

Series K92100 & L92100 Digital Linear Actuators



Series 92100 Digital Linear Actuators

The Series 92100 bidirectional linear actuator is a stepper motor that has been modified by incorporating a pre-loaded ball bearing and an internally threaded rotor with a lead screw shaft. Energizing the unit's coil in proper sequence will cause the threaded shaft to move out or back into the rotor in linear increments of .001", .002" or .004" per pulse.

The actuator shaft will remain in position when power is removed. The actuator shaft of the Series K92100 has a maximum travel of 1/2". Maximum travel of the Series L92100 shaft is 1 7/8". The *Linear Force Chart* shows typical forces available vs. pulse rates. "K" units contain an integral anti-rotational shaft feature. "L" units require an external means of preventing shaft rotation.

These devices are particularly useful for applications, such as valve actuators, variable displacement pumps, etc., where rapid movement to a particular linear position is required. Actuators for applications requiring different step increments, force outputs or extended travel can be provided on a special basis. Please supply us with complete specifications of your requirements.

Specifications

Part Number	DC Operating Voltage	Maximum Travel	Linear Travel Per Step	Maximum Force	Minimum Holding Force (Unenergized)
K92111-P1	5	0.5" (12.7mm)	.001" (.025mm)	45 oz (12.5N)	60 oz (16.68N)
K92111-P2	12				
L92111-P1	5	1.875" (47.6mm)			
L92111-P2	12				
K92121-P1	5	0.5" (12.7mm)	.002" (.05mm)	26 oz (7.23N)	40 oz (11.13N)
K92121-P2	12				
L92121-P1	5	1.875" (47.6mm)			
L92121-P2	12				
K92141-P1	5	0.5" (12.7mm)	.004" (.10mm)	16 oz (4.45N)	7 oz (1.95N)
K92141-P2	12				
L92141-P1	5	1.875" (47.6mm)			
L92141-P2	12				

Note: Shaft Options Series K92100

Add Suffix-S1 for #4-40 NC-2A Threaded Tip

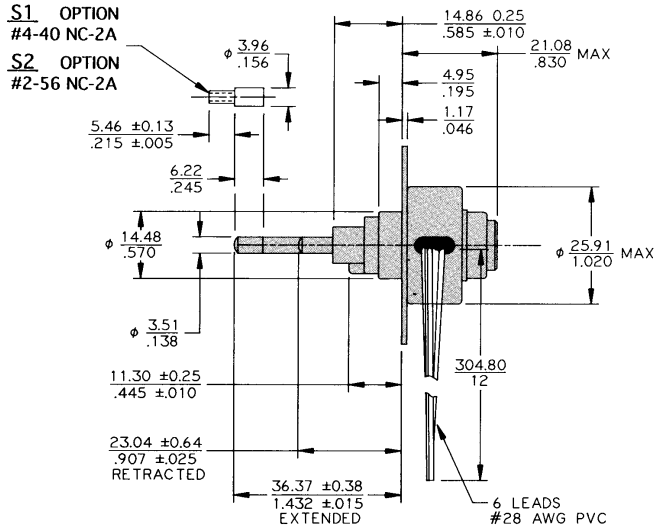
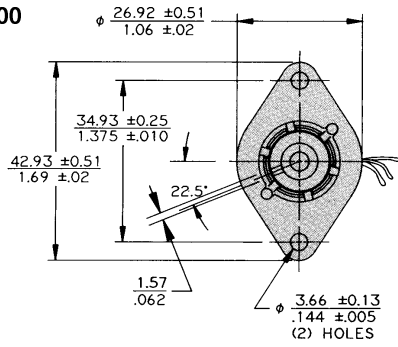
Add Suffix-S2 for #2-56 NC-2A Threaded Tip

Unipolar Drive		
Max Pull-in Rate (Steps/Sec)		380
Max Pull-out Rate (Steps/Sec)		650
Power Consumption:		3.5 Watts
Insulation Resistance:		20MΩ
Bearings:		Radial Ball
Weight:		1.5 oz. (42.5 gr.)
Operating Temp. Range:		-20°C to 70°C
Storage Temp. Range:		-40°C to 85°C
Coil Data	-P1 (5Vdc)	-P2 (12Vdc)
Resistance Per Phase:	15Ω	84Ω
Inductance Per Phase:	5mH	29mH

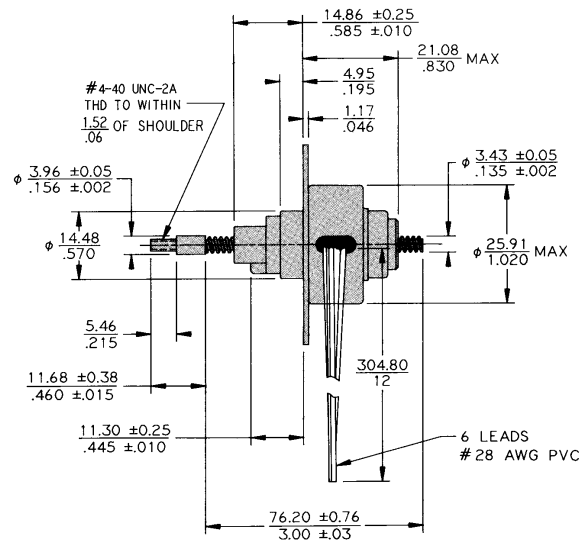
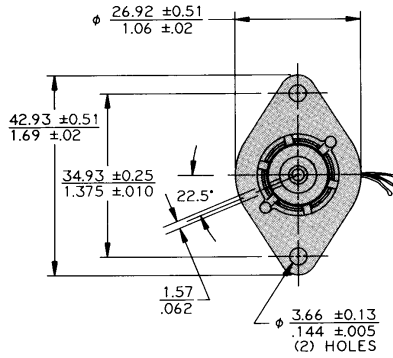
For information or to place an order in North America: 1 (203) 271-6444 Europe: (44) 1276-691622 Asia: (65) 7474-888

Dimensions: mm/in

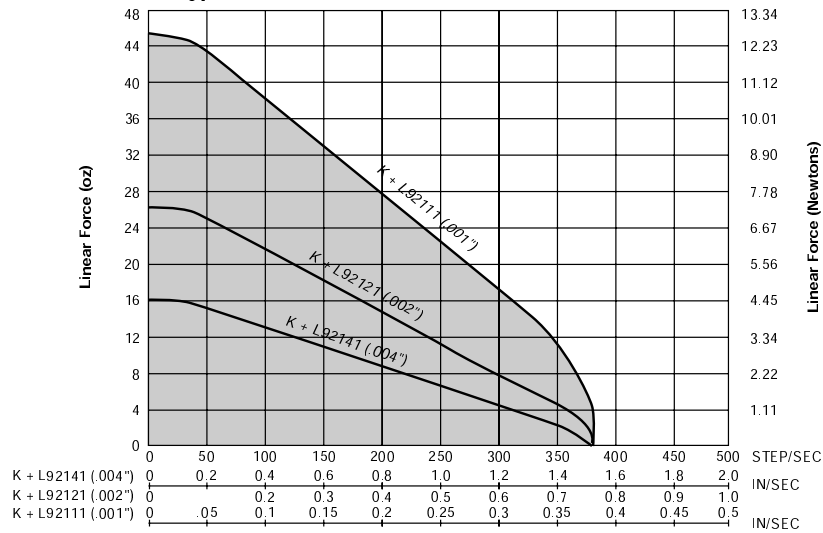
Series K92100



Series L92100



Typical Linear Pull-In Force vs. Linear Rate at 20°C



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The specifications in this publication are believed to be accurate and reliable. However, it is the responsibility of the product user to determine the suitability of Thomson products for a specific application. While defective products will be replaced without charge if promptly returned, no liability is assumed beyond such replacement.

