



# KSS acoustic sensor

## Technical Data

- ⊕ Supply 4mA, const. I
- ⊕ Output voltage  $\pm 5$  V, max.
- ⊕ Sensitivity 55 dBref1V/(m/s)
- ⊕ Temperature range 0 to 60 0C
- ⊕ Ground Isolation  $> 10$  M $\Omega$
- ⊕ Shock resistance 2500 g (0,5 ms Puls)
- ⊕ Sensor Protection Type IP 66,  
resistant to industrial climate, oil and  
cooling lubricant
- ⊕ Amplifier Protection Type IP 68,  
resistant to industrial climate, oil and  
cooling lubricant
- ⊕ Installed in conjunction with MWW1  
amplifier



**Installation note:** Needs flat surface with good contact to machine to work well

## Typical applications include:

- ⊕ Tool breakage (stamp, drill etc.)
- ⊕ Contact identification for quality measurement



# KSS Strengths and limitations



## Strengths:

- ⊕ High resolution, can detect very small changes
- ⊕ Robust sensor technology, not sensitive to electric interference
  - ⊙ No false alarms
- ⊕ Relatively simple installation, one screw to hold sensor in place

## Weaknesses:

- ⊕ Contact to machine required, as close as possible to machining point
- ⊕ Sensitive to mechanical interference from spanners hitting machine (emulates tool break signature)

**General take-away; Good for tool breakage detection,  
stay away from high speed/force cutting\***

\*machining processes which require a lot of cooling or which generate a lot of spanners