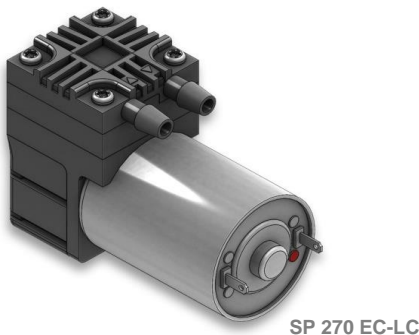
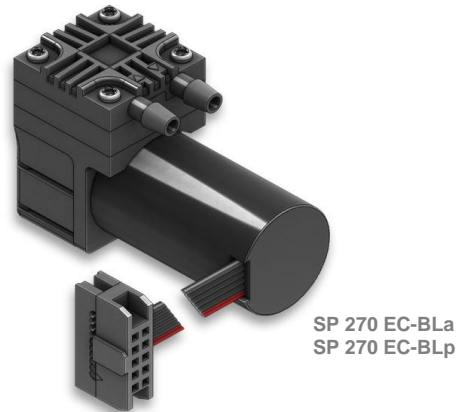




SP 270 EC



SP 270 EC-LC

SP 270 EC-BLa
SP 270 EC-BLp

We care.

Customised Pumps - No Additional Costs!

Product Features

- Micro diaphragm pump for gases
- Applicable as vacuum or pressure pump
- FCV technology (fast closing valves)
- Available in common supply voltages
- From low-cost to durable brushless drives
- Low weight and very small size
- Applicable for noise- and vibration-sensitive environments (i.e. hospitals, personal protection equipment, etc.)
- Installation in any mounting orientation allows simple device integration
- Leak-tight, oil-free and maintenance-free

Application Examples

Particularly suitable for portable devices such as:

- Air sampling
- Gas sniffer
- Breath gas analysis
- Gas monitoring
- Personal gas detectors
- Exhaust analyzers
- Pneumatics
- Pipetting devices
- Fuel cells

and many more...

Customisation

- We offer your customised precision pump without additional costs - even for small batches
- Our modular concept allows easy adaptations
- Outstanding quality - Made in Germany
- Excellent technical consultation and service by experts
- More than 40 years experience in pump applications
- Manifold mounting
- Fast delivery - order your sample now!



Schwarzer
Precision

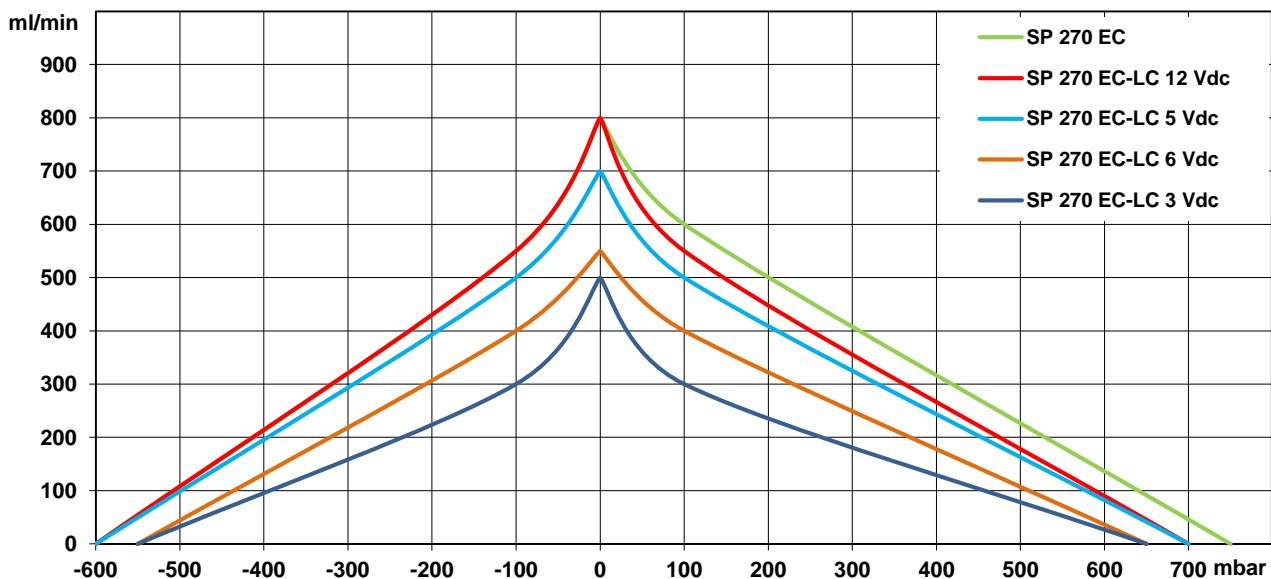
Am Lichtbogen 7 • 45141 Essen • Germany
Phone: +49 201 31697-0 • Fax: +49 201 31697-29
e-mail: info@schwarzer.com • <http://www.schwarzer.com>



The pumps listed below represent a typical selection of our wide range of eccentric pumps and are intended for initial tests. **Customised versions** for your individual application would be made without additional costs - please contact us! All flow values given under norm conditions (according to DIN 1343). Optional materials can cause deviating performance values.

Designation	SP 270 EC			SP 270 EC-LC			
Operating Voltage [Vdc]	3	5	12	3	5	6	12
Art.No.	7s20097	7s20098	7s20099	7s20093	7s20094	7s20095	7s20096
Pneumatic Performance							
Free Flow [ml/min]	800	800	800	500	700	550	800
Pressure Side							
Flow at 100 mbar [ml/min]	600	600	600	300	500	400	550
max. Pressure [mbar]	750	750	750	650	700	650	700
Vacuum Side							
Flow at -100 mbar [ml/min]	550	550	550	300	500	400	550
max. Vacuum [mbar]	-600	-600	-600	-550	-600	-550	-600
Motor / Power Consumption							
Standard Motor Type	skew wound / sintered bearings			iron core / sintered bearings			
max. Nominal Current [mA]	150	120	60	150	130	90	60
Optional Motor Type	ball bearings			-			
Construction							
Pump Head	standard				PPS		
	optional				manifold mounting, customer specific - upon request		
Diaphragm, Valves	standard				EPDM		
	optional				FKM		
Weight [g]	27			24			

Performance Curves

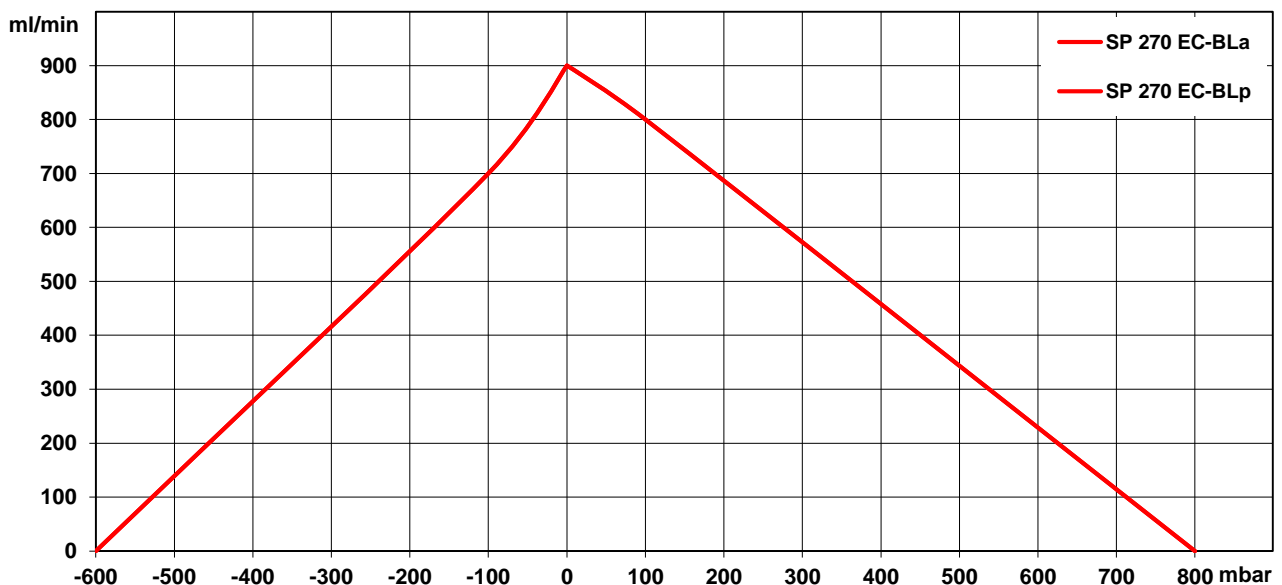




The pumps listed below represent a typical selection of our wide range of eccentric pumps and are intended for initial tests. **Customised versions** for your individual application would be made without additional costs - please contact us! All flow values given under norm conditions (according to DIN 1343). Optional materials can cause deviating performance values.

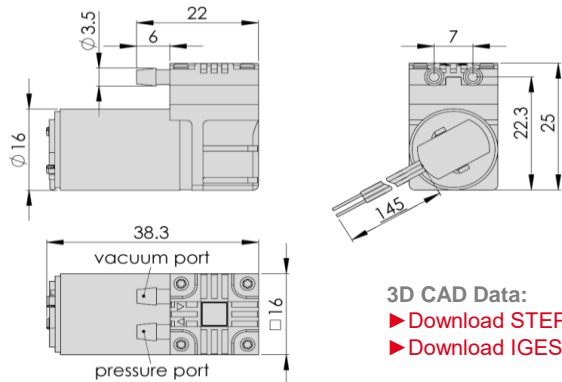
Designation	SP 270 EC-BLa	SP 270 EC-BLp
Operating Voltage [Vdc]	12	12
Art.No.	7s20100	7s20101
Pneumatic Performance		
Free Flow [ml/min]	900	900
Pressure Side		
Flow at 100 mbar [ml/min]	800	800
max. Pressure [mbar]	800	800
Vacuum Side		
Flow at -100 mbar [ml/min]	700	700
max. Vacuum [mbar]	-600	-600
Motor / Power Consumption		
Standard Motor Type	brushless, analog control / ball bearings	brushless, PWM control / ball bearings
max. Nominal Current [mA]	120	120
Optional Motor Type	-	-
Construction		
Pump Head	standard optional	PPS manifold mounting, customer specific - upon request
Diaphragm, Valves	standard optional	EPDM FKM
Weight [g]	23	23

Performance Curves



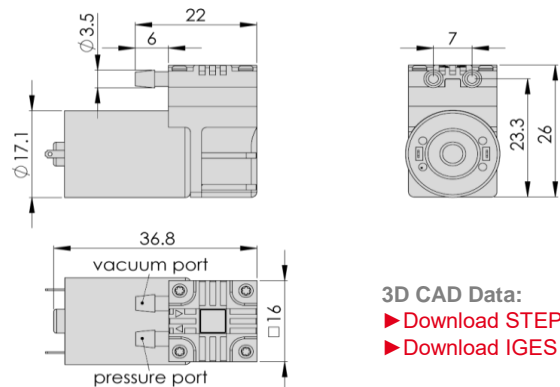


SP 270 EC



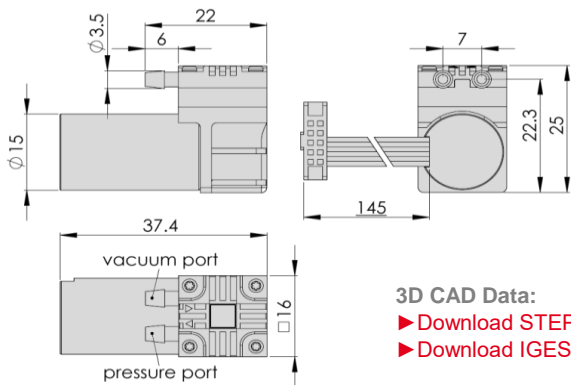
3D CAD Data:
▶ Download STEP
▶ Download IGES

SP 270 EC-LC



3D CAD Data:
▶ Download STEP
▶ Download IGES

SP 270 EC-BLa / -BLp



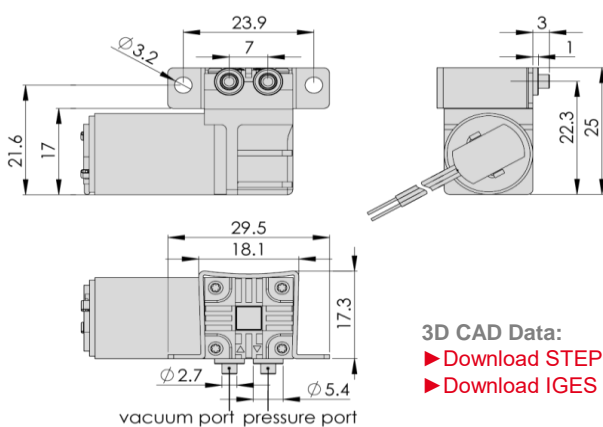
3D CAD Data:
▶ Download STEP
▶ Download IGES

Standard: connection ports as shown
Optional: 3 other port positions possible

You can also download the 3D CAD data on the SP website:

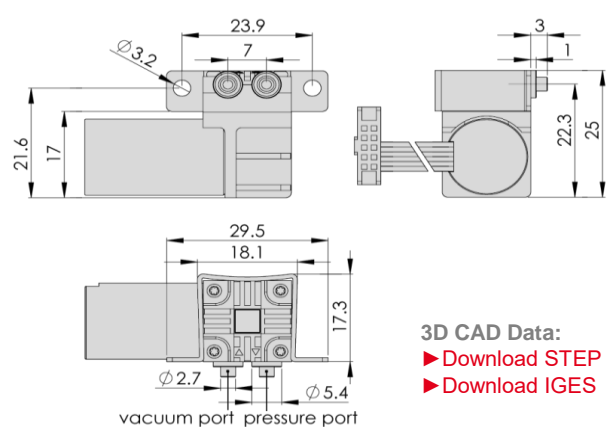
▶ www.schwarzer.com/download

Optional: SP 270 EC with Manifold Mounting



3D CAD Data:
▶ Download STEP
▶ Download IGES

Optional: SP 270 EC-BLa / -BLp with Manifold Mounting

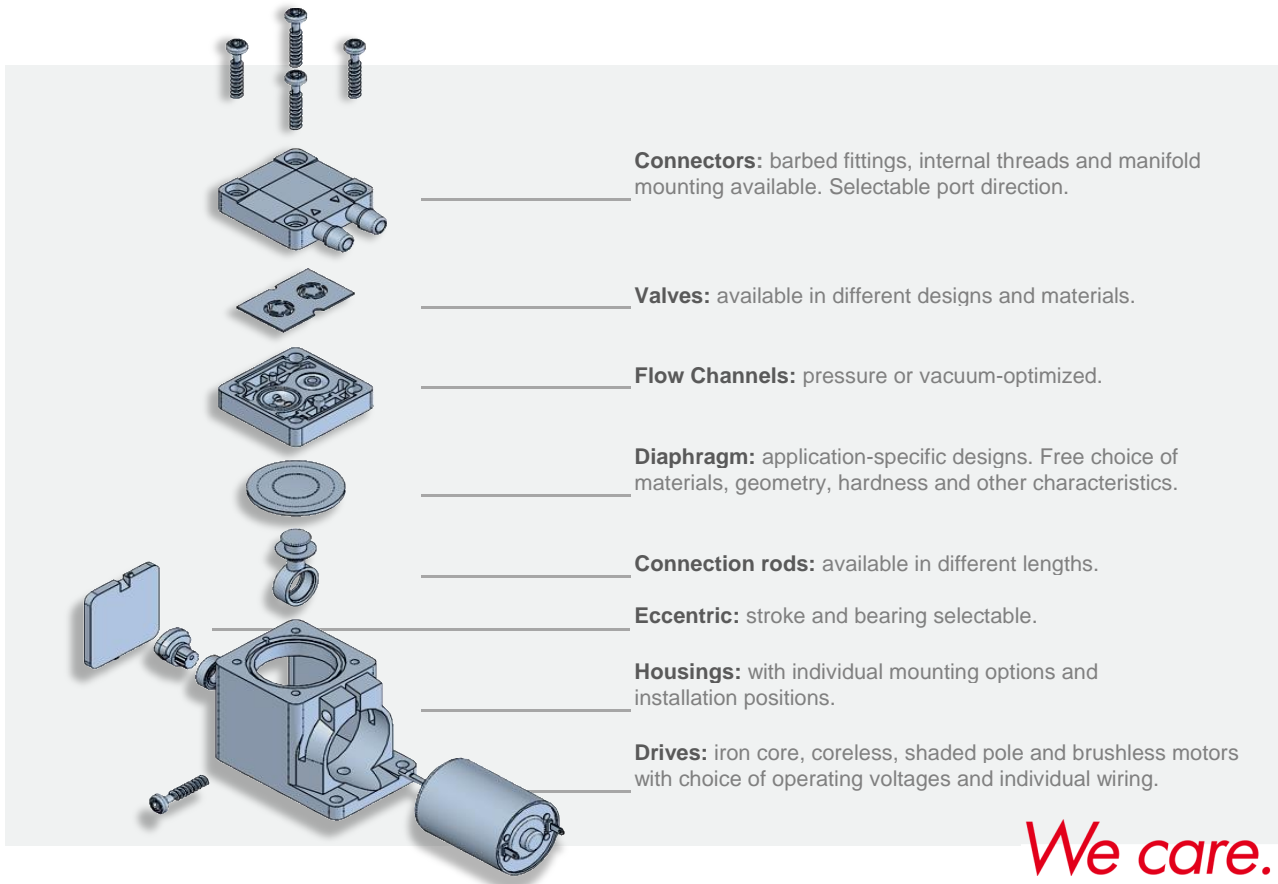


3D CAD Data:
▶ Download STEP
▶ Download IGES



Customising Examples

Customising without compromises is extremely important to us. We develop precision pumps in direct collaboration with our customers - with all parameters exactly adapted to the respective application. Thanks to the modular pump design, this is done without added development-related costs! We develop the ideal pump for you. Uncompromising and reliable.



Installation Notes

In order to minimise noise and vibration we recommend securing the pump in one of the following ways:

- with rubber mounting (see "Accessories")
- with padded double sided adhesive tape
- with Velcro (hook and loop) tape for easy assembly and service
- Put the pump in a box lined with foam. Motor wires and tubing for the pump can lead through a hole in the side of the box.

Accessories

Schwarzer Precision offers a comprehensive portfolio of pump accessories such as:

- mountings
- silencers + filters
- electronics
- check valves + pressure switches

For further information please consider the accessories data sheet or contact us for technical consultation.

► [Download PDF "Accessories"](#)

You can also download the PDF "Accessories" on our website: ► www.schwarzer.com/accessories