

S 9432 Binary High - Pressure Gradient Pump

The Schambeck SFD GmbH Pump HPLC System is intended for the ambitious analyst. The system configuration is highly variable and several upgrade options make this system suitable for the whole range of analytical applications.

The HPLC Pump System is a very flexible and powerful HPLC solvent delivery system. Its modular setup makes the HPLC Pump System one of the most versatile pump systems on the market.



The S 9432 Binary - High Pressure Gradient Pump incorporates two pump systems with an optional Active High Pressure Mixer with adjustable chamber volume.

An optional integrated vacuum degasser removes dissolved gases in the eluents and prevents air bubbles in the system. The system is available with Micro, Analytical or Preparative pump head in Stainless Steel or PEEK.

The S 9432 Binary - High Pressure Gradient Pump is delivered in a slightly larger housing than HPLC Pump S 9425 (see technical specifications). The size of the pump housing is adapted to the two different auto samplers (60 vials or 120 vials).

Stepper Motor

The S 9432 Binary - High Pressure Gradient Pump is driven by high - power stepper motors. The stepper motor has a much better resolution in the low - flow range than a conventional DC motor.

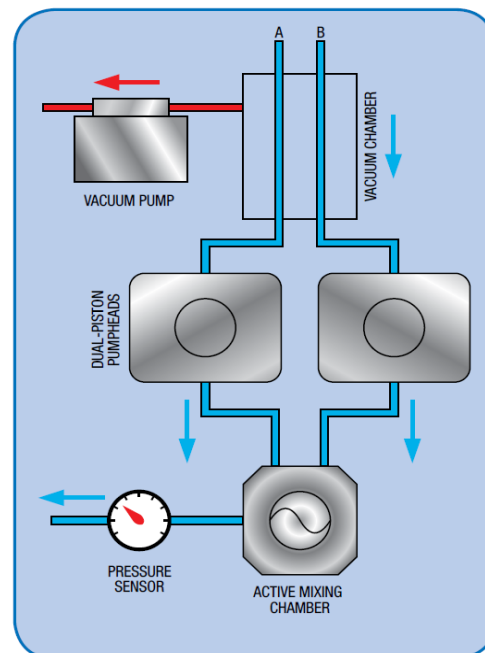


Figure: Flow chart S 9432

Dual-Piston Pump head

The S 9432 Binary - High Pressure Gradient Pump use a dual-piston pump head for low pulsation. Together with electronic pressure compensation the pumps are suitable for all analytical tasks in HPLC and GPC.

Optional: Active High Pressure Mixer

Inside the S 9432 Binary - High Pressure Gradient Pump is (Optional) an integrated Active High Pressure Mixer to achieve highly precise and accurate gradient.

Optional: Integrated 2 Channel Vacuum Degasser

Inside the S 9432 Binary - High Pressure Gradient Pump is (optional) an integrated 2 Channel Vacuum Degasser to remove dissolved gases in the eluents and prevents air bubbles in the system.

Optional: Active Piston Back flushing

The S 9432 Binary - High Pressure Gradient Pump heads incorporates an optional active piston back flushing system; this system is interchangeable with old Schambeck SFD GmbH pumps and does not require an additional motor

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Stepp Motor

The HPLC pumps are driven by a high power stepper motor. The stepper motor has a much better resolution in the low - flow range than a conventional DC motor.

Lubrication

The HPLC pumps camshaft is constantly lubricated within a sealed chamber to guarantee long lifetime and low maintenance.

Optional:

Active Piston Back flushing

The HPLC pump head incorporates an automatic piston back flushing system. This system is interchangeable with older Schambeck SFD GmbH pumps and does not require an additional motor.

Dual-Piston Pump head

The HPLC pumps use a dual-piston Pump head for low pulsation. Together with electronic pressure compensation the HPLC pumps are suitable for all analytical tasks in HPLC and GPC.

Figure: Pump mechanic S 9432

Technical Specifications*

Wetted Materials:	Stainless Steel / PEEK*, Teflon AF®, PVDF, Ceramics, Sapphire, Ruby
Flow Rate:	Programmable
	Micro: 0.001 - 2.000 ml/min.
	Analytical: 0.001 - 10.000 ml/min.
	Preparative: 0.100 - 40.000 ml/min.
Mixer Volumen:	Adjustable from 10 – 500 µl
Flow Accuracy:	± 1.0 % 1.000 ml/min.
Flow Precision:	± 0.1 % RSD 1.000 ml/min.
Pressure Range:	0 – 40 MPa (0 – 6000 PSI)
Pressure Pulsation:	typical < 0.1 MPa or < 1.0 %
Compressibility Compensation:	user-adjustable for different solvents
Dimensions (W x H x D):	S 9432 396 x 165 x 478 mm (larger housing)
Power Supply:	100 - 250 ~V (47 - 63 Hz)

* depending on configuration

S 9432 Binary High - Pressure Gradient Pump

Order Information S 9432 Binary High - Pressure Gradient Pump

Part-No.:	Description:
S9432BSM	S 9432 Binary High - Pressure Gradient Pump – Stainless Steel – Micro
S9432BPM	S 9432 Binary High - Pressure Gradient Pump – PEEK – Micro
S9432BSA	S 9432 Binary High - Pressure Gradient Pump – Stainless Steel – Analytical
S9432BPA	S 9432 Binary High - Pressure Gradient Pump – PEEK – Analytical
S9432BSP	S 9432 Binary High - Pressure Gradient Pump – Stainless Steel – Preparative
S9432BPP	S 9432 Binary High - Pressure Gradient Pump – PEEK – Preparative
S9432-01	Option: Integrated 2 Channel Vacuum Degasser
S9432-02	Option: Integrated Active High Pressure Mixer
S9425-02	Option: Integrated Active Piston Back Flushing System

Order Information Solvent bottle rack

Part-No.:	Description:
SBR1	Solvent bottle rack include 1000 ml glas bottle

Order Information Spare Parts Pump S 9432

Part-No.:	Description:
2020019	Ceramic Piston - Micro
2410020	Primary Piston Seal - Micro, grey
2410021	Secondary Piston Seal - Micro, white
2020018	Ceramic Piston - Analytical
2410015	Primary Piston Seal - Analytical, grey
2410016	Secondary Piston Seal - Analytical, white
2020020	Ceramic Piston - Preparative
2410018	Primary Piston Seal - Preparative, grey
2410019	Secondary Piston Seal - Preparative, white