

Vibration Insulators



[Features]

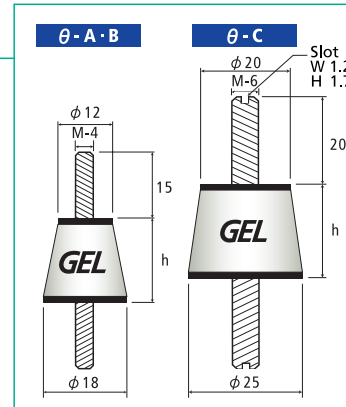
- Ideal for low frequency and micro vibration due to resonance point designed to be set low.
- Wide selection to choose from: from 2 kg (4.4 lb) to 300 kg (661.4 lb).
- Pick the best fit for your application based on the load (weight).
- The published data are based on four points of support (usage).



Type θ

| Part No. | Optimum Load (kg/4 points) | Resonance Point (Hz) | Resonance Magnification (dB) | Recommended Frequency (Hz) | h (mm) |
|-------------|----------------------------|----------------------|------------------------------|----------------------------|--------|
| θ -A | 2.0 ~ 3.2 | 16 ~ 15 | 12 | 23 ~ | 13 |
| θ -B | 1.6 ~ 2.4 | 13 ~ 11 | 13 ~ 12 | 18 ~ | 18 |
| θ -C | 3.2 ~ 8.0 | 14 ~ 12 | 13 ~ 12 | 20 ~ | 18 |

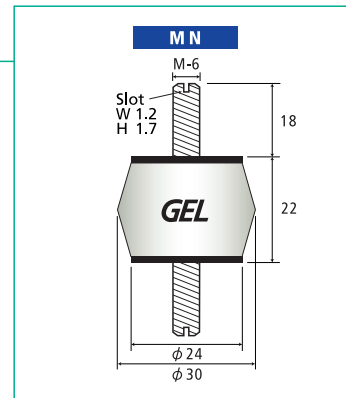
Bolt material : Iron with trivalent chromate plating



Type MN

| Part No. | Optimum Load (kg/4 points) | Resonance Point (Hz) | Resonance Magnification (dB) | Recommended Frequency (Hz) |
|----------|----------------------------|----------------------|------------------------------|----------------------------|
| MN-3 | 8 ~ 14 | 12 ~ 10 | 12 | 17 ~ |
| MN-5 | 14 ~ 22 | 11 ~ 10 | 14 ~ 13 | 16 ~ |
| MN-7 | 22 ~ 34 | 11 ~ 10 | 16 ~ 15 | 16 ~ |
| MN-10 | 34 ~ 50 | 11 ~ 10 | 20 ~ 18 | 16 ~ |

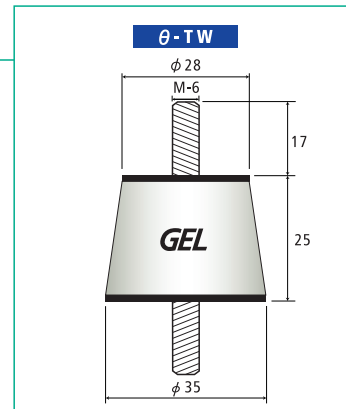
Bolt material : Iron with trivalent chromate plating



Type θ -TW

| Part No. | Optimum Load (kg/4 points) | Resonance Point (Hz) | Resonance Magnification (dB) | Recommended Frequency (Hz) |
|--------------|----------------------------|----------------------|------------------------------|----------------------------|
| θ -TW | 50 ~ 100 | 10 ~ 8 | 20 ~ 19 | 14 ~ |

Bolt material : Iron with trivalent chromate plating

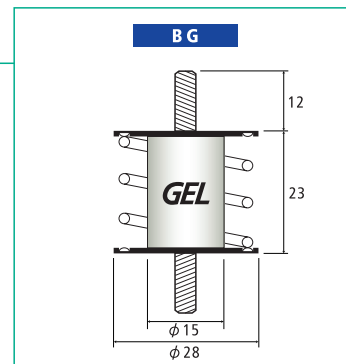


Type BG

Supported by a spring, type BG is effective for vertical vibration damping in particular.

| Part No. | Optimum Load (kg/4 points) | Resonance Point (Hz) | Resonance Magnification (dB) | Recommended Frequency (Hz) | Bolt Diameter |
|----------|----------------------------|----------------------|------------------------------|----------------------------|---------------|
| BG-7 | 3.2 ~ 6.4 | 10 ~ 8 | 16 ~ 14 | 14 ~ | M - 3 |
| BG-8 | 6 ~ 16 | 10 ~ 8 | 18 ~ 16 | 14 ~ | M - 6 |

Bolt material : Brass
Spring material : SWPA with trivalent chromate plating

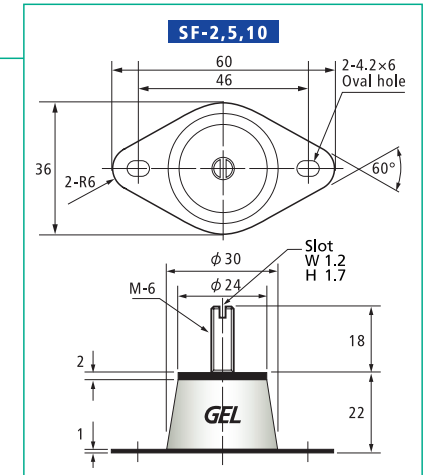


Type SF

For applications where a plate at bottom is preferred instead of a bolt.

| Part No. | Optimum Load (kg/4 points) | Resonance Point (Hz) | Resonance Magnification (dB) | Recommended Frequency (Hz) |
|----------|----------------------------|----------------------|------------------------------|----------------------------|
| SF-2 | 5 ~ 13 | 15 ~ 10 | 12 ~ 13 | 22 ~ |
| SF-5 | 13 ~ 30 | 13 ~ 9 | 15 ~ 16 | 19 ~ |
| SF-10 | 30 ~ 50 | 12 ~ 9 | 19 ~ 21 | 17 ~ |

Upper bolt material : Iron with trivalent chromate plating
Bottom plate material : SUS304



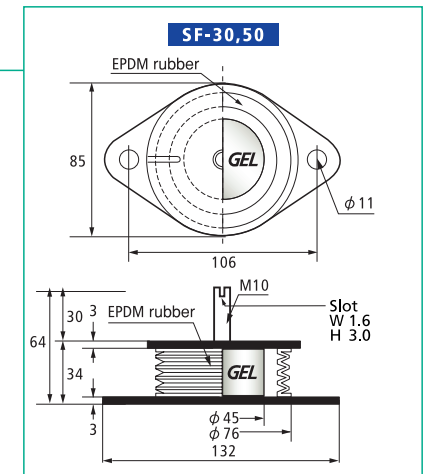
(Rubber-coated) Type SF

- For application where a bottom plate is preferable and there is a need for damping heavy-load vibration.
- Good for outdoor use in particular due to reinforced durability deriving from α GEL wrapped by bellows-type EPDM rubber.
- Stable performance in the -20°C (-4°F) to 90°C (194°F) range.

| Part No. | Optimum Load (kg/4 points) | Resonance Point (Hz) | Resonance Magnification (dB) | Recommended Frequency (Hz) |
|----------|----------------------------|----------------------|------------------------------|----------------------------|
| SF-30 | 100 ~ 140 | 8 ~ 9 | 18 ~ 19 | 13 ~ |
| SF-50 | 120 ~ 300 | 10 ~ 15 | 12 ~ 18 | 15 ~ |

Metal parts have a choice between following 1. and 2.

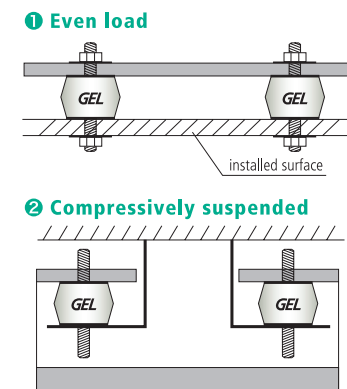
1. Upper bolt material : Iron with trivalent chromate plating
Bottom plate material : Iron with trivalent chromate plating
2. Upper bolt material : SUS304 / Bottom plate material : SUS304



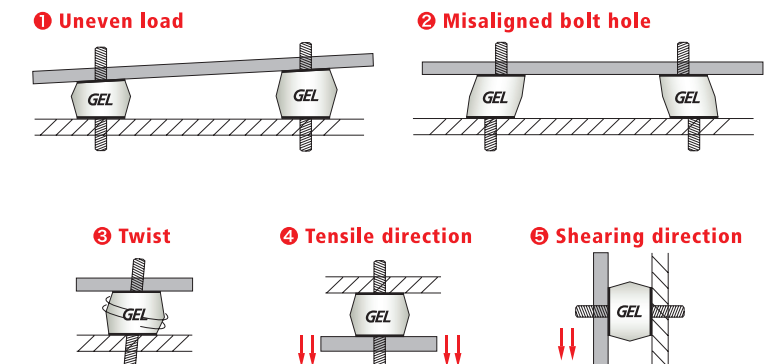
Installation

Always use in compression.

Correct Use



Incorrect Use



- ※ The height of the insulator may vary as the gel is compressed under load.
- ※ The direction of the slot on the head of stud is not controlled.
- ※ Do not remove the gel burr around the edge of metal. This could cause detachment of gel from metal.