

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19

BASE

Glass-fibre reinforced polyamide based (PA) technopolymer, black colour, matte finish.

DAMPING ELEMENT

Polyurethane-based rubber (PUR), natural colour, hardness 50 Shore A.

ARTICULATED STEM

Threaded zinc-plated steel with regulation hexagon.

FEATURES AND APPLICATIONS

The rubber buffers have been designed to damp vibrations, shocks and noises produced by moving bodies or non-balanced vibrating masses of equipment and machines.

Vibrations can cause:

- malfunctioning and reduction of the machine lifespan and/or of the adjacent ones;
- damage to operator's health;
- noise.

ORDER INFORMATION

The levelling feet are supplied unassembled to make carriage and storage easier. The components (base and stem) are supplied in separate packing: less volume taken and better protection from scratches and dirt.

To order bases and stems separately, see:

- table of possible combinations Bases/Stems (see page 839)
- the codes of the Bases (see page 836)
- the codes of the Stems (see page 985).

TECHNICAL DATA AND GUIDELINES FOR THE CHOICE

The maximum static load value shown in the table indicates the static load for a specific load of 0.4 N/mm² to which the damping element can be subjected in order to have optimal vibration absorption.

The table shows also the values (12) of elastic deformation with a load of max 0.6 N/mm² in case of a dynamic load.

The natural frequency of the base depends on the material, the geometry, and the specific load [N/mm²] to which it is subjected.

The specific load is obtained by dividing the applied load by the support area of the damping element.

Once the specific load is known, the natural frequency of the foot can be obtained from the graph in figure 1.

The damping starts when the ratio between the disturbance frequency of the machine and the natural frequency of the damping foot is greater than $\sqrt{2}$. The greater the difference between the interference frequency of the machine and the natural frequency of the foot, the greater the damping (see figure 2).

Example:

1. Expected load on the foot = 150 N
2. Specific load LS.VA-32 = $150/239 = 0.63 \text{ N/mm}^2$
3. Specific load LS.VA-40 = $150/452 = 0.33 \text{ N/mm}^2$
4. LS.VA-40 is therefore chosen as the specific load of the example is less than 0.4 N/mm², which is the optimal damping value.
5. Entering the graph in figure 1 with a specific load of 0.33 N/mm² we obtain a natural frequency of 26 Hz (curve LS.VA-40).
6. Entering the graph in figure 2, with 26 Hz, the chosen foot will start to dampen frequencies greater than 32 Hz.
A damping of 69% is obtained for a machine frequency of 61 Hz.
A damping of 92% is obtained for a machine frequency of 85 Hz.

ACCESSORIES ON REQUEST

AISI 304 stainless steel nut (see Nuts NT. on page 835).



ELESA Original design

Fig.1

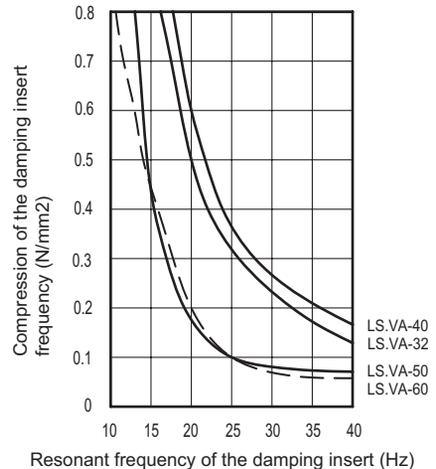
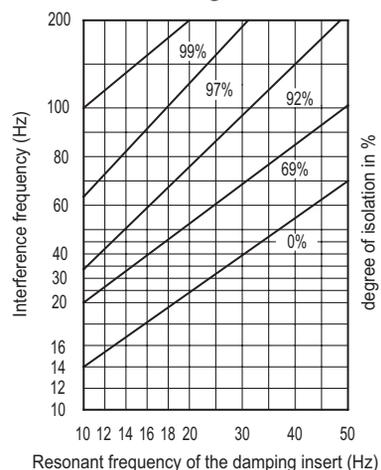
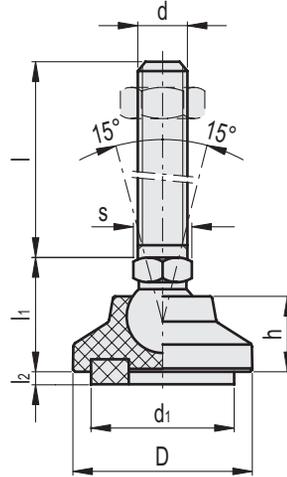


Fig.2





Code	Description	D	d2A	l	l1	l2	d1	h	s	Articulation ∅	I2	I2	I2	Area damping insert [inch ²]	Max. limit static load* [lbf]	⚖
											0 [lbf/inch ²]	0.4 [lbf/inch ²]	0.6 [lbf/inch ²]			
90342122	LS.VA-32-14-3/8-16X2	1.26	3/8-16	2	0.98	0.21	0.91	0.59	9/16	0.55	768.70	696.18	667.17	0.37	21.58	0.12
90342126	LS.VA-32-14-3/8-16X4	1.26	3/8-16	4	0.98	0.21	0.91	0.59	9/16	0.55	768.70	696.18	667.17	0.37	21.58	0.17
90342129	LS.VA-32-14-3/8-16X6	1.26	3/8-16	6	0.98	0.21	0.91	0.59	9/16	0.55	768.70	696.18	667.17	0.37	21.58	0.18
90342322	LS.VA-32-14-1/2-13X2	1.26	1/2-13	2	0.98	0.21	0.91	0.59	9/16	0.55	768.70	696.18	667.17	0.37	21.58	0.15
90342326	LS.VA-32-14-1/2-13X4	1.26	1/2-13	4	0.98	0.21	0.91	0.59	9/16	0.55	768.70	696.18	667.17	0.37	21.58	0.24
90342332	LS.VA-32-14-1/2-13X6	1.26	1/2-13	6	0.98	0.21	0.91	0.59	9/16	0.55	768.70	696.18	667.17	0.37	21.58	0.22
90342422	LS.VA-32-14-5/8-11X4	1.26	5/8-11	4	0.98	0.21	0.91	0.59	5/8	0.55	768.70	696.18	667.17	0.37	21.58	0.35
90342432	LS.VA-32-14-5/8-11X6	1.26	5/8-11	6	0.98	0.21	0.91	0.59	5/8	0.55	768.70	696.18	667.17	0.37	21.58	0.50
90342442	LS.VA-32-14-5/8-11X8	1.26	5/8-11	8	0.98	0.21	0.91	0.59	5/8	0.55	768.70	696.18	667.17	0.37	21.58	0.55
90343122	LS.VA-40-14-3/8-16X2	1.57	3/8-16	2	0.98	0.24	1.18	0.67	9/16	0.55	870.23	812.21	783.20	0.70	40.47	0.14
90343126	LS.VA-40-14-3/8-16X4	1.57	3/8-16	4	0.98	0.24	1.18	0.67	9/16	0.55	870.23	812.21	783.20	0.70	40.47	0.19
90343128	LS.VA-40-14-3/8-16X6	1.57	3/8-16	6	0.98	0.24	1.18	0.67	9/16	0.55	870.23	812.21	783.20	0.70	40.47	0.20
90343222	LS.VA-40-14-1/2-13X2	1.57	1/2-13	2	0.98	0.24	1.18	0.67	9/16	0.55	870.23	812.21	783.20	0.70	40.47	0.17
90343226	LS.VA-40-14-1/2-13X4	1.57	1/2-13	4	0.98	0.24	1.18	0.67	9/16	0.55	870.23	812.21	783.20	0.70	40.47	0.26
90343232	LS.VA-40-14-1/2-13X6	1.57	1/2-13	6	0.98	0.24	1.18	0.67	9/16	0.55	870.23	812.21	783.20	0.70	40.47	0.24
90343422	LS.VA-40-14-5/8-11X4	1.57	5/8-11	4	0.98	0.24	1.18	0.67	5/8	0.55	870.23	812.21	783.20	0.70	40.47	0.36
90343432	LS.VA-40-14-5/8-11X6	1.57	5/8-11	6	0.98	0.24	1.18	0.67	5/8	0.55	870.23	812.21	783.20	0.70	40.47	0.52
90343442	LS.VA-40-14-5/8-11X8	1.57	5/8-11	8	0.98	0.24	1.18	0.67	5/8	0.55	870.23	812.21	783.20	0.70	40.47	0.57
90344122	LS.VA-50-14-3/8-16X2	1.97	3/8-16	2	1.06	0.24	1.57	0.75	9/16	0.55	870.23	725.19	681.68	1.55	89.92	0.17
90344126	LS.VA-50-14-3/8-16X4	1.97	3/8-16	4	1.06	0.24	1.57	0.75	9/16	0.55	870.23	725.19	681.68	1.55	89.92	0.21
90344128	LS.VA-50-14-3/8-16X6	1.97	3/8-16	6	1.06	0.24	1.57	0.75	9/16	0.55	870.23	725.19	681.68	1.55	89.92	0.23
90344322	LS.VA-50-14-1/2-13X2	1.97	1/2-13	2	1.06	0.24	1.57	0.75	9/16	0.55	870.23	725.19	681.68	1.55	89.92	0.20
90344326	LS.VA-50-14-1/2-13X4	1.97	1/2-13	4	1.06	0.24	1.57	0.75	9/16	0.55	870.23	725.19	681.68	1.55	89.92	0.29
90344332	LS.VA-50-14-1/2-13X6	1.97	1/2-13	6	1.06	0.24	1.57	0.75	9/16	0.55	870.23	725.19	681.68	1.55	89.92	0.27
90344522	LS.VA-50-14-5/8-11X4	1.97	5/8-11	4	1.06	0.24	1.57	0.75	5/8	0.55	870.23	725.19	681.68	1.55	89.92	0.39
90344526	LS.VA-50-14-5/8-11X6	1.97	5/8-11	6	1.06	0.24	1.57	0.75	5/8	0.55	870.23	725.19	681.68	1.55	89.92	0.55
90344542	LS.VA-50-14-5/8-11X8	1.97	5/8-11	8	1.06	0.24	1.57	0.75	5/8	0.55	870.23	725.19	681.68	1.55	89.92	0.60
90344612	LS.VA-60-14-3/8-16X2	2.36	3/8-16	2	1.30	0.20	1.99	0.94	9/16	0.55	725.19	565.65	507.63	2.65	152.87	0.32
90344616	LS.VA-60-14-3/8-16X4	2.36	3/8-16	4	1.30	0.20	1.99	0.94	9/16	0.55	725.19	565.65	507.63	2.65	152.87	0.37
90344618	LS.VA-60-14-3/8-16X6	2.36	3/8-16	6	1.30	0.20	1.99	0.94	9/16	0.55	725.19	565.65	507.63	2.65	152.87	0.38
90344722	LS.VA-60-14-1/2-13X2	2.36	1/2-13	2	1.30	0.20	1.99	0.94	9/16	0.55	725.19	565.65	507.63	2.65	152.87	0.35
90344726	LS.VA-60-14-1/2-13X4	2.36	1/2-13	4	1.30	0.20	1.99	0.94	9/16	0.55	725.19	565.65	507.63	2.65	152.87	0.44
90344732	LS.VA-60-14-1/2-13X6	2.36	1/2-13	6	1.30	0.20	1.99	0.94	9/16	0.55	725.19	565.65	507.63	2.65	152.87	0.42
90345226	LS.VA-60-14-5/8-11X4	2.36	5/8-11	4	1.30	0.20	1.99	0.94	5/8	0.55	725.19	565.65	507.63	2.65	152.87	0.55
90345232	LS.VA-60-14-5/8-11X6	2.36	5/8-11	6	1.30	0.20	1.99	0.94	5/8	0.55	725.19	565.65	507.63	2.65	152.87	0.70
90345236	LS.VA-60-14-5/8-11X8	2.36	5/8-11	8	1.30	0.20	1.99	0.94	5/8	0.55	725.19	565.65	507.63	2.65	152.87	0.75
90345246	LS.VA-60-24-5/8-11X4	2.36	5/8-11	4	1.69	0.20	1.99	0.94	15/16	0.94	725.19	565.65	507.63	2.65	152.87	0.67
90345252	LS.VA-60-24-5/8-11X6	2.36	5/8-11	6	1.69	0.20	1.99	0.94	15/16	0.94	725.19	565.65	507.63	2.65	152.87	0.86
90345256	LS.VA-60-24-5/8-11X8	2.36	5/8-11	8	1.69	0.20	1.99	0.94	15/16	0.94	725.19	565.65	507.63	2.65	152.87	0.99
90345266	LS.VA-60-24-3/4-10X4	2.36	3/4-10	4	1.69	0.20	1.99	0.94	15/16	0.94	725.19	565.65	507.63	2.65	152.87	0.86
90345272	LS.VA-60-24-3/4-10X6	2.36	3/4-10	6	1.69	0.20	1.99	0.94	15/16	0.94	725.19	565.65	507.63	2.65	152.87	1.06
90345276	LS.VA-60-24-3/4-10X8	2.36	3/4-10	8	1.69	0.20	1.99	0.94	15/16	0.94	725.19	565.65	507.63	2.65	152.87	1.26

* See paragraph: Technical data and guidelines for the choice.

