





# Acoustic wall lining system

# 3900-01/TD2 Model

The **model 3900** is perfect for the installation of acoustic wall lining systems of great heights. It is an unique insulator standing out by its simplicity. This model is designed to eradicate and attenuate the transmission of vibrations provided by shocks, impacts and vibro-mechanical energies from units generating acoustic pollution avobe the 20 Hz.





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### Introduction

A different wall mount in constant **evolution** for wall lining systems of great height (as of **4,5 mm** of height).

**SENOR** makes it possible using the last technology in the vibro-acoustic field.

It is a wall mount with double fastening to wall made of:

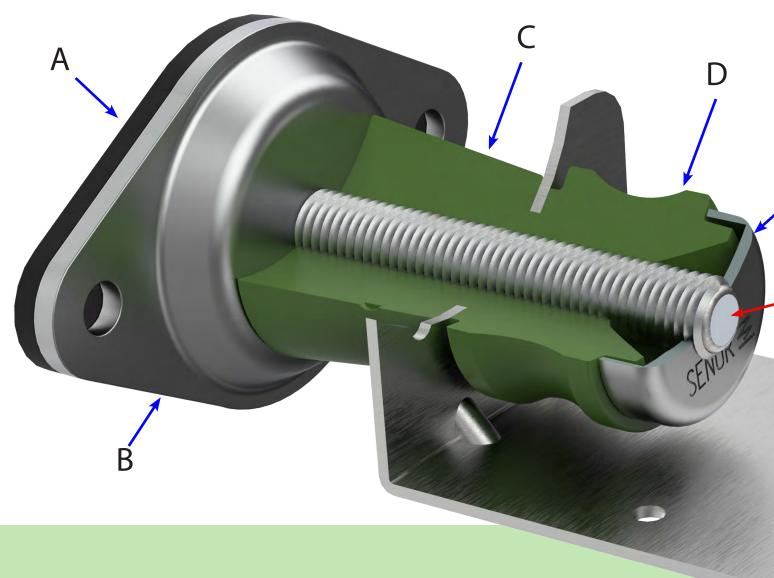
**Double rubber** placed face to face, made of a renovated **polymer** providing great performance.

Ref. **3900/TD2** 

The **TC 4/GPN** provides a better performance and insulation to vibrations in low, medium and high frequencies providing improvements in the internal properties and an increase of >10% in the acoustic field.







## **Main features**

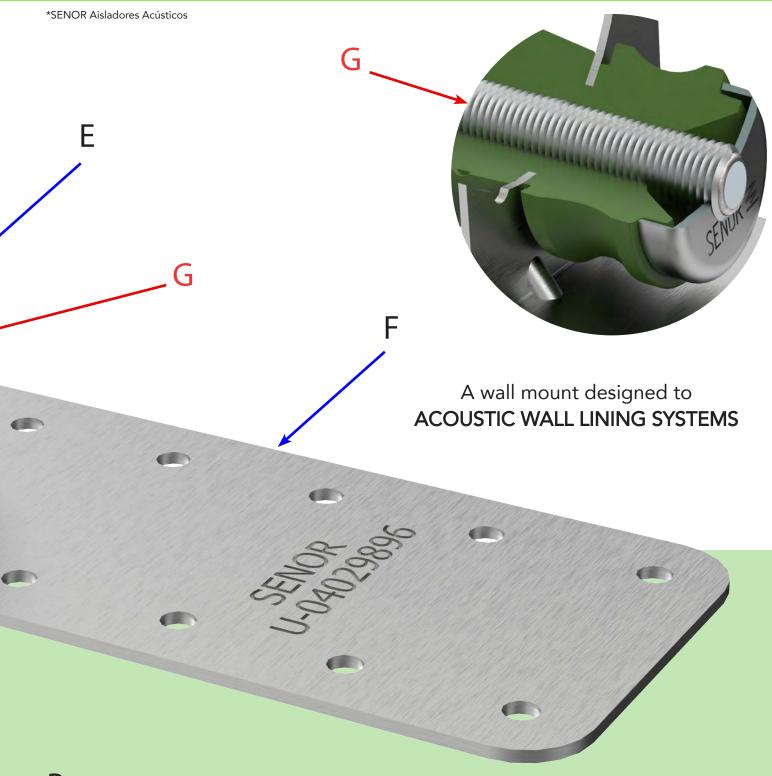
It is a wall mount direct to wall. It allows separating and isolating wall lining systems in the least space. It is available in two thickness in order to expand or reduce the air chamber depending on the conditions of the work site.

Profile type: **STUD** 

A BEC-3 Sheet is an acoustic microcellular sheet made of CAU EPDM 130 RE-42. It allows wall mount to be supported in the wall easily, absorbing any unevenness that the original facing may present.







Oval steel flat: made of laminated steel type DC04 with deep drawing in accordance with spanish steel standard EN 10131.

The mechanical resistance is increased due to the two holes in the area without deep drawing assuring that, in the fastening process, the tensions applied don't damage the threaded rod or produce deformation to the piece.



# C and D

#### TC 4/GPN

It is a renovated polymer with a protrusion part that avoid the contact between the threaded rod (**G**) and metal components (**B**, **E** and **F**). In addition, it provides a great settlement with the bracket and an optimal behaviour in the medium/high frequencies (Hz).

#### System C: TC-4/GPN

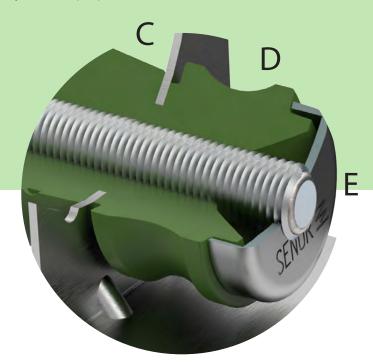
For loads between 8-45 kg.

**Resonance** Frequency: **7** to **15 Hz**.

#### System D TC-4/GPN

For loads between 5-25 kg.

**Resonance** Frequency: **7** to **15 Hz**.



Metallic bowl-shaped piece: made of high performance galvanized steel Dx54d + Z140 with a thickness of 1,5 mm. It provides resistance to mechanical traction of the system.

BREAKING POINT: the threaded rod is broken avobe the 250 kg.

L Bracket: made of high performance galvanized steel Dx54d + Z140 with two available thickness (0,8 mm and 1,5 mm). It provides rigidity and fastening to the system.

**STEEL** Thickness

Bracket of **1,5 mm:** . **Ref. SE-3900/TD2:** it is recommended for air chambers avobe **10 cm**.







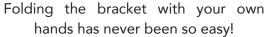
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#### **STEEL** Thickness

Bracket of 0,8 mm: Ref: SE-3901/TD2

You can fold the bracket with your own hands and at the same time you can hold the mineral fibre or rock wool placed among studs.





Ref. **3900/TD2** 



**SAFETY DEVICE** consisted of a central steel shaft and a circular metallic support. In case of fire, the polymer becomes disintegrated but the mechanical fastening remains.

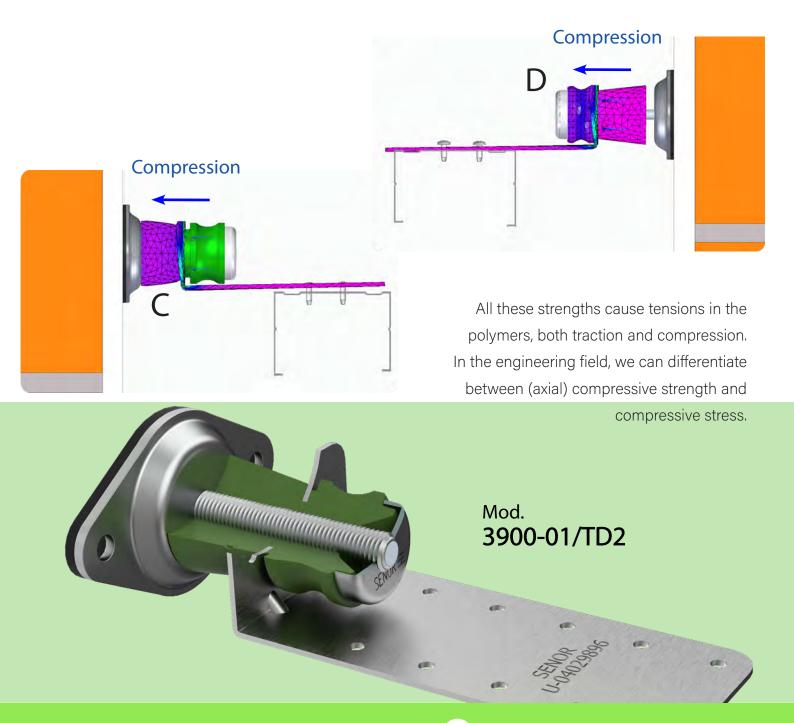
\*Product registered in the Spanish Patents and Trademarks Office.\*



## Optimal performance

When an acoustic treatment is stimulated and starts vibrating, it generates a swinging movement. Therefore, we have to use a wall mount that allows axial compression in both directions. The **3900-01 TD2** model incorporates a PATENTED movement control system that allows the metallic bracket to be moved on both sides. In this way, when the wall mount is fixed to the wall by using screws it remains joined to the wall and makes the steel bracket free to do polymer compression in both directions.

The threaded rod (G) allows for limiting the movement and facilitating the axial movement.



SENOR Z

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## Laboratory tests carried out according to standard UNE-EN ISO 10846-1:2009

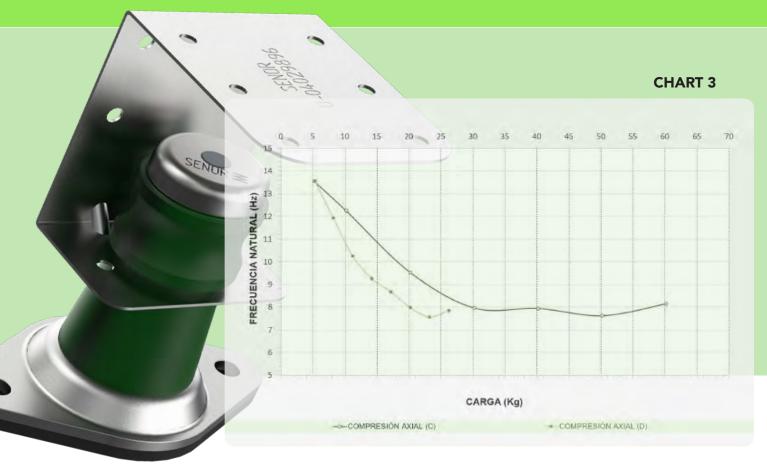
Acoustic and vibrations. Laboratory measurement of vibro-acoustic transfer properties of elastic elements.

# ( **CHART 1** ( 70 65 60 55 45 CARGA (Kg) 40 35 30 25 20 15 10 0 **DEFORMACION (mm)** O-COMPRESIÓN AXIAL (C) · COMPRESIÓN AXIAL (D) **CHART 2** 15 FRECUENCIA NATURAL (Hz) DEFORMACIÓN (mm)

o-COMPRESIÓN AXIAL (C)

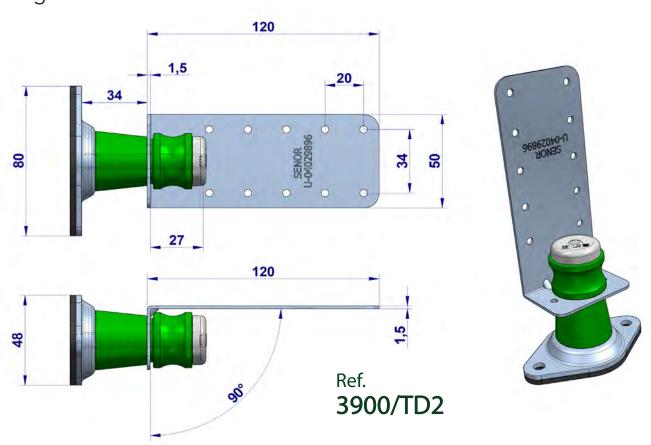
. COMPRESIÓN AXIAL (D)





# A wall mount designed to ACOUSTIC WALL LINING SYSTEMS

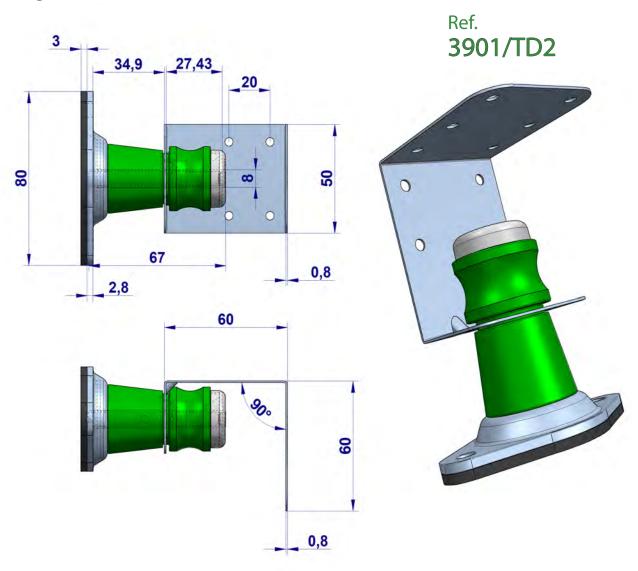
## Drawing views







## Drawing views









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# **Certificate of Compliance**

#### **SENOR** certifies:

All our **construction products** for the installation of acoustic wall lining systems including the **3900-01/TD2** model has an optimal lifespan of **10 years** provided that the installation is carried out under ordinary environmental conditions and are not exposed to chemical components that could degrade the product. The **3900-01/TD2** model strictly complies with UNE (Spanish Association for Standardization) **UNE 100-153-88:** air conditioning: vibration insulators: design criteria.

# Warning

### **Relevant information**

SENOR reserves the right to make changes in specifications at any time without prior notice. It is a responsibility of the user to use the latest and updated version of the product data sheets. A copy of which will be available on request. This information and, in particular, relative recommendations for the application and final use of the product, are given in good faith, based on SENOR knowledge and experience of its products, provided that they are correctly installed in ordinary circumstances and within its useful life.

PROJECT MANAGER: David Muñoz SENOR

