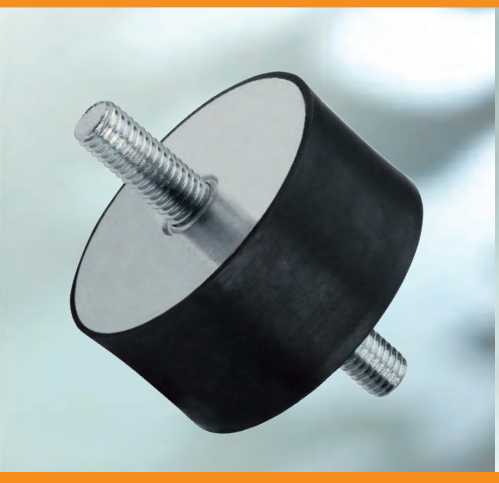


Vibration-damping elements

elesa®

Technical data and guidelines for the choice

Basic data required

- disturbing frequency: the frequency of the disturbing vibration produced by a on-duty machine. In general, it is obtained by the number of rotations of the engine [Hz=r.p.m./60];
- the load applied to every single vibration-damping element [lbf];
- the isolation degree required [%];
- the deflection value of the vibration-damping element under a given load [mm];
- the rigidity [lbf/inches], that is to say the load that applied to the vibration-damping element produces a deflection of 0.039 inches.

For DVA.6 and DVA.7 the non-linear progress of the rigidity as reported in the graphs.

How to choose the vibration-damping element

- with reference to the diagram for checking the isolation degree, intersect the disturbing frequency value with the isolation degree required (each isolation degree corresponds to a line in the diagram) and define the deflection [in inches];
- divide the load applied onto the vibration-damping element by the deflection value to obtain the required rigidity of the vibration-damping element;
- compare the rigidity obtained with the rigidity shown in the table and choose the vibration-damping element which presents the nearest value (lower) to the calculated one.

Check

- the deflection of the vibration-damping element chosen can be obtained in the graphs (DVA.6-DVA.7) on the basis of the load;
- intersect the disturbing frequency value with the vibration-damping element deflection value in the diagram to obtain the isolation degree offered by the vibration-damping element chosen;
- compare the obtained value with the isolation degree required.

Example

Conditions of use:

- disturbing frequency= 50 Hz (3,000 r.p.m.);
- load applied on each vibration-damping element 26 lbf;
- 90% isolation required;
- diagram shows that with a 50 Hz disturbing frequency and an isolation degree of 90%, the deflection obtained is 0.039 inches;
- divide the load applied by the deflection obtained to define the rigidity required, which is 26/0.039 = 667 lbf/inches;
- compare the rigidity value obtained (667 lbf/inches) with the values reported in the table;
- the values reported in table, for type DVA.1, show that the vibration-damping element which should be used is DVA.1-25-25-1/4-55.

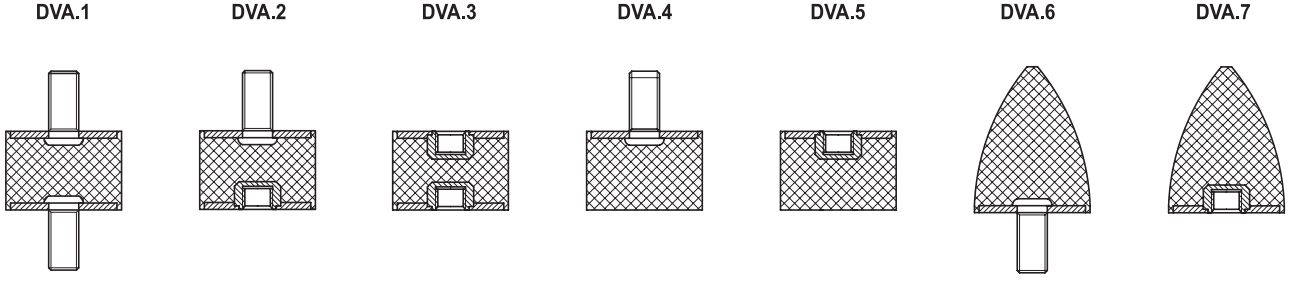
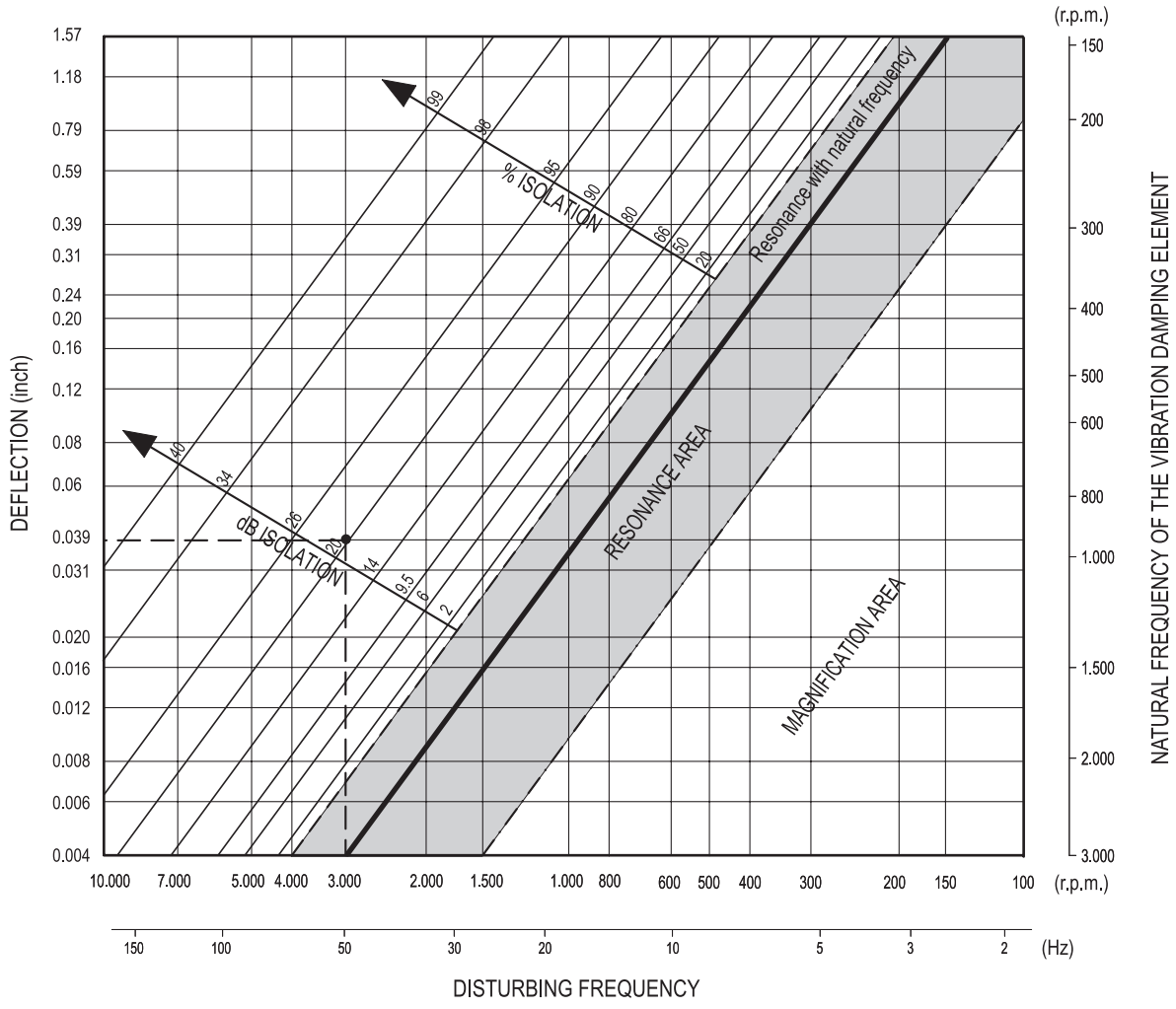
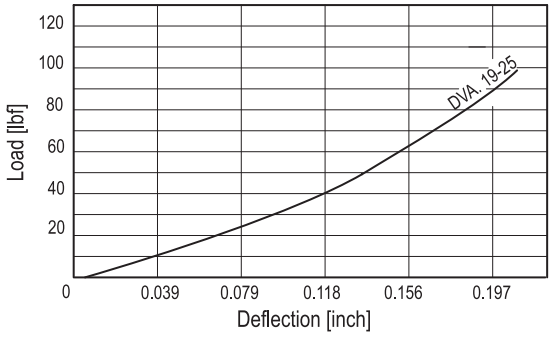
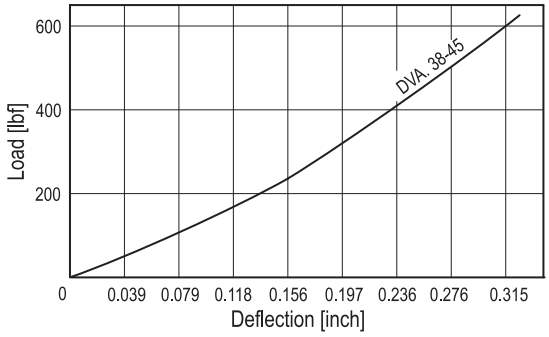


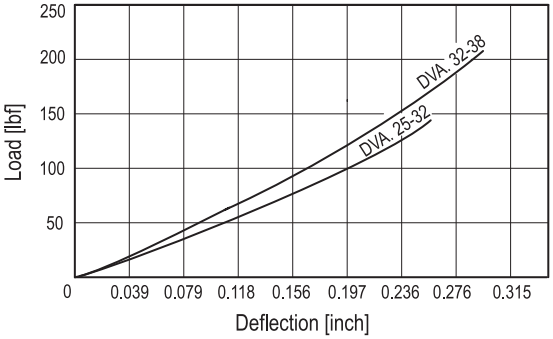
Diagram for checking the isolation degree of the vibration-damping element

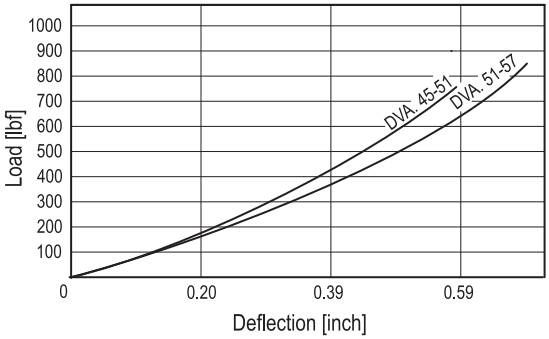


Graphs (DVA.6 - DVA.7)









DVA.1 ▪ DVA.2 ▪ DVA.3

INCH

INOX Stainless Steel

Vibration-damping elements

RoHS

+175°F -40°F

- **Base**
  - **DVA**: glossy zinc-plated steel.
  - **DVA-SST**: AISI 304 stainless steel.
- **Vibration-damping body**
  Natural rubber NR, hardness 55 tolerance ±5 Shore A, black colour.
- **Standard executions**
  - **DVA.1**: zinc-plated steel threaded studs.
  - **DVA.1-SST**: AISI 304 stainless steel threaded studs.
  - **DVA.2**: threadead stud and boss in glossy zinc-plated steel, threaded blind hole.
  - **DVA.2-SST**: threadead stud and boss in AISI 304 stainless steel, threaded blind hole.
  - **DVA.3**: zinc-plated steel bosses, threaded blind holes.
  - **DVA.3-SST**: AISI 304 stainless steel bosses, threaded blind holes.

Special executions on request

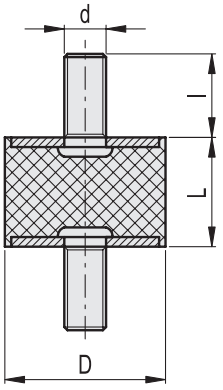
- Natural rubber NR, hardness 40 tolerance ±5 Shore A.
- Natural rubber NR, hardness 70 tolerance ±5 Shore A.

Features and applications

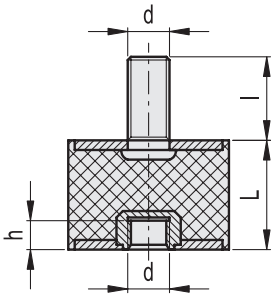
ELESA vibration-damping elements have been designed to damp vibrations, shocks and noises produced by moving bodies or non-balanced vibrating masses of equipment and machines which can cause:

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

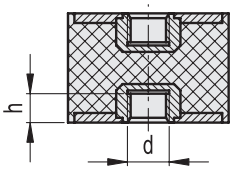
DVA.1



DVA.2



DVA.3



DVA.1 - 9 -13 - 8 - 55
D L d Shore A

DVA.1

DVA.1-SST INOX Stainless Steel *american units*

Elesa Standards		Main dimensions				Max load	Max deflection	Stiffness	⚖	Elesa Standards	
Code	Description	D	L	d	l	lbf	inch	lbf/inch	lbs	Code	Description
9411131	DVA.1-9-13-8-55	0.35	0.51	8-32	0.5	20	0.1	205	0.009	9410001	DVA.1-9-13-SST-8-55
9411136	DVA.1-14-13-10-55	0.55	0.51	10-32	0.38	13	0.15	91	0.015	9410013	DVA.1-14-13-SST-10-55
9411151	DVA.1-16-13-8-55	0.63	0.51	8-32	0.5	2	0.1	440	0.018	9410015	DVA.1-16-13-SST-8-55
9411201	DVA.1-19-19-1/4-55	0.75	0.75	1/4-20	0.5	3	0.2	295	0.037	9410023	DVA.1-19-19-SST-1/4-55
9411221	DVA.1-25-13-1/4-55	0.98	0.51	1/4-20	0.5	157	0.15	1043	0.053	9410031	DVA.1-25-13-SST-1/4-55
9411241	DVA.1-25-19-1/4-13-55	0.98	0.75	1/4-20	0.5	165	0.15	1125	0.062		
9411246	DVA.1-25-19-1/4-55	0.98	0.75	1/4-20	0.62	183	0.15	682	0.064	9410033	DVA.1-25-19-SST-1/4-55
9411251	DVA.1-25-19-5/16-55	0.98	0.75	5/16-18	0.62	183	0.15	1220	0.068	9410034	DVA.1-25-19-SST-5/16-55
9411261	DVA.1-25-25-1/4-55	0.98	0.75	1/4-20	0.5	164	0.15	668	0.07	9410035	DVA.1-25-25-SST-1/4-55
9411271	DVA.1-25-25-5/16-55	0.98	0.98	5/16-18	0.62	151	0.25	616	0.079	9410036	DVA.1-25-25-SST-5/16-55
9411281	DVA.1-32-19-1/4-55	1.26	0.75	1/4-20	0.5	283	0.15	1886	0.088	9410043	DVA.1-32-19-SST-1/4-55
9411301	DVA.1-32-19-5/16-55	1.26	0.75	5/16-18	0.62	280	0.2	1425	0.104	9410044	DVA.1-32-19-SST-5/16-55
9411321	DVA.1-32-25-5/16-55	1.26	0.98	5/16-18	0.62	280	0.2	1090	0.115	9410045	DVA.1-32-25-SST-5/16-55
9411323	DVA.1-35-25-5/16-55	1.38	0.98	5/16-18	0.62	336	0.2	1344	0.139	9410046	DVA.1-35-25-5/16-55
9411325	DVA.1-35-25-5/16-19-55	1.38	0.98	5/16-18	0.75	336	0.2	1344	0.14		
9411327	DVA.1-38-19-5/16-55	1.5	0.75	5/16-18	0.62	523	0.2	2615	0.141	9410047	DVA.1-38-19-SST-5/16-55
9411329	DVA.1-38-25-3/8-55	1.5	0.98	3/8-16	0.62	300	0.25	1200	0.172	9410048	DVA.1-38-25-SST-3/8-55
9411331	DVA.1-40-25-5/16-55	1.57	0.98	5/16-18	0.62	336	0.2	1710	0.165	9410052	DVA.1-40-25-SST-5/16-55
9411341	DVA.1-40-25-3/8-55	1.57	0.98	3/8-16	0.62	500	0.25	2000	0.178	9410051	DVA.1-40-25-SST-3/8-55
9411381	DVA.1-51-19-3/8-55	2.01	0.75	3/8-16	1.12	804	0.2	4093	0.256	9410061	DVA.1-51-19-SST-3/8-55
9411421	DVA.1-51-41-3/8-55	2.01	1.61	3/8-16	0.62	576	0.3	1955	0.346	9410065	DVA.1-51-41-SST-3/8-55
9411451	DVA.1-62-32-1/2-55	2.44	1.26	1/2-13	0.88	762	0.3	2582	0.468	9410071	DVA.1-62-32-SST-1/2-55
9411501	DVA.1-79-57-1/2-55	3.11	2.24	1/2-13	1.25	2607	0.2	13281	1.21	9410085	DVA.1-79-57-SST-1/2-55

DVA.2 -16-13 - 8 - 55
D L d Shore A

DVA.2

DVA.2-SST INOX Stainless Steel *american units*

Elesa Standards		Main dimensions					Max load	Max deflection	Stiffness	⚖	Elesa Standards	
Code	Description	D	L	d	l	h	lbf	inch	lbf/inch	lbs	Code	Description
9411731	DVA.2-16-13-8-55	5/8	1/2	8-32	1/2	0.16	73	0.1	730	0.04	9410115	DVA.2-16-13-SST-8-55
9411821	DVA.2-25-13-1/4-55	0.98	0.51	1/4-20	1/2	0.24	116	0.1	1160	0.048	9410131	DVA.2-25-13-SST-1/4-55
9411841	DVA.2-25-19-1/4-55	0.98	0.75	1/4-20	1/2	0.24	217	0.15	1445	0.057	9410133	DVA.2-25-19-SST-1/4-55
9411846	DVA.2-25-25-1/4-55	0.98	0.98	1/4-20	1/2	0.24	200	0.25	800	0.066	9410135	DVA.2-25-25-SST-1/4-55
9411851	DVA.2-25-25-5/16-55	0.98	0.98	5/16-18	5/8	0.24	200	0.25	800	0.075	9410136	DVA.2-25-25-SST-5/16-55
9411906	DVA.2-25-25-5/16-55	1.38	0.98	5/16-18	5/8	0.31	500	0.25	2000	0.134	9410147	DVA.2-35-25-SST-5/16-55
9412001	DVA.2-51-41-3/8-55	2.01	1.61	3/8-16	5/8	0.39	748	0.4	1870	0.337	9410165	DVA.2-51-41-SST-3/8-55
9412026	DVA.2-51-51-3/8-55	2.01	2.01	3/8-16	1.1/8	0.39	682	0.5	1364	0.399	9410169	DVA.2-51-51-SST-3/8-55
9412081	DVA.2-79-57-1/2-55	3.11	2.24	1/2-13	1.1/4	0.47	1880	0.55	3357	1.16	9410185	DVA.2-79-57-SST-1/2-55

DVA.3 -16-13 - 8 - 55
D L d Shore A

DVA.3

DVA.3-SST INOX Stainless Steel *american units*

Elesa Standards		Main dimensions				Max load	Max deflection	Stiffness	⚖	Elesa Standards	
Code	Description	D	L	d	h	lbf	inch	lbf/inch	lbs	Code	Description
9412326	DVA.3-16-13-8-55	0.63	0.51	8-32	0.16	110	0.1	1100	0.055	9410215	DVA.3-16-13-SST-8-55
9412386	DVA.3-25-25-5/16-55	0.98	0.98	5/16-18	0.24	257	0.15	1713	0.068	9410233	DVA.3-25-25-SST-5/16-55
9412396	DVA.3-38-25-5/16-55	1.5	0.98	5/16-18	0.31	510	0.15	3400	0.137	9410251	DVA.3-38-25-SST-5/16-55
9412466	DVA.3-51-41-3/8-55	2.01	1.61	3/8-16	0.39	560	0.3	1866	0.326	9410265	DVA.3-51-41-SST-3/8-55

DVA.4 ▪ DVA. 5

INCH

INOX Stainless Steel

Vibration-damping elements

RoHS +175°F -40°F

- **Base**
  - **DVA**: glossy zinc-plated steel.
  - **DVA-SST**: AISI 304 stainless steel.
- **Vibration-damping body**
  Natural rubber NR, hardness 55 tolerance ±5 Shore A, black colour.
- **Standard executions**
  - **DVA.4**: zinc-plated steel threaded stud.
  - **DVA.4-SST**: AISI 304 stainless steel threaded stud.
  - **DVA.5**: zinc-plated steel boss, threaded blind hole.
  - **DVA.5-SST**: AISI 304 stainless steel boss, threaded blind hole.

Special executions on request

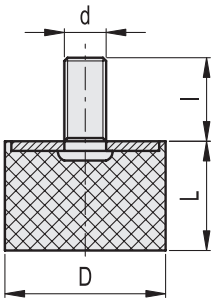
- Natural rubber NR, hardness 40 tolerance ±5 Shore A.
- Natural rubber NR, hardness 70 tolerance ±5 Shore A.

Features and applications

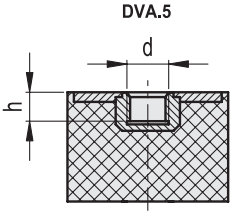
ELESA vibration-damping elements have been designed to damp vibrations, shocks and noises produced by moving bodies or non-balanced vibrating masses of equipment and machines which can cause:

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

DVA.4



DVA.5



DVA.4 -25-13-1/4- 55
D L d Shore A

DVA.4

DVA.4-SST INOX Stainless Steel *american units*

Elesa Standards		Main dimensions				Max load	Max deflection	Stiffness	⚖	Elesa Standards	
Code	Description	D	L	d	l	lbf	inches	lbf/inches	lbs	Code	Description
9412756	DVA.4-25-13-1/4-55	0.98	0.51	1/4-20	0.5	214	0.1	2140	0.035	9410331	DVA.4-25-13-SST-1/4-55
9412766	DVA.4-25-19-1/4-55	0.98	0.75	1/4-20	0.5	140	0.15	933	0.044	9410335	DVA.4-25-19-SST-1/4-55
9412771	DVA.4-25-25-5/16-55	0.98	0.98	5/16-18	0.62	180	0.25	720	0.057	9410336	DVA.4-25-25-SST-5/16-55
9412773	DVA.4-38-19-5/16-55	1.5	0.75	5/16-18	0.62	398	0.15	2653	0.097	9410351	DVA.4-38-19-SST-5/16-55
9412831	DVA.4-40-25-5/16-55	1.57	0.98	5/16-18	0.62	434	0.25	1736	0.121	9410354	DVA.4-40-25-SST-5/16-55
9412841	DVA.4-40-25-3/8-55	1.57	0.98	3/8-16	0.62	434	0.25	1736	0.128	9410353	DVA.4-40-25-SST-3/8-55
9412881	DVA.4-51-19-3/8-55	2.01	0.75	3/8-16	1.12	830	0.15	5533	0.176	9410361	DVA.4-51-19-SST-3/8-55
9412921	DVA.4-51-41-3/8-55	2.01	1.61	3/8-16	0.62	640	0.4	1600	0.278	9410365	DVA.4-51-41-SST-3/8-55

DVA.5 -25-13-1/4- 55
D L d Shore A

DVA.5

DVA.5-SST INOX Stainless Steel *american units*

Elesa Standards		Main dimensions				Max load	Max deflection	Stiffness	⚖	Elesa Standards	
Code	Description	D	L	d	h	lbf	inches	lbf/inches	lbs	Code	Description
9413091	DVA.5-25-13-1/4-55	0.98	0.51	1/4-20	0.24	205	0.1	2050	0.031	9410421	DVA.5-25-13-SST-1/4-55
9413101	DVA.5-25-19-1/4-55	0.98	0.75	1/4-20	0.24	142	0.15	946	0.04	9410425	DVA.5-25-19-SST-1/4-55
9413106	DVA.5-25-25-5/16-55	0.98	0.98	5/16-18	0.24	190	0.25	760	0.051	9410426	DVA.5-25-25-SST-5/16-55
9413107	DVA.5-38-19-5/16-55	1.5	0.75	5/16-18	0.31	441	0.15	2940	0.088	9410441	DVA.5-38-19-SST-5/16-55
9413108	DVA.5-38-25-5/16-55	1.5	0.98	5/16-18	0.31	400	0.15	1600	0.108	9410442	DVA.5-38-25-SST-3/8-55
9413109	DVA.5-38-25-3/8-55	1.5	0.98	3/8-16	0.31	400	0.15	1600	0.112	9410443	DVA.5-38-25-SST-5/16-55
9413181	DVA.5-51-19-3/8-55	2.01	0.75	3/8-16	0.39	1045	0.15	6966	0.156	9410451	DVA.5-51-19-SST-3/8-55
9413186	DVA.5-51-41-3/8-55	2.01	1.61	3/8-16	0.39	670	0.4	1675	0.269	9410455	DVA.5-51-41-SST-3/8-55

elesa

DVA.6 ▪ DVA. 7

INCH

INOX Stainless Steel

Vibration-damping elements

RoHS +175°F -40°F

- **Base**
  - **DVA**: glossy zinc-plated steel.
  - **DVA-SST**: AISI 304 stainless steel.
- **Vibration-damping body**
  Natural rubber NR, hardness 55 tolerance ±5 Shore A, black colour.
- **Standard executions**
  - **DVA.6**: zinc-plated steel threaded stud.
  - **DVA.6-SST**: AISI 304 stainless steel threaded stud.
  - **DVA.7**: zinc-plated steel boss, threaded blind hole.
  - **DVA.7-SST**: AISI 304 stainless steel boss, threaded blind hole.

Special executions on request

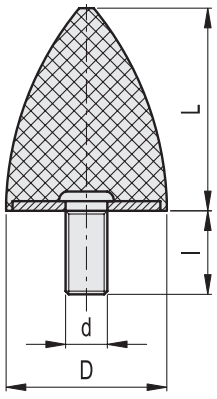
- Natural rubber NR, hardness 40 tolerance ±5 Shore A.
- Natural rubber NR, hardness 70 tolerance ±5 Shore A.

Features and applications

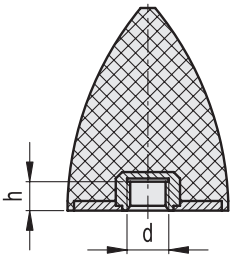
ELESA vibration-damping elements have been designed to damp vibrations, shocks and noises produced by moving bodies or non-balanced vibrating masses of equipment and machines which can cause:

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

DVA.6



DVA.7



DVA.6 -19-25-1/4- 55
D L d Shore A

DVA.6

DVA.6-SST INOX Stainless Steel american units

Elesa Standards		Main dimensions				Max load	Max deflection	⚖	Elesa Standards	
Code	Description	D	L	d	l	lbf	inch	lbs	Code	Description
9413401	DVA.6-19-25-1/4-55	0.75	0.98	1/4-20	0.51	22	0.24	0.022	9410501	DVA.6-19-25-SST-1/4-55
9413411	DVA.6-25-32-1/4-55	0.98	1.26	1/4-20	0.51	33	0.25	0.053	9410503	DVA.6-25-32-SST-1/4-55
9413421	DVA.6-32-38-5/16-55	1.26	1.5	5/16-18	0.63	45	0.29	0.086	9410507	DVA.6-32-38-SST-5/16-55
9413431	DVA.6-38-45-5/16-55	1.5	1.77	5/16-18	0.63	146	0.38	0.099	9410515	DVA.6-38-45-SST-5/16-55
9413441	DVA.6-45-51-3/8-55	1.77	2.01	3/8-16	0.63	168	0.59	0.311	9410517	DVA.6-45-51-SST-3/8-55
9413451	DVA.6-51-57-3/8-55	2.01	2.24	3/8-16	1.1	191	0.66	0.289	9410521	DVA.6-51-57-SST-3/8-55

DVA.7 -19-25-1/4- 55
D L d Shore A

DVA.7

DVA.7-SST INOX Stainless Steel american units

Elesa Standards		Main dimensions				Max load	Max deflection	⚖	Elesa Standards	
Code	Description	D	L	d	h	lbf	inches	lbs	Code	Description
9413601	DVA.7-19-25-1/4-55	0.75	0.98	1/4-20	0.24	22	0.24	0.018	9410601	DVA.7-19-25-SST-1/4-55
9413611	DVA.7-25-32-1/4-55	0.98	1.26	1/4-20	0.24	33	0.25	0.062	9410605	DVA.7-25-32-SST-1/4-55
9413621	DVA.7-32-38-5/16-55	1.26	1.5	5/16-18	0.31	45	0.29	0.066	9410613	DVA.7-32-38-SST-5/16-55
9413631	DVA.7-38-45-5/16-55	1.5	1.77	5/16-18	0.31	146	0.39	0.095	9410625	DVA.7-38-45-SST-5/16-55
9413641	DVA.7-45-51-3/8-55	1.77	2.01	3/8-16	0.39	168	0.58	0.251	9410627	DVA.7-45-51-SST-3/8-55
9413651	DVA.7-51-57-3/8-55	2.01	2.24	3/8-16	0.39	191	0.67	0.264	9410631	DVA.7-51-57-SST-3/8-55

DVA.1 ▪ DVA.2 ▪ DVA.3

METRIC

INOX Stainless Steel

Vibration-damping elements

RoHS

+175°F -40°F

- **Base**
  - **DVA**: glossy zinc-plated steel.
  - **DVA-SST**: AISI 304 stainless steel.
- **Vibration-damping body**
  Natural rubber NR, hardness 40, 55, 70 tolerance ±5 Shore A, black colour.
- **Standard executions**
  - **DVA.1**: zinc-plated steel threaded studs.
  - **DVA.1-SST**: AISI 304 stainless steel threaded studs.
  - **DVA.2**: threadead stud and boss in glossy zinc-plated steel, threaded blind hole.
  - **DVA.2-SST**: threadead stud and boss in AISI 304 stainless steel, threaded blind hole.
  - **DVA.3**: zinc-plated steel bosses, threaded blind holes.
  - **DVA.3-SST**: AISI 304 stainless steel bosses, threaded blind holes.

Special executions on request

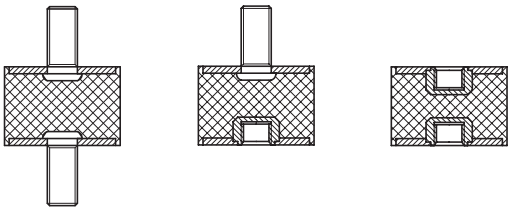
Natural rubber NR, hardness 40, 70 tolerance ±5 Shore A for executions with AISI 304 stainless steel base.

Features and applications

ELESA vibration-damping elements have been designed to damp vibrations, shocks and noises produced by moving bodies or non-balanced vibrating masses of equipment and machines which can cause:

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

DVA.1 **DVA.2** **DVA.3**

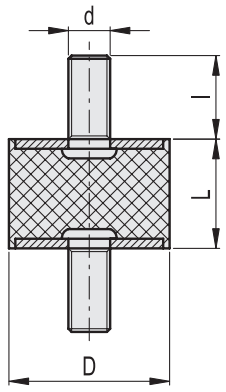


DVA.1

Conversion Table
1 mm = 0.039 inch

D				L			
mm	**inch**	mm	**inch**	mm	**inch**	mm	**inch**
8	**0.31**	40	**1.57**	8	**0.31**	40	**1.57**
10	**0.39**	50	**1.97**	10	**0.39**	45	**1.77**
15	**0.59**	60	**2.36**	15	**0.59**	50	**1.97**
20	**0.79**	70	**2.76**	20	**0.79**	55	**2.17**
25	**0.98**	75	**2.95**	25	**0.98**	60	**2.36**
30	**1.18**	100	**3.94**	30	**1.18**	75	**2.95**

DVA.1



* Complete the description with the desired hardness: 40, 55 or 70 tolerance ±5 Shore A.

DVA.1 - 8 - 8 - M3 - 6 - 55
D L d l Shore A

metric units

Elesa Standards	Dimensions				⚖	Hardness 40 Shore A				Hardness 55 Shore A				Hardness 70 Shore A			
Description	D	L	d	l	g	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]
DVA.1-8-8-M3-6-*	8	8	M3	6	4	413801	24	1.3	19	411101	70	2	35	416501	49	0.6	76
DVA.1-10-10-M4-10-*	10	10	M4	10	5	413811	37	1.7	22	411121	89	2.5	36	416511	77	0.9	88
DVA.1-10-15-M4-10-*	10	15	M4	10	6	413821	27	2.7	10	411131	60	3.75	16	416521	56	1.4	40
DVA.1-15-8-M4-10-*	15	8	M4	10	7	413831	61	1.1	55	411141	230	1	230	416531	126	0.6	220
DVA.1-15-10-M4-10-*	15	10	M4	10	8	413841	73	1.5	50	411151	198	2.5	79	416541	270	1.5	180
DVA.1-15-15-M4-10-*	15	15	M4	10	10	413851	61	2.1	30	411161	145	3.75	39	416551	126	1.1	118
DVA.1-15-20-M4-10-*	15	20	M4	10	12	413861	61	3.1	20	411171	125	5	25	416561	126	1.6	80
DVA.1-20-15-M6-18-*	20	15	M6	18	18	413871	109	1.6	70	411181	352	3.75	94	416571	224	0.8	280
DVA.1-20-20-M6-18-*	20	20	M6	18	25	413881	95	2.2	42.5	411201	260	5	52	416581	196	1.2	170
DVA.1-20-25-M6-18-*	20	25	M6	18	20	413891	109	3.8	28.5	411211	310	6.25	50	416591	224	1.2	114
DVA.1-25-15-M6-18-*	25	15	M6	18	28	413901	303	2.8	110	411221	687	3.75	183	416601	623	1.4	440
DVA.1-25-20-M6-18-*	25	20	M6	18	31	413911	272	2.9	95	411241	602	5.0	120	416611	560	1.5	380
DVA.1-25-25-M6-18-*	25	25	M6	18	35	413921	265	5.5	45	411261	675	6.25	108	416621	455	2.4	190
DVA.1-25-30-M6-18-*	25	30	M6	18	38	413931	204	5.4	37.5	411271	562	7.5	75	416631	420	2.8	150
DVA.1-30-15-M8-20-*	30	15	M8	20	45	413941	408	1.6	257.5	411281	534	3.75	142	416641	840	0.8	1030
DVA.1-30-20-M8-20-*	30	20	M8	20	50	413951	340	2.1	160	411301	1250	5	250	416651	700	1.1	640
DVA.1-30-30-M8-20-*	30	30	M8	20	57	413961	238	4	60	411321	843	7.5	112	416661	490	2	240
DVA.1-40-20-M8-23-*	40	20	M8	23	80	413971	-	-	-	411331	1500	5	300	416671	2430	3	810
DVA.1-40-30-M8-23-*	40	30	M8	23	95	413981	544	3.8	145	411341	1527	7.5	204	416681	1120	1.9	580
DVA.1-40-40-M8-23-*	40	40	M8	23	100	413991	469	5.5	85	411361	1620	10	162	416691	966	2.8	340
DVA.1-50-20-M10-28-*	50	20	M10	28	130	414001	1496	2.3	650	411381	3589	5	718	416701	3080	1.2	2600
DVA.1-50-30-M10-28-*	50	30	M10	28	184	414011	884	3.7	240	411401	2570	7.5	343	416711	1820	1.9	960
DVA.1-50-40-M10-28-*	50	40	M10	28	170	414021	816	5.4	150	411421	2436	10	244	416721	1680	2.8	600
DVA.1-50-45-M10-28-*	50	45	M10	28	180	414031	748	6.2	120	411441	2265	11.25	201	416731	1540	3.2	480
DVA.1-50-50-M10-28-*	50	50	M10	28	195	414041	780	6.5	120	411446	2198	12.5	176	416741	2880	6	480
DVA.1-60-30-M10-28-*	60	30	M10	28	211	414051	2400	5	480	411451	3400	7.5	453	416751	6620	5	1324
DVA.1-60-40-M10-28-*	60	40	M10	28	236	414061	1890	7	270	411456	3300	10	330	416761	5520	7	789
DVA.1-70-45-M10-28-*	70	45	M10	28	380	414071	1292	5.4	237.5	411461	4000	11.25	356	416771	2660	2.8	950
DVA.1-75-25-M12-37-*	75	25	M12	37	345	414081	-	-	-	411471	11640	5	2330	416781	-	-	-
DVA.1-75-40-M12-37-*	75	40	M12	37	410	414091	1700	4.5	375	411481	4500	10	450	416791	3500	2.3	1500
DVA.1-75-55-M12-37-*	75	55	M12	37	515	414101	1564	7.3	215	411501	4400	13.75	320	416801	3220	3.7	860
DVA.1-100-40-M16-41-*	100	40	M16	41	765	414111	4692	6.3	750	411521	18600	10	1860	416811	9660	32	3000
DVA.1-100-55-M16-41-*	100	55	M16	41	905	414121	2584	4.9	525	411541	16500	13.75	1200	416821	12600	6	2100
DVA.1-100-60-M16-41-*	100	60	M16	41	950	414131	2580	6.5	400	411561	12000	15	800	416831	5320	3.3	2100
DVA.1-100-75-M16-41-*	100	75	M16	41	1090	414141	2380	9	265	411581	11250	18.75	600	416841	4900	4.6	1060

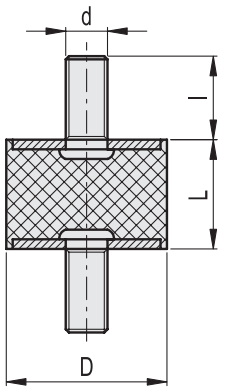
DVA.1

Conversion Table
1 mm = 0.039 inch

D				L			
mm	inch	mm	inch	mm	inch	mm	inch
8	**0.31**	40	**1.57**	8	**0.31**	40	**1.57**
10	**0.39**	50	**1.97**	10	**0.39**	45	**1.77**
15	**0.59**	60	**2.36**	15	**0.59**	50	**1.97**
20	**0.79**	70	**2.76**	20	**0.79**	55	**2.17**
25	**0.98**	75	**2.95**	25	**0.98**	60	**2.36**
30	**1.18**	100	**3.94**	30	**1.18**	75	**2.95**

DVA.1 - 8 - 8 - M3 - 6 - 55
D L d l Shore A

DVA.1



INOX Stainless Steel

metric units

Elesa Standards	Dimensions					Hardness 40 Shore A				Hardness 55 Shore A				Hardness 70 Shore A			
Description	D	L	d	l	g	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]
DVA.1-8-8-SST-M3-6-55	8	8	M3	6	4		24	1.3	19	410001	70	2	35		49	0.6	76
DVA.1-10-10-SST-M4-10-55	10	10	M4	10	5		37	1.7	22	410005	89	2.5	36		77	0.9	88
DVA.1-10-15-SST-M4-10-55	10	15	M4	10	6		27	2.7	10	410007	60	3.75	16		56	1.4	40
DVA.1-15-8-SST-M4-10-55	15	8	M4	10	7		61	1.1	55	410011	230	1	230		126	0.6	220
DVA.1-15-10-SST-M4-10-55	15	10	M4	10	8		73	1.5	50	410013	198	2.5	79		270	1.5	180
DVA.1-15-15-SST-M4-10-55	15	15	M4	10	10		61	2.1	29.5	410015	125	3.75	33		126	1.1	118
DVA.1-15-20-SST-M4-10-55	15	20	M4	10	12		61	3.1	20	410017	145	5	29		126	1.6	80
DVA.1-20-15-SST-M6-18-55	20	15	M6	18	18		109	1.6	70	410021	352	3.75	94		224	0.8	280
DVA.1-20-20-SST-M6-18-55	20	20	M6	18	25		95	2.2	42.5	410023	260	5	52		196	1.2	170
DVA.1-20-25-SST-M6-18-55	20	25	M6	18	20		109	3.8	28.5	410025	310	6.25	50		224	1.2	114
DVA.1-25-15-SST-M6-18-55	25	15	M6	18	28		303	2.8	110	410031	687	3.75	183		623	1.4	440
DVA.1-25-20-SST-M6-18-55	25	20	M6	18	31		272	2.9	95	410033	602	5.0	120		560	1.5	380
DVA.1-25-25-SST-M6-18-55	25	25	M6	18	35		265	5.5	45	410035	675	6.25	108		455	2.4	190
DVA.1-25-30-SST-M6-18-55	25	30	M6	18	38		204	5.4	37.5	410037	562	7.5	75		420	2.8	150
DVA.1-30-15-SST-M8-20-55	30	15	M8	20	45		408	1.6	257.5	410041	534	3.75	142		840	0.8	1030
DVA.1-30-20-SST-M8-20-55	30	20	M8	20	50	ON REQUEST	340	2.1	160	410043	1250	5	250	ON REQUEST	700	1.1	640
DVA.1-30-30-SST-M8-20-55	30	30	M8	20	57		238	4	60	410045	843	7.5	112		490	2	240
DVA.1-40-20-SST-M8-23-55	40	20	M8	23	80		-	-	-	410051	1500	5	300		2430	3	810
DVA.1-40-30-SST-M8-23-55	40	30	M8	23	95		544	3.8	145	410053	1527	7.5	204		1120	1.9	580
DVA.1-40-40-SST-M8-23-55	40	40	M8	23	100		469	5.5	85	410055	1620	10	162		966	2.8	340
DVA.1-50-20-SST-M10-28-55	50	20	M10	28	130		1496	2.3	650	410061	3589	5	718		3080	1.2	2600
DVA.1-50-30-SST-M10-28-55	50	30	M10	28	184		884	3.7	240	410063	2570	7.5	343		1820	1.9	960
DVA.1-50-40-SST-M10-28-55	50	40	M10	28	170		816	5.4	150	410065	2436	10	244		1680	2.8	600
DVA.1-50-45-SST-M10-28-55	50	45	M10	28	180		748	6.2	120	410067	2265	11.25	201		1540	3.2	480
DVA.1-50-50-SST-M10-28-55	50	50	M10	28	195		780	6.5	120	410069	2198	12.5	176		2880	6	480
DVA.1-60-30-SST-M10-28-55	60	30	M10	28	211		2400	5	480	410071	3400	7.5	453		6620	5	1324
DVA.1-60-40-SST-M10-28-55	60	40	M10	28	236		1890	7	270	410073	3300	10	330		5520	7	789
DVA.1-70-45-SST-M10-28-55	70	45	M10	28	380		1292	5.4	237.5	410077	4000	11.25	356		2660	2.8	950
DVA.1-75-25-SST-M12-37-55	75	25	M12	37	345		-	-	-	410081	11640	5	2330		-	-	-
DVA.1-75-40-SST-M12-37-55	75	40	M12	37	410		1700	4.5	375	410083	4500	10	450		3500	2.3	1500
DVA.1-75-55-SST-M12-37-55	75	55	M12	37	515		1564	7.3	215	410085	4400	13.75	320		3220	3.7	860
DVA.1-100-40-SST-M16-41-55	100	40	M16	41	765		4692	6.3	750	410091	18600	10	1860		9660	32	3000
DVA.1-100-55-SST-M16-41-55	100	55	M16	41	905		2584	4.9	525	410093	16500	13.75	1200		12600	6	2100
DVA.1-100-60-SST-M16-41-55	100	60	M16	41	950		2580	6.5	400	410095	12000	15	800		5320	3.3	2100
DVA.1-100-75-SST-M16-41-55	100	75	M16	41	1090		2380	9	265	410097	11250	18.75	600		4900	4.6	1060

DVA.2

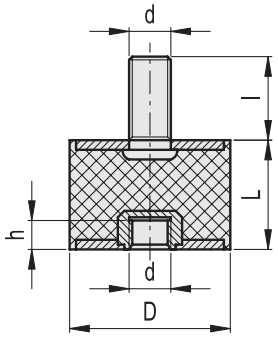
Conversion Table
1 mm = 0.039 inch

D				L			
mm	**inch**	mm	**inch**	mm	**inch**	mm	**inch**
8	**0.31**	40	**1.57**	8	**0.31**	40	**1.57**
10	**0.39**	50	**1.97**	10	**0.39**	45	**1.77**
15	**0.59**	60	**2.36**	15	**0.59**	50	**1.97**
20	**0.79**	70	**2.76**	20	**0.79**	55	**2.17**
25	**0.98**	75	**2.95**	25	**0.98**	60	**2.36**
30	**1.18**	100	**3.94**	30	**1.18**	75	**2.95**

* Complete the description with the desired hardness: 40, 55 or 70 tolerance ±5 Shore A.

DVA.2 - 8 - 8 - M3 - 6 - 55
D L d l Shore A

DVA.2



metric units

Elesa Standards	Dimensions						Hardness 40 Shore A				Hardness 55 Shore A				Hardness 70 Shore A			
Description	D	L	d	l	h	g	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]
DVA.2-8-8-M3-6-*	8	8	M3	6	3	3	414301	24	1.1	22	411701	75	2	38	417001	49	0.6	89
DVA.2-10-10-M4-10-*	10	10	M4	10	4	4	414311	37	1.6	23	411721	90	2.5	36	417011	77	0.8	92
DVA.2-10-15-M4-10-*	10	15	M4	10	4	5	414321	27	2.5	11	411731	65	3.75	17	417021	56	1.3	44
DVA.2-15-10-M4-10-*	15	10	M4	10	4	6	414331	113	1.5	75	411741	200	2.5	80	417031	240	1.1	220
DVA.2-15-15-M4-10-*	15	15	M4	10	4	7	414341	61	1.7	36	411761	130	3.75	35	417041	126	0.9	146
DVA.2-15-20-M4-10-*	15	20	M4	10	4	8	414351	61	2.2	27	411771	150	5	30	417051	126	1.1	110
DVA.2-20-15-M6-18-*	20	15	M6	18	6	15	414361	109	1.3	85	411781	355	3.75	95	417061	224	0.7	340
DVA.2-20-20-M6-18-*	20	20	M6	18	6	17	414371	95	1.6	60	411801	265	5	53	417071	196	0.8	240
DVA.2-20-25-M6-18-*	20	25	M6	18	6	18	414381	109	2.9	37	411811	315	6.25	50	417081	224	1.5	150
DVA.2-25-15-M6-18-*	25	15	M6	18	6	26	414391	303	2.3	131	411821	690	3.75	184	417091	623	1.2	526
DVA.2-25-20-M6-18-*	25	20	M6	18	6	28	414401	272	3.2	85	411841	605	5	121	417101	560	1.6	340
DVA.2-25-30-M6-18-*	25	30	M6	18	6	36	414411	204	4.1	50	411851	570	7.5	76	417111	420	2.1	200
DVA.2-30-15-M8-20-*	30	15	M8	20	8	41	414421	408	0.3	1350	411861	535	3.75	143	417121	840	0.1	5400
DVA.2-30-20-M8-20-*	30	20	M8	20	8	43	414431	340	2	170	411881	1690	4	423	417131	700	1	680
DVA.2-30-30-M8-20-*	30	30	M8	20	8	50	414441	238	3.7	65	411901	850	7.5	113	417141	490	1.9	260
DVA.2-40-20-M8-23-*	40	20	M8	23	8	73	414451	952	1.5	650	411911	1510	5	302	417151	2080	0.8	2600
DVA.2-40-30-M8-23-*	40	30	M8	23	8	85	414461	544	3.1	175	411921	1530	7.5	204	417161	1120	1.6	700
DVA.2-40-40-M8-23-*	40	40	M8	23	8	98	414471	469	5.2	90	411941	1630	10	163	417171	966	2.7	360
DVA.2-50-20-M10-28-*	50	20	M10	28	10	115	414481	1496	1.9	785	411961	3600	5	720	417181	3080	1	3140
DVA.2-50-30-M10-28-*	50	30	M10	28	10	135	414491	844	3.2	275	411981	2575	7.5	343	417191	1820	1.7	1100
DVA.2-50-40-M10-28-*	50	40	M10	28	10	160	414501	816	4.9	165	412001	2440	10	244	417201	1680	2.5	660
DVA.2-50-45-M10-28-*	50	45	M10	28	10	170	414511	748	6.5	115	412021	2590	11.25	230	417211	1540	3.3	460
DVA.2-50-50-M10-28-*	50	50	M10	28	10	185	414521	684	7.2	95	412026	2200	12.5	176	417221	1400	3.7	380
DVA.2-60-30-M10-28-*	60	30	M10	28	10	199	414531	2100	4.5	467	412031	3400	7.5	453	417231	5890	4.5	1309
DVA.2-60-40-M10-28-*	60	40	M10	28	10	220	414541	1600	6	267	412036	3330	10	333	417241	4820	6	803
DVA.2-70-45-M10-28-*	70	45	M10	28	10	372	414551	1292	5.3	245	412041	4000	11.25	356	417251	2660	2.7	980
DVA.2-75-25-M12-37-*	75	25	M12	37	12	321	414561	-	-	-	412051	7000	3	2335	417261	-	-	-
DVA.2-75-40-M12-37-*	75	40	M12	37	12	385	414571	1700	4.3	400	412061	4600	10	460	417271	3500	2.2	1600
DVA.2-75-55-M12-37-*	75	55	M12	37	12	450	414581	1564	6.5	240	412081	4510	13.75	328	417281	3220	3.4	960
DVA.2-100-40-M16-41-*	100	40	M16	41	16	740	414591	4692	5.9	800	412101	22500	10	2250	417291	9660	3	3200
DVA.2-100-55-M16-41-*	100	55	M16	41	16	850	414601	2584	4.5	575	412121	24060	13.75	1750	417301	5320	2.3	2300
DVA.2-100-60-M16-41-*	100	60	M16	41	16	865	414611	-	-	-	412141	18000	15	1200	417311	-	-	-
DVA.2-100-75-M16-41-*	100	75	M16	41	16	980	414621	2380	9	265	412161	15940	18.75	850	417321	4900	4.6	1060

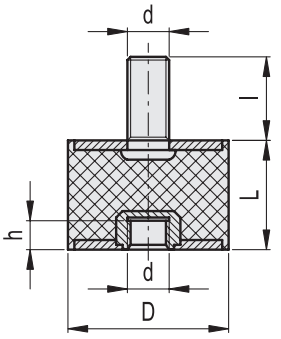
DVA.2

Conversion Table
1 mm = 0.039 inch

D				L			
mm	inch	mm	inch	mm	inch	mm	inch
8	**0.31**	40	**1.57**	8	**0.31**	40	**1.57**
10	**0.39**	50	**1.97**	10	**0.39**	45	**1.77**
15	**0.59**	60	**2.36**	15	**0.59**	50	**1.97**
20	**0.79**	70	**2.76**	20	**0.79**	55	**2.17**
25	**0.98**	75	**2.95**	25	**0.98**	60	**2.36**
30	**1.18**	100	**3.94**	30	**1.18**	75	**2.95**

DVA.2 - 8 - 8 - M3 - 6 - 55
D L d l Shore A

DVA.2



INOX Stainless Steel

metric units

Elesa Standards	Dimensions						Hardness 40 Shore A				Hardness 55 Shore A				Hardness 70 Shore A			
Description	D	L	d	l	h	g	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]
DVA.2-8-8-SST-M3-6-55	8	8	M3	6	3	3		24	1.1	22	410101	75	2	38		49	0.6	89
DVA.2-10-10-SST-M4-10-55	10	10	M4	10	4	4		37	1.6	23	410105	90	2.5	36		77	0.8	92
DVA.2-10-15-SST-M4-10-55	10	15	M4	10	4	5		27	2.5	11	410107	65	3.75	17		56	1.3	44
DVA.2-15-10-SST-M4-10-55	15	10	M4	10	4	6		113	1.5	75	410113	200	2.5	80		240	1.1	220
DVA.2-15-15-SST-M4-10-55	15	15	M4	10	4	7		61	1.7	36	410115	130	3.75	35		126	0.9	146
DVA.2-15-20-SST-M4-10-55	15	20	M4	10	4	8		61	2.2	27	410117	150	5	30		126	1.1	110
DVA.2-20-15-SST-M6-18-55	20	15	M6	18	6	15		109	1.3	85	410121	355	3.75	95		224	0.7	340
DVA.2-20-20-SST-M6-18-55	20	20	M6	18	6	17		95	1.6	60	410123	265	5	53		196	0.8	240
DVA.2-20-25-SST-M6-18-55	20	25	M6	18	6	18		109	2.9	37	410125	315	6.25	50		224	1.5	150
DVA.2-25-15-SST-M6-18-55	25	15	M6	18	6	26		303	2.3	131	410131	690	3.75	184		623	1.2	526
DVA.2-25-20-SST-M6-18-55	25	20	M6	18	6	28		272	3.2	85	410133	605	5	121		560	1.6	340
DVA.2-25-30-SST-M6-18-55	25	30	M6	18	6	36		204	4.1	50	410137	570	7.5	76		420	2.1	200
DVA.2-30-15-SST-M8-20-55	30	15	M8	20	8	41		408	0.3	1350	410141	535	3.75	143		840	0.1	5400
DVA.2-30-20-SST-M8-20-55	30	20	M8	20	8	43		340	2	170	410143	1690	4	423		700	1	680
DVA.2-30-30-SST-M8-20-55	30	30	M8	20	8	50	ON REQUEST	238	3.7	65	410145	850	7.5	113	ON REQUEST	490	1.9	260
DVA.2-40-20-SST-M8-23-55	40	20	M8	23	8	73		952	1.5	650	410151	1510	5	302		2080	0.8	2600
DVA.2-40-30-SST-M8-23-55	40	30	M8	23	8	85		544	3.1	175	410153	1530	7.5	204		1120	1.6	700
DVA.2-40-40-SST-M8-23-55	40	40	M8	23	8	98		469	5.2	90	410155	1630	10	163		966	2.7	360
DVA.2-50-20-SST-M10-28-55	50	20	M10	28	10	115		1496	1.9	785	410161	3600	5	720		3080	1	3140
DVA.2-50-30-SST-M10-28-55	50	30	M10	28	10	135		844	3.2	275	410163	2575	7.5	343		1820	1.7	1100
DVA.2-50-40-SST-M10-28-55	50	40	M10	28	10	160		816	4.9	165	410165	2440	10	244		1680	2.5	660
DVA.2-50-45-SST-M10-28-55	50	45	M10	28	10	170		748	6.5	115	410167	2590	11.25	230		1540	3.3	460
DVA.2-50-50-SST-M10-28-55	50	50	M10	28	10	185		684	7.2	95	410169	2200	12.5	176		1400	3.7	380
DVA.2-60-30-SST-M10-28-55	60	30	M10	28	10	199		2100	4.5	467	410171	3400	7.5	453		5890	4.5	1309
DVA.2-60-40-SST-M10-28-55	60	40	M10	28	10	220		1600	6	267	410173	3330	10	333		4820	6	803
DVA.2-70-45-SST-M10-28-55	70	45	M10	28	10	372		1292	5.3	245	410177	4000	11.25	356		2660	2.7	980
DVA.2-75-25-SST-M12-37-55	75	25	M12	37	12	321		-	-	-	410181	7000	3	2335		-	-	-
DVA.2-75-40-SST-M12-37-55	75	40	M12	37	12	385		1700	4.3	400	410183	4600	10	460		3500	2.2	1600
DVA.2-75-55-SST-M12-37-55	75	55	M12	37	12	450		1564	6.5	240	410185	4510	13.75	328		3220	3.4	960
DVA.2-100-40-SST-M16-41-55	100	40	M16	41	16	740		4692	5.9	800	410191	22500	10	2250		9660	3	3200
DVA.2-100-55-SST-M16-41-55	100	55	M16	41	16	850		2584	4.5	575	410193	24060	13.75	1750		5320	2.3	2300
DVA.2-100-60-SST-M16-41-55	100	60	M16	41	16	865		-	-	-	410195	18000	15	1200		-	-	-
DVA.2-100-75-SST-M16-41-55	100	75	M16	41	16	980		2380	9	265	410197	15940	18.75	850		4900	4.6	1060

DVA.3

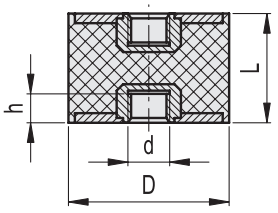
Conversion Table
1 mm = 0.039 inch

D				L			
mm	**inch**	mm	**inch**	mm	**inch**	mm	**inch**
8	**0.31**	40	**1.57**	8	**0.31**	40	**1.57**
10	**0.39**	50	**1.97**	10	**0.39**	45	**1.77**
15	**0.59**	60	**2.36**	15	**0.59**	50	**1.97**
20	**0.79**	70	**2.76**	20	**0.79**	55	**2.17**
25	**0.98**	75	**2.95**	25	**0.98**	60	**2.36**
30	**1.18**	100	**3.94**	30	**1.18**	75	**2.95**

* Complete the description with the desired hardness:
40, 55 or 70 tolerance ±5 Shore A.

DVA.3 - 8 - 8 - M3 - 55
D L d Shore A

DVA.3



metric units

Elesa Standards	Dimensions				⚖	Hardness 40 Shore A				Hardness 55 Shore A				Hardness 70 Shore A			
Description	D	L	d	h	g	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]
DVA.3-8-8-M3-*	8	8	M3	3	2	414801	38	1.1	35	412301	75	2	38	417501	87	0.6	145
DVA.3-10-10-M4-*	10	10	M4	4	3	414811	37	1.4	26	412321	90	2.5	36	417511	77	0.7	106
DVA.3-10-15-M4-*	10	15	M4	4	4	414821	27	2.2	12	412326	65	3.75	17	417521	56	1.1	50
DVA.3-15-10-M4-*	15	10	M4	4	5	414831	960	0.4	900	412331	200	2.5	80	417531	44	0.4	1100
DVA.3-15-15-M4-*	15	15	M4	4	6	414841	61	1.6	39	412341	135	3.75	36	417541	126	0.8	156
DVA.3-15-20-M4-*	15	20	M4	4	8	414851	61	1.4	42	412346	152	5	30	417551	126	0.7	170
DVA.3-20-15-M6-*	20	15	M6	6	13	414861	109	0.1	900	412351	355	3.75	95	417561	224	0.1	3600
DVA.3-20-20-M6-*	20	20	M6	6	16	414871	95	2	47	412361	267	5	53	417571	196	1	190
DVA.3-20-25-M6-*	20	25	M6	6	19	414881	109	2.7	40	412371	315	6.25	50	417581	224	1.4	160
DVA.3-25-20-M6-*	25	20	M6	6	26	414891	272	3	90	412381	605	5	121	417591	560	1.6	360
DVA.3-25-25-M6-*	25	25	M6	6	29	414901	221	4.5	49	412386	530	6.25	85	417601	455	2.3	196
DVA.3-25-30-M6-*	25	30	M6	6	25	414911	190	5	38	412391	575	7.5	77	417611	450	3	150
DVA.3-30-20-M8-*	30	20	M8	8	39	414921	-	-	-	412401	2050	5	410	417621	-	-	-
DVA.3-30-30-M8-*	30	30	M8	8	45	414931	238	6	75	412421	855	7.5	114	417631	490	1.6	300
DVA.3-30-40-M8-*	30	40	M8	8	53	414941	390	6	65	412431	757	10	76	417641	1080	4	270
DVA.3-40-30-M8-*	40	30	M8	8	80	414951	544	2.4	225	412441	1535	7.5	205	417651	1120	1.2	900
DVA.3-40-40-M8-*	40	40	M8	8	98	414961	469	4.5	105	412461	1635	10	164	417661	966	2.3	420
DVA.3-50-30-M10-*	50	30	M10	10	125	414971	884	2.9	300	412463	2570	7.5	343	417671	1820	1.5	1200
DVA.3-50-40-M10-*	50	40	M10	10	150	414981	816	4.4	185	412466	2445	10	245	417681	1680	2.3	740
DVA.3-50-50-M10-*	50	50	M10	10	125	414991	683	6.5	105	412469	2225	12.5	178	417691	2520	6	420
DVA.3-60-30-M10-*	60	30	M10	10	189	415001	1370	3	457	412471	3400	7.5	453	417701	4170	3	1390
DVA.3-60-40-M10-*	60	40	M10	10	220	415011	1220	4.5	271	412476	3300	10	330	417711	3820	4.5	849
DVA.3-70-45-M10-*	70	45	M10	10	335	415021	1292	3.4	375	412481	4000	11.25	356	417721	2660	1.8	1500
DVA.3-75-40-M12-*	75	40	M12	12	360	415031	1700	3.1	550	412501	4650	10	465	417731	3500	1.6	2200
DVA.3-75-55-M12-*	75	55	M12	12	445	415041	1564	6.3	250	412521	4500	13.75	327	417741	3220	3.2	1000
DVA.3-100-40-M16-*	100	40	M16	16	690	415051	4692	5.2	900	412541	22500	10	2250	417751	9660	2.7	3600
DVA.3-100-55-M16-*	100	55	M16	16	765	415061	2584	4.3	600	412551	24060	13.75	1750	417761	5320	2.2	2400
DVA.3-100-60-M16-*	100	60	M16	16	885	415071	2584	5.2	500	412561	18000	15	1200	417771	5320	2.7	2000
DVA.3-100-75-M16-*	100	75	M16	16	965	415081	2380	9	265	412581	15940	18.75	850	417781	4900	4.6	1060

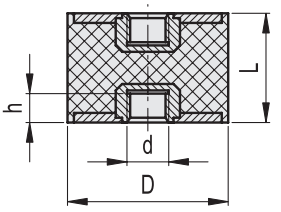
DVA.3

Conversion Table
1 mm = 0.039 inch

D				L			
mm	inch	mm	inch	mm	inch	mm	inch
8	**0.31**	40	**1.57**	8	**0.31**	40	**1.57**
10	**0.39**	50	**1.97**	10	**0.39**	45	**1.77**
15	**0.59**	60	**2.36**	15	**0.59**	50	**1.97**
20	**0.79**	70	**2.76**	20	**0.79**	55	**2.17**
25	**0.98**	75	**2.95**	25	**0.98**	60	**2.36**
30	**1.18**	100	**3.94**	30	**1.18**	75	**2.95**

DVA.3 - 8 - 8 - M3 - 55
D L d Shore A

DVA.3



INOX Stainless Steel

metric units

Elesa Standards	Dimensions					Hardness 40 Shore A				Hardness 55 Shore A				Hardness 70 Shore A			
Description	D	L	d	h	g	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]
DVA.3-8-8-SST-M3-55	8	8	M3	3	2		38	1.1	35	410201	75	2	38		87	0.6	145
DVA.3-10-10-SST-M4-55	10	10	M4	4	3		37	1.4	26	410205	90	2.5	36		77	0.7	106
DVA.3-10-15-SST-M4-55	10	15	M4	4	4		27	2.2	12	410207	65	3.75	17		56	1.1	50
DVA.3-15-10-SST-M4-55	15	10	M4	4	5		960	0.4	900	410213	200	2.5	80		44	0.4	1100
DVA.3-15-15-SST-M4-55	15	15	M4	4	6		61	1.6	39	410215	135	3.75	36		126	0.8	156
DVA.3-15-20-SST-M4-55	15	20	M4	4	8		61	1.4	42	410217	152	5	30		126	0.7	170
DVA.3-20-15-SST-M6-55	20	15	M6	6	13		109	0.1	900	410221	355	3.75	95		224	0.1	3600
DVA.3-20-20-SST-M6-55	20	20	M6	6	16		95	2	47	410223	267	5	53		196	1	190
DVA.3-20-25-SST-M6-55	20	25	M6	6	19		109	2.7	40	410225	315	6.25	50		224	1.4	160
DVA.3-25-20-SST-M6-55	25	20	M6	6	26		272	3	90	410231	605	5	121		560	1.6	360
DVA.3-25-25-SST-M6-55	25	25	M6	6	29		221	4.5	49	410233	530	6.25	85		455	2.3	196
DVA.3-25-30-SST-M6-55	25	30	M6	6	25		190	5	38	410237	575	7.5	77		450	3	150
DVA.3-30-20-SST-M8-55	30	20	M8	8	39	ON REQUEST	-	-	-	410241	2050	5	410	ON REQUEST	-	-	-
DVA.3-30-30-SST-M8-55	30	30	M8	8	45		238	6	75	410243	855	7.5	114		490	1.6	300
DVA.3-30-40-SST-M8-55	30	40	M8	8	53		390	6	65	410245	757	10	76		1080	4	270
DVA.3-40-30-SST-M8-55	40	30	M8	8	80		544	2.4	225	410253	1535	7.5	205		1120	1.2	900
DVA.3-40-40-SST-M8-55	40	40	M8	8	98		469	4.5	105	410255	1635	10	164		966	2.3	420
DVA.3-50-30-SST-M10-55	50	30	M10	10	125		884	2.9	300	410263	2570	7.5	343		1820	1.5	1200
DVA.3-50-40-SST-M10-55	50	40	M10	10	150		816	4.4	185	410265	2445	10	245		1680	2.3	740
DVA.3-50-50-SST-M10-55	50	50	M10	10	125		683	6.5	105	410269	2225	12.5	178		2520	6	420
DVA.3-60-30-SST-M10-55	60	30	M10	10	189		1370	3	457	410271	3400	7.5	453		4170	3	1390
DVA.3-60-40-SST-M10-55	60	40	M10	10	220		1220	4.5	271	410273	3300	10	330		3820	4.5	849
DVA.3-70-45-SST-M10-55	70	45	M10	10	335		1292	3.4	375	410277	4000	11.25	356		2660	1.8	1500
DVA.3-75-40-SST-M12-55	75	40	M12	12	360		1700	3.1	550	410283	4650	10	465		3500	1.6	2200
DVA.3-75-55-SST-M12-55	75	55	M12	12	445		1564	6.3	250	410285	4500	13.75	327		3220	3.2	1000
DVA.3-100-40-SST-M16-55	100	40	M16	16	690		4692	5.2	900	410291	22500	10	2250		9660	2.7	3600
DVA.3-100-55-SST-M16-55	100	55	M16	16	765		2584	4.3	600	410293	24060	13.75	1750		5320	2.2	2400
DVA.3-100-60-SST-M16-55	100	60	M16	16	885		2584	5.2	500	410295	18000	15	1200		5320	2.7	2000
DVA.3-100-75-SST-M16-55	100	75	M16	16	965		2380	9	265	410297	15940	18.75	850		4900	4.6	1060

DVA.4 ▪ DVA.5

METRIC

INOX Stainless Steel

Vibration-damping elements

RoHS +175°F -40°F

- **Base**
  - **DVA**: glossy zinc-plated steel.
  - **DVA-SST**: AISI 304 stainless steel.
- **Vibration-damping body**
  Natural rubber NR, hardness 40, 55, 70 tolerance ±5 Shore A, black colour.
- **Standard executions**
  - **DVA.4**: zinc-plated steel threaded stud.
  - **DVA.4-SST**: AISI 304 stainless steel threaded stud.
  - **DVA.5**: zinc-plated steel boss, threaded blind hole.
  - **DVA.5-SST**: AISI 304 stainless steel boss, threaded blind hole.

Special executions on request

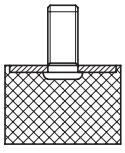
Natural rubber NR, hardness 40, 70 tolerance ±5 Shore A for executions with AISI 304 stainless steel base.

Features and applications

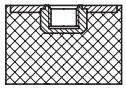
ELESA vibration-damping elements have been designed to damp vibrations, shocks and noises produced by moving bodies or non-balanced vibrating masses of equipment and machines which can cause:

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

DVA.4



DVA.5

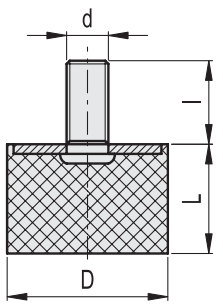


DVA.4

Conversion Table
1 mm = 0.039 inch

D				L			
mm	**inch**	mm	**inch**	mm	**inch**	mm	**inch**
8	**0.31**	40	**1.57**	8	**0.31**	40	**1.57**
10	**0.39**	50	**1.97**	10	**0.39**	50	**1.97**
15	**0.59**	60	**2.36**	15	**0.59**	55	**2.17**
20	**0.79**	70	**2.76**	20	**0.79**	60	**2.36**
25	**0.98**	75	**2.95**	25	**0.98**		
30	**1.18**	100	**3.94**	30	**1.18**		

DVA.4



* Complete the description with the desired hardness: 40, 55 or 70 tolerance ±5 Shore A.

DVA.4 - 8 - 8 - M3 - 6 - 55
D L d l Shore A

metric units

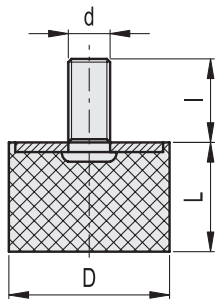
Elesa Standards	Dimensions				⚖	Hardness 40 Shore A				Hardness 55 Shore A				Hardness 70 Shore A			
Description	D	L	d	l	g	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]
DVA.4-8-8-M3-6-*	8	8	M3	6	3	415201	52	1.6	28	412700	40	2	20	417901	102	0.6	98
DVA.4-10-10-M4-10-*	10	10	M4	10	2	415211	41	1.8	19	412701	59	2.5	24	417911	84	0.9	76
DVA.4-10-15-M4-10-*	10	15	M4	10	3	415221	33	2.1	12	412703	78	3.75	21	417921	68	1.1	57
DVA.4-15-10-M4-10-*	15	10	M4	10	4	415231	84	1.8	52	412706	154	2	77	417931	178	0.9	145
DVA.4-15-15-M4-10-*	15	15	M4	10	5	415241	73	2.1	30	412709	241	3.75	64	417941	151	1.1	118
DVA.4-15-20-M4-10-*	15	20	M4	10	7	415251	94	3.8	21	412711	287	5	57	417951	193	2	82
DVA.4-15-30-M4-10-*	15	30	M4	10	9	415261	90	5	15	412716	210	7.5	28	417961	193	2	60
DVA.4-20-10-M6-18-*	20	10	M6	18	15	415271	240	1.7	118	412721	315	2.5	126	417971	504	0.9	470
DVA.4-20-15-M6-18-*	20	15	M6	18	10	415281	210	3.2	55	412741	289	3.75	77	417981	437	1.7	220
DVA.4-20-20-M6-18-*	20	20	M6	18	13	415291	160	3.9	35	412746	302	5	60	417991	336	2	140
DVA.4-20-30-M6-18-*	20	30	M6	18	23	415301	132	5.6	18	412751	285	7	38	418001	450	6	75
DVA.4-25-15-M6-18-*	25	15	M6	18	18	415311	320	3.2	100	412756	612	3.75	163	418011	655	1.4	400
DVA.4-25-17-M6-18-*	25	17	M6	18	20	415321	-	-	-	412761	770	4.25	181	418021	-	-	-
DVA.4-25-20-M6-18-*	25	20	M6	18	20	415331	260	3.9	57	412766	560	5	112	418031	538	2	266
DVA.4-25-30-M6-18-*	25	30	M6	18	25	415341	230	5.6	34	412771	509	7.5	68	418041	470	2.9	136
DVA.4-30-15-M8-20-*	30	15	M8	20	30	415351	530	2	170	412776	934	3.75	249	418051	1100	1.3	680
DVA.4-30-17-M8-20-*	30	17	M8	20	31	415361	-	-	-	412781	1960	4.25	460	418061	-	-	-
DVA.4-30-20-M8-20-*	30	20	M8	20	35	415371	310	2.6	100	412801	924	5	185	418071	638	1.3	400
DVA.4-30-25-M8-20-*	30	25	M8	20	38	415381	280	3	65	412811	815	6.25	130	418081	600	1.5	340
DVA.4-30-30-M8-20-*	30	30	M8	20	43	415391	265	4.6	50	412821	876	7.5	117	418091	571	2.4	200
DVA.4-40-20-M8-23-*	40	20	M8	23	55	415401	980	3.9	210	412831	1235	5	247	418101	980	3.9	210
DVA.4-40-25-M8-23-*	40	25	M8	23	60	415411	810	4.9	140	412836	1546	6.25	247	418111	1680	2.5	560
DVA.4-40-30-M8-23-*	40	30	M8	23	73	415421	490	3.8	1008	412841	1600	7.5	213	418121	1008	2	430
DVA.4-40-40-M8-23-*	40	40	M8	23	83	415431	473	5.9	68	412861	1820	10	182	418131	974	3	270
DVA.4-50-20-M10-28-*	50	20	M10	28	90	415441	1470	3.9	310	412881	2587	5	517	418141	3024	2	1240
DVA.4-50-30-M10-28-*	50	30	M10	28	118	415451	1140	5.5	174	412901	2453	7.5	327	418151	2352	2.8	694
DVA.4-50-40-M10-28-*	50	40	M10	28	140	415461	963	6.5	120	412921	2468	10	247	418161	1800	3.6	430
DVA.4-60-20-M10-28-*	60	20	M10	28	219	415471	2280	4	420	412931	3630	5	726	418171	4900	2	1780
DVA.4-60-40-M10-28-*	60	40	M10	28	195	415481	-	-	-	412936	3400	10	340	418181	3520	3.4	860
DVA.4-70-40-M10-28-*	70	40	M10	28	265	415491	1550	5.4	240	412941	4100	10	410	418191	3520	2.3	1300
DVA.4-70-55-M10-28-*	70	55	M10	28	357	415501	1980	9.3	180	412951	4500	13.75	327	418201	4368	4.8	760
DVA.4-75-25-M12-37-*	75	25	M12	37	223	415511	3670	2	1500	412961	4700	6.25	752	418211	5370	1.9	2400
DVA.4-75-40-M12-37-*	75	40	M12	37	310	415521	2300	5	380	412971	4500	10	450	418221	4090	3.9	1150
DVA.4-75-50-M12-37-*	75	50	M12	37	340	415531	1795	6.9	216	412981	4400	12.5	352	418231	3690	4.5	864
DVA.4-100-40-M16-41-*	100	40	M16	41	570	415541	3900	5.2	625	413001	14000	10	1400	418241	8064	2.7	2500
DVA.4-100-50-M16-41-*	100	50	M16	41	655	415551	3260	10.1	271	413011	16250	12.5	1300	418251	6720	5.2	1082
DVA.4-100-60-M16-41-*	100	60	M16	41	830	415561	2540	15.4	140	413021	16500	15	1100	418261	4200	7.8	580

DVA.4

Conversion Table
1 mm = 0.039 inch

D				L			
mm	inch	mm	inch	mm	inch	mm	inch
8	**0.31**	40	**1.57**	8	**0.31**	40	**1.57**
10	**0.39**	50	**1.97**	10	**0.39**	50	**1.97**
15	**0.59**	60	**2.36**	15	**0.59**	55	**2.17**
20	**0.79**	70	**2.76**	20	**0.79**	60	**2.36**
25	**0.98**	75	**2.95**	25	**0.98**		
30	**1.18**	100	**3.94**	30	**1.18**		

DVA.4



DVA.4 - 8 - 8 - M3 - 6 - 55
D L d l Shore A

INOX Stainless Steel

metric units

Elesa Standards	Dimensions				⚖	Hardness 40 Shore A				Hardness 55 Shore A				Hardness 70 Shore A			
Description	D	L	d	l	g	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]
DVA.4-8-8-SST-M3-6-55	8	8	M3	6	3		52	1.6	28	410301	40	2	20		102	0.6	98
DVA.4-10-10-SST-M4-10-55	10	10	M4	10	2		41	1.8	19	410305	59	2.5	24		84	0.9	76
DVA.4-10-15-SST-M4-10-55	10	15	M4	10	3		33	2.1	12	410307	78	3.75	21		68	1.1	57
DVA.4-15-10-SST-M4-10-55	15	10	M4	10	4		84	1.8	52	410311	154	2	77		178	0.9	145
DVA.4-15-15-SST-M4-10-55	15	15	M4	10	5		73	2.1	30	410313	241	3.75	64		151	1.1	118
DVA.4-15-20-SST-M4-10-55	15	20	M4	10	7		94	3.8	21	410315	287	5	57		193	2	82
DVA.4-15-30-SST-M4-10-55	15	30	M4	10	9		90	5	15	410317	210	7.5	28		193	2	60
DVA.4-20-10-SST-M6-18-55	20	10	M6	18	15		240	1.7	118	410321	315	2.5	126		504	0.9	470
DVA.4-20-15-SST-M6-18-55	20	15	M6	18	10		210	3.2	55	410323	289	3.75	77		437	1.7	220
DVA.4-20-20-SST-M6-18-55	20	20	M6	18	13		160	3.9	35	410325	302	5	60		336	2	140
DVA.4-20-30-SST-M6-18-55	20	30	M6	18	23		132	5.6	18	410327	285	7	38		450	6	75
DVA.4-25-15-SST-M6-18-55	25	15	M6	18	18		320	3.2	100	410331	612	3.75	163		655	1.4	400
DVA.4-25-17-SST-M6-18-55	25	17	M6	18	20		-	-	-	410333	770	4.25	181		-	-	-
DVA.4-25-20-SST-M6-18-55	25	20	M6	18	20		260	3.9	57	410335	560	5	112		538	2	266
DVA.4-25-30-SST-M6-18-55	25	30	M6	18	25		230	5.6	34	410337	509	7.5	68		470	2.9	136
DVA.4-30-15-SST-M8-20-55	30	15	M8	20	30	ON REQUEST	530	2	170	410341	934	3.75	249	ON REQUEST	1100	1.3	680
DVA.4-30-17-SST-M8-20-55	30	17	M8	20	31		-	-	-	410343	1960	4.25	460		-	-	-
DVA.4-30-20-SST-M8-20-55	30	20	M8	20	35		310	2.6	100	410345	924	5	185		638	1.3	400
DVA.4-30-25-SST-M8-20-55	30	25	M8	20	38		280	3	65	410347	815	6.25	130		600	1.5	340
DVA.4-30-30-SST-M8-20-55	30	30	M8	20	43		265	4.6	50	410349	876	7.5	117		571	2.4	200
DVA.4-40-20-SST-M8-23-55	40	20	M8	23	55		980	3.9	210	410351	1235	5	247		980	3.9	210
DVA.4-40-25-SST-M8-23-55	40	25	M8	23	60		810	4.9	140	410353	1546	6.25	247		1680	2.5	560
DVA.4-40-30-SST-M8-23-55	40	30	M8	23	73		490	3.8	1008	410355	1600	7.5	213		1008	2	430
DVA.4-40-40-SST-M8-23-55	40	40	M8	23	83		473	5.9	68	410357	1820	10	182		974	3	270
DVA.4-50-20-SST-M10-28-55	50	20	M10	28	90		1470	3.9	310	410361	2587	5	517		3024	2	1240
DVA.4-50-30-SST-M10-28-55	50	30	M10	28	118		1140	5.5	174	410363	2453	7.5	327		2352	2.8	694
DVA.4-50-40-SST-M10-28-55	50	40	M10	28	140		963	6.5	120	410365	2468	10	247		1800	3.6	430
DVA.4-60-20-SST-M10-28-55	60	20	M10	28	219		2280	4	420	410371	3630	5	726		4900	2	1780
DVA.4-60-40-SST-M10-28-55	60	40	M10	28	195		-	-	-	410373	3400	10	340		3520	3.4	860
DVA.4-70-40-SST-M10-28-55	70	40	M10	28	265		1550	5.4	240	410377	4100	10	410		3520	2.3	1300
DVA.4-70-55-SST-M10-28-55	70	55	M10	28	357		1980	9.3	180	410379	4500	13.75	327		4368	4.8	760
DVA.4-75-25-SST-M12-37-55	75	25	M12	37	223		3670	2	1500	410381	4700	6.25	752		5370	1.9	2400
DVA.4-75-40-SST-M12-37-55	75	40	M12	37	310		2300	5	380	410383	4500	10	450		4090	3.9	1150
DVA.4-75-50-SST-M12-37-55	75	50	M12	37	340		1795	6.9	216	410385	4400	12.5	352		3690	4.5	864
DVA.4-100-40-SST-M16-41-55	100	40	M16	41	570		3900	5.2	625	410391	14000	10	1400		8064	2.7	2500
DVA.4-100-50-SST-M16-41-55	100	50	M16	41	655		3260	10.1	271	410393	16250	12.5	1300		6720	5.2	1082
DVA.4-100-60-SST-M16-41-55	100	60	M16	41	830		2540	15.4	140	410395	16500	15	1100		4200	7.8	580

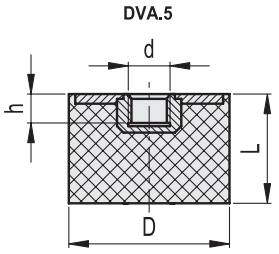
DVA.5

Conversion Table
1 mm = 0.039 inch

D				L			
mm	**inch**	mm	**inch**	mm	**inch**	mm	**inch**
10	**0.39**	50	**1.97**	10	**0.39**	40	**1.57**
15	**0.59**	60	**2.36**	15	**0.59**	50	**1.97**
20	**0.79**	70	**2.76**	17	**0.67**	55	**2.17**
25	**0.98**	75	**2.95**	20	**0.79**	60	**2.36**
30	**1.18**	100	**3.94**	25	**0.98**		
40	**1.57**			30	**1.18**		

* Complete the description with the desired hardness:
40, 55 or 70 tolerance ±5 Shore A.

DVA.5 - 10 - 10 - M4 - 55
D L d Shore A



metric units

Elesa Standards	Dimensions					Hardness 40 Shore A				Hardness 55 Shore A				Hardness 70 Shore A			
Description	D	L	d	h	g	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]
DVA.5-10-10-M4-*	10	10	M4	4	2	415701	41	1.8	19	413031	59	2.5	24	418401	84	0.9	76
DVA.5-15-15-M4-*	15	15	M4	4	5	415711	73	2.1	30	413041	241	3.75	64	418411	151	1.1	118
DVA.5-15-20-M4-*	15	20	M4	4	6	415721	94	3.8	21	413051	287	5	57	418421	193	2	82
DVA.5-20-15-M6-*	20	15	M6	6	10	415731	210	3.2	55	413061	289	3.75	77	418431	437	1.7	220
DVA.5-20-20-M6-*	20	20	M6	6	11	415741	160	3.9	35	413071	302	5	60	418441	336	2	140
DVA.5-20-25-M6-*	20	25	M6	6	13	415751	150	4.8	26	413081	297	6.25	48	418451	311	2.5	104
DVA.5-25-15-M6-*	25	15	M6	6	16	415761	320	2.7	100	413091	612	3.75	163	418461	655	1.4	400
DVA.5-25-20-M6-*	25	20	M6	6	20	415771	260	3.9	57	413101	560	5	112	418471	538	2	226
DVA.5-25-30-M6-*	25	30	M6	6	21	415781	230	5.6	34	413106	509	7.5	68	418481	470	2.9	136
DVA.5-30-15-M8-*	30	15	M8	8	23	415791	530	2	170	413111	934	3.75	249	418491	1100	1.3	680
DVA.5-30-17-M8-*	30	17	M8	8	25	415801	-	-	-	413121	1660	4.25	390	418501	-	-	-
DVA.5-30-20-M8-*	30	20	M8	8	27	415811	310	2.6	100	413141	924	5	185	418511	638	1.3	400
DVA.5-30-30-M8-*	30	30	M8	8	34	415821	265	4.6	50	413146	1000	7.5	133	418521	-	-	-
DVA.5-40-20-M8-*	40	20	M8	8	45	415831	980	3.9	210	413151	1235	5	247	418531	2020	2	830
DVA.5-40-30-M8-*	40	30	M8	8	65	415841	490	3.8	108	413161	1600	7.5	213	418541	1008	2	430
DVA.5-40-40-M8-*	40	40	M8	8	75	415851	473	5.9	68	413171	1820	10	182	418551	974	3	270
DVA.5-50-20-M10-*	50	20	M10	10	77	415861	1470	3.9	310	413181	2587	5	517	418561	3024	2	1240
DVA.5-50-30-M10-*	50	30	M10	10	100	415871	1140	5.5	174	413183	2453	7.5	327	418571	2352	2.8	694
DVA.5-50-40-M10-*	50	40	M10	10	115	415881	963	6.5	120	413186	2468	10	247	418581	1800	3.6	430
DVA.5-60-30-M10-*	60	30	M10	10	141	415891	1720	6	215	413191	3500	7.5	467	418591	4120	2.9	1450
DVA.5-60-50-M10-*	60	50	M10	10	205	415901	1340	9	140	413193	3367	12.5	269	418601	3192	4.4	600
DVA.5-70-40-M10-*	70	40	M10	10	255	415911	1550	5.4	240	413196	4100	10	410	418611	3520	2.3	1300
DVA.5-70-45-M10-*	70	45	M10	10	275	415921	-	-	-	413201	5110	11.25	454	418621	-	-	-
DVA.5-70-55-M10-*	70	55	M10	10	341	415931	1980	9.3	180	413211	4500	13.75	327	418631	4368	4.8	760
DVA.5-75-25-M12-*	75	25	M12	12	205	415941	-	-	-	413221	10000	5	2000	418641	-	-	-
DVA.5-75-30-M12-*	75	30	M12	12	210	415951	2600	3.6	600	413226	4500	7.5	600	418651	4515	2.9	1840
DVA.5-75-40-M12-*	75	40	M12	12	290	415961	2300	5	380	413231	4500	10	450	418661	4090	3.9	1150
DVA.5-75-50-M12-*	75	50	M12	12	345	415971	1795	6.9	216	413241	4400	12.5	352	418671	3690	4.5	864
DVA.5-100-40-M16-*	100	40	M16	16	485	415981	3900	5.2	625	413261	14000	10	1400	418681	8064	2.7	2500
DVA.5-100-50-M16-*	100	50	M16	16	580	415991	3260	10.1	271	413281	16250	12.5	1300	418691	6720	5.2	1082
DVA.5-100-60-M16-*	100	60	M16	16	720	416001	2540	15.4	140	413291	16500	15	1100	418701	4200	7.8	580

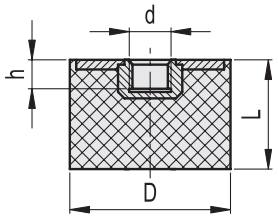
DVA.5

Conversion Table
1 mm = 0.039 inch

D				L			
mm	inch	mm	inch	mm	inch	mm	inch
10	**0.39**	50	**1.97**	10	**0.39**	40	**1.57**
15	**0.59**	60	**2.36**	15	**0.59**	50	**1.97**
20	**0.79**	70	**2.76**	17	**0.67**	55	**2.17**
25	**0.98**	75	**2.95**	20	**0.79**	60	**2.36**
30	**1.18**	100	**3.94**	25	**0.98**		
40	**1.57**			30	**1.18**		

DVA.5 - 10 - 10 - M4 - 55
D L d Shore A

DVA.5



INOX Stainless Steel

metric units

Elesa Standards	Dimensions					Hardness 40 Shore A				Hardness 55 Shore A				Hardness 70 Shore A			
Description	D	L	d	h	g	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]	Code	Max load [N]	Max deflection [mm]	Stiffness [N/mm]
DVA.5-10-10-SST-M4-55	10	10	M4	4	2		41	1.8	19	410401	59	2.5	24		84	0.9	76
DVA.5-15-15-SST-M4-55	15	15	M4	4	5		73	2.1	30	410405	241	3.75	64		151	1.1	118
DVA.5-15-20-SST-M4-55	15	20	M4	4	6		94	3.8	21	410407	287	5	57		193	2	82
DVA.5-20-15-SST-M6-55	20	15	M6	6	10		210	3.2	55	410413	289	3.75	77		437	1.7	220
DVA.5-20-20-SST-M6-55	20	20	M6	6	11		160	3.9	35	410415	302	5	60		336	2	140
DVA.5-20-25-SST-M6-55	20	25	M6	6	13		150	4.8	26	410417	297	6.25	48		311	2.5	104
DVA.5-25-15-SST-M6-55	25	15	M6	6	16		320	2.7	100	410421	612	3.75	163		655	1.4	400
DVA.5-25-20-SST-M6-55	25	20	M6	6	20		260	3.9	57	410425	560	5	112		538	2	226
DVA.5-25-30-SST-M6-55	25	30	M6	6	21		230	5.6	34	410427	509	7.5	68		470	2.9	136
DVA.5-30-15-SST-M8-55	30	15	M8	8	23		530	2	170	410431	934	3.75	249		1100	1.3	680
DVA.5-30-17-SST-M8-55	30	17	M8	8	25		-	-	-	410433	1660	4.25	390		-	-	-
DVA.5-30-20-SST-M8-55	30	20	M8	8	27		310	2.6	100	410435	924	5	185		638	1.3	400
DVA.5-30-30-SST-M8-55	30	30	M8	8	34		265	4.6	50	410437	1000	7.5	133		-	-	-
DVA.5-40-20-SST-M8-55	40	20	M8	8	45	ON REQUEST	980	3.9	210	410441	1235	5	247	ON REQUEST	2020	2	830
DVA.5-40-30-SST-M8-55	40	30	M8	8	65		490	3.8	108	410443	1600	7.5	213		1008	2	430
DVA.5-40-40-SST-M8-55	40	40	M8	8	75		473	5.9	68	410445	1820	10	182		974	3	270
DVA.5-50-20-SST-M10-55	50	20	M10	10	77		1470	3.9	310	410451	2587	5	517		3024	2	1240
DVA.5-50-30-SST-M10-55	50	30	M10	10	100		1140	5.5	174	410453	2453	7.5	327		2352	2.8	694
DVA.5-50-40-SST-M10-55	50	40	M10	10	115		963	6.5	120	410455	2468	10	247		1800	3.6	430
DVA.5-60-30-SST-M10-55	60	30	M10	10	141		1720	6	215	410461	3500	7.5	467		4120	2.9	1450
DVA.5-60-50-SST-M10-55	60	50	M10	10	205		1340	9	140	410463	3367	12.5	269		3192	4.4	600
DVA.5-70-40-SST-M10-55	70	40	M10	10	255		1550	5.4	240	410471	4100	10	410		3520	2.3	1300
DVA.5-70-45-SST-M10-55	70	45	M10	10	275		-	-	-	410473	5110	11.25	454		-	-	-
DVA.5-70-55-SST-M10-55	70	55	M10	10	341		1980	9.3	180	410475	4500	13.75	327		4368	4.8	760
DVA.5-75-25-SST-M12-55	75	25	M12	12	205		-	-	-	410481	10000	5	2000		-	-	-
DVA.5-75-30-SST-M12-55	75	30	M12	12	210		2600	3.6	600	410483	4500	7.5	600		4515	2.9	1840
DVA.5-75-40-SST-M12-55	75	40	M12	12	290		2300	5	380	410485	4500	10	450		4090	3.9	1150
DVA.5-75-50-SST-M12-55	75	50	M12	12	345		1795	6.9	216	410487	4400	12.5	352		3690	4.5	864
DVA.5-100-40-SST-M16-55	100	40	M16	16	485		3900	5.2	625	410491	14000	10	1400		8064	2.7	2500
DVA.5-100-50-SST-M16-55	100	50	M16	16	580		3260	10.1	271	410493	16250	12.5	1300		6720	5.2	1082
DVA.5-100-60-SST-M16-55	100	60	M16	16	720		2540	15.4	140	410495	16500	15	1100		4200	7.8	580

DVA.6 ▪ DVA.7

METRIC

INOX Stainless Steel

Vibration-damping elements

RoHS

+175°F -40°F

- **Base**
  - **DVA**: glossy zinc-plated steel.
  - **DVA-SST**: AISI 304 stainless steel.
- **Vibration-damping body**
  Natural rubber NR, hardness 40, 55, 70 tolerance ±5 Shore A, black colour.
- **Standard executions**
  - **DVA.6**: zinc-plated steel threaded stud.
  - **DVA.6-SST**: AISI 304 stainless steel threaded stud.
  - **DVA.7**: zinc-plated steel boss, threaded blind hole.
  - **DVA.7-SST**: AISI 304 stainless steel boss, threaded blind hole.

Special executions on request

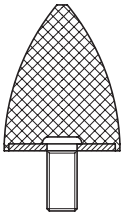
Natural rubber NR, hardness 40, 70 tolerance ±5 Shore A for executions with AISI 304 stainless steel base.

Features and applications

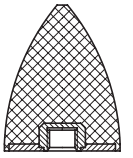
ELESA vibration-damping elements have been designed to damp vibrations, shocks and noises produced by moving bodies or non-balanced vibrating masses of equipment and machines which can cause:

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

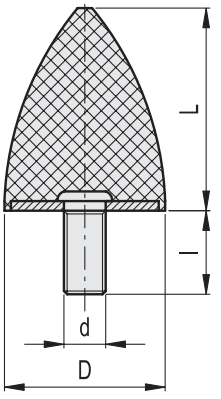
DVA.6



DVA.7



DVA.6



* Complete the description with the desired hardness: 40, 55 or 70 tolerance ±5 Shore A.

DVA.6 - 20 - 24 - M6 -18 - 55
D L d l Shore A

metric units

Elesa Standards	Dimensions					Hardness 40 Shore A			Hardness 55 Shore A			Hardness 70 Shore A		
Description	D	L	d	l	g	Code	Max load [N]	Max deflection [mm]	Code	Max load [N]	Max deflection [mm]	Code	Max load [N]	Max deflection [mm]
DVA.6-20-24-M6-18-*	20	24	M6	18	10	416101	62	5	413401	113	5	418801	178	5
DVA.6-30-30-M8-18-*	30	30	M8	18	24	416111	92	5	413411	247	7	418811	307	5
DVA.6-30-36-M8-20-*	30	36	M8	20	39	416121	106	5	413421	186	7	418821	384	5
DVA.6-35-40-M8-23-*	35	40	M8	23	45	416131	196	8	413431	305	8	418831	437	8
DVA.6-50-61-M8-28-*	50	61	M8	28	114	416141	368	12	413441	909	15	418841	1118	12
DVA.6-50-68-M10-28-*	50	68	M10	28	131	416151	502	15	413451	794	15	418851	1755	15

INOX Stainless Steel

metric units

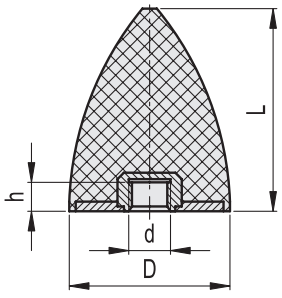
Elesa Standards	Dimensions					Hardness 40 Shore A			Hardness 55 Shore A			Hardness 70 Shore A		
Description	D	L	d	l	g	Code	Max load [N]	Max deflection [mm]	Code	Max load [N]	Max deflection [mm]	Code	Max load [N]	Max deflection [mm]
DVA.6-20-24-SST-M6-18-55	20	24	M6	18	10	ON REQUEST	62	5	410501	113	5	ON REQUEST	178	5
DVA.6-30-30-SST-M8-18-55	30	30	M8	18	24		92	5	410505	247	7		307	5
DVA.6-30-36-SST-M8-20-55	30	36	M8	20	39		106	5	410507	186	7		384	5
DVA.6-35-40-SST-M8-23-55	35	40	M8	23	45		196	8	410511	305	8		437	8
DVA.6-50-61-SST-M8-28-55	50	61	M8	28	114		368	12	410521	909	15		1118	12
DVA.6-50-68-SST-M10-28-55	50	68	M10	28	131		502	15	410523	794	15		1755	15

elesa

Conversion Table
1 mm = 0.039 inch

D		L	
mm	**inch**	mm	**inch**
20	**0.79**	24	**0.94**
30	**1.18**	30	**1.18**
35	**1.38**	36	**1.42**
50	**1.97**	40	**1.57**
		61	**2.40**
		68	**2.68**

DVA.7



* Complete the description with the desired hardness: 40, 55 or 70 tolerance ±5 Shore A.

DVA.7 - 20 - 24 - M6 - 55
D L d Shore A

metric units

Elesa Standards	Dimensions					Hardness 40 Shore A			Hardness 55 Shore A			Hardness 70 Shore A		
Description	D	L	d	h	g	Code	Max load [N]	Max deflection [mm]	Code	Max load [N]	Déflexion max [mm]	Code	Max load [N]	Max deflection [mm]
DVA.7-20-24-M6-*	20	24	M6	6	8	416301	62	5	413601	113	5	419001	178	5
DVA.7-30-30-M8-*	30	30	M8	8	28	416311	92	5	413611	247	7	419011	307	5
DVA.7-30-36-M8-*	30	36	M8	8	30	416321	106	5	413621	186	7	419021	384	5
DVA.7-35-40-M8-*	35	40	M8	8	43	416331	196	8	413631	305	8	419031	437	8
DVA.7-50-61-M8-*	50	61	M8	8	114	416341	368	12	413641	909	15	419041	1118	12
DVA.7-50-68-M10-*	50	68	M10	10	120	416351	502	15	413651	794	15	419051	1755	15

INOX Stainless Steel

metric units

Elesa Standards	Dimensions					Hardness 40 Shore A			Hardness 55 Shore A			Hardness 70 Shore A		
Description	D	L	d	h	g	Code	Max load [N]	Max deflection [mm]	Code	Max load [N]	Max deflection [mm]	Code	Max load [N]	Max deflection [mm]
DVA.7-20-24-SST-M6-55	20	24	M6	6	8	ON REQUEST	62	5	410601	113	5	ON REQUEST	178	5
DVA.7-30-30-SST-M8-55	30	30	M8	8	28		92	5	410611	247	7		307	5
DVA.7-30-36-SST-M8-55	30	36	M8	8	30		106	5	410613	186	7		384	5
DVA.7-35-40-SST-M8-55	35	40	M8	8	43		196	8	410621	305	8		437	8
DVA.7-50-61-SST-M8-55	50	61	M8	8	114		368	12	410631	909	15		1118	12
DVA.7-50-68-SST-M10-55	50	68	M10	10	120		502	15	410633	794	15		1755	15

LW.A

METRIC

Vibration-damping levelling elements

RoHS +175°F -20°F

- **Base**
  Zinc-plated steel.
- **Vibration-damping disk**
  NR rubber, hardness 80 Shore A, black colour, matte finish.
- **Levelling plate**
  Zinc-plated steel.
- **Packing ring**
  OR in NBR synthetic rubber.
- **Threaded stem**
  Zinc-plated steel, supplied not assembled.
- **Nut and washer**
  Zinc-plated steel.

Assembly instructions

- Put the base of the vibration-damping element under the machine and insert the stem through the hole (not threaded) in the frame of the machine (fig.1).
- Turn the square end of the stem to take the levelling plate in contact with the machine thus obtaining the levelling required. Then lock with nut and washer (fig.2).

Features and applications

ELESA vibration-damping levelling elements have been designed to damp vibrations, shocks and noises produced by moving bodies or non-balanced vibrating masses of equipment and machines which can cause:

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

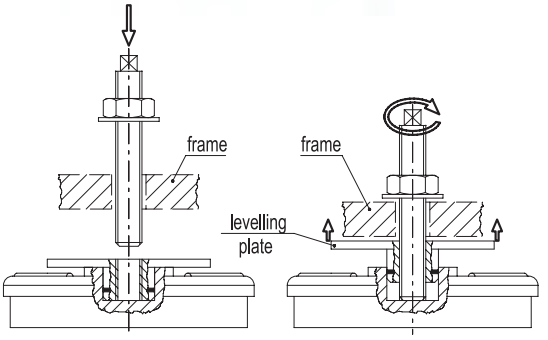
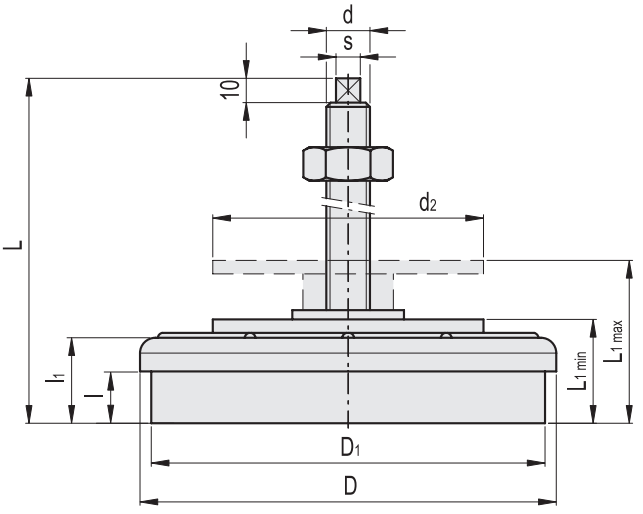


Fig.1 Fig.2



Conversion Table
1 mm = 0.039 inch

D	
mm	**inch**
80	**3.15**
120	**4.72**
160	**6.30**
200	**7.87**

metric units

Elesa Standards		Main dimensions								Threaded stem		Max load	Max deflection	Stiffness	⚖
Code	Description	D	D1	L	L1 min	L1 max	l	l1	d2	d	s	[N]	[mm]	[N/mm]	g
415111	LW.A-80-M12x1.25x120	80	72	134	38	50	18.5	33	60	M12x1.25	8x8	5000	2	2500	530
415121	LW.A-120-M16x1.5x130	120	109	150	45	58	23	39	80	M16x1.5	9x9	10000	2.5	4000	1200
415131	LW.A-160-M20x1.5x170	160	150	192	55	70	29	47	130	M20x1.5	12x12	20000	2.2	9000	2650
415141	LW.A-200-M20x1.5x170	200	186	206	65	80	36	58	130	M20x1.5	12x12	40000	2.7	15000	4500

Technical data and guidelines for the choice

1) Basic data required:
- disturbing frequency: the frequency of the disturbing vibration produced by a on-duty machine. In general, it is obtained by the number of rotations of the engine [Hz=r.p.m./60];
- the load applied to every single vibration-damping element [N];
- the isolation degree required [%];
- the deflection value of the vibration-damping element under a given load [mm];
- the rigidity, that is to say the load that applied to the vibration-damping element produces a deflection of 1.0 mm [N/mm].

2) How to choose the vibration-damping element:
- with reference to the diagram for checking the isolation degree, intersect the disturbing frequency value with the isolation degree required (each isolation degree corresponds to a line in the diagram) and define the deflection [in mm];
- divide the load applied onto the vibration-damping element by the deflection value to obtain the required rigidity of the vibration-damping element;
- compare the rigidity obtained with the rigidity shown in the table and choose the vibration-damping element which presents the nearest value (lower) to the calculated one.

3) Check the values obtained:
- the deflection of the vibration-damping element chosen can be obtained in the graph on the basis of the load;
- intersect the disturbing frequency value with the vibration-damping element deflection value in the diagram to obtain the isolation degree offered by the vibration-damping element chosen;
- compare the obtained value with the isolation degree required.

4) Example:
Conditions of use:
- disturbing frequency = 50 Hz (3,000 r.p.m.);
- load applied to every levelling element = 4,000 N;
- a 80% isolation degree is required;
- diagram shows that with a 50 Hz disturbing frequency and an isolation degree of 80%, the deflection obtained is 0.6 mm;
- divide the load applied by the deflection obtained to define the rigidity required, which is 4,000/0.6= 6,666 N/mm;
- compare the rigidity value obtained (6,666 N/mm) with the values reported in the table. This value is within the rigidity value reported in the table for LW.A-120 (4,000 N/mm) and LW.A-160 (9,000 N/mm). Choose the vibration-damping element with the lower value that is LW.A-120.

For a further check:
- graph shows that LW.A-120 (4,000 N/mm) deflection is 1mm.
- by intersecting the deflection value with the disturbing frequency of 50 Hz in the diagram, the isolation degree obtained is 90%.

This value is even greater than the required one; your choice has proved to be correct.

Graph

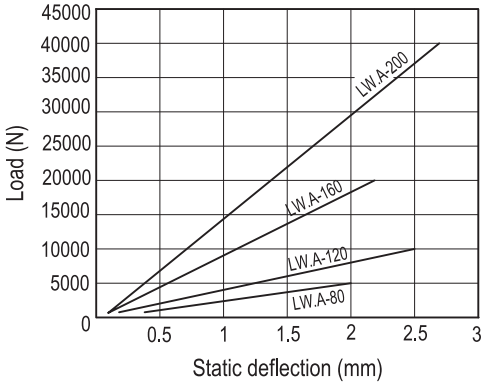
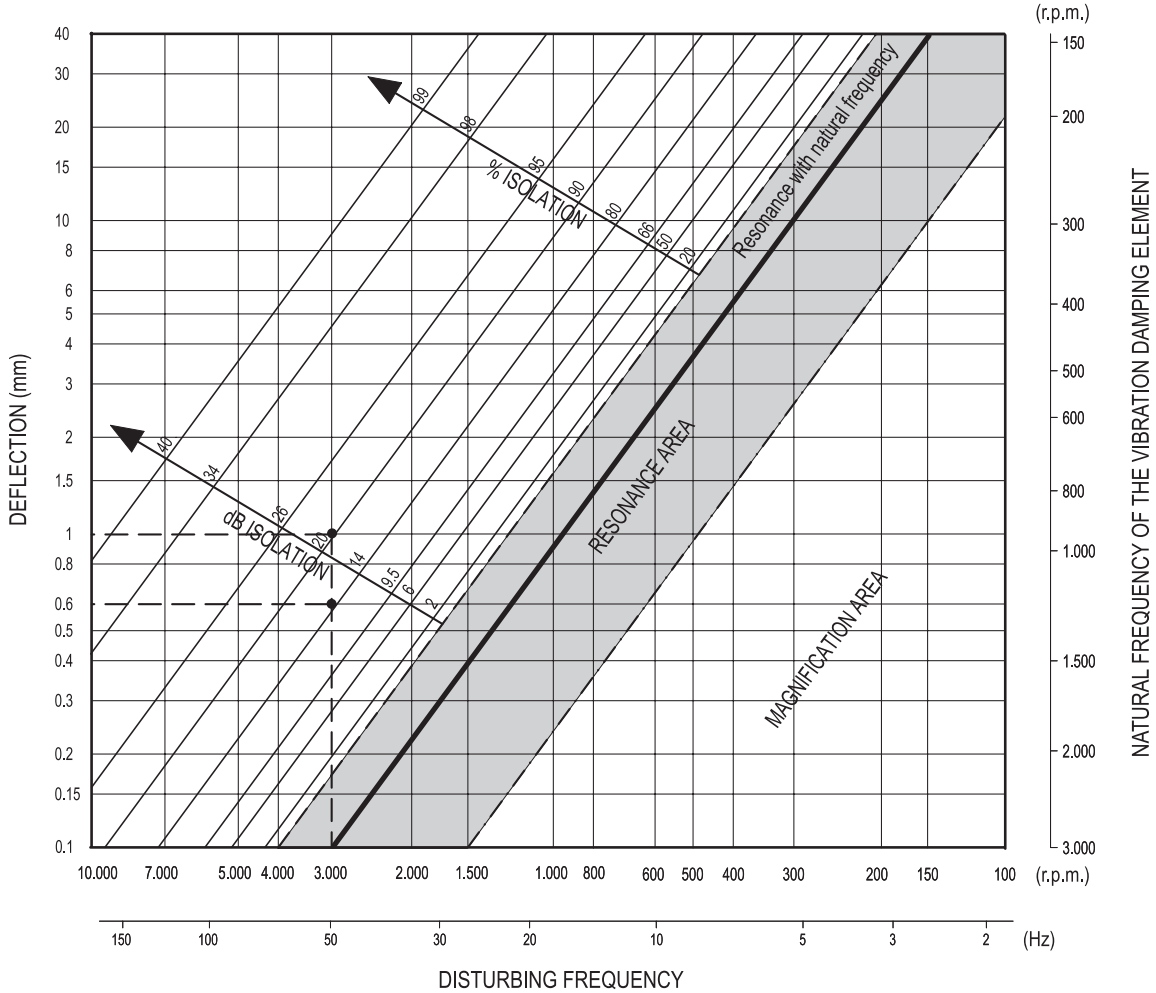


Diagram for checking the isolation degree of the vibration-damping element



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