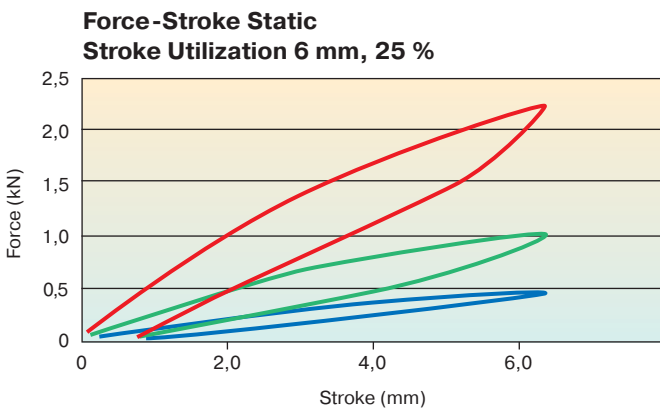
The chosen damping plate should be tested by the customer on the specific application.

Dimensions and Capacity Chart (Sample Plates MP1 to MP3)

| Type Part Number | ¹ W ₃ max. Nm/Cycle | ¹ Stroke Utilization mm | A | B | C | Area mm ² | Density kg/m ³ | Return Time s | Weight kg |
|---------------------|--|---------------------------------------|------|------|----|-------------------------|------------------------------|------------------|--------------|
| SL-100-25-D-MP1 | 5.7 (14.5) | 6 (12) | 50 | 50 | 25 | 2 500 | 500 | approx. 4 (5) | 0.031 |
| SL-100-25-D-MP2 | 11.5 (33.0) | 6 (12) | 70.7 | 70.7 | 25 | 5 000 | 500 | approx. 4 (5) | 0.062 |
| SL-100-25-D-MP3 | 28.5 (90.0) | 6 (12) | 100 | 100 | 25 | 10 000 | 500 | approx. 4 (5) | 0.125 |

¹ Energy absorption and stroke utilization as well as the below illustrated dynamic curve progression refer to a calculated free falling mass with an impact velocity of 1 m/s. For differing application data, these values can only be used as a reference. The energy absorption depends on the individual impact surface and stroke utilization. The longer the load duration the more the reduction in energy absorption (material fatigue).

Characteristics of Type SL-100-25



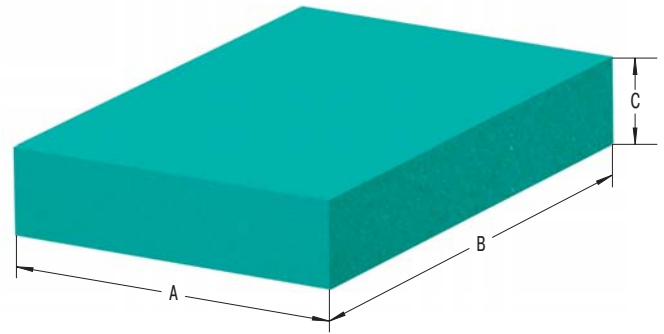
Load data: static, between two level plates, deformation velocity 1 % of the plate thickness / sec.

| | |
|---|-----------------------------|
| — | Area 10 000 mm ² |
| — | Area 5 000 mm ² |
| — | Area 2 500 mm ² |

Load data: dynamic, free-falling mass, impact velocity about 1 m/s.

Ordering Example

ACE-SLAB _____ **SL-300-12-Dxxxx**
 Material Type _____
 Material Thickness _____
 Customers Specific Dimension/Shape _____
 (D-Number is assigned by ACE)



The chosen damping plate should be tested by the customer on the specific application.

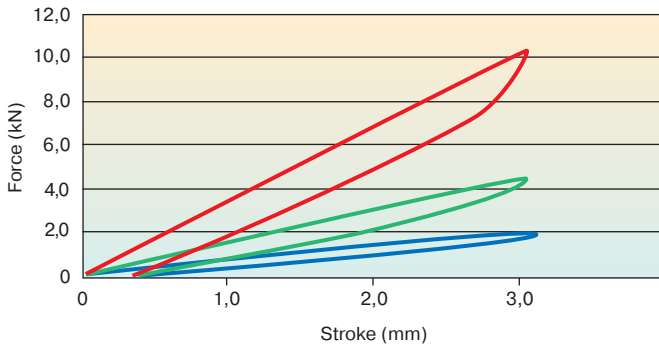
Dimensions and Capacity Chart (Sample Plates MP1 to MP3)

| Type Part Number | ¹ W ₃ max. Nm/Cycle | ¹ Stroke Utilization mm | A | B | C | Area mm ² | Density kg/m ³ | Return Time s | Weight kg |
|---------------------|--|---------------------------------------|------|------|------|-------------------------|------------------------------|------------------|--------------|
| SL-300-12-D-MP1 | 17.0 (85.0) | 3 (6) | 50 | 50 | 12.5 | 2 500 | 800 | approx. 2 (3) | 0.025 |
| SL-300-12-D-MP2 | 50.0 (250.0) | 3 (6) | 70.7 | 70.7 | 12.5 | 5 000 | 800 | approx. 2 (3) | 0.050 |
| SL-300-12-D-MP3 | 100.0 | 3 (6) | 100 | 100 | 12.5 | 10 000 | 800 | approx. 2 (3) | 0.100 |

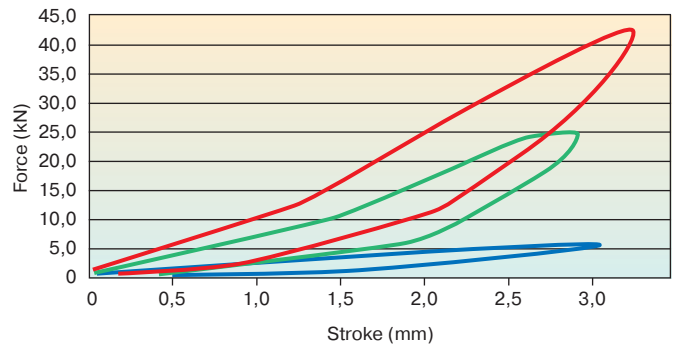
¹ Energy absorption and stroke utilization as well as the below illustrated dynamic curve progression refer to a calculated free falling mass with an impact velocity of 1 m/s. For differing application data, these values can only be used as a reference. The energy absorption depends on the individual impact surface and stroke utilization. The longer the load duration the more the reduction in energy absorption (material fatigue).

Characteristics of Type SL-300-12

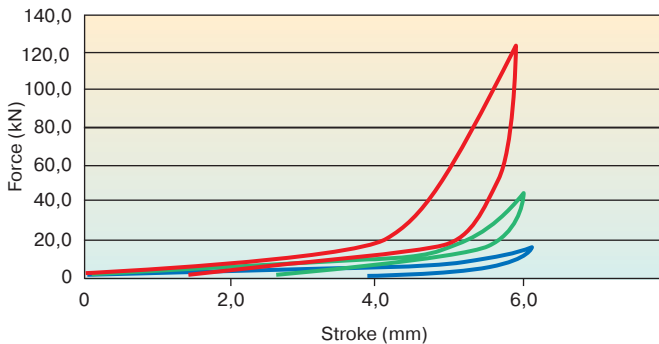
Force-Stroke Static
Stroke Utilization 3 mm, 25 %



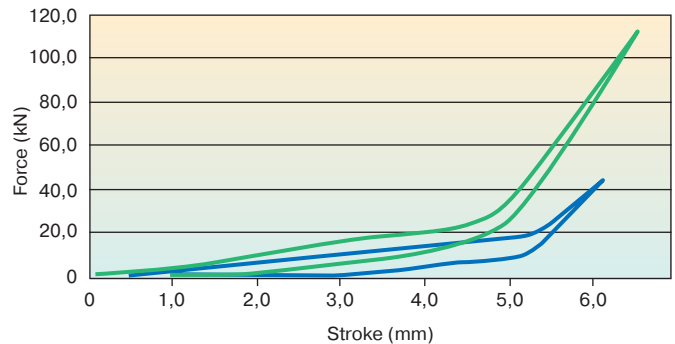
Force-Stroke Dynamic
Stroke Utilization 3 mm, 25 %



Force-Stroke Static
Stroke Utilization 6 mm, 50 %



Force-Stroke Dynamic
Stroke Utilization 6 mm, 50 %

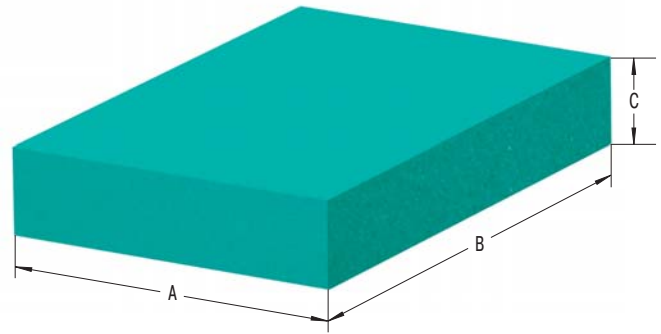
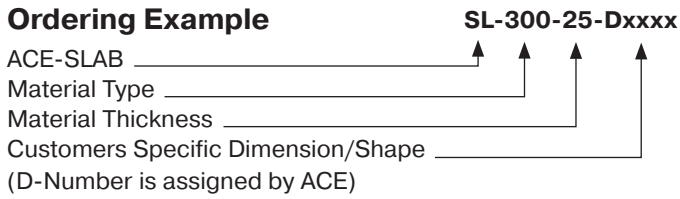


Load data: static, between two level plates, deformation velocity 1 % of the plate thickness / sec.

— Area 10 000 mm²
 — Area 5 000 mm²
 — Area 2 500 mm²

Load data: dynamic, free-falling mass, impact velocity about 1 m/s.

Ordering Example



The chosen damping plate should be tested by the customer on the specific application.

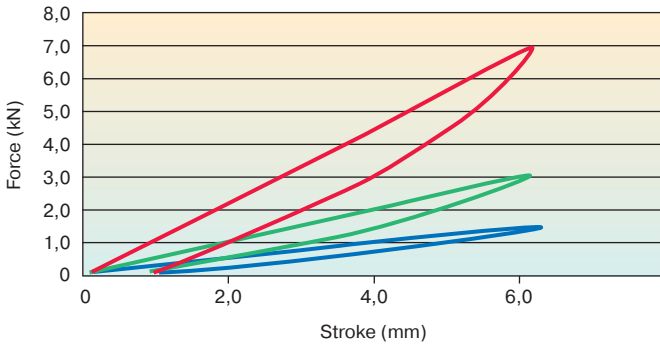
Dimensions and Capacity Chart (Sample Plates MP1 to MP3)

| Type Part Number | ¹ W ₃ max. Nm/Cycle | ¹ Stroke Utilization mm | A | B | C | Area mm ² | Density kg/m ³ | Return Time s | Weight kg |
|---------------------|--|---------------------------------------|------|------|----|-------------------------|------------------------------|------------------|--------------|
| SL-300-25-D-MP1 | 19.5 (90.0) | 6 (12) | 50 | 50 | 25 | 2 500 | 800 | approx. 3 (4) | 0.050 |
| SL-300-25-D-MP2 | 50.0 (225.0) | 6 (12) | 70.7 | 70.7 | 25 | 5 000 | 800 | approx. 3 (4) | 0.100 |
| SL-300-25-D-MP3 | 150.0 | 6 (12) | 100 | 100 | 25 | 10 000 | 800 | approx. 3 (4) | 0.200 |

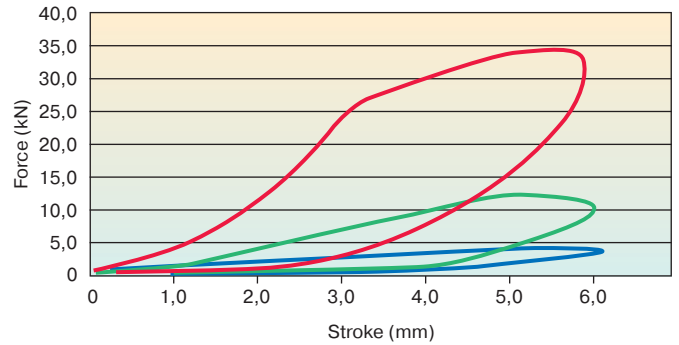
¹ Energy absorption and stroke utilization as well as the below illustrated dynamic curve progression refer to a calculated free falling mass with an impact velocity of 1 m/s. For differing application data, these values can only be used as a reference. The energy absorption depends on the individual impact surface and stroke utilization. The longer the load duration the more the reduction in energy absorption (material fatigue).

Characteristics of Type SL-300-25

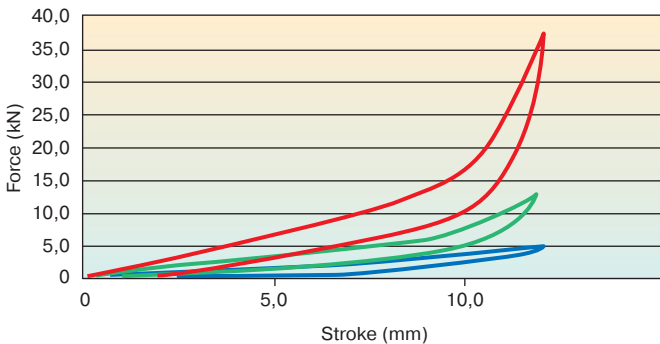
Force-Stroke Static
Stroke Utilization 6 mm, 25 %



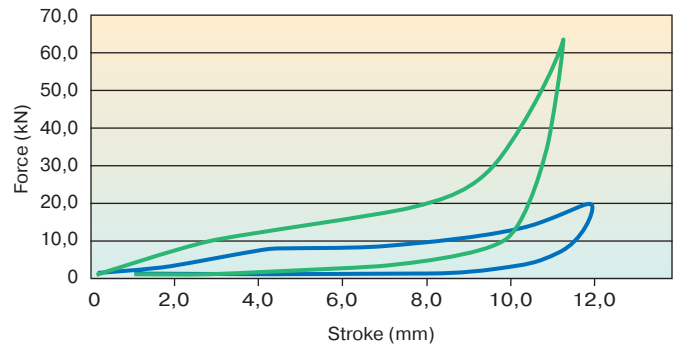
Force-Stroke Dynamic
Stroke Utilization 6 mm, 25 %



Force-Stroke Static
Stroke Utilization 12 mm, 50 %



Force-Stroke Dynamic
Stroke Utilization 12 mm, 50 %



Load data: static, between two level plates, deformation velocity 1 % of the plate thickness / sec.

| | | |
|---|------|------------------------|
| — | Area | 10 000 mm ² |
| — | Area | 5 000 mm ² |
| — | Area | 2 500 mm ² |

Load data: dynamic, free-falling mass, impact velocity about 1 m/s.

Bonding of Polyurethane (PUR) Elastomers

Cellular and compact parts of polyurethane (PUR) elastomers SLAB damping plates can be bonded according to the following recommendations. If treatment instructions are followed, the strengths of the bonded joint can be equivalent to the elastomer material itself.

1. General Information

To achieve the required bonding strength it is necessary to ensure the correct adhesive is chosen for each individual application.

Contact Bonding Material: thin adhesive film, with little filling of the gaps. Correcting or moving of the areas covered with bonding material is no longer possible after the first contact is made (contact effect).

Once a bonding is separated, the bonding process must be renewed. Please note that creases, ripples or blisters cannot be straightened once the contact is made.

Hardening Bonding Material: (As thin as possible) the film of glue fills the joint. The gluing can be done after the edges are brought together.

2. Preparation

The preparation of bonding surfaces is of significant importance for the bonding strength. The surfaces must be adapted to each other and available in plain, clean form.

Careful removal of: adhesive remnants, oil, fat, separating agents, dirt, dust, scales, molding layers, protective coating, finish, paint, sweat etc.

Mechanical Support: stripping, brushing, scraping, grinding, sandblasting.

Chemical Support: degreasing (washing off with grease remover), etching, priming; pay attention to chemical resistance on page 98!

In general, SLAB damping plates in sheet form can be bonded without pretreatment. Molded parts, with or without special skin, have to be cleaned from left-over separating agents, if necessary by grinding. When bonding with other materials like plastic, wood, metal or concrete, mechanical and/or chemical additives have to be used.

The adhesive has to be prepared according to the formula, observing the manufacturer's recommendations. The adhesive film is also to be carefully applied pursuant to these details. (Tools: brush, spatula, adhesive spreader, airless spray gun).

Contact Bonding Material: Apply the non-gap-filling adhesive film to both bonding surfaces – the thinner, the better. To close the pores of low density materials, two layers may be necessary.

Hardening Bonding Material: Apply evenly. Possible irregularities can be compensated by the film thickness.

3. Bonding

When using contact bonding material, the flash off time has to be kept in mind. Especially, with systems containing water instead of usual solvents, the adhesive film must be as dry as possible in order to pass the 'finger test' – no marks appear

when touching the adhesive surface. When using hardening bonding material, the parts have to be joined immediately after applying the bonding material.

4. Pressing

Contact Bonding Material: contact pressure up to 0.5 N/mm²

Hardening Bonding Material: fix firmly

It is important to carefully follow the manufacturer's instructions with regard to processing temperature, hardening time and earliest possible loading.

5. Selection of Approved Bonding Materials

Because of the variety of materials that can be bonded together as well as numerous suitable bonding materials, we refer you to a worldwide leading producer of bonding and sealing materials.

Sika Deutschland GmbH
Kornwestheimer Str. 103-107
D-70439 Stuttgart

Tel.: +49-711-8009-0

Fax: +49-711-8009-321

E-Mail: info@de.sika.com

Internet: <http://www.sika.de>

Test (following DIN 53428)

Exposure time of the medium: 6 weeks at room temperature, but for concentrated acids and bases as well as solvents: 7 days at room temperature

Evaluation Criteria

Changing of tensile strength and elongation of break (dry samples), change in volume

Evaluation Standard

- 1 Excellent resistance,**
change in characteristics < 10 %
- 2 Good resistance,**
change in characteristics between 10 % and 20 %
- 3 Conditional resistance,**
change in characteristics partly above 20 %
- 4 Not resistant,**
change in characteristics all above 20 %

All information is based on our current knowledge and experiences. We reserve the rights for changes towards product refinement.

Chemical Resistance

| Water/watery solutions | SL-030 to SL-300 |
|-------------------------------|------------------|
| Water | 1 |
| Iron(III) chloride 10 % | 1 |
| Sodium carbonate 10 % | 1 |
| Sodium chlorate 10 % | 1 |
| Sodium chloride 10 % | 1 |
| Sodium hydrogencarbonate 10 % | 1 |
| Sodium nitrate 10 % | 1 |
| Herbicides (div.) | 1 |
| Tensides (div.) | 1 |
| Hydrogen peroxide 3 % | 1 |
| Laitance | 1 |

| Oils and Greases | |
|---------------------------|----------------------------------|
| ASTM Oil No. 1 | 1 |
| ASTM Oil No. 3 | 1 |
| Laitance | 2 |
| Hydraulic oils | depends on consistency/additives |
| Motor oil | 1 |
| Turpentine oil | 3 |
| Formwork oil | 1 |
| Silicone oil | 1 |
| Cooking oil | 1 |
| High performance grease | 1-2 |
| Railroad switch lubricant | 1-2 |

| Acids and Bases ¹ | SL-030 to SL-300 |
|------------------------------|------------------|
| Formic acid | 4 |
| Acetic acid | 3 |
| Phosphoric acid | 2 |
| Nitric acid | 4 |
| Hydrochloric acid | 3 |
| Sulphuric acid | 3 |
| Ammonia solution | 3 |
| Caustic potash solution | 2 |
| Caustic soda solution | 2 |

| Solvents | |
|--------------------------|-----|
| Acetone | 4 |
| Ethyl acetate | 4 |
| Diesel/Fuel oil | 2 |
| Carburetor fuel/benzine | 3 |
| Glycerin | 1 |
| Glycols | 1-2 |
| Cleaning solvents/hexane | 1 |
| Methanol | 3 |
| Thinner | 4 |
| Aromatic hydrocarbons | 4 |

| Other Factors | |
|-----------------------------|-----|
| Hydrolysis | 1 |
| Ozone | 1 |
| UV radiation and weathering | 1-2 |
| Biological resistance | 1 |

¹ The resistance towards acids and bases depends on the concentration.

Sample Plates and Sample Sets

Set "Sizes" comprising 1 model, 1 type of thickness, 3 sizes = 3 sample plates

| Part Number | Contents |
|-------------|--|
| SL-SET-1.1 | SL-030-12-MP1 to MP3 (dimensions 50 x 50 mm, 70.7 x 70.7 mm, 100 x 100 mm) |
| SL-SET-1.2 | SL-030-25-MP1 to MP3 (dimensions 50 x 50 mm, 70.7 x 70.7 mm, 100 x 100 mm) |
| SL-SET-1.3 | SL-100-12-MP1 to MP3 (dimensions 50 x 50 mm, 70.7 x 70.7 mm, 100 x 100 mm) |
| SL-SET-1.4 | SL-100-25-MP1 to MP3 (dimensions 50 x 50 mm, 70.7 x 70.7 mm, 100 x 100 mm) |
| SL-SET-1.5 | SL-300-12-MP1 to MP3 (dimensions 50 x 50 mm, 70.7 x 70.7 mm, 100 x 100 mm) |
| SL-SET-1.6 | SL-300-25-MP1 to MP3 (dimensions 50 x 50 mm, 70.7 x 70.7 mm, 100 x 100 mm) |

Set "Models" comprising 3 models, 1 type of thickness, 1 size = 3 sample plates

| Part Number | Contents |
|-------------|---|
| SL-SET-2.1 | SL-030-12-D-MP1, SL-100-12-D-MP1, SL-300-12-D-MP1 (dimensions 50 x 50 mm) |
| SL-SET-2.2 | SL-030-25-D-MP1, SL-100-25-D-MP1, SL-300-25-D-MP1 (dimensions 50 x 50 mm) |
| SL-SET-2.3 | SL-030-12-D-MP2, SL-100-12-D-MP2, SL-300-12-D-MP2 (dimensions 70.7 x 70.7 mm) |
| SL-SET-2.4 | SL-030-25-D-MP2, SL-100-25-D-MP2, SL-300-25-D-MP2 (dimensions 70.7 x 70.7 mm) |
| SL-SET-2.5 | SL-030-12-D-MP3, SL-100-12-D-MP3, SL-300-12-D-MP3 (dimensions 100 x 100 mm) |
| SL-SET-2.6 | SL-030-25-D-MP3, SL-100-25-D-MP3, SL-300-25-D-MP3 (dimensions 100 x 100 mm) |

Sample Plates

| Part Number | Dimensions and Type |
|---------------------|---|
| SL-030-12-D-MP4 | 220 x 150 x 12.5 mm |
| SL-030-12-D-MP4-V+K | 220 x 150 x 12.5 mm + layer for wear protection 2 mm, self-adhesive on one side |
| SL-030-25-D-MP4 | 220 x 150 x 25 mm |
| SL-100-12-D-MP4 | 220 x 150 x 12.5 mm |
| SL-100-12-D-MP4-V+K | 220 x 150 x 12.5 mm + layer for wear protection 2 mm, self-adhesive on one side |
| SL-100-25-D-MP4 | 220 x 150 x 25 mm |
| SL-300-12-D-MP4 | 220 x 150 x 12.5 mm |
| SL-300-12-D-MP4-V+K | 220 x 150 x 12.5 mm + layer for wear protection 2 mm, self-adhesive on one side |
| SL-300-25-D-MP4 | 220 x 150 x 25 mm |



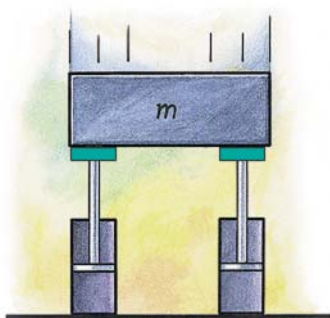
Noise reduction

ACE-SLAB damping plates protect man and machine.

At the beginning of the construction phase of a modern processing centre at the end position, a 25 kg cable channel collided with force against the housing and produced a deafening noise and mechanical strain on the energy chain. A reliable solution for compliance with the operational parameters was realized with the **SL-030-25-Dxxxx** type ACE-SLAB damping plates even before the milling machine was finished.



Low-noise energy chain



Impact reduction in ring form

ACE-SLAB damping plates make tyre transport safer.

Developed for absorbing the impact of forces, the ACE-SLAB damping plates **SL-030-121-Dxxxx** applied in this tyre testing system are ideal for protecting the sliding parts of the machine during quality tests. The individual customisation of the ring form of the centre arm and simple integration into the equipment also support the decision for applying these innovative absorber elements.



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Perfectly fitted machine protection

SLAB damping plates of the **SL-150** to **SL-720** are universally applicable elastic PUR materials that are manufactured according to a patented formula and which are used throughout industry. The standard densities of 150 kg/m³ to 720 kg/m³ serve as vibration insulation in a wide variety of applications. For specific applications, special designs with specific densities can be manufactured. The static and dynamic product characteristics are precisely defined. The effectiveness of elastic suspension can be calculated in advance. The necessary parameters are shown on a respective checklist.

The static load capacity of standard materials are in the range of:

SL-150: 0 to 0.01 N/mm²

SL-220: 0 to 0.025 N/mm²

SL-290: 0 to 0.05 N/mm²

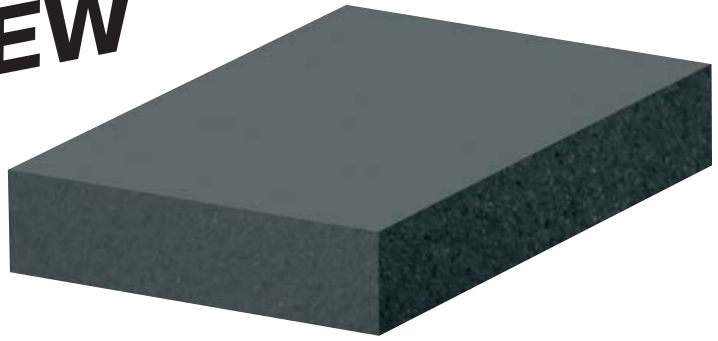
SL-450: 0 to 0.15 N/mm²

SL-600: 0 to 0.30 N/mm²

SL-720: 0 to 0.50 N/mm²

and for special designs up to 0.8 N/mm². Unusual and light loads can withstand forces of 5.0 N/mm². This value can reach up to 6 N/mm² for special designs.

NEW



"Efficiency of the elastic damping can be calculated in advance!"



Compression set: ≤ 5 %, at 50 % of compression, 23 °C, 70 h, 30 min after unloading, according to EN ISO 1856

Environment: Resistant against ozone and UV radiation; food-graded according to ENV 1186-3 (also see chemical resistancy page 98)

Material: Mixed cellular polyether urethane

Standard density: 150 kg/m³, 220 kg/m³, 290 kg/m³, 450 kg/m³, 600 kg/m³ and 720 kg/m³, according to DIN 53420, special designs on request

Fire rating: B2, normally flammable according to DIN 4102

Operating temperature range: -30 °C to +70 °C, short-term higher temperature potential up to 110 °C

Delivery form: Thickness: 12.5 mm and 25 mm. Rolls: 1.5 m wide, 5.0 m long. Strips: Up to the maximum width and length. Other dimensions (also thickness), colours, shapes and cut-out parts on request.

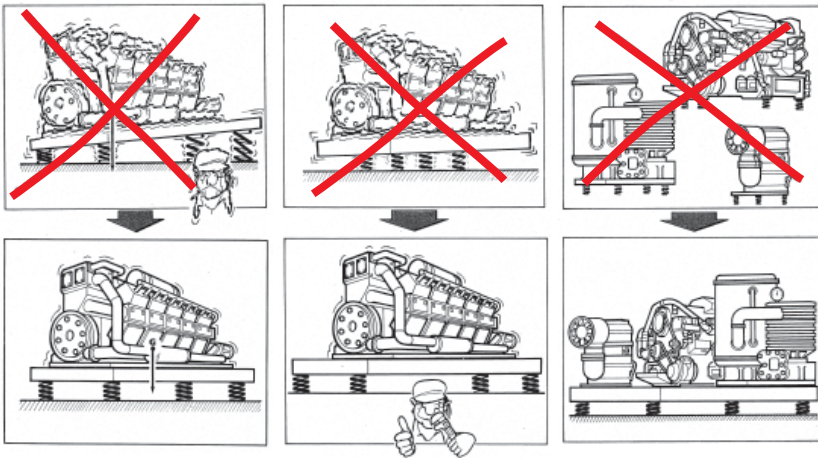
Possibilities for cutting: Water jet cutting, stamping, splitting, sawing, drilling, etc.

Mounting style: Bonding (see adhesive recommendation page 97), clamps, screws, etc.

On request: Available with compact polyurethane wearing surface, shore hardness: 82 shore Sh A.



Even load distribution of vibration damping elements are illustrated using the example of a combustion engine

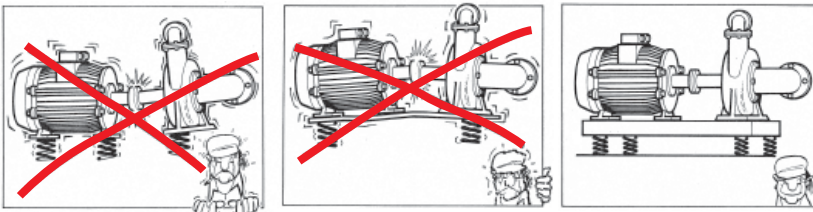


Pay attention to center of gravity!

Maximize the bearing's torsional stiffness!

Merging of assembly groups (combined elastic bearing)

Mounting of individual equipment components illustrated using the example of a pump

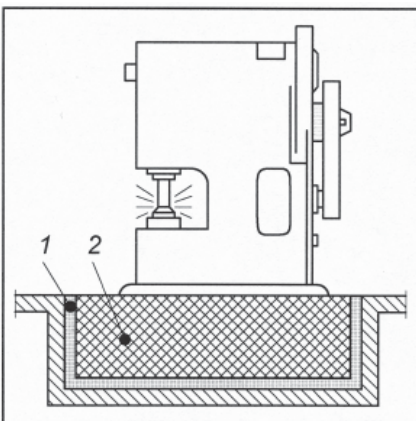


Pay attention to separate flexible mounts of connected equipment components!

Pay attention to flexible base plates or machine frames!

Use large flex resistant base plates or machine frames!

Full surface mounted eccentric press



- sufficient base size
- modeling
- assure vibration insulation
- static view: center of gravity, deflection
- maximize torsional stiffness
- dynamic view: forces, torques, amplitude

1 Vibration damping
2 Concrete base

Source: SUVA,
Elastic Bearing of Machines

Machines generate vibrations which are transmitted to the surroundings. They can influence the manufacturing process of other machines and thereby the quality of the products.

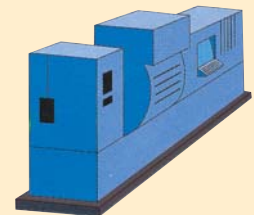
Vibrations disrupt the location and the environment and cause damage to buildings. SLAB polyurethane elastomer is a material that effectively reduces vibration and structure-borne noise. Depending on the requirements, SLABs are available in different densities, thicknesses and dimensions.

SLAB damping plates are used to insulate vibrations for:

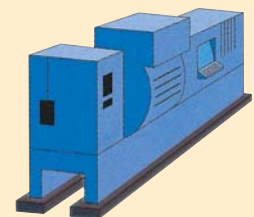
- Machine tools
- Textile machinery
- Air conditioning and ventilating machines
- Crane rails
- Hydraulic crushers
- Presses / stamping machines etc.

Potential for direct bearing support on SLAB damping plates:

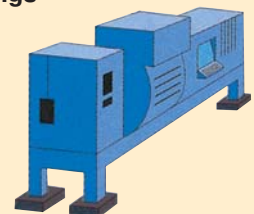
Full surface mount



Strip bearings



Discrete bearings



For detailed information about this product see www.acecontrols-int.com