KB² Fibre-Optic Sheet Break Detector
is the new generation sheet break
detector that with the latest RGB
technology enables more light with
effective power LED. This allows longer
detection distance and operation in high
ambient light condition. KB² is the perfect
choice for installations in unclean, steamy
and high temperature environments,
or where the space is limited.

KB² Fibre-Optic Sheet Break Detection system is designed to
monitor sheet breaks in harsh environments. The non-contact
sensor is placed above or under the web to be monitored.
The system is proven with hundreds of installations around the
world, and set as a mill standard for many customers.

Thanks to the air purged system in the sensor head, keeping the
optics free from dirt, steam or high temperatures, KB² is suita-
ble for installations in harsh environments or where the space is
limited. In addition to open-draw applications the breaks can be
detected against felt, wire, or even against a cylinder.

RGB Colour and IR measurement
KB² has both, RGB or Infrared light sources to perform superi-
orly with all paper and board grades and applications regard-
less of colour. The RGB colour measurement can handle all
sheet, wire and felt colours providing reliable break detection.

Fast break detection
KB²'s digital signal processing technology measures all signals
a thousand times per second. KB² is immune to ambient light
changes by measuring the backlight intensity. The break de-
tection delay is very short, a minimum of 15 ms – with digital
filtration the user can select how many measurement cycles
should be used for break detection.

Easy to set up
KB² unit's large display and logical user interface allows easy
setup of the break detection by selecting the measurements
which give the highest signal difference. Break signal and
maintenance alarm are wired to the PLC or DCS. The 4–20 mA
current outputs for the signal levels are also available as an
option.

Electronics located outside harsh environment
KB² is very reliable even in a 100% humidity environment. While
the sensor head is exposed to high temperatures, the electronics
unit is mounted outside the machine hood using a fibre optic
cable. Fibre optics is available in lengths of 6, 9 and 12 meters.
The fibre optic cable is located inside the straight stainless
steel sensor head, which is 1.5 m long. Between the sensor
head and the display unit the fibre optic cable is located inside
the stainless steel flexible conduit. Purge air is lead trough the
conduit to keep the sensor head window open.
KB² Fibre-Optic Sheet Break Detector is designed to handle all kind of break detection. With RGB-colour based detection it can detect different colours and then separate wire/felt reflection easily from the paper.

**Benefits**
- Non-contact optical sensor
- Reliable in harsh environments
- Air purge system
- Not affected by dirt, steam or high temperatures
- Fast break detection
- Handles all paper and board grades and applications regardless of colours
- Detects breaks even against a cylinder
- Easy to setup
- Large graphical display and logical user interface
- Proven with hundreds of installations worldwide

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The information provided in this data sheet contains descriptions or characterizations of performance which may change as a result of further development of the products. Availability and technical specifications are subject to change without notice.

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