



# C30 series

M30 cylindrical capacitive sensors



M30 cylindrical

## features

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



## web contents



- Application notes
- Photos
- Catalogue / Manuals




## code description

	C30	P	/	B	P	-	1	E
series	C30	M30 capacitive sensor						
housing	P	Plastic housing						
	M	Metal housing						
output state	B	NO + NC complementary output						
	0	NO / NC selectable output						
output logic	P	PNP logic						
	N	NPN logic						
	0	SCR output						
distance	1	2...16 mm shielded models						
	2	4...25 mm unshielded models						
connect.	E	M12 plug exit						
	A	2 m cable exit						

## available models

supply	housing	installation	distance (mm)	connections	NPN NO + NC	PNP NO + NC	SCR NO + NC
10...40 Vcc	stainless steel	shielded	2...16	2 m plug	C30M/BN-1A	C30M/BP-1A	-
		unshielded	4...25		C30M/BN-2A	C30M/BP-2A	-
		shielded	2...16	M12	C30M/BN-1E	C30M/BP-1E	-
		unshielded	4...25		C30M/BN-2E	C30M/BP-2E	-
	plastic	shielded	2...16	2 m plug	C30P/BN-1A	C30P/BP-1A	-
		unshielded	4...25		C30P/BN-2A	C30P/BP-2A	-
		shielded	2...16	M12	C30P/BN-1E	C30P/BP-1E	-
		unshielded	4...25		C30P/BN-2E	C30P/BP-2E	-
20...250 Vac	stainless steel	shielded	2...16	2 m plug	-	-	C30M/00-1A
		unshielded	4...25		-	-	C30M/00-2A
		shielded	2...16	M12	-	-	C30M/00-1E
		unshielded	4...25		-	-	C30M/00-2E
	plastic	shielded	2...16	2 m plug	-	-	C30P/00-1A
		unshielded	4...25		-	-	C30P/00-2A
		shielded	2...16	M12	-	-	C30P/00-1E
		unshielded	4...25		-	-	C30P/00-2E

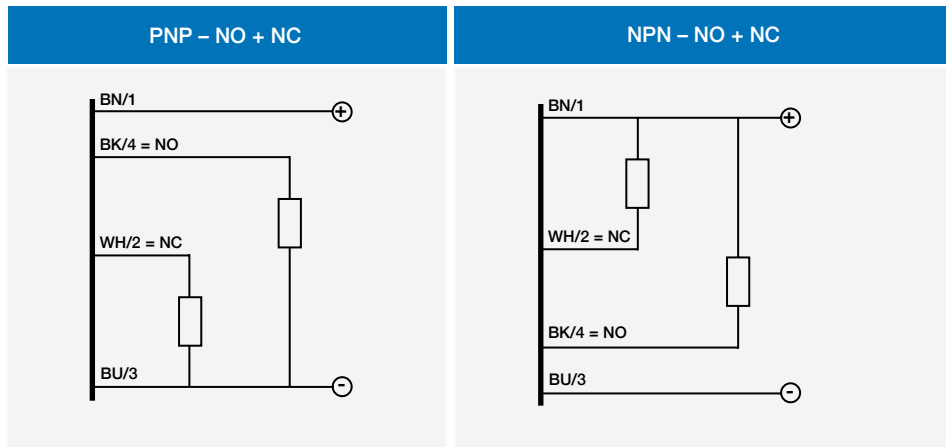
## technical specification

	C30*/**-1*	C30*/**-2*
		
nominal sensing distance Sn	16 mm	25 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 / 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)	
temperature drift	≤ 20 %	
EMC	in conformity with the EMC Directive, according to EN 60947-5-2	
protection degree	IP67 (EN 60529) NEMA 1,3,4,6,13	
LEDs	yellow (output status LOn/DOn)	
housing material	thermoplastic polyester	
active head material	polyester	
weight	plastic version: 100 g connector M12 / 180 g cable metallic version: 150 g connector / 230 g cable+	
tightening torque	50 Nm	

# electrical diagrams of connections



M30 cylindrical



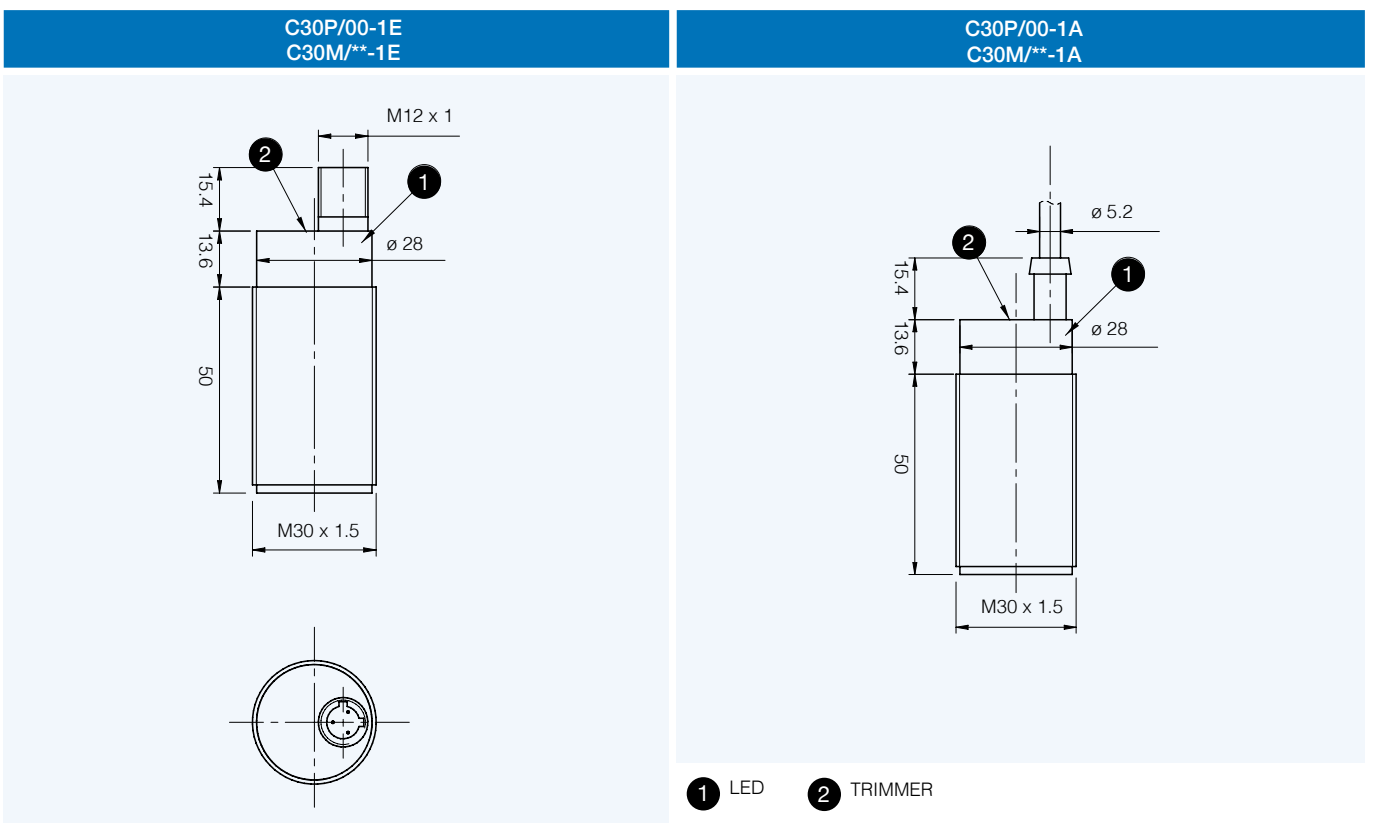
- BN** brown
- BU** blue
- BK** black
- WH** white

## plug

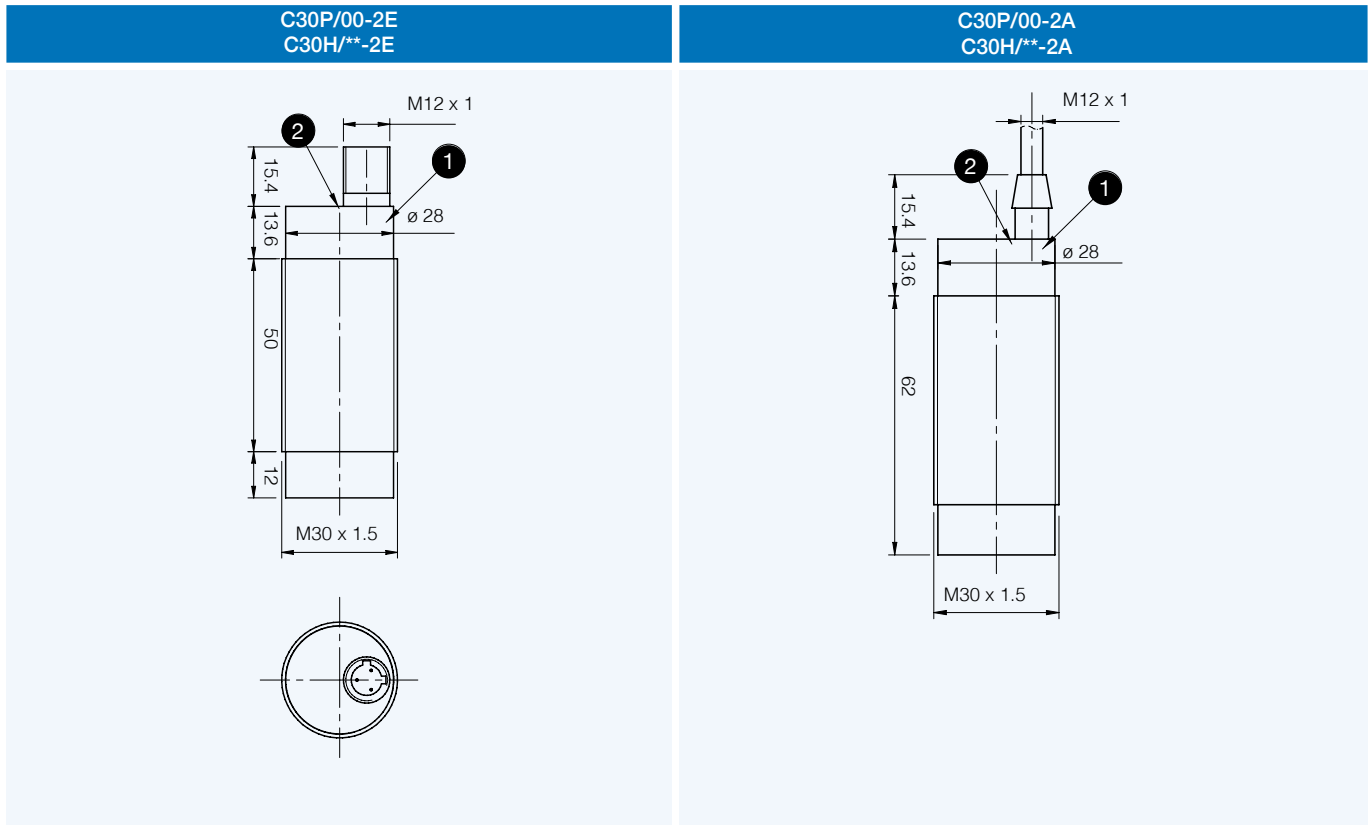


## dimensions (mm)

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



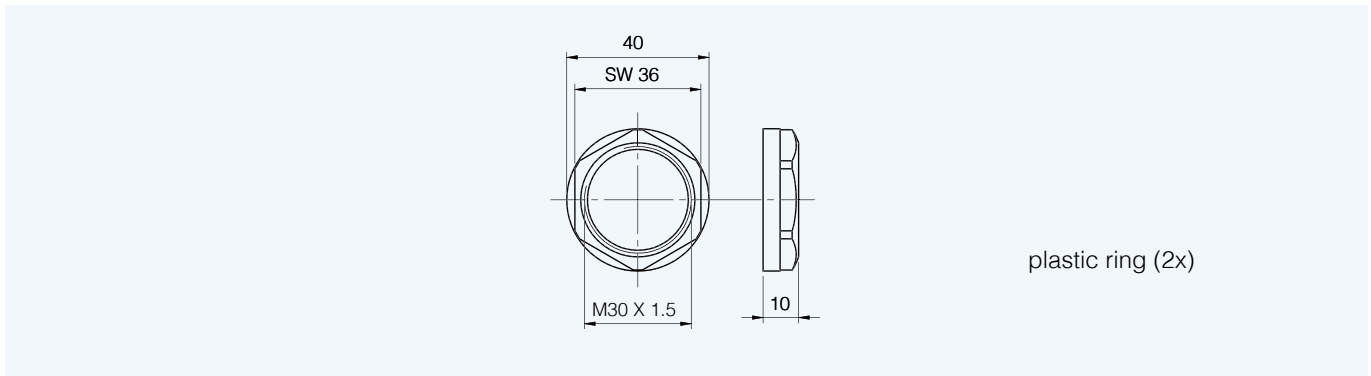
## dimensions (mm)



1 LED    2 TRIMMER

## dimensions (mm)

accessories included in all plastic models



## dimensions (mm)

accessories included models

