

# Solid State Sensors

## Closed Loop Current Sensors

CSN Series

### CSNF, CSNR, CSNP, CSNT SERIES ORDER GUIDE

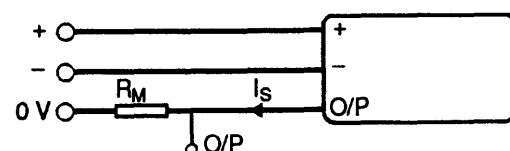
Catalog Listings	Peak Current Range Amps	Supply Voltage VDC $\pm 5\%$	Coil Characteristics		Meas. Currents Nom.	Meas. Resist (@ $I_{nom}$ )
			Turns	Resistance		
<b>CSNP661</b>	$\pm 90$	$\pm 12$ to 15	1000	30 $\Omega$ @ 70°C	50 mA for 50 A	50 to 100 $\Omega$
<b>CSNT651</b>	$\pm 150$	$\pm 12$ to 15	2000	100 $\Omega$ @ 70°C	25 mA for 50 A	40 to 75 $\Omega$
<b>CSNF161</b>	$\pm 150$	$\pm 12$ to 15	1000	30 $\Omega$ @ 70°C	100 mA for 100 A	10 to 40 $\Omega$
<b>CSNF151</b>	$\pm 180$	$\pm 12$ to 15	2000	100 $\Omega$ @ 70°C	50 mA for 100 A	10 to 75 $\Omega$
<b>CSNR161</b>	$\pm 200$	$\pm 12$ to 15	1000	30 $\Omega$ @ 70°C	125 mA for 125 A	30 to 40 $\Omega$
<b>CSNR151</b>	$\pm 200$	$\pm 12$ to 15	2000	100 $\Omega$ @ 70°C	62.5 mA for 125 A	10 to 40 $\Omega$

NOTE: Busbar options available.

### SPECIFICATIONS

Catalog Listings	CSNP661	CSNT651	CSNF161	CSNF151	CSNR161	CSNR151
Offset Current @ 25°C, mA max.	±0.20	±0.10	±0.20	±0.10	±0.20	±0.10
Temperature Drift, 0 to 70°C, mA	±0.30 typ. ±0.50 max.	±0.15 typ. ±0.25 max.	±0.30 typ. ±0.50 max.	±0.15 typ. ±0.25 max.	±0.30 typ. ±0.60 max.	±0.15 typ. ±0.30 max.
Linearity	±0.1%	±0.1%	±0.1%	±0.1%	±0.1%	±0.1%
Supply Voltage	±12 to 15V	±12 to 15V	±12 to 15V	±12 to 15V	±12 to 15V	±12 to 15V
Galvanic Isolation @ 50 Hz/1 min.	3 kV rms	3 kV rms	3 kV rms	3 kV rms	3 kV rms	3 kV rms
Accuracy	±0.5% of I <sub>N</sub> (nominal Current) at 25°C					
Response Time	<500 ns					
Bandwidth	DC to 150 kHz					
Operating Temperature	−40 to 85°C (−40 to 185°F)		−40 to 85°C (−40 to 185°F)			
Storage Temperature	−40 to 90°C (−40 to 194°F)		−40 to 90°C (−40 to 194°F)			
Primary Circuit Connection	Thru-hole					
Secondary Circuit Connection	3 pins					
Current Drain	10 mA (no load current) + output current		14 mA (no load current) + output current			
“In-Out” Sense Signal	To obtain positive measuring current on O/P terminal, current must flow in direction of arrow					
Mounting	3 pins					
Pin Style	A	A	B	B	B	B

### WIRING DIAGRAM

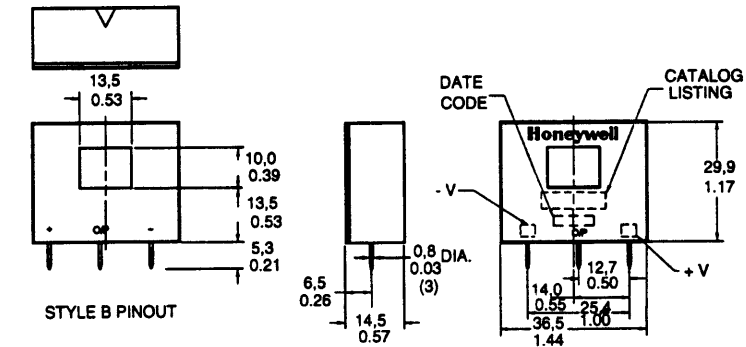
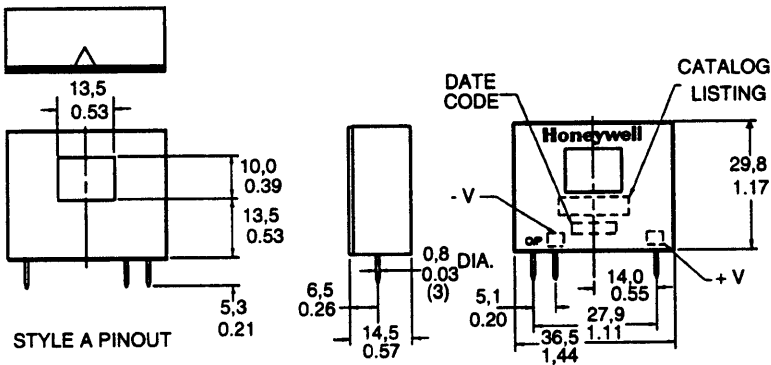
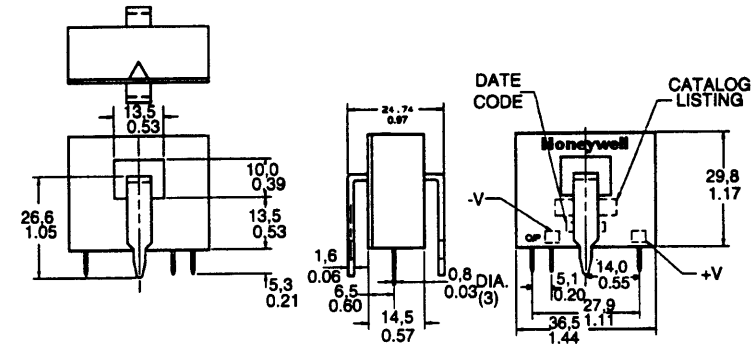


Current

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**Closed Loop Current Sensors**

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**MOUNTING DIMENSIONS** (for reference only)



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