

## C18 series

### M18 cylindrical capacitive sensors



## features

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



web contents

- **Application notes**
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- **Catalogue / Manuals**



available models

	C18	P	/	B	P	-	1	E
series	C18	M18 capacitive sensor						
housing	P	Plastic housing						
output state	B	NO + NC complementary output						
	A	NO output						
	C	NC output						
output logic	P	PNP logic						
	N	NPN logic						
	0	SCR output						
distance	1	3...8 mm shielded models						
	2	3...12 mm unshielded models						
connect.	E	M12 plug exit						
	A	2 m cable exit						

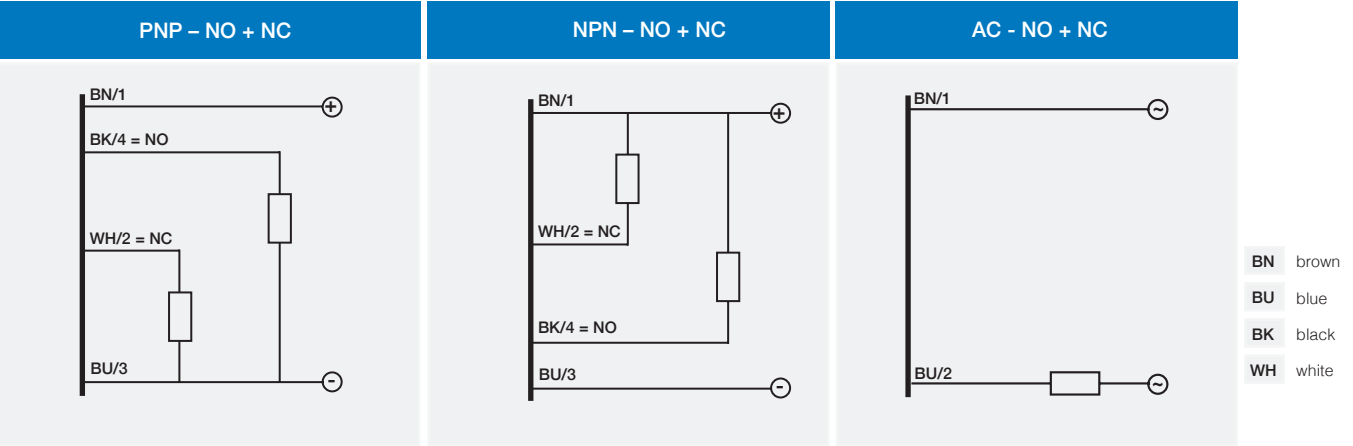
## available models

supply	installation	connections	distance	NPN NO + NC	PNP NO + NC	NO	NC
10...40 Vcc	shielded	cable 2 m	3...8 mm	C18P/BN-1A	C18P/BP-1A	-	-
		M12		C18P/BN-1E	C18P/BP-1E	-	-
	unshielded	cable 2 m	3...12 mm	C18P/BN-2A	C18P/BP-2A	-	-
		M12		C18P/BN-2E	C18P/BP-2E	-	-
20...250 Vac	shielded	cable 2 m	3...8 mm	-	-	C18P/A0-1A	C18P/C0-1A
		M12		-	-	C18P/A0-1E	C18P/C0-1E
	unshielded	cable 2 m	3...12 mm	-	-	C18P/A0-2A	C18P/C0-2A
		M12		-	-	C18P/A0-2E	C18P/C0-2E

## technical specification

	C18P/**-1*	C18P/**-2*
		
nominal sensing distance	8 mm	12 mm
hysteresis	≤ 20%	
repeatability	5%	
operating voltage	10 ... 40 Vcc oppure 20 ... 250 Vac	
max ripple content	≤ 10 %	
no-Load supply current	≤ 12 mA	
load current	≤ 200 mA (dc models), ≤ 500 mA; max. 2,5 A max. 20 ms (ca models)	
leakage current	≤ 100 µA	
output voltage drop Ud	2,5 Vmax @ IL= 200 mA (dc models), ≤ 10 VAC @ IL ≥ 20 mA (ca models)	
output type	NPN or PNP - NO + NC; SCR - NO or NC	
switching frequency	50 Hz (dc models); 10 Hz (ca models)	
power on delay	≤ 200 ms	
power supply protections	polarity reversal, impulsive overvoltage	
output protection	autoreset short circuit, overvoltage (dc models)	
sensitivity adjustment	●	
storage temperature	-40 ... +85° C	
operating temperature range	-25 ... +80° C (without freeze) (ca models); -35 ... +85° C (without freeze) (dc models)	
temperature drift	≤ 20 %	
EMC	in conformity with the EMC Directive, according to IEC 60947-5-2	
protection degree	IP67 (IEC 60529) NEMA 1,3,4,6,13 (ca models); IP67 - IP68/60 min - IP69K (IEC 60529; 60943-1) NEMA 1,2,4,4x,5,6,6p,12 (models dc)	
LEDs	yellow (output status) (ca-models), yellow (object detected), green (supply/stability) (dc models)	
housing material	thermoplastic polyester	
active head material	polyester	
weight	65 g M12 connector / 150 g cable	
tightening torque	2.6 Nm	

electrical diagrams of connections

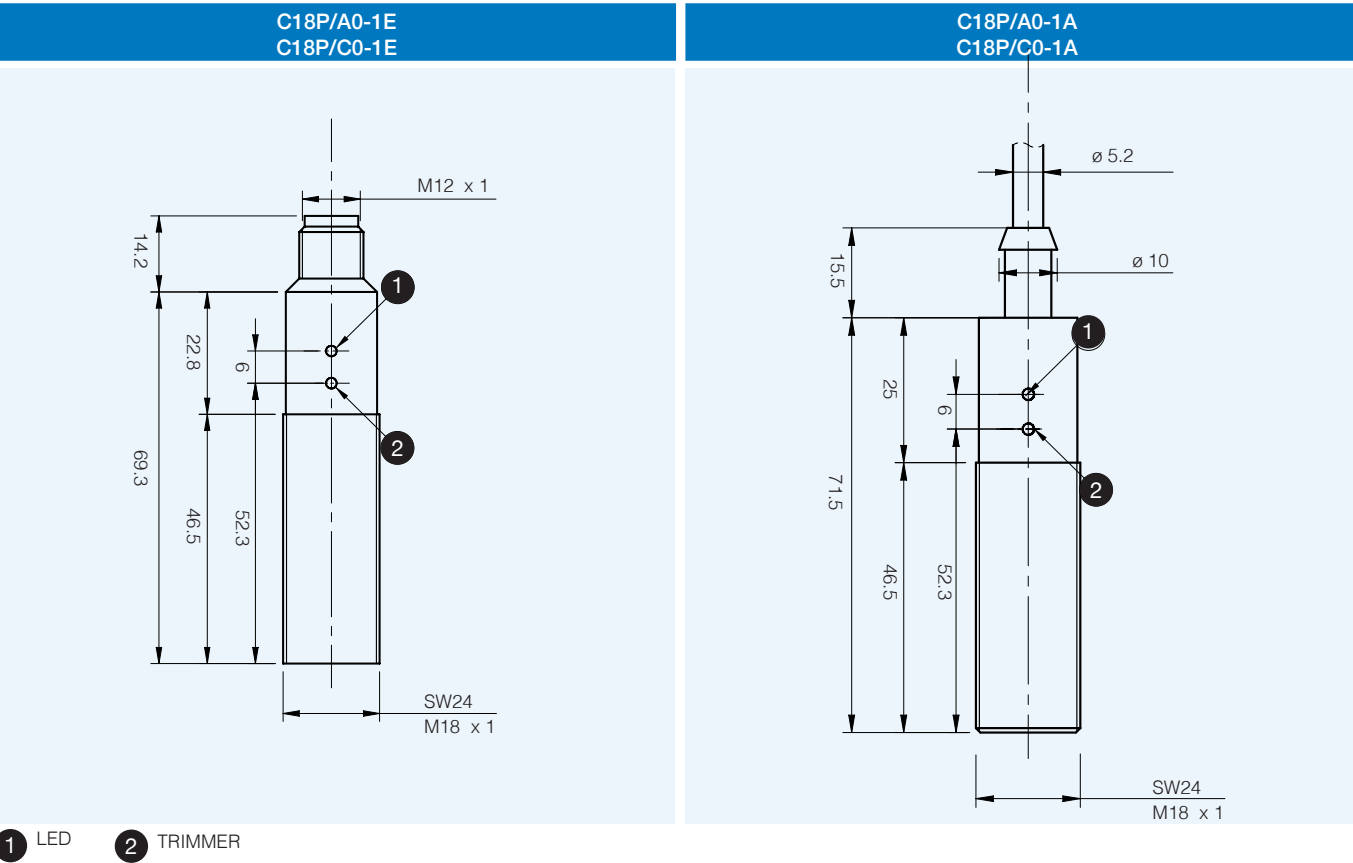


plug

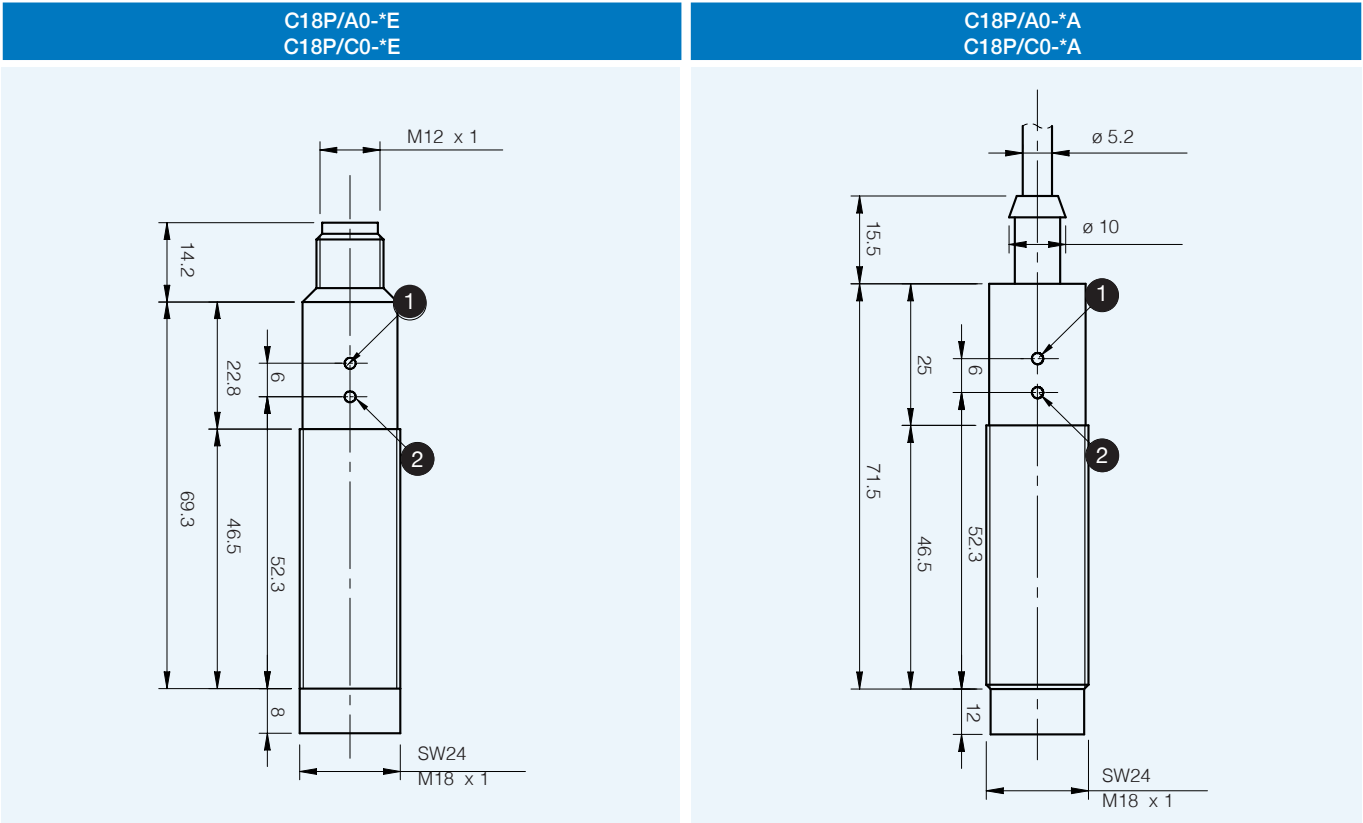


For models with AC power supply using the connection cable series CD12M/AC

dimensions (mm)



dimensions (mm)



1 LED 2 TRIMMER

dimensions (mm)

accessories included in all models

