



SLC-1720 - Linear Piezo Stage

The SLC-1720 is the smallest nanometer precision linear stage in SmarAct's SLC-17 series. At 22 x 17 x 8.5 mm, it is the world's smallest closed-loop piezo stage with nanometer resolution and macroscopic travel range.

Please note that the downloadable documents for this linear piezo stage show the dimensions and specifications of a 1720 for atmospheric or HV environments, equipped with an [S-position sensor](#). For technical drawings and detailed specifications of other variants, such as [UHV compatible stages](#), stages with higher blocking force or other sensor options, please [contact our sales team](#).

Travel range: 12 mm Length: 22 mm Weight: 13 g

	Mechanical
Scan Range [μm]	> 1.3
Travel [mm]	12
Blocking Force [N]	≥ 3.5
Max. Normal Force [N]	10
Max. Lift Force [N]	> 1.5
Dimensions [mm]	22 x 17 x 8.5
Weight [g]	13
	Open-loop
Velocity [mm/s]	> 20
Open-Loop Resolution MCS2 [nm]	< 1
Open-Loop Resolution (H)CU [nm]	< 50
	Closed-Loop
Sensor Resolution MCS2 [nm]	1 (S), 4 (L)
Sensor Resolution (H)CU [nm]	100 (L)
Uni-Directional Repeatability MCS2 [nm]	± 40 (S,L)
Uni-Directional Repeatability (H)CU [nm]	± 200 (L)

	Options
Material Options	Aluminum base as standard; Steel base (-ST); Titanium base (-TI); Black anodized (-BK)
Mechanical Options	U-shaped base for higher mechanical strength (-W): width is 6mm larger; cage-creep-free guideways (-Z)
Performance Options	Higher blocking force (-D): +1.5 N
Cryogenic Option	Yes (only open loop, travel restricted to 6 mm)
Vacuum Options	HV (1E-6 mbar); UHV (1E-11 mbar)
Non-Magnetic Option	Yes, changes of the slide hole pattern apply: all threaded holes