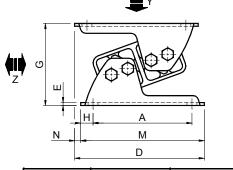
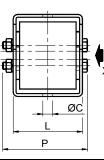




# VIB 弹性组件 型号: AN / Elastic Components VIB Type: AN







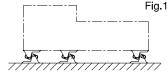
| 型号<br><i>Typ</i> e | 编号 N°    | Q           | А   | с    | D     | Е   | G   | G1  | н    | L   | М   | N    | Р    | 重量<br><i>Weight</i><br>in kg |
|--------------------|----------|-------------|-----|------|-------|-----|-----|-----|------|-----|-----|------|------|------------------------------|
| AN 20              | RE020832 | 0 - 375     | 65  | 7    | 90.5  | 2   | 54  | 44  | 10   | 49  | 85  | 5.5  | 58.5 | 0.40                         |
| AN 30              | RE020834 | 290 - 1145  | 80  | 9.5  | 110.5 | 2.5 | 65  | 52  | 12.5 | 60  | 105 | 5.5  | 69   | 0.65                         |
| AN 40              | RE020836 | 960 - 1940  | 110 | 11.5 | 148   | 3   | 88  | 72  | 15   | 71  | 140 | 8    | 85.5 | 1.32                         |
| AN 50              | RE020838 | 1750 - 3300 | 140 | 14   | 182   | 4   | 117 | 93  | 17.5 | 98  | 175 | 7    | 117  | 3.70                         |
| AN 60              | RE020840 | 3000 - 5740 | 170 | 18   | 234.5 | 5   | 143 | 115 | 25   | 120 | 220 | 14.5 | 138  | 5.50                         |
| AN 70              | RE020842 | 5230 - 8560 | 175 | 18   | 240   | 6   | 165 | 134 | 25   | 142 | 225 | 15   | 163  | 11.00                        |

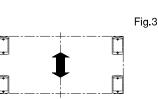
Fig.2

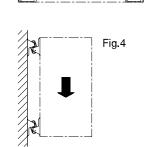
Q:在Y轴和Z轴上负载,以N表示/Max loading in N on Y and Z axis

## 在 X 轴上可允许最大负载为 Y 轴上负载的 20%

The maximum allowable load on X axis is 20% greater than that of the Y axis







- 图 1: 安置 / Positioning
- 图 2: 纵向动力 / Longitudinal dynamic forces
- 图 3: 横向动力 / Transversal dynamic forces
- 图 4: 墙面安装 / Wall mounting

## 材料

尺寸从 30 至 60, 夹具为钢制, 双中心体和内部方管 为铝制拉丝; 尺寸为 70, 双中心体和夹具为钢制, 内 部方管为铝制拉丝。

## 处理

双体和夹具外壳为烤炉涂漆。

## 应用

弹性组件 AN 一般应用于低等和中等频率振动的吸 收:旋转组件、制冷设备电机、压缩机、泵、搅拌 机,也可用磅秤、电子线路、缓冲器等的支撑。

弹性组件 AN 可用于地面支撑也可用于天花板或墙壁

悬挂。为了保证正确效能,所有弹性组件 An 均应以 同一方向固定。

#### 问一万问回止。

# MATERIALS

From size 30 to 60 clamps are made of steel while double inner body and inner squares are made out of light alloy profile. Size 70: double body and clamps are made of steel while inner squares are made out of light alloy profile. **TREATMENTS** 

## Double body and clamps are oven painted.

DUTY

The elastic components AN are mainly used to damping vibration of low and medium frequency: rotating components, refrigerant motor unit, compressors, pumps, mixing machine, but also as supports for measuring systems, eletric distribution board, impact damper etc.

The elastic components AN can be used as ground supports or ceiling and wall mountings. For a correct operation in series, the shock absorbing elements AN must all be fixed in the same direction.

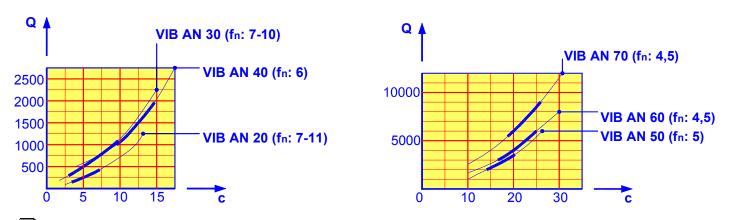




# 负载图 / LOAD GRAPH

(Q: 垂直压缩负载 [N]; c: 变形量 [mm]; f<sub>n</sub>: 固有频率 [Hz])

(Q: Vertical compression load [N]; c: Set [mm]; f<sub>n</sub>: Own frequency [Hz])



💭 **计算实例:** 剧院设备起重机所用抗震支撑 AN 的计算,应力和负载主要为垂直方向,重心在机器中部。

**CALCULATION EXAMPLE:** Determination of an anti-vibration support type AN for a theatrical equipment lift with verticals forces and loadings with the centre of gravity in the median point of the machine.

## 起始数据 / Given data:

| n:         | 电动机旋转速度:<br><i>Motor rotation velocity:</i> | 3550 min <sup>-1</sup> | X: 支撑数目:<br>Mounting number: | 6 |
|------------|---|------------------------|------------------------------|---|
| <b>G</b> : | 重量:<br>Weight:                              | 27600 N                |                              |   |
|            |   |                        |                              |   |

Incognite / Unknow data:

**Q₀:** 每个悬架的负载 / Load for each support

## <u> 计算步骤 / Calculation steps:</u>

- **Q**<sub>0</sub>: 每个悬架的静负载: Static load for each suspension:  $= \frac{G}{X} = \frac{27600}{4} = 4600 \text{ N}$
- 应使用 VIB AN 60 It must be used VIB AN 60

计算激励频率  $f_0$ It must be calculated the excitation frequency:  $f_0$  $f_0$ :  $\frac{n}{60} = \frac{3550}{60} = 59.2$  Hz

- AN 60 的固有频率 f<sub>n</sub> AN 60 own frequency f<sub>n</sub>: 4.5 Hz
- µ: 由第 68 页图 3 和图 4 所得的隔离程度:
  Degree of isolation given by fig 3 and 4 at page 68:
  - 约 99% / about 99%

结论: 应使用 6 个 AN 60 Conclusion: It must be used 6 pieces AN 60

