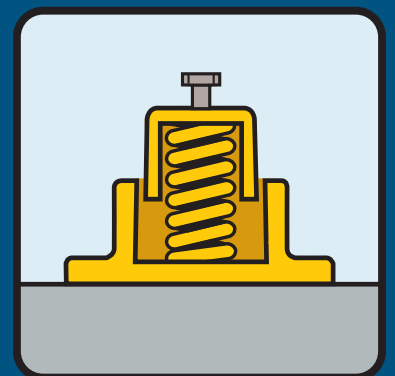




Standard Type Spring Units



GERB

Spring Units with and without Damping, for Loads up to 60 kN (6000 kg)

Vibration isolating a machine means to reduce significantly any transmission of periodic type, shock type or transient type dynamic forces into the surroundings.

Spring units belonging to our standard program may be selected from the following tables for all machines which cause small dynamic forces compared to the total weight of the machine, e.g. well balanced rotating machines or mass balanced compressors. All listed spring units are available on short notice ex works GERB Berlin.

Spring units of this program consist of cast iron made lower and upper casings

containing one or more helical compression springs. Spring units are delivered with a high quality painting (standard colour: yellow, RAL 1004).

On special request these spring units are available also in welded steel casings.

The spring units are designed for load capacities from 0.1 to 60 kN (10 to 6,000 kg) and can readily be supplied for mounting with or without damping (Viscodamping® or Sordino-damping) and height adjustment.

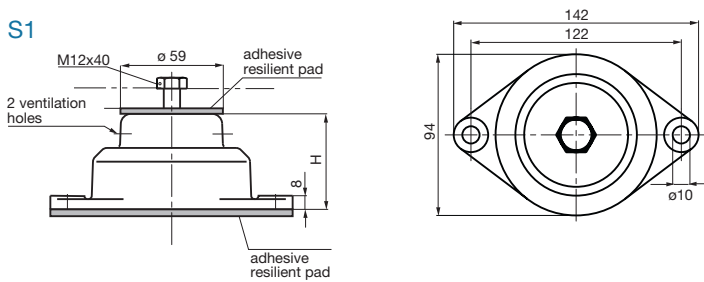
Attention: Damping might increase spring constants and natural frequencies of the spring units.

GERB spring units may be fixed with bolts, but in most cases our 4 mm thick resilient pads will provide safe fixing.

For higher vertical loads and for low speed GERB supplies spring units of special design with load capacities of up to 3,000 kN (300 t).

Our technical offices would appreciate to give you all required support regarding selection of spring units and the GERB range of activities. Please contact your nearest GERB office or send a mail to info@gerb.com.

S1

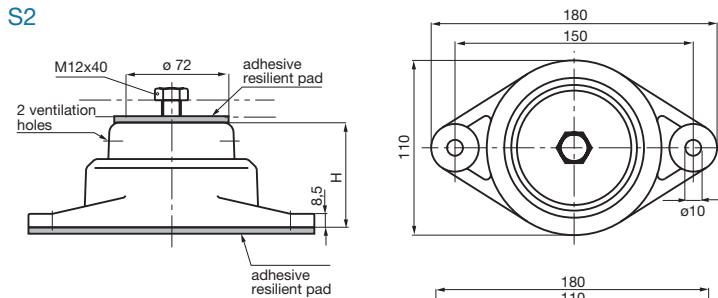


Spring unit type S1

| type | load capacity (N) | | vertical spring constant (N/mm) | vertical natural frequency (Hz) | | height (H in mm) | | |
|-------|-------------------|------|---------------------------------|---------------------------------|-----|------------------|------|-----------|
| | from | to | | from | to | at delivery | from | loaded to |
| S1-11 | 120 | 270 | 11 | 4.8 | 3.2 | 56 | 53 | 40 |
| S1-12 | 200 | 460 | 19 | 4.8 | 3.2 | 56 | 53 | 40 |
| S1-13 | 300 | 610 | 28 | 4.8 | 3.4 | 56 | 53 | 42 |
| S1-14 | 510 | 1070 | 64 | 5.6 | 3.9 | 56 | 53 | 44 |

This type can be supplied with height adjustment and/or damping.

S2

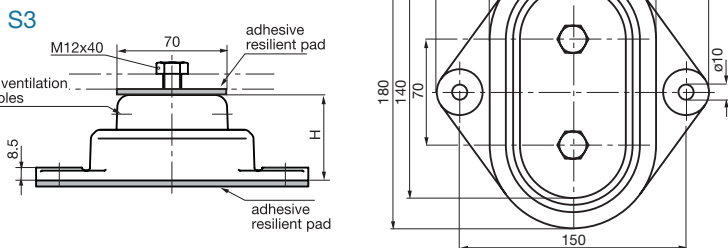


Spring unit type S2

| type | load capacity (N) | | vertical spring constant (N/mm) | vertical natural frequency (Hz) | | height (H in mm) | | |
|-------|-------------------|------|---------------------------------|---------------------------------|-----|------------------|------|-----------|
| | from | to | | from | to | at delivery | from | loaded to |
| S2-41 | 550 | 1450 | 69 | 5.6 | 3.5 | 66 | 63 | 50 |
| S2-42 | 560 | 1500 | 81 | 6.0 | 3.7 | 66 | 62 | 51 |
| S2-43 | 670 | 1810 | 97 | 6.0 | 3.7 | 66 | 62 | 50 |
| S2-44 | 810 | 1920 | 118 | 6.0 | 3.9 | 66 | 62 | 53 |
| S2-45 | 980 | 1980 | 142 | 6.0 | 4.2 | 66 | 62 | 55 |
| S2-46 | 1200 | 2430 | 173 | 6.0 | 4.2 | 66 | 62 | 55 |
| S2-47 | 1380 | 2840 | 200 | 6.0 | 4.2 | 66 | 62 | 55 |
| S2-48 | 1680 | 3310 | 243 | 6.0 | 4.3 | 66 | 61 | 54 |

This type can be supplied with height adjustment and/or damping.

S3

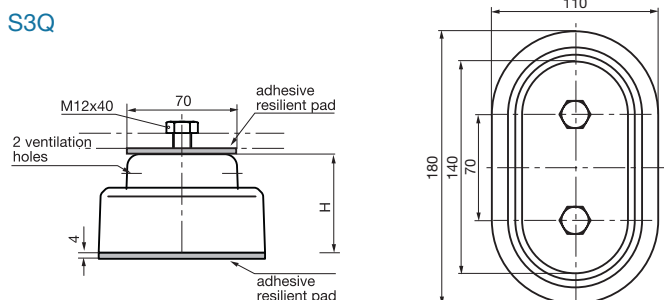


Spring unit type S3, S3Q

| type | load capacity (N) | | vertical spring constant (N/mm) | vertical natural frequency (Hz) | | height (H in mm) | | |
|--------|-------------------|------|---------------------------------|---------------------------------|-----|------------------|------|-----------|
| | from | to | | from | to | at delivery | from | loaded to |
| S3-241 | 1240 | 2890 | 138 | 5.3 | 3.5 | 66 | 63 | 51 |
| S3-242 | 1290 | 2990 | 162 | 5.6 | 3.7 | 66 | 63 | 53 |
| S3-243 | 1330 | 3610 | 194 | 6.0 | 3.7 | 66 | 62 | 50 |
| S3-244 | 1620 | 3830 | 236 | 6.0 | 3.9 | 66 | 62 | 53 |
| S3-245 | 1950 | 3950 | 284 | 6.0 | 4.2 | 66 | 62 | 55 |
| S3-246 | 2380 | 4850 | 346 | 6.0 | 4.2 | 66 | 62 | 55 |
| S3-247 | 2760 | 5680 | 400 | 6.0 | 4.2 | 66 | 62 | 55 |
| S3-248 | 3350 | 6610 | 486 | 6.0 | 4.3 | 66 | 61 | 54 |

This type can be supplied with damping.

S3Q



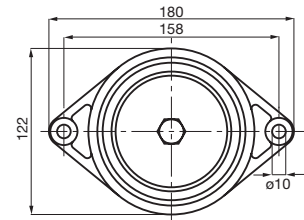
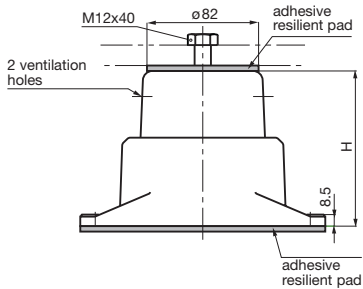


Spring unit type D1

| type | load capacity (N) | | vertical spring constant (N/mm) | vertical natural frequency (Hz) | | height (H in mm) | | |
|-------|-------------------|-------|---------------------------------|---------------------------------|-----|------------------|------|--------|
| | from | to | | from | to | at delivery | from | loaded |
| D1-31 | 100 | 650 | 15 | 6.0 | 2.4 | 114 | 110 | 74 |
| D1-32 | 180 | 1080 | 27 | 6.0 | 2.5 | 114 | 108 | 75 |
| D1-33 | 260 | 1420 | 35 | 5.8 | 2.5 | 114 | 111 | 78 |
| D1-34 | 520 | 2300 | 75 | 6.0 | 2.9 | 114 | 108 | 84 |
| D1-35 | 1000 | 2990 | 145 | 6.0 | 3.5 | 114 | 108 | 94 |
| D1-81 | 1670 | 4990 | 241 | 6.0 | 3.5 | 114 | 108 | 94 |
| D1-82 | 1390 | 6100 | 311 | 7.5 | 3.6 | 114 | 111 | 96 |
| D1-83 | 2720 | 6610 | 393 | 6.0 | 3.9 | 114 | 109 | 99 |
| D1-84 | 3450 | 13570 | 497 | 6.0 | 3.0 | 114 | 109 | 88 |
| D1-85 | 4260 | 15230 | 614 | 6.0 | 3.2 | 114 | 109 | 91 |

This type can be supplied with height adjustment and/or damping.

D1



D2, D3*

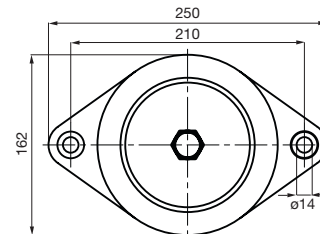
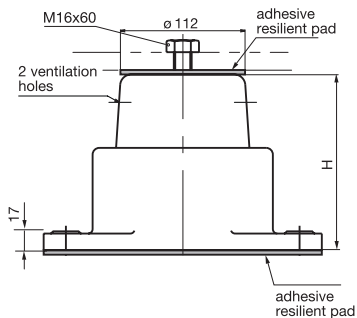


Spring unit type D2, D3*

| type | load capacity (N) | | vertical spring constant (N/mm) | vertical natural frequency (Hz) | | height (H in mm) | | |
|--------|-------------------|-------|---------------------------------|---------------------------------|-----|------------------|------|--------|
| | from | to | | from | to | at delivery | from | loaded |
| D2-52 | 550 | 4270 | 79 | 6.0 | 2.2 | 158 | 155 | 108 |
| D2-53 | 1110 | 7000 | 159 | 6.0 | 2.4 | 158 | 155 | 118 |
| D2-55 | 3240 | 13210 | 326 | 5.0 | 2.5 | 158 | 155 | 122 |
| D2-56 | 1580 | 10770 | 228 | 6.0 | 2.3 | 179 | 172 | 132 |
| D3-57* | 980 | 8330 | 140 | 6.0 | 2.0 | 258 | 255 | 203 |

This type can be supplied with height adjustment and/or damping.

*) D3 welded elements with baseplate 250 x 170 x 8 mm



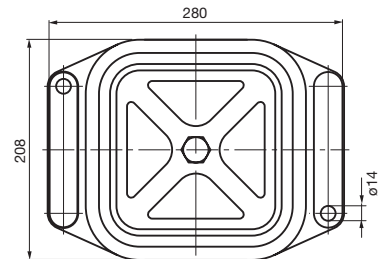
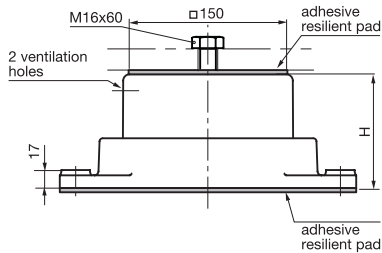
W1, W2



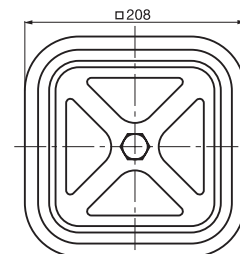
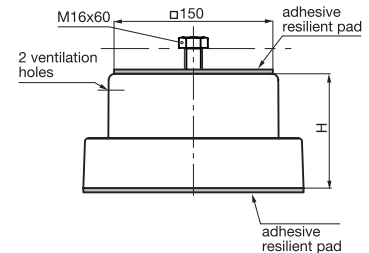
Spring unit type W1, W1Q, W2, W2Q

| type | load capacity (N) | | vertical spring constant (N/mm) | vertical natural frequency (Hz) | | height (H in mm) | | |
|--------|-------------------|-------|---------------------------------|---------------------------------|-----|------------------|------|--------|
| | from | to | | from | to | at delivery | from | loaded |
| W1-441 | 1900 | 5770 | 276 | 6.0 | 3.5 | 69 | 65 | 51 |
| W1-442 | 2230 | 5970 | 324 | 6.0 | 3.7 | 69 | 65 | 54 |
| W1-443 | 2670 | 7220 | 388 | 6.0 | 3.7 | 69 | 65 | 53 |
| W1-444 | 3250 | 7650 | 472 | 6.0 | 3.9 | 69 | 65 | 56 |
| W1-445 | 3910 | 7900 | 568 | 6.0 | 4.2 | 69 | 65 | 58 |
| W1-446 | 4770 | 9690 | 692 | 6.0 | 4.2 | 69 | 65 | 58 |
| W1-447 | 5520 | 11360 | 800 | 6.0 | 4.2 | 69 | 65 | 58 |
| W1-448 | 6700 | 13220 | 972 | 6.0 | 4.3 | 69 | 64 | 57 |
| W1-548 | 8380 | 16530 | 1215 | 6.0 | 4.3 | 69 | 64 | 57 |
| W2-431 | 1680 | 2670 | 60 | 3.0 | 2.4 | 108 | 105 | 89 |
| W2-432 | 2050 | 3840 | 108 | 3.6 | 2.7 | 108 | 105 | 89 |
| W2-433 | 3920 | 5660 | 140 | 3.0 | 2.5 | 108 | 105 | 93 |
| W2-434 | 4800 | 9180 | 300 | 4.0 | 2.9 | 108 | 105 | 90 |
| W2-435 | 7540 | 11950 | 580 | 4.4 | 3.5 | 108 | 105 | 97 |
| W2-481 | 12530 | 19960 | 964 | 4.4 | 3.5 | 108 | 105 | 97 |
| W2-482 | 9950 | 24390 | 1244 | 5.6 | 3.6 | 108 | 105 | 93 |
| W2-483 | 12570 | 26410 | 1572 | 5.6 | 3.9 | 108 | 105 | 96 |
| W2-484 | 15900 | 48710 | 1988 | 5.6 | 3.2 | 108 | 105 | 89 |
| W2-485 | 19640 | 60180 | 2456 | 5.6 | 3.2 | 108 | 105 | 89 |

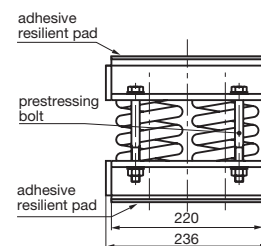
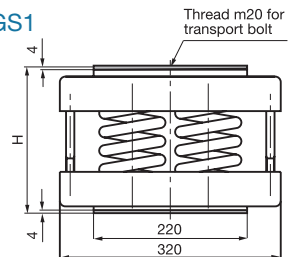
This type can be supplied with load-dependent height adjustment and/or damping.



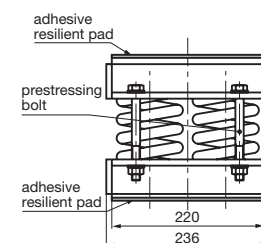
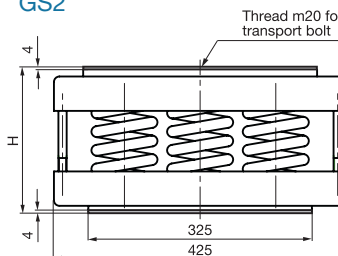
W1Q, W2Q



GS1



GS2



Spring unit type GS1, GS2

| type | load capacity (kN) | | vertical spring constant (kN/mm) | vertical natural frequency (Hz) | | height (H in mm) | | |
|---------|--------------------|----|----------------------------------|---------------------------------|-----|------------------|------|--------|
| | from | to | | from | to | at delivery | from | loaded |
| GS1-452 | 10 | 16 | 0.32 | 2.8 | 2.2 | 175 | 147 | 128 |
| GS1-453 | 10 | 26 | 0.64 | 4.0 | 2.5 | 175 | 162 | 137 |
| GS1-454 | 20 | 38 | 1.95 | 5.0 | 3.6 | 135 | 128 | 119 |
| GS1-455 | 20 | 38 | 1.30 | 4.0 | 2.9 | 175 | 163 | 149 |
| GS1-456 | 20 | 36 | 0.91 | 3.4 | 2.5 | 200 | 181 | 164 |
| GS1-457 | 20 | 33 | 0.56 | 2.6 | 2.0 | 253 | 242 | 219 |
| GS2-654 | 35 | 57 | 2.93 | 4.6 | 3.6 | 135 | 126 | 119 |
| GS2-655 | 35 | 57 | 1.95 | 3.7 | 2.9 | 175 | 160 | 149 |
| GS2-656 | 35 | 55 | 1.37 | 3.1 | 2.5 | 200 | 177 | 163 |
| GS2-657 | 35 | 50 | 0.84 | 2.5 | 2.0 | 253 | 236 | 218 |

This type can be supplied with damping. Spring units are prestressable. Housings are made of welded steel.



Spring Units with and without Damping

We would appreciate to select suitable spring units for you. Please provide technical details of your machine or equipment to be isolated:

- ▶ Type and Model of Machine,
- ▶ Outer dimensions or general arrangement drawing,
- ▶ Total weight,
- ▶ Normal speed or number of strokes per minute.

Based on your information we will provide a proposal for vibration isolation, of course free of charge.

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