



# Micro Detectors

Italian Sensors Technology



Application:  
detection of food  
in automatic mangers

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

## Proximity Sensors

Application note

CAT3E001262301

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



## MARKET SECTORS

DESCRIPTION OF THE MARKET SECTOR AND ITS TYPICAL ACTIVITY

## APPLIED SOLUTION

## SPECIFICATIONS

Agriculture.

When it is necessary to feed animals, it is fundamental to avoid fighting between them because if the mangers are not supplied at the same time, the concentration of animals could kill some of them.

M.D. Micro Detectors' Capacitive Sensors detect the presence of granular feed in the mangers.

### C18

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

### CE

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

### CT

- Adjustable sensitivity
- Plastic housing
- DC supply voltage
- Adjustable sensitivity
- Plastic or metallic housing

### C30

### CQ50

- DC supply voltage
- High noise immunity
- Adjustable sensitivity
- Capacitive water level sensor

### CQ55

- Capacitive water level sensor

## TECHNICAL FEATURES

### 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	•	•	—	•	•
	DECOUT®	—	—	—	—	—
	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						

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

