

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

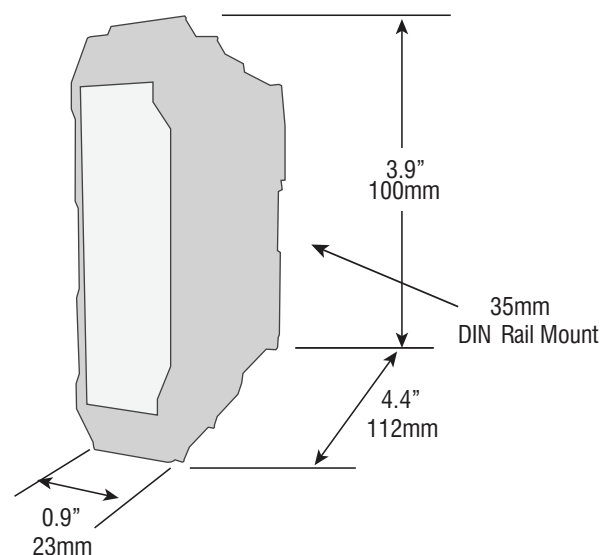
Resolution ¹ :	CPA100: 0.03% RMS@ 15 kHz CPA 100e: 0.3 μ m RMS or higher @ 15 kHz
Bandwidth:	15 kHz
Linearity:	Nonlinear
Max Drift:	Driver: 0.2% F.S./°C Probe: 0.05% F.S./°C
Analog Output:	0-10V, 0 Ω , 15mA max.
Setpoint:	Fixed at 5 V (mid-range)
Setpoint Output:	Solid state switch closure
On state: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

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.

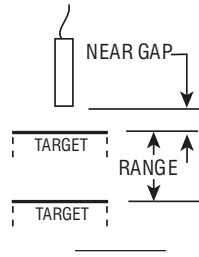
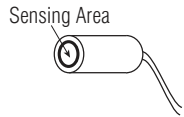


Export License

May require an export license to some countries due to the high resolution

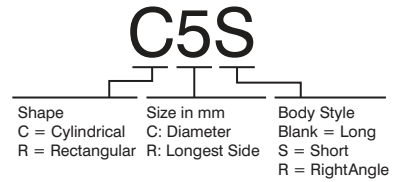
CPA100

Probes and Ranges



CPA100

Probe Measurement Ranges and Resolutions



Sensing Area Diameter mm	Measurement Range			Midpoint Resolution ¹ @ 15 kHz		Available Body Sizes	
	Range Type	Range μm mils	Near Gap μm mils	CPA100 nm μin	CPA100e nm μin	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	125 5.0	40 1.6	400 16	C5S C5R C5	C8S C8R C8
	Extended	500 20	125 5.0	55 2.2	400 16		
3.2	Standard	500 20	250 10	85 3.4	400 16	C8S C8R C8	
	Extended	1250 50	250 10	130 5.2	400 16		
5.6	Standard	500 20	500 20	140 5.5	400 16	C9.5S C9.5R C9.5	
	Extended	2000 80	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 CPA100e does not require an export license.