

ECP2010 ECP2010H

ANALYTICAL HPLC PUMP



This pump works as **isocratic** pump and together with **ECB2004B, ECB2004BP (ECB2007, ECB2007PC) Gradient Box with Degasser (without Degasser)** also as **gradient** pump.

ECB2004B, ECB2004BP (ECB2007, ECB2007PC) Gradient Box with Degasser (without Degasser) is equipped with **four way gradient mixing valve** and must be ordered together with the pump.

With a flow-rate of **0.02-10.00 ml/min.** and a pressure limit at **40 MPa (ECP2010) and 60 MPa (ECP2010H)** is this pump suited for **analytical** applications in liquid chromatography. It is designed with main and auxiliary pump heads connected in series with a piston diameter of 1/8".

New sophisticated unit allows achieving a precise **low-pressure gradient**, i.e. gradual changes of solvent composition by mixing **up to four liquids** at the pump's

entry. It is also possible to predefine percentage of composition when using the pump in isocratic mode. The gradient profile can be defined from a computer or manually using display and keypad.

There are many improvements which make pump more reliable, safe and precise. Also, maintenance is now easier. E.g. pistons exchange is easier because of new construction; new learning algorithm for **pulsation suppression**; leakage sensor etc.

When necessary, it is possible to use **back washing of pistons** (e.g. when using buffered mobile phase).

Pump is supported by **ECOMAC** and **Clarity** software.

SPECIFICATION

	ECP2010	ECP2010H
Part number	ACA0000X	ACF0000X
Flow-rate	0.02 – 10.00 ml/min.	
Pumping system	Two plungers dia. 1/8" connected in series	
Maximum operating pressure	40 MPa (5800 PSI, 400 bar)	60 MPa (8700 PSI, 600 bar)
Accuracy of flow-rate (1ml/min. 12MPa H2O)	± 2%	
Repeatability of flow-rate (1ml/min. 12MPa H2O)	± 0.5%	
Accuracy of pressure measurement	± 2%	
Gradient accuracy (AB 5-95%, 1 ml/min, 10MPa, ethanol)	± 1%**	
Adjustable lower pressure limit	0.0 – 39.0 MPa	0.0 – 59.0 MPa
Adjustable upper pressure limit	1.0 – 40.0 MPa	1.0 – 60.0 MPa
Number of gradient valves*	4 (A,B,C,D)	
Setting of components concentrations*	0.0 – 100.0 %	
Wetted materials	Stainless steel, sapphire, KEL-F, seals***	
Communication	RS232, Ethernet (LAN), USB	
Display, keypad	VFD 140x32 pixels, 10 pushbuttons	
Power supply	100-240V 50/60Hz 100VA	
Dimensions (w x h x d)	280 x 135 x 498 mm (11.02 x 5.12 x 18.23 in)	
Weight	10 kg (22lb)	

* Gradient functions are available with **box adjusted together with the pump in ECOM production.**

** According to used box.

*** Seals material: default is GFP (PTFE), recommended optimal seals material are UHMW-PE seals, ask for more information.