



www.IetLtd.com Proudly serving laboratories worldwide since 1979

CALL 001.847.913.0777 for Refurbished & Certified Lab Equipment

Shimadzu LC20AD

LC-20AD

Liquid Chromatographs



The LC-20AD offers the most stable solvent delivery performance in the world. With an automatic pulsation-correction mechanism and high-speed micro plunger drive, it achieves pulse-free solvent delivery. Improvements in solvent-delivery control firmware have significantly improved performance in the micro-flow-rate range below 50 $\mu\text{L}/\text{min}$

Features

Enhanced Solvent Delivery Specifications

Flow-rate accuracy and precision in the micro-flow rate region have been improved with the addition of a new type of check valve and modifications to the solvent delivery control method. Non-polar organic solvents such as hexane can be delivered stably.

Improved Durability

New and improved plunger seal materials ensure robust, long-lasting performance. A sapphire plunger optimized according to its crystal structure and a precise plunger-holding mechanism help increase the service life of plunger seals and enable stable solvent delivery over long periods.

Space-saving Designs

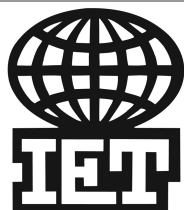
An optional low pressure gradient valve (LC-20AD/20AT), CBM-20Alite system controller, and a seal wash pump (LC-20AD) can now be installed inside the solvent delivery unit, enabling 4-solvent gradient elution in a compact space. The LC-20AB

high-pressure binary gradient pump delivers the performance of two LC-20AD pumps in one compact unit.

Specifications

	LC-20AD	LC-20AT	LC-20AB
Solvent delivery method	Parallel-type double plunger	Series-type double plunger	Parallel-type double plunger (2 sets)
Plunger capacity	10 μ L	Primary side: 47 μ L, Secondary side: 23 μ L	10 μ L
Maximum discharge pressure	40MPa		
Flow-rate setting range	0.0001 to 10.0000 mL/min.	0.001 to 10.000 mL/min.	0.0001 to 10.0000 mL/min.
Flow-rate accuracy	No more than 1% or 0.5 μ L/min., whichever is greater (0.01 to 2 mL/min.)	No more than 2% or 2 μ L/min., whichever is greater (0.01 to 5 mL/min.)	No more than 1% or 0.5 μ L/min., whichever is greater (0.01 to 2 mL/min.)
Flow-rate precision	0.3% max. (RSD: 0.1% max.)		
Pulsation	0.1 MPa (for water at 1.0 mL/min. and 7MPa)	0.3 MPa (for water at 1.0 mL/min. and 7MPa)	0.1 MPa (for water at 1.0 mL/min. and 7MPa)
Constant-pressure solvent delivery	Supported		
Plunger rinsing mechanism	Manual rinsing or automatic rinsing using optional product		
Safety measures	Liquid-leakage sensor, high-pressure/low-pressure limits		
Operating temperature range	4°C to 35°C		
Dimensions, weight	260 (W) x 140 (H) x 420 (D) mm, 10 kg	260 (W) x 140 (H) x 420 (D) mm, 11 kg	260 (W) x 140 (H) x 420 (D) mm, 13 kg
Power requirements	100 VAC, 150 VA, 50/60 Hz		100 VAC, 180

		VA, 50/60 Hz	
GRADIENT SYSTEM			
	LC-20AD/20AT, low-pressure GE specifications	LC-20AD/20AT, high-pressure GE specifications	LC-20AB
Gradient type	Low-pressure mixing	High-pressure mixing	
Number of mixed solvents	4 max.	2 or 3	2
Mixing concentration accuracy		0.5% max. (LC- 20AD), 1.0% max. (LC-20AT)	0.5% max.



www.IetLtd.com Proudly serving laboratories worldwide since 1979

CALL 001.847.913.0777 for Refurbished & Certified Lab Equipment