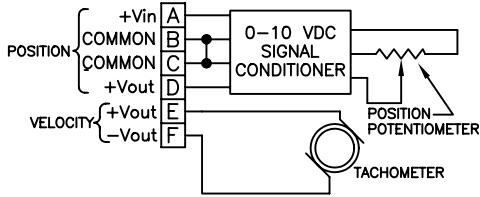


# VP510 Series Installation Guide

## Wiring and Circuit Diagram

### Model VP510



**Velocity**  
The tachometer is self energizing and requires no input voltage.

Excitation Voltage..... 11 to 35 VDC  
Excitation Current..... 40 mA max.  
Output Impedance..... 10  $\Omega$  max.  
Output Load ..... 5K $\Omega$  min.

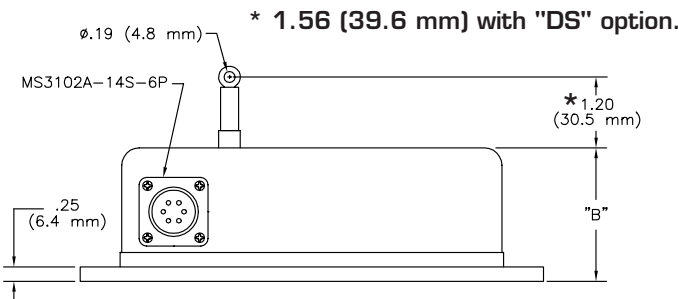
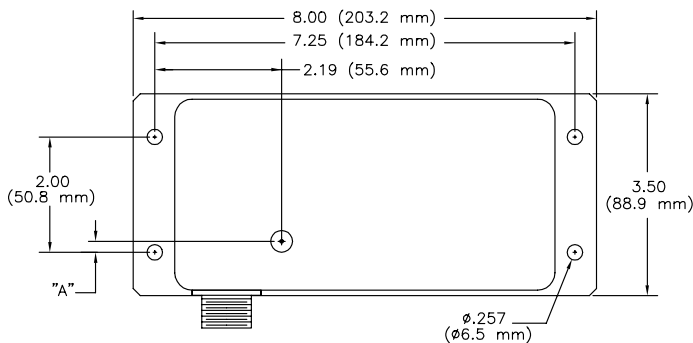
As shown in the diagram above, both commons on pins "B" and "C" are connected together internally at the transducer, so that either a 3-wire or 4-wire connection to the transducer may be made.

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.

## Dimensional Information

Ranges to 80" (2000 mm)



RANGE	DIMENSION "A"		DIMENSION "B"	
	in.	mm	in.	mm
2", 10"	0.66	16.8	2.25	57.0
3", 15", 30"	0.51	12.9	2.25	57.0
4", 20", 40"	0.35	8.8	2.25	57.0
5", 25", 50"	0.19	4.8	2.25	57.0
60"	0.04	1.0	3.25	82.6
75"	-0.20	-5.1	3.25	82.6
80"	-0.28	-7.1	3.25	82.6

# Standard Series Installation Guide

## OPTION "CES" SIDE CABLE EXIT

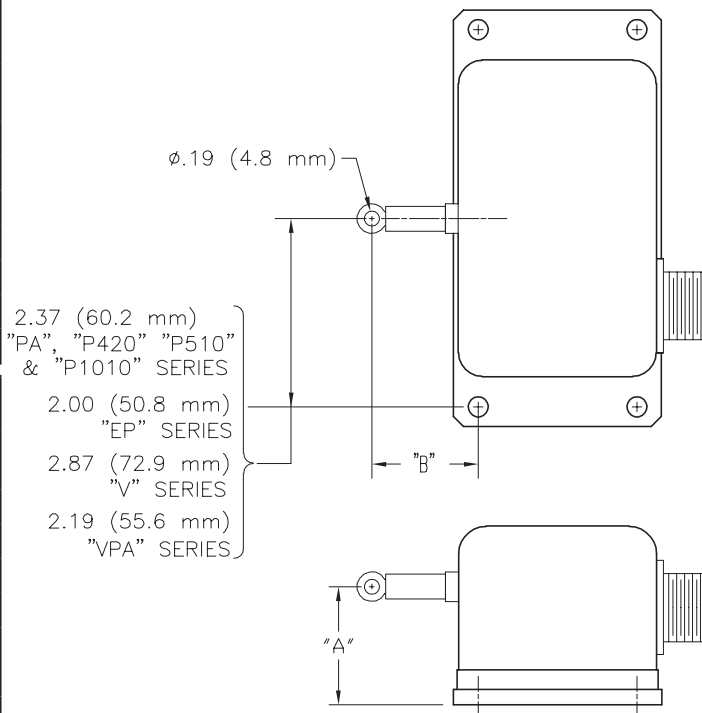
### PA, PB, P420, P510, P1010, EP, V, VP SERIES

RANGE	PA, PB, P420, P510, P1010 EP, V SERIES	
	DIMENSION "A"	DIMENSION "B"*
2", 10"	1.52" (38.6 mm)	1.28" (32.5 mm)
3", 15", 30"	1.68" (42.7 mm)**	1.28" (32.5 mm)
4", 20", 40"	1.84" (46.7 mm)**	1.28" (32.5 mm)
5", 25", 50"	1.97" (50.8mm)**	1.28" (32.5 mm)
60"	2.53" (64.3 mm)	1.78" (45.2 mm)
75"	2.76" (70.2 mm)	1.78" (45.2 mm)
80"	2.84" (72.2 mm)	1.78" (45.2 mm)

RANGE	VP SERIES	
	DIMENSION "A"	DIMENSION "B"*
2", 10"	1.58" (40.1 mm)	1.68" (42.7 mm)
3", 15", 30"	1.74" (44.2 mm)**	1.68" (42.7 mm)
4", 20", 40"	1.90" (48.3 mm)**	1.68" (42.7 mm)
5", 25", 50"	2.03" (52.3 mm)**	1.68" (42.7 mm)
60"	2.59" (65.8 mm)	1.68" (42.7 mm)
75"	2.82" (71.6 mm)	1.68" (42.7 mm)
80"	2.90" (73.7 mm)	1.68" (42.7 mm)

\* With "DS" (dust shield) option, add 0.36" (9.1 mm) to "B" dimensions above.

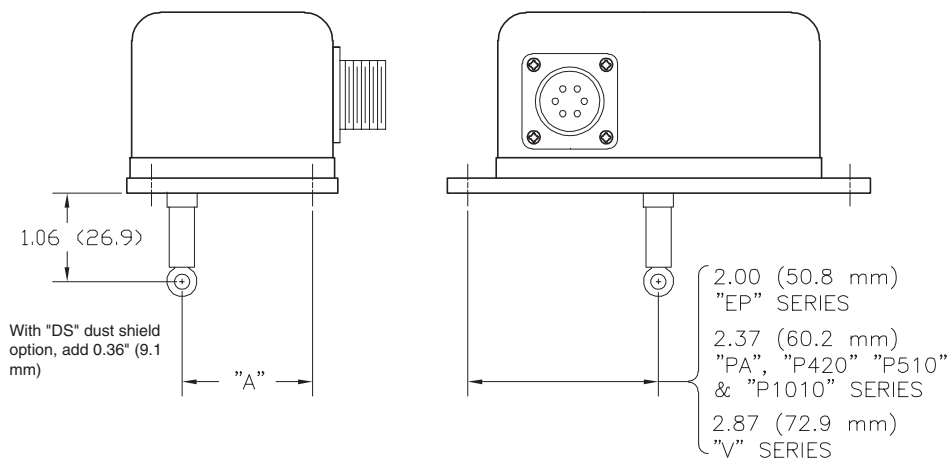
\*\* With "HG" (high wire rope tension) option, add 0.375" to dimension shown for 30", 40" and 50" measurement ranges only.



## OPTION "CEB" BOTTOM CABLE EXIT

### PA, PB, P420, P510, P1010, EP, V SERIES

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



**UniMeasure**

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