

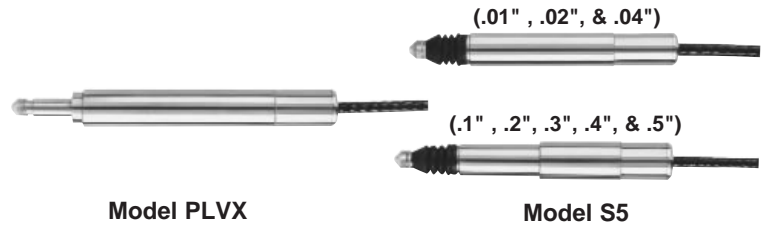
# AC-AC Ultra Precision LVDTs

## Models PLVX AND S5

0.25% NON-LINEARITY

NON-ROTATING PROBE

STAINLESS STEEL

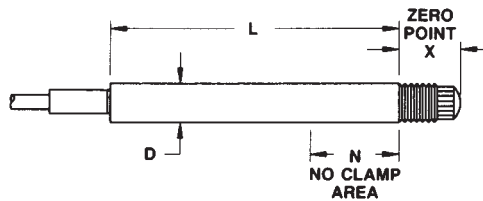


SENSOTEC's Models PLVX and S5 Ultra Precision LVDTs are designed for single and multi-point industrial gaging applications and micro-displacement measurements in research and scientific studies. Both models incorporate non-rotating armatures to increase resistance to side loads and improve repeatability. Bodies and probes are stainless steel constructed and windings are magnetically shielded. Ultra Precision LVDTs utilize spring loaded captive guided armatures and low friction, non-rotating probes. Non-linearity is 0.25% full scale. The Model PLVX with a 0.02" stroke range has a mechanical zero adjustment to correct pre- and over-travel.

### Dimensions

#### Model PLVX

Order Code W/Range	Available Stroke Ranges	Output Sensitivity mv/v/.001"	L"	N"	D"	X"	Approx. Unit Wt. (oz.)
AY111HI	+/-0.02"	5.59	1.02	.22	.31	.30	.45
AY111HK	+/-0.04"	3.81	2.09	.55	.31	.55	.56
AY111HM	+/-0.1"	3.81	2.26	.71	.31	.79	.63
AY111HN	+/-0.2"	3.05	3.23	1.18	.31	.87	.78



#### Model S5

Order Code W/Range	Available Stroke Ranges	L"	I"	D"	d**	X"	Approx. Unit Wt. (grams)
AY112HH	+/-0.01"	1.9	.75	.32	.32	.43	14
AY112HI	+/-0.02"	1.9	.75	.32	.32	.48	14
AY112HK	+/-0.04"	2.0	.75	.37	.32	.52	18
AY112HM	+/-0.1"	2.4	---	.37	---	.45	22
AY112HN	+/-0.2"	2.7	---	.37	---	.45	26
AY112HF	+/-0.3"	3.5"	---	.37	---	.60	30
AY112HG	+/-0.4"	3.9"	---	.37	---	.75	34
AY112HP	+/-0.5"	4.8"	---	.37	---	.85	42

\* Ranges above +0.1" do not have a 'd' dimension.



		<b>Model PLVX</b> Order Code AY111	<b>Model S5</b> Order Code AY112
<b>PERFORMANCE</b>	Stroke Ranges.....	+ /-.02" to .2"	+ /-.01" to .5"
	Non-linearity (max) .....	+ /-0.25% F.S.	+ /-0.25% F.S.
	Non-repeatability (max) .....	6 microinches	<20 microinches
	Output Sensitivity .....	See dimension table	4mv/v/.001"
	Resolution .....	Infinite	Infinite
	Phase Shift .....	<10° @ 5KHz	<10° @ 5KHz
<b>ENVIRONMENTAL</b>	Temperature, Operating .....	-40° F to 212° F	-4° F to 257° F
	Temperature Effect.....		
	- Zero (max).....	.005% F.S./° F	.006% F.S./° F
	- Span (max).....	.005% Rdg./° F	.006% Rdg./° F
<b>ELECTRICAL</b>	Element Type .....	AC-AC LVDT	AC-AC LVDT
	Input Supply (calibrated) .....	5V RMS @ 5KHz	3V RMS @ 5KHz
	Input Supply (acceptable) .....	1-7V RMS @ 2-10KHz	1-7V RMS @ 2-10KHz
	Output Load (min.) .....	100k ohms	100k ohms
	Wiring Code (std) .....	#30 (See Pg. AP-8)	#30 (See Pg. AP-8)
	Electrical Termination.....	Multiconductor shielded cable	Multiconductor shielded cable
<b>MECHANICAL</b>	Case Material .....	Stainless steel	Stainless steel
	Probe Material.....	Stainless steel	Stainless steel
	Armature Type.....	Captive guided spring return	Captive guided spring return
	Unit Weight.....	See dimension table	See dimension table
	Spring Force (max) .....	4.4 oz.	7.5 oz. (.01", .02", .04") 4.23 oz. (.1") 4.58 oz. (.2") 8.64 oz. (.3") 7.40 oz. (.4") 7.58 oz. (.5")

## General Information

How to order (See Pg. AP-19)  
LVDT selection flow chart (See Pg. LV-1)

DISPLACEMENT

CAPTIVE GUIDED SPRING

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