

## Détecteur de filetage

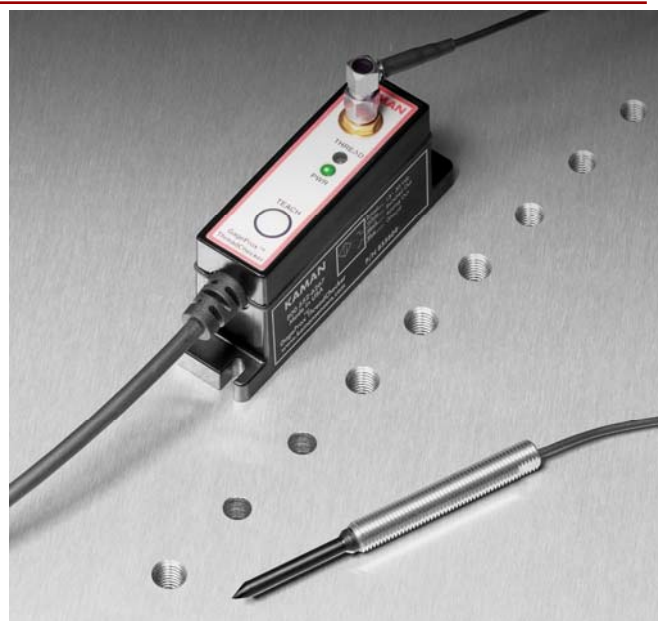
Le Thread Checker de Kaman est un produit dédié à vérifier la présence d'un filetage.

Designé comme un outil 'Go/No go', ce produit différencie un trou fileté et non-fileté.

C'est une solution efficace, fiable, rapide, basé sur un capteur à gain fixe.

Thread Checker fait partie de la gamme GageProx de capteurs à gain fixe et sortie analogique.

Thread Checker et les capteurs associés sont étudiés pour des environnements sévères, ils sont conformes à l'IP67.



### Principe de détection :

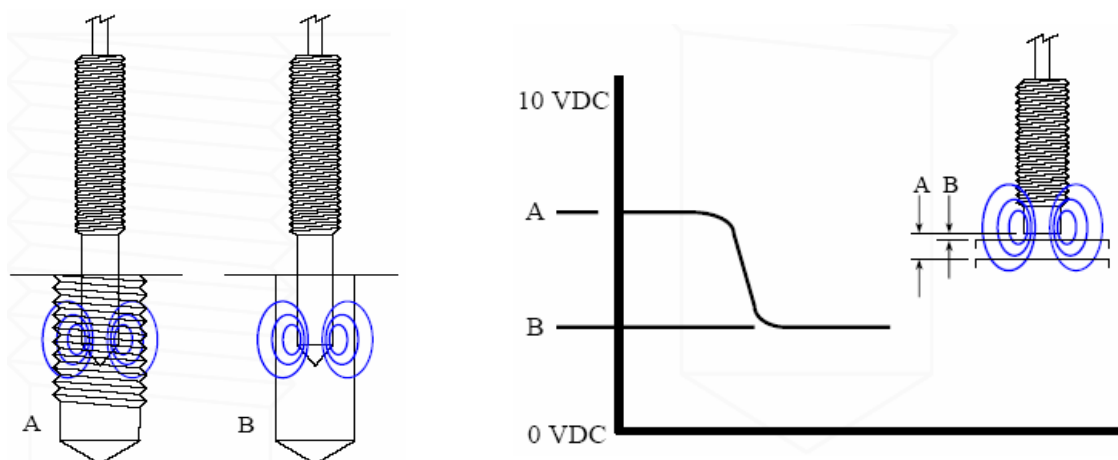
#### Thread Detection Using Eddy Current Technology

Instead of using the axial portion of the electro-magnetic field, thread detection uses the radial portion of the field.

#### Thread Presence/Absence Operation

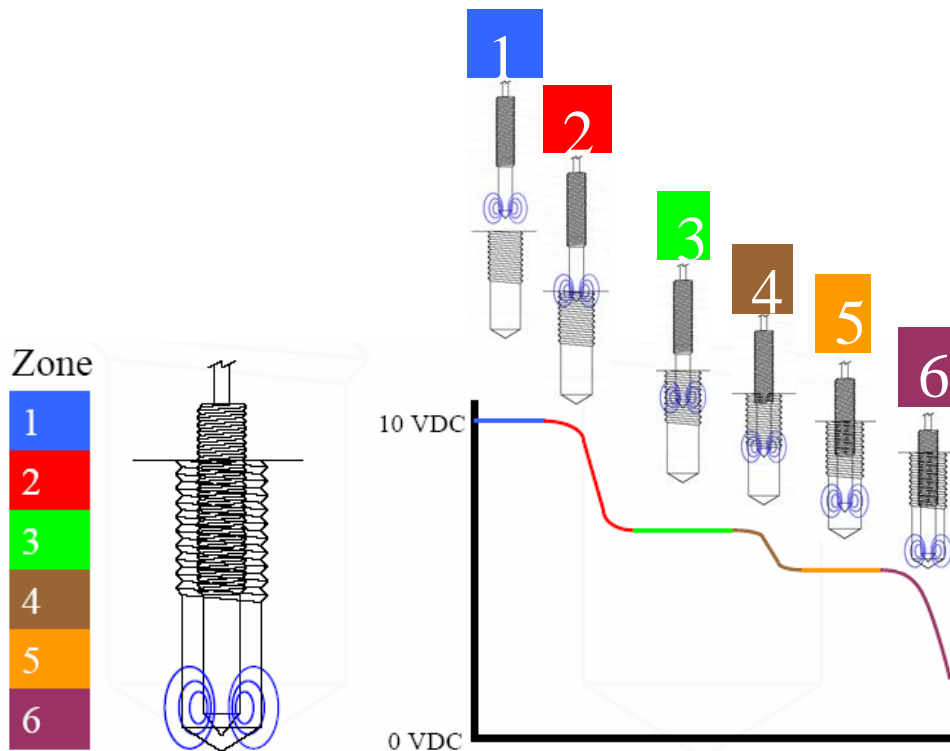
The sensor uses the portion of the electro-magnetic field radiating radially from the sensor.

An untapped hole results in a lower voltage output than that of a tapped hole.



## Détecteur de filetage

### Développements :



### Application Concerns

- |                                       |   |
|---------------------------------------|---|
| • Thread pitch.                       | Coarse threads are easier to detect. Finer threads require tighter insertion repeatability. |
| • Pitch diameter vs. sensor diameter. | Bigger gaps provide less sensitivity. Smaller gaps require tighter insertion repeatability. |
| • Axial insertion repeatability.      | Long thread length is easier. Short thread lengths require tighter insertion repeatability. |
| • Radial insertion repeatability.     | Big hole/small sensor is easier. Less gap requires tighter insertion repeatability.         |
| • Thermal environmental changes.      | Sensor temperature changes can/will cause a change in the output.                           |
| • Cut vs. cold form threads.          | Cut threads are easier to detect. Formed threads requires tighter insertion repeatability.  |
| • Base material.                      | Ferrous and non-ferrous materials require different electronics for proper operation.       |
| • Sensor damage potential.            | Spring loaded sensor mounts minimize damage potential during operation.                     |

## Détecteur de filetage

### Teaching the ThreadChecker™

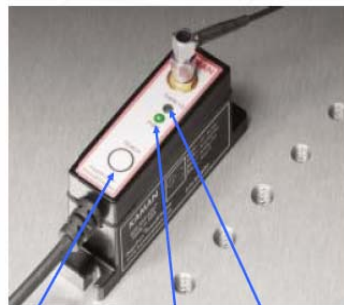
- Push the teach button once to put the microprocessor in 'teach' mode. The yellow 'Thread' LED will flash rapidly.

- Insert the sensor into a threaded hole and push the teach button once. The yellow 'Thread' LED will flash slowly.

- Insert the sensor into an unthreaded hole and push the teach button once. The yellow 'Thread' LED will go out.

- Alternate between threaded and unthreaded holes and verify the yellow LED is on when the sensor is in the threaded hole and off when the sensor is in the unthreaded hole.

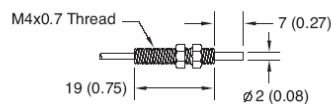
- If desired the polarity of the switched output can be inverted by holding the teach button for 10 seconds.



Teach Pushbutton    Power On LED    Switch LED

### THREADCHECKER SENSORS

#### 2mm SENSOR

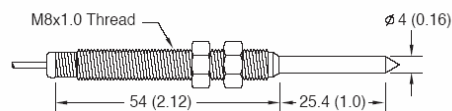


Recommended for hole sizes 3mm - 5mm #5 - #10

#### ORDERING INFORMATION

For ferrous material	P/N 855604-02TTF
For non-ferrous material	N/A
Spare sensor	P/N 855641-302

#### 4mm SENSOR

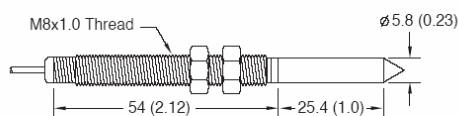


Recommended for hole sizes 6mm - 7mm #12 - 5/16"

#### ORDERING INFORMATION

For ferrous material	P/N 855604-04TTF
For non-ferrous material	P/N 855604-04TTN
Spare sensor	P/N 855641-602

#### 6mm SENSOR

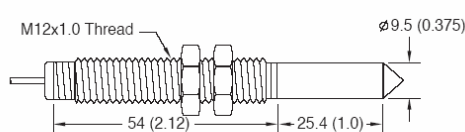


Recommended for hole sizes 8mm - 10mm 3/8" - 1/2"

#### ORDERING INFORMATION

For ferrous material	P/N 855604-06TTF
For non-ferrous material	P/N 855604-06TTN
Spare sensor	P/N 855641-802

#### 10mm SENSOR



Recommended for hole sizes 12mm - 14mm 9/16" - 3/4"

#### ORDERING INFORMATION

For ferrous material	P/N 855604-10TTF
For non-ferrous material	P/N 855604-10TTN
Spare sensor	P/N 855641-1202