





## Normalized and unnormalized readings [T30]

The absolute shock pulse level of a bearing, measured in dBsv (decibel shock value), is both a function of rolling velocity and of bearing condition. To neutralize the effect of rolling velocity on the measured value, the T30 has to be programmed with shaft diameter (in millimetre or inch) and rotational speed (in rpm).

The T30 will then calculate the **initial value dBi**, the starting point of the condition scale for a particular bearing. You can also input the dBi directly. The condition scale is graded in **normalized** shock values, dBn.

The T30 takes a sample count of the shock pulses occurring over a period of time and displays:

- the **maximum value dBm** for the small number of strong shock pulses.
- the **carpet value dBc** for the large number of weaker shock pulses.
- an arrow against a field on the condition scale: green for dBm up to 20 dBn = good condition, yellow for 21-34 dBn = caution, red for 35 dBn and more = bad condition.

The maximum value dBm defines the bearing's position on the condition scale. The difference between dBm and dBc is used for a finer analysis of the causes for reduced or bad condition.

When you set the dBi to "--" (below -9), the T30 will take an **unnormalized** reading, in dBsv (absolute shock values). The condition zones do not apply. This method is used for comparative reading on different bearings and/ or other shock pulse sources.