

## Application Note 62/02

### Advantages and Applications of Series BG, NG und LG

Acceleration sensors of series BG, NG and LG are distinguished by:

- simple construction – assembling with two screws M4 only
- rugged plastic housing – no electrochemical processes between sensor and object to measure
- housing in protection class IP67 – resistant against fuels, oils, seawater and a lot of chemicals
- Plug in protection class IP67 brand AMP Superseal – developed for heavy requirements in automotive industry
- wide range of temperature -50°C to +85°C (-67°F to +185°F) – to use almost everywhere
- no hysteresis – very good repeatability of signal
- label cutted by laser – readable also after many years
- robust sensor for good price

There are a lot of interesting applications:

- plant and machine engineering and construction
  - o rail vehicle engineering
    - vibration brakes BS2166
    - inclination inclination control for high speed trains BG2168
    - swinging movements across the main direction BT series
  - o agriculture and forestry equipment
    - horizontal position harvesters, tractors BG2168, LG2166, BG2180
    - tilt tractors, forestry machines NS2168
  - o construction machines
    - horizontal position cranes, wheel loader, tracked and wheeled pavers BG2168, BG2180
    - tilt wheel loaders, mobile cranes, forklifts NS2180
  - o conveyence
    - horizontal position facade maintenance units, hoists BG2168, NG2166, BG2180
    - tilt hoists NS2168
    - vibration conveyence systems BG2168
  - o machine engineering
    - vobration engines, bearings, damp systems BG2168, BS2166
    - imbalance rotating machines, reaktors, mills
- energy
  - o power plants
    - vibration steam generators, generators BG2168
  - o wind energy
    - vibration CMS at rotor, generator and gearbox BG2166, BG2168
    - swinging towers, housings BG2166, BG2168
- automotive
  - o driveability
    - acceleration cars, trucks BG2168, BG2180
    - vibrations cars, trucks BG2168
- vessel engineering
  - o behaviour
    - inclination list BT series, BG2168, BG2180
    - vibration engines, gearboxes, bearings BG2168

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