

# CAPACITIVE DRIVER

## CPA100

### Precision Analog Proximity Switch

- Lower Cost
- 0-10 V nonlinear analog output
- Setpoint/Switched output
- Adjustable gain and zero
- Five-element range indicator
- Remote gain and zero adjustment connections
- DIN rail case
- Multiple channel sync

### Specifications

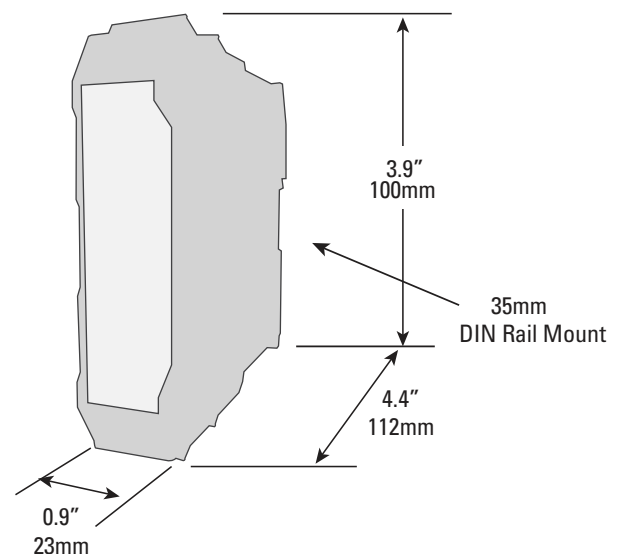
Resolution <sup>1</sup> :	CPA100: 0.03% RMS@ 15 kHz
	CPA 100e: 0.3µm RMS or higher @ 15 kHz
Bandwidth:	15 kHz
Linearity:	Nonlinear
Max Drift:	Driver: 0.2% F.S./°C
	Probe: 0.05% F.S./°C
Analog Output:	0-10V, 0Ω, 15mA max.
Setpoint:	Fixed at 5 V (mid-range)
Setpoint Output:	Solid state switch closure
On state:	2.5Ω, 100mA max
Off state leakage:	10µA max
Operating Temp:	4-50°C
Onput Power <sup>2</sup> :	15-24 VDC, 2.5W

1. Typical at midpoint. Dependent on probe, range, and bandwidth.  
See next page for details.

2. External power supply not included – available as accessory (p.3)

Listed [specifications](#) assume a two meter probe cable; Flat measurement area diameter at least 1.3 times larger than the Sensing Area with no customizations.

Different probe body styles/sizes are available for each Sensing area.

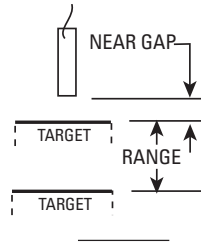
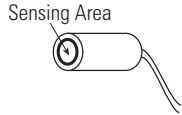


### Export License

May require an export license to some countries.

# CPA100

## Probes and Ranges



### CPA100 Probe Measurement Ranges and Resolutions

### C5S

Shape: C = Cylindrical, R = Rectangular  
 Size in mm: C: Diameter, R: Longest Side  
 Body Style: Blank = Long, S = Short, R = Right Angle

Sensing Area Diameter mm	Measurement Range			Midpoint Resolution <sup>1</sup> @ 15 kHz		Available Body Sizes		
	Range Type	Range $\mu\text{m}$ / mils	Near Gap $\mu\text{m}$ / mils	CPA100 $\mu\text{m}$ / $\mu\text{in}$	CPA100e $\mu\text{m}$ / $\mu\text{in}$	Models	Body Sizes	
0.5	Standard	50 2.0	50 2.0	55 2.2	400 16	C3S C3R	C5S C5R C5	
	Extended	80 3.0	60 2.4	100 4.0	400 16			
0.8	Standard	100 4.0	100 4.0	55 2.2	400 16	C3S C3R	C5S C5R C5	
2.0	Standard	250 10.0	125 5.0	40 1.6	400 16	C5S C5R C5	C8S C8R C8	
	Extended	500 20.0	125 5.0	55 2.2	400 16			
3.2	Standard	500 20.0	250 10	85 3.4	400 16	C8S C8R C8		
	Extended	1250 50.0	250 10	130 5.2	400 16			
5.6	Standard	500 20.0	500 20	140 5.5	400 16	C9.5S C9.5R C9.5		
	Extended	2000 80.0	250 10	170 6.7	800 32			
13	Standard	3200 125	2000 80	1000 40	1000 40	C18		
	Extended	5000 200	3000 120	1600 63	1600 63			
19	Standard	2500 100	5000 200	800 32	800 32	R45		
	Extended	6000 250	3000 120	1100 44	1100 44			
21	Standard	8000 300	5000 200	1200 47	1200 47	C25		
	Extended	12500 500	5000 200	1600 63	1600 63			

The CPA100 does not require an export license.