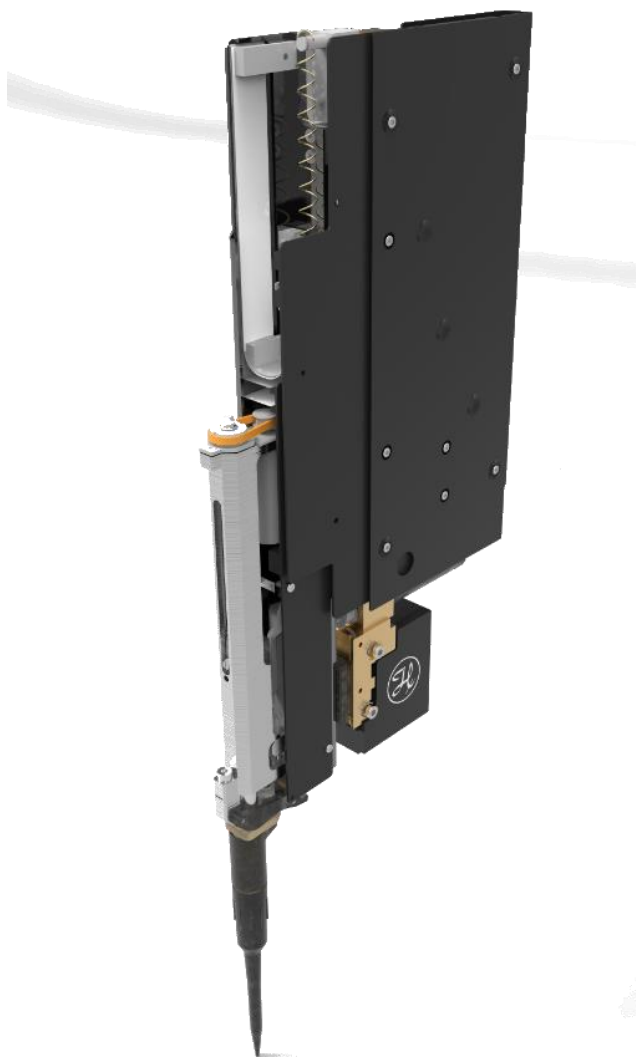


ZEUS 5 mL CO-RE 1.0



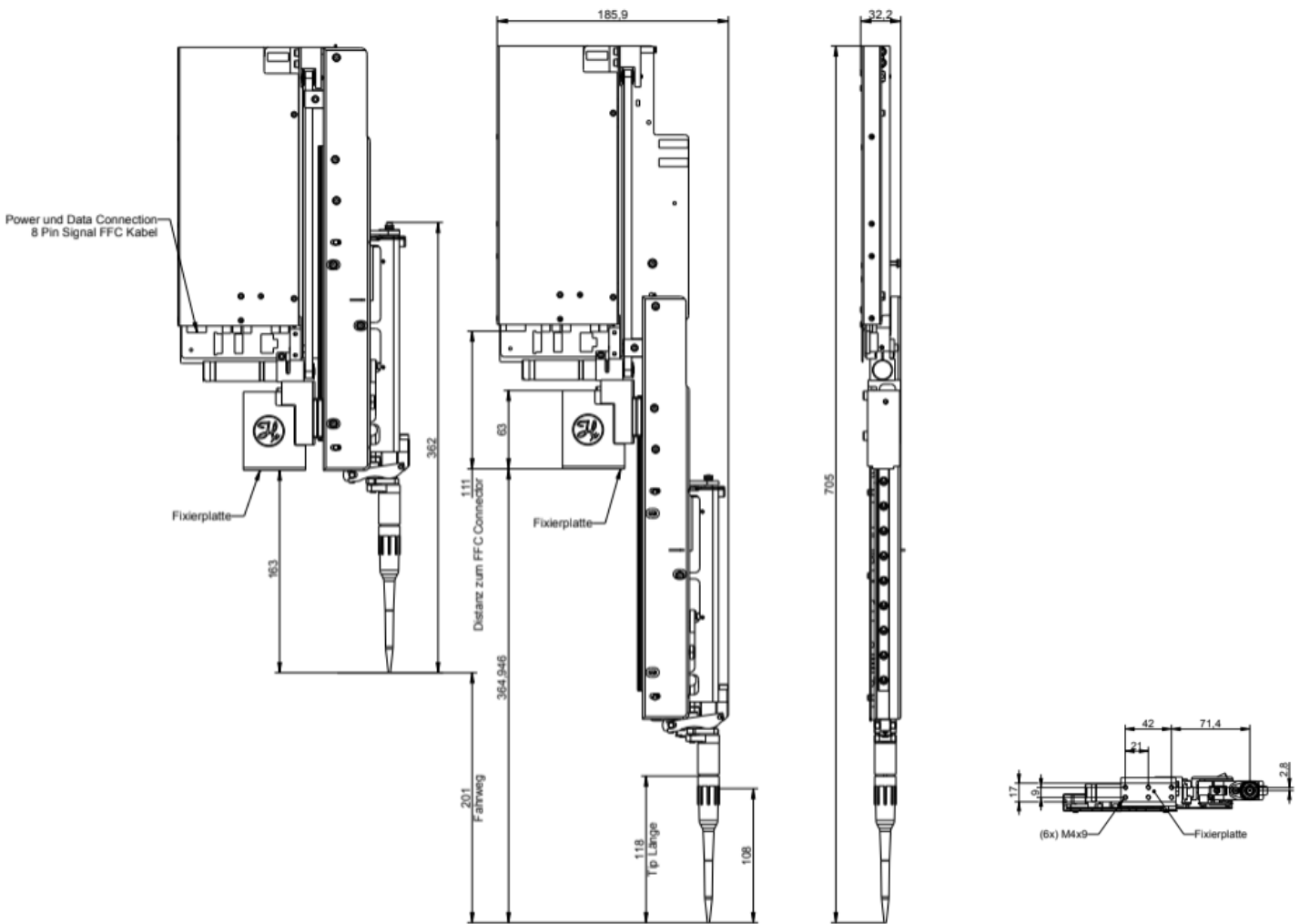
Hamilton ZEUS 5 mL Z-Excursion is a fully automated, self-contained, ready-to-go liquid handling module for integration in instruments requiring on-board pipetting.

ZEUS 5mL is based on Hamilton's revolutionary air-displacement pipetting technology and uses disposable tips to avoid carry-over.

The module is equipped with TADM (Total Aspiration and Dispensation Monitoring), MAD (Monitored Air Displacement), ADC (Anti-Droplet Control) technology to ensure successful pipetting. ZEUS 5mL can pipette volumes in the range of 10 μ L to 5000 μ L.



ZEUS Product Drawing and Dimensions in mm



Technical Data Sheet

Structure: Ability to pipette in 18 mm pattern (face to face). Distance between two modules side by side is 36 mm.

Z drive
 Maximum z-Excursion: Z max with tip \geq 145 mm above deck
 Resolution z-Axis: \leq 0.05 mm/step
 Maximum Speed: 128 mm/sec

Pipetting Drive
 Volume Range: 10-5000 uL
 Resolution: d-drive \leq 0.2 uL/step
 Maximum Speed: 5000 uL/sec

Pipetting Mode
 Single and aliquot dispensing

Single Dispense:

Volume [μ L]	Accuracy [%]	Precision [%]
10	\pm 8	<4
50	\pm 5	<2.5
500	\pm 2	<1.5
1000	\pm 1.5	<1
5000	\pm 1	<0.5

Aliquot:

Volume [μ L]	Accuracy [%]	Precision [%]
50	\pm 5	<3.5
500	\pm 2	<2.5

Process Security
 Tip presence sensor
 Pressure-based and capacitive Liquid Level Detection (cLLD and pLLD)
 On board Qualitative Pipetting Monitoring (QPM)
 Anti-Droplet Control (ADC)

Operating Data
 Power requirement: 40V \pm 5%
 Temperature range: 15°C-35°C
 Relative humidity: 30%-85% (non-condensing, indoors)
 Noise level: < 60 dBA
 In door use only

Storage and Transportation
 Temperature range: -25°C-+70°C
 Relative humidity: 40% - 80% (non-condensing, indoors)

Tip Pick-up
 CO-RE Technology

Communication
 CAN (Hamilton protocol)