

CAMAG LINOMAT 5



Sample application is the first step in the workflow of planar chromatography and it significantly affects the quality of the result. The choice of the application technique and the device depend on the requirements of precision, sample volumes, number of analyses and the desired grade of automation. With the microprocessor-controlled CAMAG Linomat 5 samples are sprayed onto TLC/HPTLC plates in the form of bands with nitrogen or compressed air. The CAMAG Linomat 5 is suitable for routine use.

Key features

- Software-controlled with visionCATS or operation in stand alone mode
- Semi-automatic sample application as narrow bands using the spray-on technique onto any layer
- Manual filling, inserting and rinsing of the syringe

WORLD LEADER IN
PLANAR CHROMATOGRAPHY

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BANDWISE SAMPLE APPLICATION IN THIN-LAYER CHROMATOGRAPHY

With the CAMAG Linomat 5 samples are sprayed onto the chromatographic layer in the form of narrow bands. This technique allows larger sample volumes to be applied than by contact transfer (spotting). While the solvent is almost completely evaporated in the process, the sample is concentrated on the layer surface into a narrow band of selectable length. Even of samples dissolved in rather polar solvents such as methanol or water compact and narrow zones are formed.

Starting zones sprayed on as narrow bands ensure the highest resolution attainable with any given planar chromatographic system.

Software-controlled operation

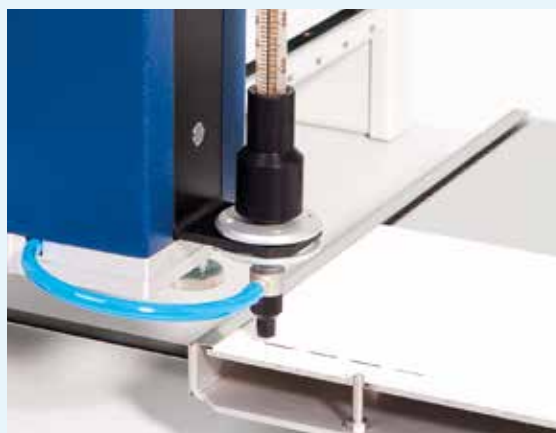
A software-controlled operation of the CAMAG Linomat 5 allows to rapidly enter all data on the sample sequence, plate dimensions, number and distance of tracks, designation, sample volumes. All operating data are automatically transferred to the densitometric or image processing evaluation step.

Operation in stand-alone mode

The CAMAG Linomat 5 can also be operated in stand-alone mode. Up to 10 application programs can be entered either manually via the keypad or transferred from a computer.

Advantages of sample application with the Linomat 5

- With the spray-on technique larger sample volumes can be applied than by contact transfer.
- For multi-level calibration different volumes of one standard solution can be applied without affecting precision.
- Also spiking of samples is possible, simply by over-spraying.
- Pre-chromatographic derivatization by over-spraying can be done as well with suitable reagents.



The sample liquid is sprayed onto the layer from the tip of the syringe needle. The stage movement is controlled so that the sample is uniformly distributed over the entire length of the band. Samples can also be sprayed-on as spots.



Separation of a test dye mixture on HPTLC silica gel; always CAMAG Test Dye III (from left) diluted 1:1 with hexane, toluene, or methanol respectively, contact spotting 2 μ L each, bandwise spray-on application of 6 μ L as 10 mm bands with Linomat 5; development with toluene. It can be seen that the result for contact spotting is strongly dependent on the solvent of the sample, whereas for bandwise spray-on application this is not the case. Furthermore, the separation is significantly improved.

Ordering Information

022.7808 CAMAG® Linomat 5

semi-automatic sample application system for bandwise, spray-on application of the sample onto the chromatographic layer, including one dosing syringe 100 μ L, without software winCATS or visionCATS, 90 - 230 V

Note: For operation the Linomat 5 requires external supply of compressed nitrogen (or air), which is not included.

028.0000 CAMAG® HPTLC Software visionCATS: Basic Version

Including access and control of all instruments - one server, one client; Instrument Diagnostics (xQ); analytical reports and access to HPTLC Method Library. Basic Version is not included in any Ultimate Package and needs to be purchased separately.

695.0014 Dosage syringe 100 μ L for Linomat

695.0015 Dosage syringe 500 μ L for Linomat

Before installing visionCATS, please visit www.camag.com/visionCATS for recommended system requirements and further information.

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