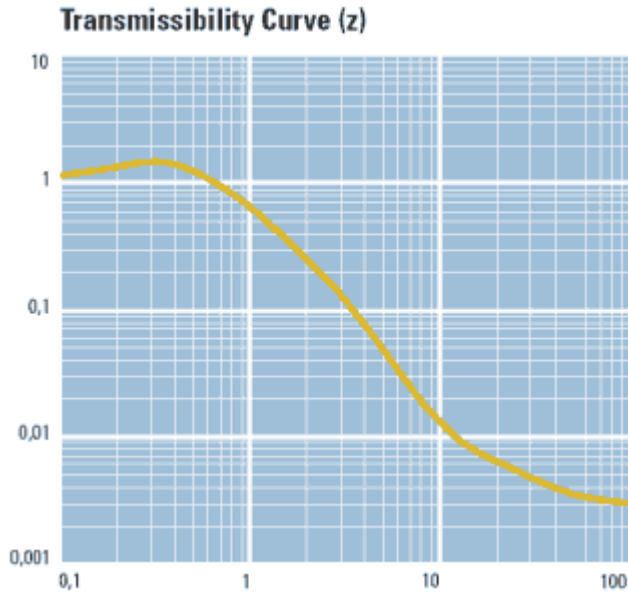


## 1TS-140 - Active Vibration Isolation System

- **Active Vibration Isolation System**
- The isolation of the 1TS-140 begins at 0,7 Hz, increasing rapidly to 40 dB beyond 10 Hz
- The lack of any low frequency resonance means much better performance than with common passive damping approaches
- The inherent stiffness of the 1TS-140 imparts excellent directional + positional stability
- The outstanding isolation performance of the 1TS-140 includes all six linear and rotational vibration modes



**Active isolation systems** offer a solution, which combines stiffness with a very short settling time. The most useful active systems employ inertial velocity in a feedback loop. (Inertial velocity can be measured for example by integration the signal from an accelerometer). A signal proportional to inertial velocity is very similar to a viscous damping force, but with the very important difference that the damping is relative to an inertial plane. So in contrast to the passive system, by increasing the damping, the system becomes 'glued' to the inertial plane which by definition means the system is isolated from the environment.



**1TS-140B with breadboard 1HB05-06-025-001**

**Specifications**

**Isolation** dynamic 0.7 Hz to 200 Hz, mainly passive at higher frequencies, although for good stability the feedback is active to at least 2 KHz

**Transmissibility** See curve. Above 10 Hz transmissibility <0.01 (-40dB)

**Maximum load** 140 kg

**Ordering Information**

Model	Qty.	Ordering Information
1TS-140		solid board without holes
1TS-140B	2D	with stainless steel breadboard <a href="#">1HB05-06-025-001</a>

[MORE >](#)

**Dimensions** 500x600x80 mm

**Self - weight** 23 kg

**Electrical**

**Safety class** 1

**Power consumption** maximum 10 W when isolating, maximum 20W during load adjustment

**Input voltage** 90 – 120V AC, 47 – 63 Hz / 200 – 240V AC, 47 – 63 Hz

**Fuses** 2x1.6A/250V slow, located in the power socket on the rear side of the unit

**Normal Environmental Conditions**

**Protection class** IP 20

**Temperature range** 5°C - 40°C

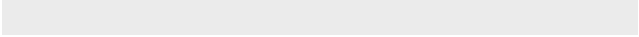
**1TS-140B-AL**  with aluminium breadbord  
[1B-AL-50-60-015](#)

[MORE >](#)

**Relative Humidity** 10 - 90% (5 - 30°C) /  
10 - 60% (30 - 40°C)



**Application** Indoor



**Altitude** Up to 2000 m (6.500 ft)

