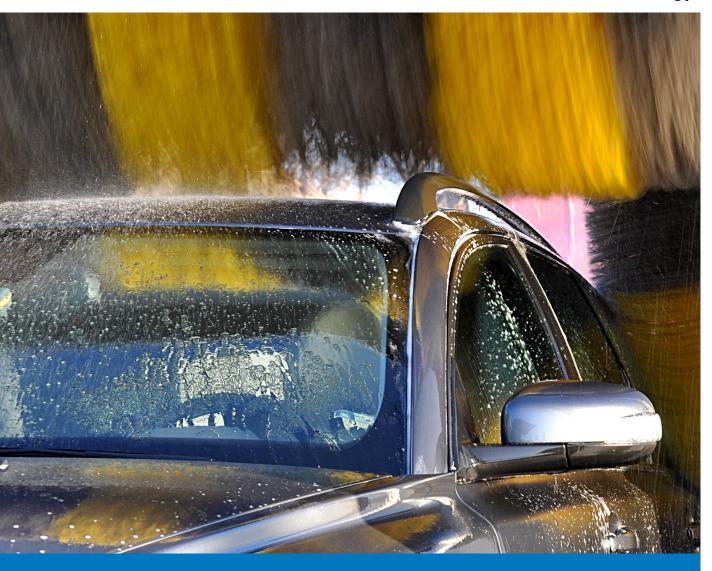MD Micro Detectors ®

Italian Sensors Technology

Application:
soap and waxes level in
automatic washing systems

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

Proximity Sensors
Application note

MARKET SECTORS

DESCRIPTION OF THE MARKET SECTOR AND ITS TYPICAL ACTIVITY

Industrial and private washing systems.

To grant a perfect washing of cars, it is necessessary to check the level of liquids like soaps and waxes In automatic washing systems.

APPLIED SOLUTION

M.D. Micro Detectors capacitive sensors can detect the level of liquids in the plastic reservoirs, allowing operators to substitute them whenever they're finished.

SPECIFICATIONS

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

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	●	●	●	●	●	●
supply voltage — Vac	●	—	—	●	—	—
output type — NPN - NO	—	—	●	—	●	—
output type — NPN - NC	—	—	●	—	●	—
output type — PNP - NO	—	—	●	—	●	—
output type — PNP - NC	—	—	●	—	—	—
output type — PNP - NO + NC	●	—	—	●	—	●
output type — NPN - NO + NC	●	●	—	●	—	●
output type — DECOUT®	—	—	—	—	—	—
output type — SCR	●	—	—	●	—	—
output type — 0...10 V	—	—	—	—	—	—
output type — 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	●	●	●	●	●	●
output — M8 plug	—	—	—	—	—	—
output — M12 plug	●	●	●	●	—	●
ATEX	—	—	—	—	—	—
other certifications	c UL us LISTED CE	CE	CE	c UL us LISTED CE	CE	c UL us LISTED CE