

Proximity Sensors Capacitive Thermoplastic Polyester Housing Type CA, M 30, 2-wire AC/DC

TRIPLESCHILD™

CARLO GAVAZZI



- Featuring TRIPLESCHILD™ Sensor Protection
- Temperature stability
- Humidity compensation circuit
- Adjustable sensing distance 2-16 mm or 2-25 mm
- Rated operational voltage: 20-250 VAC/DC
- Output: Power MOSFET
- Make and break switching function, selectable
- LED indication
- High noise immunity
- Flush and non-flush types
- Cable and plug versions available

Product Description

Capacitive proximity switches with either sensing distance 16 mm flush mounted or 25 mm sensing distance non-flush mounted. 2-wire AC/DC output with a switch

for choosing NO and NC switching. Grey M 30 polyester housing with 2 m PVC cable or plug. Ideal for use in level and plastic machinery applications.

Ordering Key

CA30CLF25CPM6

Type: Cap. proximity switch	<input type="text"/>
Housing style	<input type="text"/>
Housing size	<input type="text"/>
Housing material	<input type="text"/>
Housing length	<input type="text"/>
Detection principle	<input type="text"/>
Sensing distance	<input type="text"/>
Output type	<input type="text"/>
Output configuration	<input type="text"/>
Connection	<input type="text"/>

Type Selection

Housing diameter	Rated operating dist. (S_n) ¹⁾	Mounting
M30 ²⁾	16 mm	Flush (built-in)
M30	25 mm	Non-flush

¹⁾ Object: Grounded steel plate

Ordering no. Power MOSFET, cable Make & break switching	Ordering no. Power MOSFET, plug Make & break switching
CA30CLF16CP CA30CLN25CP	CA30CLF16CPM6 CA30CLN25CPM6

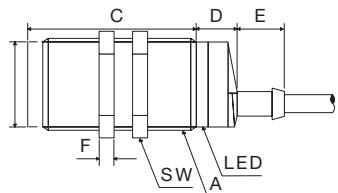
²⁾ No humidity compensation

Specifications

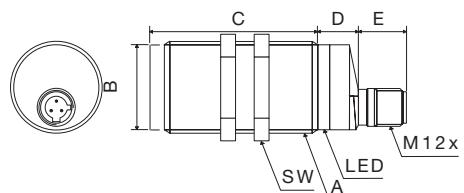
Rated operating dist. (S_n) CA30CL.16CP..: CA30CL.25CP..:	2 to 16 mm (preset at 16 mm) 2 to 25 mm (preset at 25 mm)
Sensitivity	Adj. multiturn pot.meter
Effective operating dist. (S_r)	$0.9 \times S_n \leq S_r \leq 1.1 \times S_n$
Usable operating dist. (S_u)	$0.8 \times S_r \leq S_u > 1.2 \times S_r$
Repeat accuracy (R)	$\leq 5\%$
Hysteresis (H)	4 to 20% of sensing distance
Rated operational volt. (U_B)	20 to 250 VAC/DC (ripple included)
Ripple	$\leq 10\%$
Rated operational current (I_e) Continuous	$\leq 250 \text{ mA DC } @ T_A \leq 50^\circ\text{C}$ $\leq 200 \text{ mA DC } @ T_A \leq 80^\circ\text{C}$ $\leq 350 \text{ mA AC } @ T_A \leq 50^\circ\text{C}$ $\leq 250 \text{ mA AC } @ T_A \leq 80^\circ\text{C}$ $< 2.5 \text{ A (max. 20 ms)}$
Short-time	$< 2.5 \text{ A (max. 20 ms)}$
Min. load current	10 mA
OFF-state current (I_f)	$< 1.9 \text{ mA } (@ 20-250 \text{ VAC})$ $< 1.7 \text{ mA } (@ 20-250 \text{ VDC})$
Voltage drop (U_d)	$\leq 5.5 \text{ VAC/DC } @ I_{e \text{ max}}$

Protection	Transients, reverse polarity $\leq 200 \text{ ms}$
Power ON delay	
Freq. of operating cycles (f)	10 Hz
Indication for output ON	LED, yellow
Environment	
Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
Temperature (T_A)	
Operating temperature	-25° to +80°C (-13° to +176°F)
Storage temperature	-40° to +85°C (-40° to +185°F)
Housing material	
Body	Grey, thermoplastic polyester
Cable end	Polyester
Nuts	Black reinforced nylon
Connection	
Cable	Grey, 2 m, 2 x 0.5 mm ² Oil proof, PVC
Plug (-6)	M12 x 1 double keyed
Cable for plug (-6)	CON.-6A-series
Weight (incl. nuts)	CA30CL.16CP..: 140 g CA30CL.25CP..: 150 g
Approvals	UL, CSA
CE-marking	Yes

Dimensions



Cable



Plug

Type	A	B Ø mm	C mm	D mm	E mm	F mm	SW
CA30CLF16CP(-M6)	M 30 x 1.5 x 50	28	50	13.6	15.4	5	36
CA30CLN25CP(-M6)	M 30 x 1.5 x 50	28	62	13.6	15.4	5	36