

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)

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	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

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