



# Micro Detectors

Italian Sensors Technology



Application:  
goods detection  
inside boxes

CE, CT, C18, C30, CQ50, CQ55  
Capacitive Sensors

Proximity Sensors

Application note

CAT3E001261635

Application note - capacitive models - english - Ed.01/2012



## MARKET SECTORS

## DESCRIPTION OF THE MARKET SECTOR AND ITS TYPICAL ACTIVITY

## APPLIED SOLUTION

## SPECIFICATIONS

## TECHNICAL FEATURES

Production and distribution industry, post offices.

During the packaging process, it is necessary to detect the presence of goods inside boxes to avoid the possibility of an incorrect presence of products inside them.

M.D. Micro Detectors' Capacitive Sensors detect the presence of the goods inside the box through the box walls

### C18

- DC or AC supply voltage
- High noise immunity
- Shielded and unshielded models
- Adjustable sensitivity
- Plastic housing

### CE

- DC supply voltage
- Shielded and unshielded models
- Adjustable sensitivity
- Metallic housing
- Self monitoring models

### CT

- DC supply voltage
- Adjustable sensitivity

### C30

- DC or AC supply voltage
- High noise immunity
- Shielded and unshielded models
- Adjustable sensitivity
- Plastic or metallic housing

### CQ50

- DC supply voltage
- High noise immunity
- Adjustable sensitivity

### CQ55

- Capacitive water level sensor

		Capacitive Sensors						
		Cylindrical				Cubic		
		C18	CE	CT	C30	CQ50	CQ55	
dimensions		M18	ø 20 mm	M30	M30	7 x 30 x 50 mm	15 x 35 x 55 mm	
standard shielded		3...8 mm	10 mm	—	2...16 mm	—	—	
standard unshielded		3...12 mm	—	—	4...25 mm	—	—	
long distance shielded		—	—	15 mm	—	5/6/7/10 mm	4...25 mm	
long distance unshielded		—	—	20 mm	—	—	—	
standard housing		•	•	•	•	•	•	
short housing		—	—	—	—	—	—	
miniaturized housing		—	—	—	—	—	—	
supply voltage		Vdc	•	•	•	•	•	
		Vac	•	—	—	•	—	—
output type		NPN - NO	—	—	•	—	•	
		NPN - NC	—	—	•	—	•	
		PNP - NO	—	—	•	—	•	
		PNP - NC	—	—	•	—	—	
		PNP - NO + NC	•	—	—	•	—	•
		NPN - NO + NC	•	•	—	•	—	•
		DECOU <sup>®</sup>	—	—	—	—	—	—
		SCR	•	—	—	•	—	—
0...10 V		—	—	—	—	—	—	
4...20 mA		—	—	—	—	—	—	
temperature range		-25°C...+80°C	-25°C...+70°C	-25°C...+70°C	-25°C...+80°C	-0°C...+60°C	-25°C...+80°C	
protection degree		IP67	IP65	IP65	IP67	IP67	IP67	
housing material		PE	stainless steel	nickel plated brass	PE / stainless steel	Noryl	PC	
active head material		PE	LPG	PBT	PE	Noryl	PC	
output		cable	•	•	•	•	•	
		M8 plug	—	—	—	—	—	
		M12 plug	•	•	•	•	—	•
other certifications		UL LISTED CE	CE	CE	UL LISTED CE	CE	UL LISTED CE	

Copyright:

M.D. Micro Detectors S.p.A.  
con Unico Socio

Strada S. Caterina 235  
41122 Modena - Italy

tel. + 39 059 420411  
fax + 39 059 253973  
info@microdetectors.com  
www.microdetectors.com

