

LSN Series Stages



The LSN Series is a highly versatile line of compact linear motion stages that can withstand continuous and rigorous duty cycles. Configurable with stepper, rotary servo, or linear servo motors, and a variety of feedback options to prioritize the velocity and accuracy demands of the application.

Specifications for LSN Series of Stages are on the pages that follow

Specifications - LSN115 Ball Screw

	LSN115-50-BS	LSN115-100-BS	LSN115-150-BS	LSN115-200-BS	LSN115-300-BS	LSN115-400-BS
Width	115mm					
Travel Length	50mm	100mm	150mm	200mm	300mm	400mm
Load Capacity	40 kg					
Straightness of Travel	±1.5µm	±2.5µm	±3.0µm	±4.0µm	±6.0µm	±8.0µm
Flatness of Travel	±1.5µm	±2.5µm	±3.0µm	±4.0µm	±6.0µm	±8.0µm
Pitch	±2 arcsec	±3 arcsec		±4 arcsec	±6 arcsec	±8 arcsec
Yaw	±2 arcsec	±3 arcsec		±4 arcsec	±6 arcsec	±8 arcsec
Bi-Directional Repeatability	±1.0µm					
Linear Accuracy	±6.0µm	±6.0µm	±8.0µm	±8.0µm	±10.0µm	±12.0µm
Max Speed	300mm/s					

Specifications - LSN115 Linear Motor

	LSN115-50-LM	LSN115-100-LM	LSN115-150-LM	LSN115-200-LM	LSN115-300-LM	LSN115-400-LM
Width	115mm					
Travel Length	50mm	100mm	150mm	200mm	300mm	400mm
Load Capacity	40 kg					
Straightness of Travel	±1.5µm	±2.5µm	±3.0µm	±4.0µm	±6.0µm	±8.0µm
Flatness of Travel	±1.5µm	±2.5µm	±3.0µm	±4.0µm	±6.0µm	±8.0µm
Pitch	±2 arcsec	±3arcsec		±4 arcsec	±6 arcsec	±8 arcsec
Yaw	±2 arcsec	±3arcsec		±4 arcsec	±6 arcsec	±8 arcsec
Bi-Directional Repeatability	±0.4µm			±0.5µm		
Linear Accuracy	±3.0µm	±4.0µm	±6.0µm	±8.0µm	±10.0µm	±12.0µm
Max Speed	2m/s					

Specifications - LSN165 Ball Screw					
	LSN165-100-BS	LSN165-150-BS	LSN165-200-BS	LSN165-300-BS	LSN165-400-BS
Width	165mm				
Travel Length	100mm	150mm	200mm	300mm	400mm
Load Capacity	45 kg				
Straightness of Travel	±2.5µm	±3.0µm	±4.0µm	±6.0µm	±8.0µm
Flatness of Travel	±2.5µm	±3.0µm	±4.0µm	±6.0µm	±8.0µm
Pitch	±3 arcsec		±4 arcsec	±6 arcsec	±8 arcsec
Yaw	±3 arcsec		±4 arcsec	±6 arcsec	±8 arcsec
Bi-Directional Repeatability	±1.0µm				
Linear Accuracy	±6.0µm	±8.0µm		±10.0µm	±12.0µm
Max Speed	300mm/s				

Specifications - LSN165 Linear Motor							
	LSN165-100-LM	LSN165-150-LM	LSN165-200-LM	LSN165-300-LM	LSN165-400-LM	LSN165-500-LM	LSN165-600-LM
Width	165mm						
Travel Length	100mm	150mm	200mm	300mm	400mm	500mm	600mm
Load Capacity	45 kg						
Straightness of Travel	±2.5µm	±3.0µm	±4.0µm	±6.0µm	±8.0µm	±9.0µm	±10.0µm
Flatness of Travel	±2.5µm	±3.0µm	±4.0µm	±6.0µm	±8.0µm	±9.0µm	±10.0µm
Pitch	±3 arcsec		±4 arcsec	±6 arcsec	±7.5 arcsec	±8.5 arcsec	±9.5 arcsec
Yaw	±3 arcsec		±4 arcsec	±6 arcsec	±7.5 arcsec	±8.5 arcsec	±9.5 arcsec
Bi-Directional Repeatability	±0.4µm		±0.5µm				
Linear Accuracy	±4.0µm	±6.0µm	±8.0µm	±10.0µm	±12.0µm	±14.0µm	±15.5µm
Max Speed	2m/s						



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Specifications - LSN190 Ball Screw							
	LSN190-100-BS	LSN190-150-BS	LSN190-200-BS	LSN190-300-BS	LSN190-400-BS	LSN190-500-BS	LSN190-600-BS
Width	190mm						
Travel Length	100mm	150mm	200mm	300mm	400mm	500mm	600mm
Load Capacity	60 kg						
Straightness of Travel	±2.0µm	±2.5µm		±3.5µm	±4.5µm	±5.5µm	±6.5µm
Flatness of Travel	±2.0µm	±2.5µm		±3.5µm	±4.5µm	±5.5µm	±6.5µm
Pitch	±3 arcsec		±4 arcsec	±5 arcsec	±6.5 arcsec	±7.5 arcsec	±8.5 arcsec
Yaw	±3 arcsec		±4 arcsec	±5 arcsec	±6.5 arcsec	±7.5 arcsec	±8.5 arcsec
Bi-Directional Repeatability	±1.0µm						
Linear Accuracy	±6.0µm	±7.0µm	±8.0µm	±9.5µm	±11.0µm	±13.0µm	±15.0µm
Max Speed	300mm/s						

Specifications - LSN190 Linear Motor							
	LSN190-100-LM	LSN190-150-LM	LSN190-200-LM	LSN190-300-LM	LSN190-400-LM	LSN190-500-LM	LSN190-600-LM
Width	190mm						
Travel Length	100mm	150mm	200mm	300mm	400mm	500mm	600mm
Load Capacity	60 kg						
Straightness of Travel	±1.5µm	±2.0µm	±2.5µm	±3.5µm	±4.5µm	±5.5µm	±6.5µm
Flatness of Travel	±1.5µm	±2.0µm	±2.5µm	±3.5µm	±4.5µm	±5.5µm	±6.5µm
Pitch	±3 arcsec		±4 arcsec	±6 arcsec	±7.5 arcsec	±8.5 arcsec	±9.5 arcsec
Yaw	±3 arcsec		±4 arcsec	±6 arcsec	±7.5 arcsec	±8.5 arcsec	±9.5 arcsec
Bi-Directional Repeatability	±0.3µm	±0.4µm					
Linear Accuracy	±4.0µm	±6.0µm	±8.0µm	±10.0µm	±12.0µm	±14.0µm	±15.5µm
Max Speed	2m/s						

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Specifications - LSN225 Ball Screw								
	LSN225-100-BS	LSN225-200-BS	LSN225-300-BS	LSN225-400-BS	LSN225-500-BS	LSN225-600-BS	LSN225-800-BS	LSN225-1000-BS
Width	225mm							
Travel Length	100mm	200mm	300mm	400mm	500mm	600mm	800mm	1000mm
Load Capacity	100 kg							
Straightness of Travel	±2.0µm	±2.5µm	±3.5µm	±4.5µm	±5.5µm	±6.5µm	±8.0µm	±9.5µm
Flatness of Travel	±2.0µm	±2.5µm	±3.5µm	±4.5µm	±5.5µm	±6.5µm	±8.0µm	±9.5µm
Pitch	±3 arcsec	±4 arcsec	±5.5 arcsec	±6.5 arcsec	±7.5 arcsec	±8.5 arcsec	±9.5 arcsec	±11.5 arcsec
Yaw	±3 arcsec	±4 arcsec	±5.5 arcsec	±6.5 arcsec	±7.5 arcsec	±8.5 arcsec	±9.5 arcsec	±11.5 arcsec
Bi-Directional Repeatability	±1.0µm							
Linear Accuracy	±6.0µm	±8.0µm	±9.5µm	±11.0µm	±13.0µm	±15.0µm	±17.0µm	±18.0µm
Max Speed	220mm/s							

Specifications - LSN225 Linear Motor									
	LSN225-100-LM	LSN225-200-LM	LSN225-300-LM	LSN225-400-LM	LSN225-500-LM	LSN225-600-LM	LSN225-800-LM	LSN225-1000-LM	
Width	225mm								
Travel Length	100mm	200mm	300mm	400mm	500mm	600mm	800mm	1000mm	
Load Capacity	100 kg								
Straightness of Travel	±1.5µm	±2.5µm	±3.5µm	±4.5µm	±5.5µm	±6.5µm	±8.0µm	±9.5µm	
Flatness of Travel	±1.5µm	±2.5µm	±3.5µm	±4.5µm	±5.5µm	±6.5µm	±8.0µm	±9.5µm	
Pitch	±3 arcsec	±4 arcsec	±5.5 arcsec	±6.5 arcsec	±7.5 arcsec	±8.5 arcsec	±9.5 arcsec	±11.5 arcsec	
Yaw	±3 arcsec	±4 arcsec	±5.5 arcsec	±6.5 arcsec	±7.5 arcsec	±8.5 arcsec	±9.5 arcsec	±11.5 arcsec	
Bi-Directional Repeatability	±0.3µm	±0.4µm					±0.5µm		
Linear Accuracy	±4.0µm	±8.0µm	±10.0µm	±12.0µm	±14.0µm	±15.5µm	±17.0µm	±18.0µm	
Max Speed	2m/s								