## P510 Series Installation Euide

## Wiring and Circuit Diagram

## Model P510

POSITION


| Excitation Voltage | 4.9 to 30 VDC |
| :--- | :--- |
| Excitation Current | 25 mA max. |
| Output Impedance | $10 \Omega$ max. |
| Output Load | $5 \mathrm{~K} \Omega$ min. |

## 0 to 5 VDC and 0 to 10 VDC

As shown in the diagram above, both commons on pins " B " and " C " are connected together internally at the transducer, so that either a 3-wire or 4-wire connection to the transducer may be made. With small blade type screwdriver (. 105 " max. blade width X .023" max. blade thickness), adjust the Zero and Span controls on the transducer to set zero output voltage and maximum output voltage. Note: The Zero and Span controls are somewhat interactive and may require several iterations to obtain the desired zero and maximum settings. Extend the cable (on angular position transducers, rotate shaft) of the transducer to the desired zero position (must be within $0 \%$ to $30 \%$ of range.) Adjust the Zero control so that the output voltage is zero. Then extend the cable (on angular position transducers, rotate shaft) to the desired maximum position (must be within $80 \%$ to $100 \%$ of range.) Adjust the Span control for maximum output voltage required (unit will adjust from 5 VDC to 10 VDC). Recheck the zero setting and adjust if necessary. Recheck the Span setting and readjust if necessary.

## +/- 5 VDC and +/- 10 VDC

Extend the transducer cable to the desired zero position (must be within $10 \%$ to $90 \%$ of the total range). Adjust the Zero control to give a zero voltage output. Then extend the cable to the desired maximum position in the direction of longest possible travel (either positive or negative) from the zero position. To obtain maximum output voltage magnitude this position must lie within $50 \%$ to $100 \%$ of the longest possible travel. Adjust the Span control to the output voltage magnitude required (+ or - 10 VDC maximum). Recheck the zero and span settings and readjust if necessary.

## Dimensional Information

## Ranges to 50" (1250 mm)



* 1.56 (39.6 mm) with Optional "Dust Shield"

Ranges to 80" (2000 mm)


## Standard Series Installation Guide

## OPTION＂CES＂SIDE CABLE EXIT

## PA，Pヨ，P420，P510，P1010，EP，V，VP SERIES

| RANGE | PA，PB，P420，P510，P1010 <br> EP，V SERIES |  |
| :--- | :---: | :---: |
|  | DIMENSION＂A＂ |  |
| DIMENSION＂B＂＊ |  |  |
| $2^{\prime \prime}, 10^{\prime \prime}$ | $1.52^{\prime \prime}(38.6 \mathrm{~mm})$ | $1.28^{\prime \prime}(32.5 \mathrm{~mm})$ |
| $3 ", 15^{\prime \prime}, 30 "$ | $1.68^{\prime \prime}(42.7 \mathrm{~mm})^{\star \star}$ | $1.28^{\prime \prime}(32.5 \mathrm{~mm})$ |
| $4 ", 20^{\prime \prime}, 40^{\prime \prime}$ | $1.84^{\prime \prime}(46.7 \mathrm{~mm})^{\star \star}$ | $1.28^{\prime \prime}(32.5 \mathrm{~mm})$ |
| $5 ", 25^{\prime \prime}, 50 "$ | $1.97^{\prime \prime}(50.8 \mathrm{~mm})^{\star *}$ | $1.28^{\prime \prime}(32.5 \mathrm{~mm})$ |
| $60 "$ | $2.53^{\prime \prime}(64.3 \mathrm{~mm})$ | $1.78^{\prime \prime}(45.2 \mathrm{~mm})$ |
| $75^{\prime \prime}$ | $2.76^{\prime \prime}(70.2 \mathrm{~mm})$ | $1.78^{\prime \prime}(45.2 \mathrm{~mm})$ |
| $80 "$ | $2.84^{\prime \prime}(72.2 \mathrm{~mm})$ | $1.78^{\prime \prime}(45.2 \mathrm{~mm})$ |


| RANGE | VP SERIES |  |
| :--- | :--- | :--- |
|  | DIMENSION＂A＂ | DIMENSION＂B＂＊ |
| $2^{\prime \prime}, 10 "$ | $1.58^{\prime \prime}(40.1 \mathrm{~mm})$ | $1.68^{\prime \prime}(42.7 \mathrm{~mm})$ |
| $3^{\prime \prime}, 15^{\prime \prime}, 30^{\prime \prime}$ | $1.74(44.2 \mathrm{~mm})^{\star *}$ | $1.68^{\prime \prime}(42.7 \mathrm{~mm})$ |
| $4 ", 20^{\prime \prime}, 40 "$ | $1.90(48.3 \mathrm{~mm})^{\star *}$ | $1.68^{\prime \prime}(42.7 \mathrm{~mm})$ |
| $5 ", 25^{\prime \prime}, 50 "$ | $2.03(52.3 \mathrm{~mm})^{\star \star}$ | $1.68^{\prime \prime}(42.7 \mathrm{~mm})$ |
| $60 "$ | $2.59(65.8 \mathrm{~mm})$ | $1.68^{\prime \prime}(42.7 \mathrm{~mm})$ |
| $75^{\prime \prime}$ | $2.82(71.6 \mathrm{~mm})$ | $1.68^{\prime \prime}(42.7 \mathrm{~mm})$ |
| $80^{\prime \prime}$ | $2.90(73.7 \mathrm{~mm})$ | $1.68^{\prime \prime}(42.7 \mathrm{~mm})$ |


＊With＂DS＂（dust shield）option，add 0．36＂（ 9.1 mm ）to＂B＂dimensions above．
＊＊With＂HG＂（high wire rope tension）option，add 0.375 ＂to dimension shown for 30 ＂， 40 ＂and 50 ＂measurement ranges only．

## OPTION＂CEB＂BOTTOM CABLE EXIT

## PA，Pヨ，P42ロ，PE10，P1010，EP，V SERIES

| RANGE | DIMENSION＂A＂ |
| :--- | :---: |
| $2 ", 10 "$ | $1.34(34.0 \mathrm{~mm})$ |
| $3 ", 15 ", 30 "$ | $1.49(37.8 \mathrm{~mm})$ |
| $4 ", 20 ", 40 "$ | $1.65(41.9 \mathrm{~mm})$ |
| $5 ", 25 ", 50 "$ | $1.81(46.0 \mathrm{~mm})$ |
| $60 "$ | $1.96(49.8 \mathrm{~mm})$ |
| $75 "$ | $2.20(55.9 \mathrm{~mm})$ |
| $80 "$ | $2.28(57.9 \mathrm{~mm})$ |



