

- ACCURACY: ±0.2%
- Up to 200% Overload with Stated Accuracy
- 50PPM Temperature Coefficient

### **Description:**

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The 10CP500 and 10VP500 Series of Process Control Current and Voltage transducers are a complete selection of high accuracy electronic transducers featuring an accuracy of  $\pm 0.2\%$ . TransData current and voltage transducers are average sensing devices calibrated for the RMS value of a sine wave.

The TransData Process Control transducers have three output options: 1-5mA, 4-20mA and 10-50mA. The most popular output option is the 4-20mA model. The 4mA offset provides a live zero as distinguished from zero output which would indicate an open circuit or faulty system. The offset current can be used to furnish power to the device connected to the transducer output. Thus a single pair of wires can provide power and signal simutaneously. The output load that each model operates into is indicated under the individual specification. The compliance is limited to 30 volts.

The temperature specification is rated at less than

- Low Power Consumption
- Compact Size
- 5000 Volts SWC Test

 $0.005\%/^{\circ}$ C over an operating range of  $-20^{\circ}$ C to  $+70^{\circ}$ C. Potential or current, and power supply burdens are less than 0.02, 0.15 and 7VA respectively, among the lowest in the industry.

The Surge Withstand Capability (SWC) of the CP500 and VP500 Series is 5000 volts. This exceeds the IEEE Standard No. 472 SWC Test.

Accuracy specifications include influence of variation in current or voltage, frequency and output load resistance over the specified ranges.

TransData Transducers are noted for their small size, high reliability and applicational flexbility. Ruggged construction, both internal and external, is a design requirement to assure maximum durability and longevity.

If the measurement of Watts or Vars is desired, the TransData WP500 and VP500 Series of Process Control Watt and Var transducers are available.

Process Control Series	OUTPUT	OUTPUT LOAD <sup>(1)</sup>	CURRENT	VOLTAGE
CURRENT &	1-5mA	0-6000 OHMS	10CP551	10VP551
VOLTAGE	4-20mA	0-1500 OHMS	10CP552	10VP552
TRANSDUCERS	10-50mA	0-600 OHMS	10CP553	10VP553
FULL SCALE INPUT			5 Amperes <sup>(2)</sup>	150 Volts <sup>(3)</sup>
INPUT RANGE WITH ACCURACY			0-10 Amperes	0-180 Volts
OVERLOAD			15 A.Cont., 50A.10 Sec./hr.,	200 Volts Cont.
			400A.1.0 Sec./hr.	
BURDEN			<0.15VA	<0.2VA

## INDIVIDUAL SPECIFICATIONS:

### **GENERAL SPECIFICATIONS:**

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Accuracy @ 25°C ± 5°C	± 0.2% of R.O.	
Temperature Range	-20°C to + 70°C	
Temperature Influence (Max.)	± 0.005%/°C	
Frequency Range	50-70HZ <sup>(4)</sup>	
A.C. Component (Peak)	<0.5%	
Response Time to 99%	<400 MS	
Operating Humidity	0-95%	
Dielectric Test (1 Min.)	2000 V RMS	
Surge Withstand Capability	5000 V Peak	
Calibration Adjustment	± 10% <sup>(5)</sup>	
Zero (offset) Adjustment	± 5% <sup>(5)</sup>	
Power Supply	100-130V. 60Hz<7 VA @ R.O.	
Weight	2¼ lbs. (1.02 Kg)	

(1) 30 Volt Compliance (2) Other Inputs Available (3) 240 V. and 480 Available

(4) 25Hz and 400Hz Available (5) Other Adjustments Available



# PROCESS CONTROL CURRENT AND VOLTAGE TRANSDUCERS

## SURGE WITHSTAND CAPABILITY:

TransData, Inc. transducers are designed to withstand transient surges up to 5000 volts applied between input/output/case/power supply.

The test waveform consists of a series of damped oscillations at 50KHz to 200 KHz, the first peak being 5000 volts, decaying to 2000 volts in three cycles. These bursts are repeated at the rate of 120 per second for four seconds. Devices built with this protection will also pass the IEEE Standard No. 472 SWC Test.



## NOTE: DIMENSIONS ARE IN INCHES AND (MM)

Mounting holes (4) are 3/16" in diameter. Can is steel with integral mounting flanges. Terminal screws are 8-32 binding head.



10CP500 SERIES



**10VP500 SERIES** 

APPLICATION: TRANS DATA, INC. PROCESS CONTROL

Current and Voltage Transducers convert current or voltage input signals from a power system into DC output signals proportional to the current or voltage on the system.

