



CHS-5237-1D-10 - High Load Stage

This high load stage is suitable for high availability applications in science and industry. It is equipped with [SmarAct's exchangeable drive unit](#), which allows the complete piezo drive to be removed from the stage when required for servicing. As the drive unit is accessible from the side of the stage, the device does not need to be removed from the positioning setup during servicing. The mechanical design is based on an actuated wedge which guarantees highest resolution of the stages' motion. A separate guideway assures a straight movement along the load direction and allows an integration of a position sensor for direct position feedback and closed-loop operation. The mountinghole pattern supports an easy screwing to the linear stages of the [CLS52-Series](#) and the [SR-5014](#). Optionally, different constant force springs can be added to handle payloads up to 10 N. A high load stage equipped with an exchangeable drive unit, offering 10 mm of vertical travel and the handling of payloads up to 10 N.

	Mechanical
Degrees of Freedom	1
Travel [mm]	10
Max. Lift Force [N]	10
Dimensions [mm]	52 x 52 x 37
Weight [g]	270
	Open-loop
Velocity [mm/s]	> 2
	Closed-Loop
Sensor Resolution MCS2 [nm]	1 (S), 4 (L)
Uni-Directional Repeatability MCS2 [nm]	± 40 (S,L)
Sensor Resolution (H)CU [nm]	100 (L)
Uni-Directional Repeatability (H)CU [nm]	± 200 (S,L)
	Options

Material Options	Aluminum base as standard; steel base (-ST); titanium base (-TI); black anodized (-BK)
Vacuum Options	HV (1E-6 mbar); UHV (1E-11 mbar)