

## Semi-micro HPLC Pump **PU-2085**



The JASCO Model PU-2085 is a compact semi-micro HPLC pump, ideal for low flow rate semi-micro and LC/MS applications as well as for high sensitivity analysis. The SSQD (Slow suction, Quick delivery) pumping system is ideal to assure the most reliable and pulse free solvent flow. In addition, the specially designed semi-micro delivery pump head provides extremely consistent solvent delivery and accurate gradient operations under low flow rate conditions. The PU-2085 can easily be interfaced with the JASCO HPLC system using the JASCO chromatography data systems. These packages offer full automation of all JASCO HPLC components including the PU-2085.

- **Compact-sized HPLC pump**  
 The size of the pump is a mere 15 cm wide and 15 cm high. Two pumps and other components can be stacked to comprise a system requiring minimal bench space in the crowded modern laboratory.
- **Excellent pump performance**  
 The SSQD (Slow suction, Quick delivery) pumping method ensures the most reliable, accurate and stable solvent delivery possible. A guaranteed flow rate precision within 0.1% assures excellent reproducibility of retention time. Pulse-free flow assures maximum detector sensitivity.
- **Semi-micro delivery head**  
 Semi-micro analysis is the most useful method when sample volumes are limited and is often the preferred method in the biochemical or pharmaceutical research environment. The PU-2085 allows low flow rates for 1 to 2 mm columns to reduce solvent consumption and disposal problems, providing accurate low flow rate binary gradient operation with 2 pumps.
- **Full programmability**  
 Stand alone front panel programming of 10 files with up to 64 steps/file is provided, eliminating the need for external computers or system controllers. Built-in program allows high pressure gradient operation by 2 pumps without the need for a system controller. Full PC control is available if desired and 3-solvent high pressure gradient by 3 pumps can be created and controlled by the JASCO chromatography data systems.



## SPECIFICATIONS

Type of pump:	SSQD method (Slow Suction-Quick Delivery)
Delivery mode:	Constant flow/constant pressure, selectable
<b>Constant flow mode</b>	
Flow rate range:	1 µL/min to 4.0 mL/min
Flow rate setting:	1 µL/min to 4.0 mL/min with 1 µL increments by ten key operations
Flow rate precision:	Less than 0.1% (Relative Standard Deviation) from 0.05 ~ 2.0 mL/min
Flow rate accuracy:	±1% of setting or ±2 µL/min whichever is greater at 0.05 ~ 2.0 mL/min, 35 MPa
Max. pressure:	50MPa (less than 2mL/min), 35MPa (more than 2mL/min)
<b>Constant pressure mode</b>	
Pressure range:	3 ~ 35MPa (more than 2mL/min), 3 ~ 50MPa (less than 2mL/min)
Pressure setting:	Adjustable in 0.1 MPa increments by ten key operation
Pressure limit:	Settable max, and min pressure limit in 0.1 MPa increments
Maximum pressure:	0 ~ 50 MPa
Minimum pressure:	0 ~ 50 MPa
Pressure sensor:	Flow through type strain-gauge transducer
<b>Others</b>	
Display:	Flow rate, pressure, etc are indicated on LCD.
Time programming:	64 steps, up to 10 files (maximum 999.9 min in 0.1 min increments)
Events output:	3 provided, time programmable
Automatic pump: on/off timer	Provided, 0 ~ 99.9 hours (0.1 hour increments)
Self-diagnostics:	Internal memory check, pressure sensor check, DC power supply check
Materials:	All materials in contact with solvent are ruby, sapphire, ceramic, stainless steel or fluorocarbon polymer
Plunger cleaning:	Provided as standard, automatic
Dimension:	150 (W) x 470 (D) x 150 (H) mm
Weight:	Approx. 10 kg
Power Input voltage:	AC100 ~ 240 V ±10% 50/60 Hz
Power consumption:	185 VA

## STANDARD ACCESSORIES

<b>Tubings</b>	
Inlet tube assy.	2 pcs
Tube, PTFE (for Drain)	1 pc
<b>Plungers cleaning components</b>	
Tubing assy.	2 pcs
<b>Fuses</b>	
Spare fuse	4 pc
AC power cable	1 p
<b>Tool</b>	
Seal pre-forming tool	1 set

## OPTIONAL ACCESSORIES

6778-H401A	Maintenance tool kit including SST tubings, compression screws, ferrules, PTFE tube, marker and recorder cables
6778-H402A	Tubing kit including wrenches, screwdrivers, plunger seal preforming tool
6843-J003B	Model MX-2080-32 Dynamic mixer
6783-H102A	Semi-micro chamber, 400µL for MX-2080-32
6783-H101A	Semi-micro chamber, 250µL for MX-2080-32
6841-J004B	Model DG-2080-54 Degasser, 4-solvent
6841-J003B	Model DG-2080-53 Degasser, 3-solvent
6844-J003B	Model LV-2080-03 6-solvent switching valve
6842-J003B	Model HV-2080-01 2-column Switching selector valve
6688-H563A	LC-Net AG cable
6688-H564A	LC-Net CG cable

## ORDERING INFORMATION

6820-J002A	Model PU-2085	Semi-micro HPLC Pump
6818-J002B	Model PU-2080	HPLC Pump
6823-J003B	Model PU-2089	Quaternary HPLC Pump
6821-J002B	Model PU-2086	Semi-preparative HPLC Pump
6822-J002B	Model PU-2087	Preparative HPLC Pump
6819-J002B	Model PU-2080i	Bio-inert HPLC Pump
6823-J004B	Model PU-2089i	Bio-inert Quaternary HPLC Pump
6824-J002B	Model UV-2070	UV/VIS Detector
6825-J002B	Model UV-2075	UV/VIS Detector
6826-J002B	Model UV-2077	Multi-wavelength UV/VIS Detector
6832-J002B	Model MD-2015	Diode Array Detector
6831-J002B	Model MD-2010	Diode Array Detector
6829-J003B	Model FP-2020	Fluorescence Detector
6833-J002B	Model RI-2031	Refractive Index detector
6838-J002B	Model CD-2095	Circular Dichroism Detector
6837-J002B	Model OR-2090	Chiral Detector
6836-J002B	Model CL-2027	Chemiluminescence Detector
6828-J008B	Model AS-2059	Autosampler
6827-J005B	Model AS-2055	Autosampler
6827-J006B	Model AS-2057	Autosampler
6834-J002B	Model CO-2060	Column Oven
6835-J002B	Model CO-2065	Column Oven

● Specifications are subject to change without notice.



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