

CLS-5252 - Linear Stage with EDU

Linear stages of the CLS series were consistently designed for high availability applications in science and industry. They are equipped with SmarActs exchangeable drive units which guarantees easy access to the stage's core component, the piezo-drive. That makes servicing a very simple task. The drive unit can be exchanged without removing the complete device from the surrounding positioning setup. Additionally, their mounting hole pattern is perfectly matched to mount our rotation stages and goniometers. The smallest one of the CLS-52 linear stages offers a footprint of 52 x 52 mm, a travel range of 31 mm and an aperture of 9 mm in diameter. Furthermore, it is able to handle payloads of up to 20 N.

	Mechanical
Travel [mm]	31
Blocking Force [N]	≥ 3.5
Max. Normal Force [N]	20
Max. Lift Force [N]	> 1.0
Dimensions [mm]	52 x 52 x 14
Weight [g]	94
	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; Titanium base (-TI)
Performance Options	Higher blocking force (-D): +1.5 N
Vacuum Options	HV (1E-6 mbar); UHV (1E-11 mbar)
Non-Magnetic Option	Yes

Generated Spec Sheet: 03.11.2026 -
Copyright © 2026 SmarAct GmbH • All Rights Reserved.
SmarAct GmbH | Schuette-Lanz-Strasse 9 | 26135 Oldenburg | Germany T: +49 441 – 800 879 0 | Email: info-de@smaract.com