Proximity Sensors Capacitive Thermoplastic Polyester Housing Type CA, M18, DC







- Featuring *TRIPLESHIELD*™ sensor protection
- Adjustable sensing distance 3-8 mm or 3-12 mm
- Rated operational voltage: 10-40 VDC
- Output: DC 200 mA, NPN or PNP
- Make and break switching function
- LED indication
- High noise immunity
- Flush and non-flush types
- Plug and cable versions

Product Description

Capacitive proximity switches with either sensing distance 8 mm flush mounted in metal or sensing distance 12 mm nonflush mounted. 4-wire DC output with both make (NO) and

break (NC) switching. Grey M18 polyester housing with 2 m PVC cable or M12 plug. Ideal for use in level and plastic machinery applications

Type Housing style Housing size Housing material Housing length Detection principle Sensing distance Output type Output configuration Connection type

Type Selection

Housing diameter	Rated operating dist. (S _n) 1)	Mounting	Ordering no. Transistor NPN/cable Make & break switching	Ordering no. Transistor NPN/plug Make & break switching	Ordering no. Transistor PNP/cable Make & break switching	Ordering no. Transistor PNP/plug Make & break switching
M18	8 mm	Flush (built-in)	CA18CLF08NA	CA18CLF08NAM1	CA18CLF08PA	CA18CLF08PAM1
M18	12 mm	Non-flush	CA18CLN12NA	CA18CLN12NAM1	CA18CLN12PA	CA18CLN12PAM1

¹⁾ Object: Grounded steel plate

Specifications

Rated operating dist. (S _n) CA18CL F08	0 to 0
CA18CLF08	3 to 8 mm factory set at 8 mm
CA18CLN12	3 to 12 mm
	factory set at 12 mm
Sensitivity	Adj. 270° turn pot. meter
Effectiv operation dist. (S _r)	$0.9~x~S_n \leq S_r \leq 1.1~x~S_n$
Usable operation dist. (S _u)	$0.8 \times S_r \le S_n \le 1.2 \times S_r$
Repeat accuracy (R)	≤ 5%
Hysteresis (H)	4 to 20% of sensing distance
Rated operational volt. (U _B)	10 to 40 VDC
	(ripple included)
Ripple	≤ 10%
Rated operational current (I _e)	
Continuous	≤ 200 mA
No-load supply current (I _o)	≤ 10 mA
Voltage drop (U _d)	≤ 2.5 VDC at max. load
Protection	Reverse polarity,
	short-circuit, transients
Frequency of operating	20.11
cycles (f)	30 Hz

Indication for output ON	LED, yellow		
Environment			
Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)		
Temperature			
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		
Front	Grey, polyester		
Cable end	Polyester		
Nuts	Black, reinforced nylon		
Connection			
Cable	Grey, 2 m, 4 x 0.34 mm ²		
	Oil proof PVC		
Plug (M1)	M12 x 1		
Cable for plug (M1)	CON.1A-series		
Weight			
Cable version	110 g		
Plug version	30 g		
Approvals	UL, CSA		
CE-marking	Yes		



Dimensions

