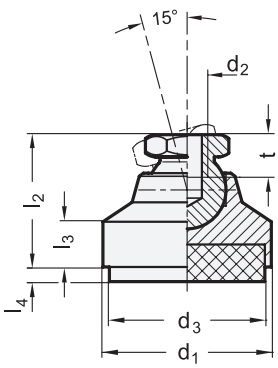
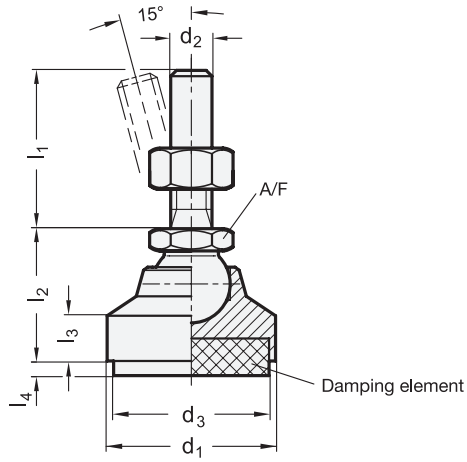
GN 342.1



GN 342.2



4 Type

SV With damping element

1 d_1	2 d_2	3 l_1		d_3	l_2	l_3	l_4 Compression in N/mm²			A/F	t	Area damping element in mm²	Load in N at compression 0,4 N/mm² (see information)
							0	0,4	0,6				
32	M 10	50	80	30	29	11	5,5	3,8	2,7	15	10,5	707	280
40	M 12	63	100	38	30	9,5	6	4,3	3,3	17	11,5	1134	450
50	M 12	63	100	48	30,5	9	6,5	4,9	3,9	17	11,5	1809	720
60	M 16	80	125	58	37,5	10	7	5,5	4,4	24	16	2641	1050

Specification

- Steel
  - Property class 5.8
  - Zinc plated, blue passivated
- Damping element
  Elastomer (PUR)
  - Sylomer SR 450-12
  - Anti-slip, glued
  - Gray
  - Oil resistant
  - Operating range from -30 °C up to +70 °C
- Hexagon nut ISO 4032
  Steel
  Zinc plated, blue passivated
- *Strength Values* → *Page 2152*
- *Elastomer Characteristics* → *Page 2158*
- RoHS

Information

The specified load in the above table of the leveling feet GN 342.1 / 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/mm², at which the damping material reaches its optimum dynamic damping ability. This also takes into account an additional load up to 0,6 N/mm² in the event of a dynamic load.

Leveling feet GN 342.1 / GN 342.2 cannot be disassembled.

see also...

- *Leveling Feet GN 343.1 / GN 343.2 (without Vibration Damping)* → *Page 1424*
- *Insert Bushings GN 448 (for Tubes)* → *Page 1498 / 1499*

How to order (With internal thread)

1 2 4

GN 342.1-32-M10-SV

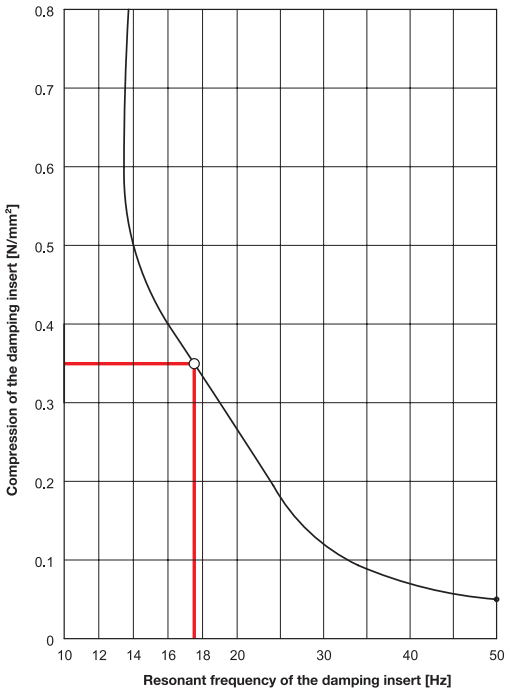
1	d_1
2	d_2
4	Type

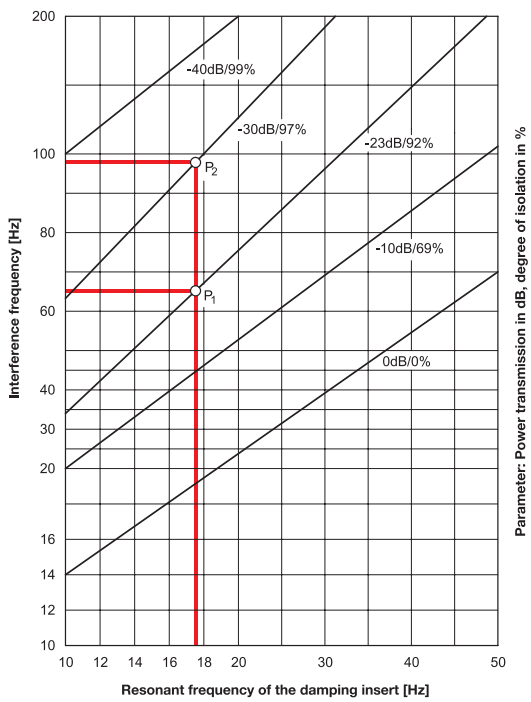
How to order (With threaded stud)

1 2 3 4

GN 342.2-50-M12-63-SV

1	d_1
2	d_2
3	l_1
4	Type





Vibration absorption - Performance graph

When using leveling feet GN 342.1 / 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 $\sqrt{2}$-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 dependent 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. Dampening elements with other absorption properties are available on request.

Example

Assume a load per leveling foot: 400 N

Compression leveling foot d1 = 32

$\frac{400\ N}{707\ mm^2} = 0{,}57\ N/mm^2$

Compression leveling foot d1 = 40

$\frac{400\ N}{1134\ mm^2} = 0{,}34\ N/mm^2$

Therefore leveling feet with d1=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%.