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[Http://www.100y.com.tw](http://www.100y.com.tw)

KN Non-Flush Series Level Switch

...Reliable sensing of liquids or solids

...“Teach” function for easy setup

...Simplified mounting

Introduction

The KN Non-Flush Series Level Switch is a capacitive proximity switch that detects the level of solids or liquids in a tank, hopper, or similar-type container. The KN level switch is optimized for sensing material through tank walls, sight glasses, or mounting wells. Unlike traditional level indicators that can fail due to product buildup on moving parts, the KN is a non-contact level switch that has no moving parts that can stick or break. The switch incorporates a patented “charge balance” circuit design that has better noise immunity than any other capacitive sensor on the market. The KN is not affected by noise caused by motor drives, walkie-talkies and switching power supplies.

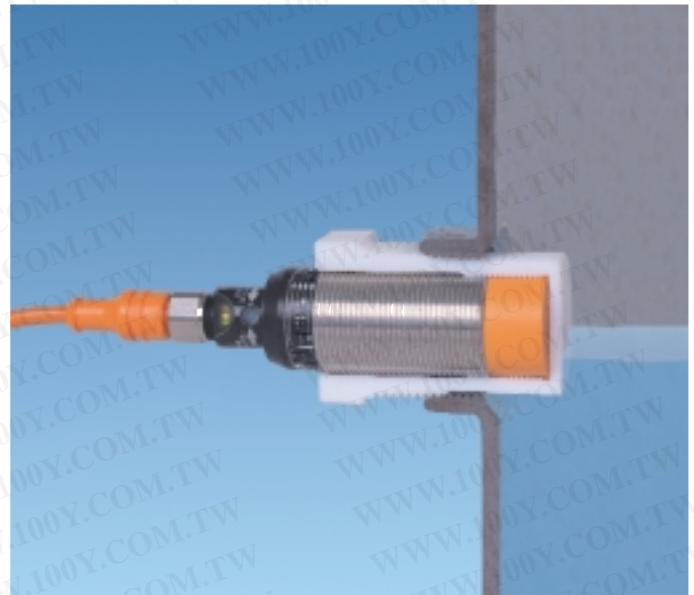
Features and Benefits

■ *Reliable sensing of liquids or solids*

Traditional level indicators rely on mechanical movement to detect the absence or presence of bulk solids and liquids in tanks, hoppers, bins or silos. Because of their mechanical nature, these devices are prone to failure due to constant wear and eventual fatigue. The KN level switch is a non-contact sensor based on the capacitive sensing principle. This results in a reliable level switch with no moving parts to break or stick. With its unique charge balance circuit design, the KN is impervious to electromagnetic interference.

■ *“Teach” function for easy set-up*

The KN level switch features a microprocessor-based “teach” function that calibrates the proper setpoint value and simplifies the setup process. Using a pushbutton, the sensor can be adjusted quickly and easily for a specified application. The microprocessor automatically balances the sensitivity to provide the safest operating condition. If the switch is inaccessible after installation, the setpoint can be readjusted by using the remote programming wire.



The KN non-flush level switch senses the level of solid or liquids through a tank wall or sight glass and can be used with a mounting well or sight glass clamp.

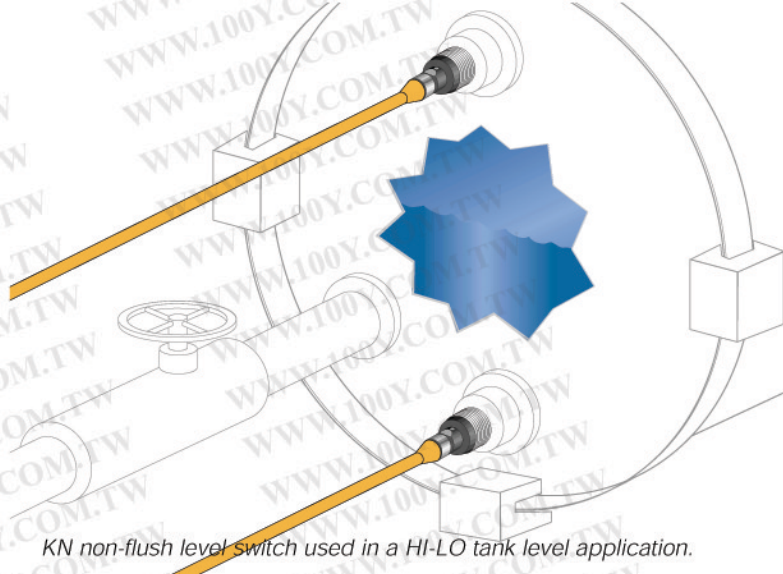
■ *Simplified mounting*

During setup of an application, the KN level switch is adjusted to “ignore” a mounting well, sight glass, or container wall and to sense the material or liquid beyond it. This capability allows the KN level switch to sense only the material in the container. When the KN level switch is used with a mounting well, the switch can be removed without the need to empty the tank or container.

■ *KN flush version available*

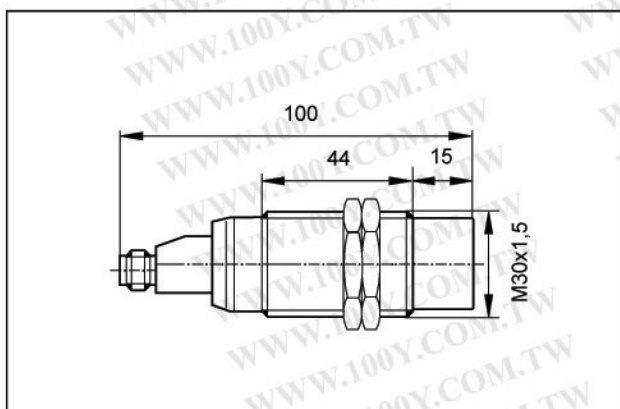
ifm efector also offers a flush level switch that detects the level of solid materials in a bin, hopper or similar-type container. The KN flush level switch can sense difficult to detect solid materials like plastic regrind, powders and other dry product with low bulk densities. The switch is designed to thread directly into a container, maintaining direct contact with the solid material being sensed. For more information, contact your ifm efector sales representative or visit our website

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KN non-flush level switch used in a HI-LO tank level application.

Dimensions



Ordering Information

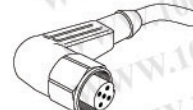
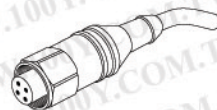
Part No.	Output
KN5101	DC, PNP, Programmable N.O./N.C.
KN5103	DC, NPN, Programmable N.O./N.C.

Cable Accessories

Micro DC, 5 Meter, PVC

Part No: E10700

Part No: E10662



Mounting Accessories

Specifications

Supply voltage	10 to 36 VDC
Maximum Load Current	250 mA
Supply Current	<30 mA
Voltage Drop	<2.5 V
Switching frequency	5 Hz
Short Circuit Protection	Yes
Reverse Polarity Protection	Yes
Status Indication	Yellow LED: Output Green LED: Power Red LED: Marginal Signal
Protection Rating	NEMA 3, 4, 6, 12, 13. IP 67
Ambient temperature	-13 to 176 F (-25 to 80 C)
Housing Material	Nickel-plated brass, Polybutyleneterephthalate
Connector	Micro DC

Part No: U10003
 Teflon Mounting Well



Part No: U10082
 HDPE Mounting Well



Part No: U20213
 1/2" to 3/4" Diameter
 Sight Glass Clamp

