

# PN2100 Quaternary Gradient HPLC Pump



## High Performance Quaternary HPLC Gradient Pump

[www.postnova.com](http://www.postnova.com)

# Specification

## Flow rate:

micro: 0,02 - 4,00 mL/min  
analytical: 0,10 - 9,95 mL/min  
semi-preparative: 0,40 - 40,00 mL/min  
Pump heads available in stainless steel, PEEK or PVDF

## Pulsation:

less than 1%

## Pressure:

selectable on the display in MPa or psi  
range up to 40 MPa (6000 psi)

## Display:

large CFL backlight LCD display (240 x 128 dots)

## Compressibility:

Programmable 0,7 - 1,00 for compressibility correction

## Remote Control:

RS232 + Analog Control  
(flow, start, stop)

## Operation modes:

- constant flow or constant pressure
- programmable run time: 0 - 999,9 min
- programmable flow after the run time for continuously flushing of the system with reduced flowrate
- programmable flow ramp at start 1 - 999 s
- programmable flow ramp at stop 1 - 999 s
- programmable pressure control min. pressure, max. pressure, purge pressure

## Power supply:

230/110 V; 50/60 Hz

## Dimensions:

310 x 210 x 450 mm



## Postnova Analytics GmbH

Max-Planck-Str. 14  
86899 Landsberg am Lech/Germany  
Tel. : +49.8191.428-181  
Fax : +49.8191.428-175

## Postnova Analytics Inc.

230 South, 500 East, Suite # 120  
84102 Salt Lake City, UT/USA  
Tel. : +1.801.521-2004  
Fax : +1.801.521-2884

email : info@postnova.com  
web : www.postnova.com

# Quaternary Gradient Pump PN2100

The Quaternary Gradient Pump PN2100 combines the dual piston technology with its advantage of low pulsation and reliable operation. It uses short piston stroke technology and only two check valves. This results in the low pulsation of a dual piston pump combined with the reliability of a single piston pump. Difficulties with solvent delivery systems, caused mainly by malfunctioning of the valves are reduced. The working principle of the solvent delivery system is shown in Fig. 1.

The **delivery piston** of the standard analytical unit works with a 2 mm stroke length, the compensation piston with 1 mm. The nearly pulseless solvent delivery of the PN2100 results from the high stroke frequency and the use of the compensation piston. The two pistons are contra rotated installed.

According to the stream of eluent which is required, the built-in pump head is easily replaced with another pump head.

**Three different pump heads** are available and meet nearly every application where low flow rates and high pressures are required.

Micro : 0,02 - 4,00 mL/min  
Analytical : 0,10 - 9,95 mL/min  
Semi-preparativ: 0,40 - 40,00 mL/min

**All these pump heads** are available in different materials depending on the application. They can be made of stainless steel, PEEK, PVDF or titanium.

## Option:

Integrated efficient 4-channel on-line degasser with vacuum pressure display via LED, efficiency of degassing < 0,4 ppm oxygen per channel, maximum flow rate 10 mL/min for each degassing channel.

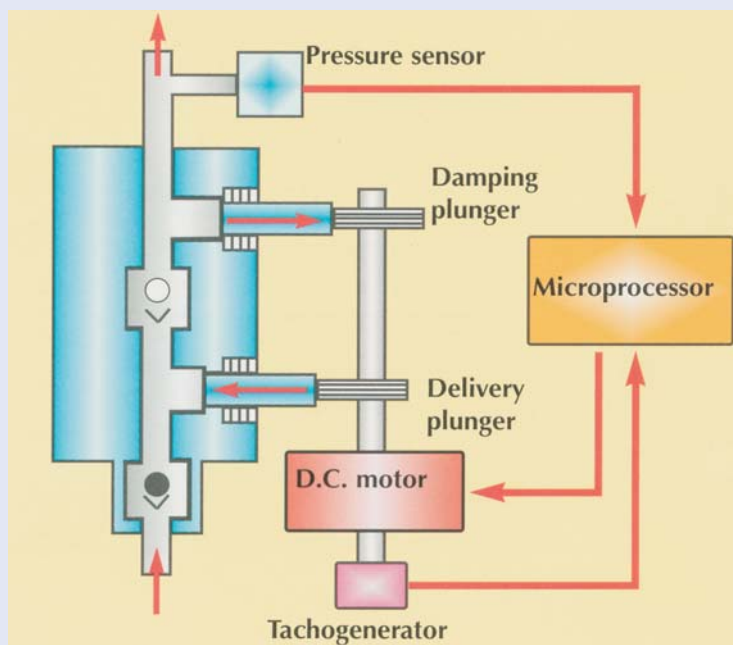


Fig. 1: Working principle of the solvent delivery system of the pump PN2100