



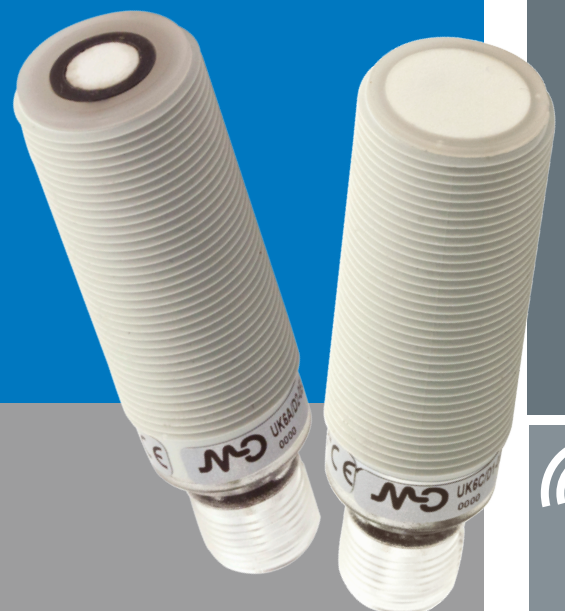
# Micro Detectors

Italian Sensors Technology



Application:  
Flat panels detection in  
glass cutting machines

UK6 - M18 Ultrasonic Sensors  
Short housig



**Ultrasonic Sensors**

Application note


CAT3EUK1266801

Application note - UK6 - english - Ed.01/2013



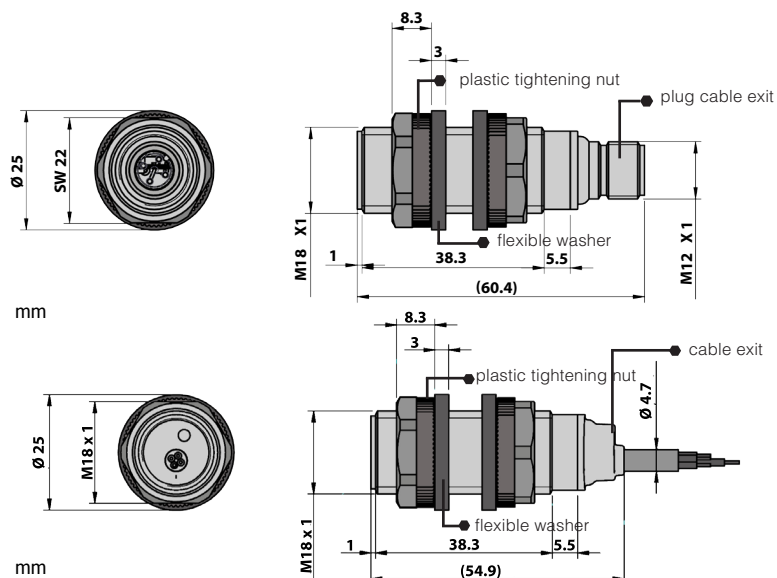
Glass cutting machines need to detect the passage of transparent flat panel before the cutting operation.

Ultrasonic technology allows to detect object independently from form, color and material. In contrast with other technologies as the photoelectric one, it is the perfect solution to detect transparent object as glass panels. In glass cutting machines, UK6A is fixed in a hole under the conveyor belt on which the glass panels are lying and its output switches when the target passes at a distance immediately next the blind zone.

models	UK6A/D*-0*UL
	
maximum sensing distance Sn	300 mm <sup>(1)</sup>
minimum operating distance (blind zone)	35 mm
beam angle	± 10°
switching frequency (digital output)	40 Hz
response time (digital output)	12 ms
hysteresis	2%
repeat accuracy	2%
linearity error	≤ 3%
temperature range	-20°C ...+60°C
temperature compensation	yes
operating voltage	15 - 30 Vcc
thermal drift	≤ 7%
ripple	5%
leakage current	≤ 10 µA @ 30 Vcc
output voltage drop	2,2 V (IL=100mA)
No-Load supply current	≤ 40 mA
maximum load current (digital output)	100 mA
minimum load resistance	500 Ω (power voltage analogue output)
adjustment set point	external Teach-in
supply electrical protections	polarity reversal, overvoltage pulses
digital output electrical protections	short circuit, overvoltage pulses
EMC	conforming to the EC Directive 2004/108/EC requirements according to EN 60947-5-2
protection degree	IP67 <sup>(2)</sup>
housing material	PBT
front end material	epoxy-glass resin
tightening torque	1 Nm
weight	15 gr (connector exit), 80 gr (cable exit)
storage temperature	-35°C...+70° without freezing

<sup>(1)</sup> Metallic target 100 x 100 mm

<sup>(2)</sup> Protection granted only by plug mounted in a correct way



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