GN 342.2

Levelling feet

with vibration damping / threaded stud

SPECIFICATION

Type

- Type **SV**: with damping element

Steel

- Tensile strength class 5.8
- zinc plated, blue passivated

Damping element
Elastomer (PUR)

- Sylomer SR 450-12
- anti-slip, glued
- grey
- oil resistant
- Operating range form -30 °C up to 70 °C

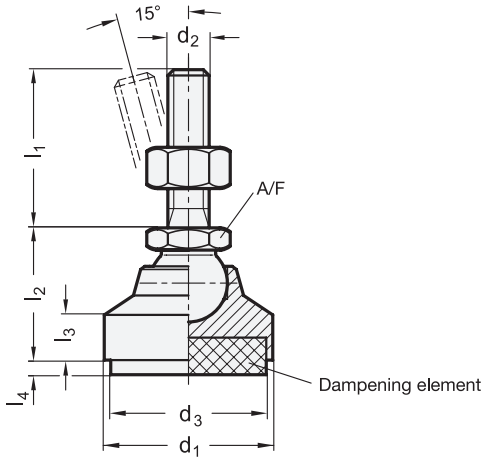
Hexagon nut ISO 4032
Steel zinc plated, blue passivated

INFORMATION

The specified load in the above table of the levelling feet GN 342.2 is a recommendation up to which the damping element can be **permanently** subjected.
This static load equals a thrust on the area of 0.4 N/mm^2 at which the damping material reaches its optimum dynamic damping ability. This also takes into account an additional load up to 0.6 N/mm^2 in the event of a dynamic load.
Levelling feet GN 342.1 cannot be disassembled.

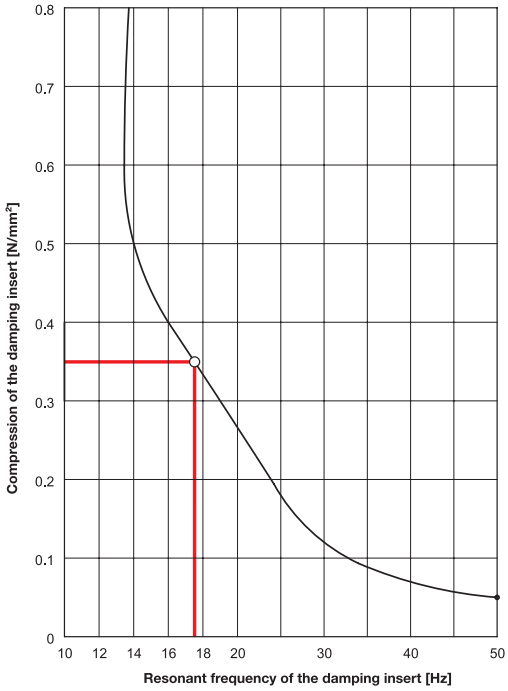
TECHNICAL INFORMATION

- Elastomer characteristics (see page A32)
- Strength values (see page A20)



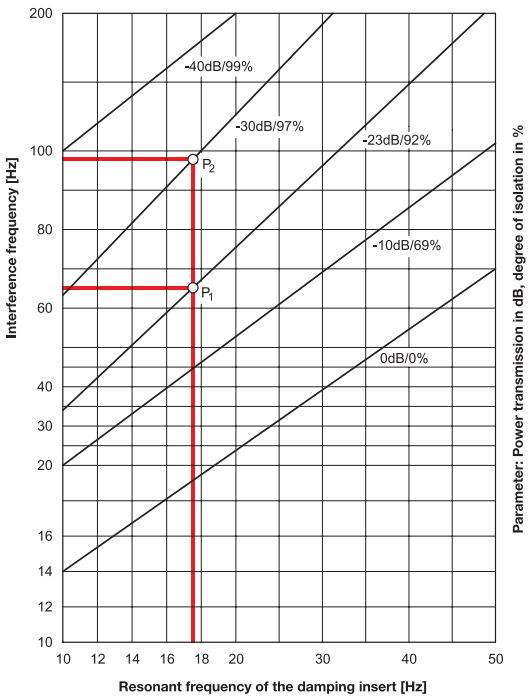
GN 342.2

Description	d1	d2	l1	d3	l2	l3	l4 Compression in N/mm^2 0	l4 Compression in N/mm^2 0.4	l4 Compression in N/mm^2 0.6	A/F	Area damping element in mm^2	Load in N by compression 0.4 N/mm^2	⚖
GN 342.2-32-M10-50-SV	32	M 10	50	30	29	11	5.5	3.8	2.7	15	707	280	107
GN 342.2-32-M10-80-SV	32	M 10	80	30	29	11	5.5	3.8	2.7	15	707	280	122
GN 342.2-40-M12-63-SV	40	M 12	63	38	30	9.5	6	4.3	3.3	17	1134	450	170
GN 342.2-40-M12-100-SV	40	M 12	100	38	30	9.5	6	4.3	3.3	17	1134	450	189
GN 342.2-50-M12-63-SV	50	M 12	63	48	30.5	9	6.5	4.9	3.9	17	1809	720	208
GN 342.2-50-M12-100-SV	50	M 12	100	48	30.5	9	6.5	4.9	3.9	17	1809	720	233
GN 342.2-60-M16-80-SV	60	M 16	80	58	37.5	10	7	5.5	4.4	24	2641	1050	430
GN 342.2-60-M16-125-SV	60	M 16	125	58	37.5	10	7	5.5	4.4	24	2641	1050	495



Vibration absorption - Performance graph

When using levelling feets GN 342.1 (see page 1308) and GN 342.2 the following differentiation in vibration absorption is made:
Active vibrations:
Vibrations transmitted to surroundings or associated equipment from working machinery for example.
Passive vibrations:
Vibrations transmitted to equipment or parts from vibrating surroundings or bases.
The efficiency of vibration absorption is dependent upon the interference frequency of the vibration to be absorbed as well as on the resonant frequency of the damping element itself.
A vibration absorbing effect is only achieved when the interference frequency is greater than √2-times the resonant frequency of the damping element. The greater the difference [Δ] between the two, the better the damping effect.
The resonant frequency of the damping pad is dependant upon type (composition) of the material cross section and the static load.
The graphs on the left show all the required data of the standard material (SR 450-12) of the damping element. Damping elements with other absorption properties are available on request.



Example

Assume a load per levelling foot: 400 N
Compression levelling foot $d_1 = 32$
400 N / 707 mm² = 0.57 N/mm²
Compression levelling foot $d_1 = 40$
400 N / 11340 mm²= 0.34 N/mm²
Therefore levelling feet with $d_1 = 40$, that exert a pressure of 0.4 N/mm² should be preferred.
The above graph shows:
Resonant frequency with compression 0.34 N/mm²:17.5 Hz
The lower graph shows:
Degree of isolation at 66 Hz interference frequency (P1): 92 %
Degree of isolation at 98 Hz interference frequency (P2): 97 %
At approximately 200 Hz interference frequency the degree of isolation is 100 %.