

S 9425 and S 9430 Quaternary Low - 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 Pumps S 9425 and S 9430 are available as Quaternary Low - Pressure Gradient Pump and also as Isocratic High - Pressure Pump (see flyer S 9425 and S 9430 Isocratic High - Pressure Pump).

The S 9425 and S 9430 Quaternary Low - Pressure Gradient Pump is available with Micro, Analytical or Preparative pump head in Stainless Steel or PEEK. The S 9425 Quaternary Low - Pressure Gradient Pump is delivered in a small housing. The S 9430 Quaternary Low - Pressure Gradient Pump is delivered in a slightly larger housing (see technical specifications). The size of the pump housing are adapted to the two different auto samplers (60 vials or 120 vials).

Mixer-Synchronization

Inside the Quaternary Gradient Pump S 9425 and S 9430 a low - pressure gradient mixer is synchronized with the piston stroke to achieve highly precise and accurate gradient results.

Stepper Motor

The S 9425 and S 9430 Quaternary Low - Pressure Gradient Pump are driven by high - power stepper motors. The stepper motor has a much better resolution in the low - flow range than a conventional DC motor.

Lubrication

The S 9425 and S 9430 Quaternary Low - Pressure Gradient Pump camshafts are constantly lubricated within a sealed chamber to guarantee long lifetime and low maintenance.

Dual-Piston Pump head

The S 9425 and S 9430 Quaternary Low - 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: Piston Back Flushing

The S 9425 and S 9430 Quaternary Low - 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.

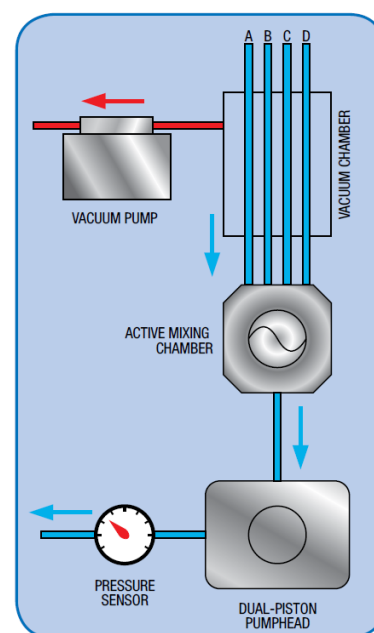


Figure: S 9425 and S 9430 Quaternary Gradient Modul

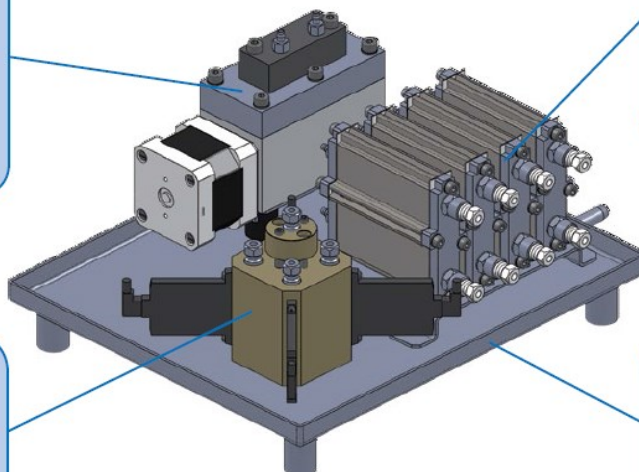
S 9425 and S 9430 Quaternary Low - Pressure Gradient Pump

Vacuum Pump

The Quaternary Gradient Module features an integrated vacuum pump for online degassing. The advanced Teflon membrane guarantees a long lifetime and maximum chemical compatibility.

Vacuum Chamber

The Quaternary Gradient Module's 4 vacuum chambers are fitted with high efficiency Teflon AF® tubing's for low volume and increased degassing efficiency.



Active Mixer

The Quaternary Gradient Module incorporates an active mixer with adjustable volume for optimized gradient mixing.

Secure Assembly

The Quaternary Gradient Module is assembled on a stainless steel tray with a separate drain to protect the instrument in case of leakages.

Figure: S 9425 and S 9430 Quaternary Low Pressure Gradient Modul

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 Volume:	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 9425 310 x 165 x 478 mm (small housing) S 9430 396 x 165 x 478 mm (large housing) The size of the pump housing are adapted to the two different auto samplers (60vials or 120 vials).
Power Supply:	100 - 250 ~V (47 - 63 Hz)

* depending on configuration

Order Information S 9425 Quaternary Low Pressure Gradient Pump (small housing)

Part-No.:	Description:
S9425GSM	S 9425 Quaternary Low Pressure Gradient Pump – Stainless Steel – Micro
S9425GPM	S 9425 Quaternary Low Pressure Gradient Pump – PEEK – Micro
S9425GSA	S 9425 Quaternary Low Pressure Gradient Pump – Stainless Steel – Analytical
S9425GPA	S 9425 Quaternary Low Pressure Gradient Pump – PEEK – Analytical
S9425GSP	S 9425 Quaternary Low Pressure Gradient Pump – Stainless Steel – Preparative
S9425GPP	S 9425 Quaternary Low Pressure Gradient Pump – PEEK – Preparative
S9425-02	Option: Integrated Active Piston Back Flushing System

Order Information S 9430 Quaternary Low Pressure Gradient Pump (large housing)

Part-No.:	Description:
S9430GSM	S 9430 Quaternary Low Pressure Gradient Pump – Stainless Steel – Micro
S9430GPM	S 9430 Quaternary Low Pressure Gradient Pump – PEEK – Micro
S9430GSA	S 9430 Quaternary Low Pressure Gradient Pump – Stainless Steel – Analytical
S9430GPA	S 9430 Quaternary Low Pressure Gradient Pump – PEEK – Analytical
S9430GSP	S 9430 Quaternary Low Pressure Gradient Pump – Stainless Steel – Preparative
S9430GPP	S 9430 Quaternary Low Pressure Gradient Pump – PEEK – Preparative
S9425-02	Option: Integrated Active Piston Back Flushing System

Order Information Quaternary Low Pressure Gradient Pump Quaternary Pump

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

Order Information Solvent bottle rack

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