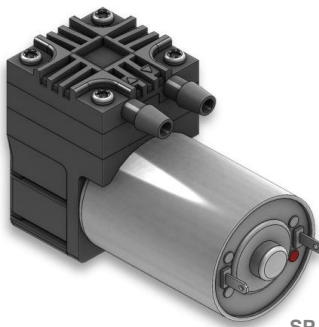
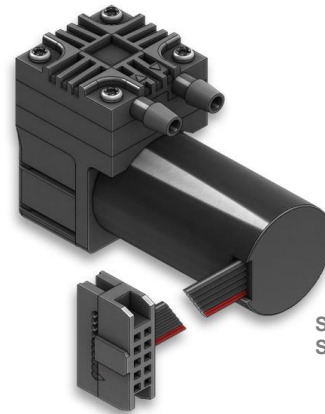


SP 270 EC



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!

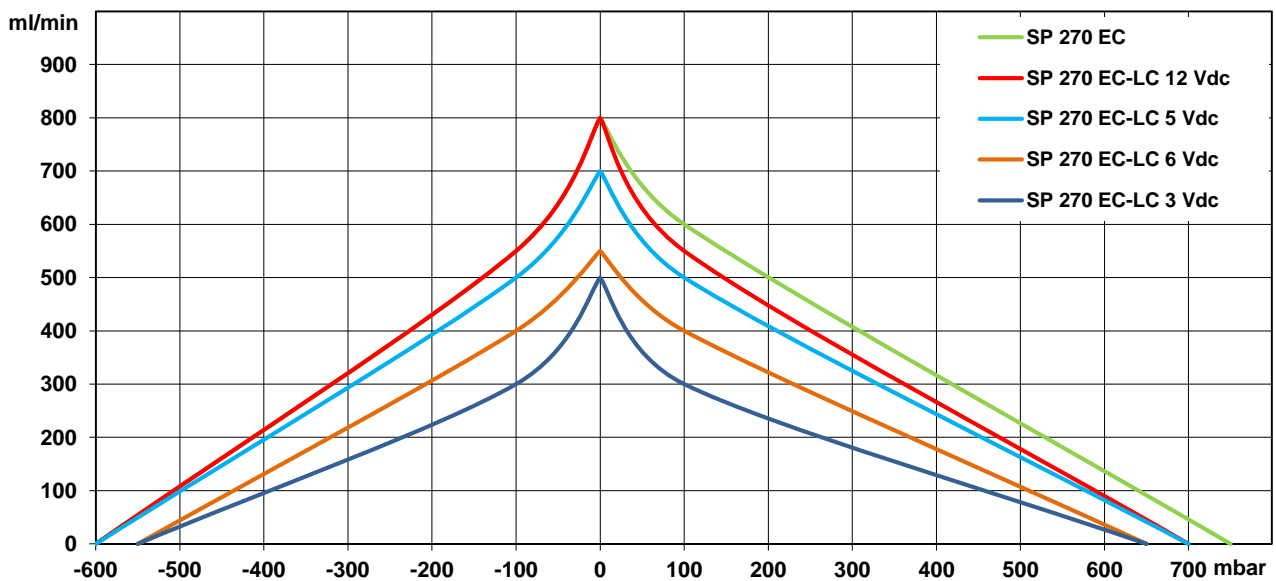




The pumps listed below represent a typical selection of our wide range of eccentric pumps and are intended for initial tests. **Customised versions** for your individual application would be made without additional costs - please contact us! All flow values given under norm conditions (according to DIN 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
<b>Pneumatic Performance</b>							
Free Flow [ml/min]	800	800	800	500	700	550	800
<b>Pressure Side</b>							
Flow at 100 mbar [ml/min]	600	600	600	300	500	400	550
max. Pressure [mbar]	750	750	750	650	700	650	700
<b>Vacuum Side</b>							
Flow at -100 mbar [ml/min]	550	550	550	300	500	400	550
max. Vacuum [mbar]	-600	-600	-600	-550	-600	-550	-600
<b>Motor / Power Consumption</b>							
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			-			
<b>Construction</b>							
Pump Head	standard				PPS		
	optional				manifold mounting, customer specific - upon request		
Diaphragm, Valves	standard				EPDM		
	optional				FKM		
Weight [g]	27			24			

## Performance Curves

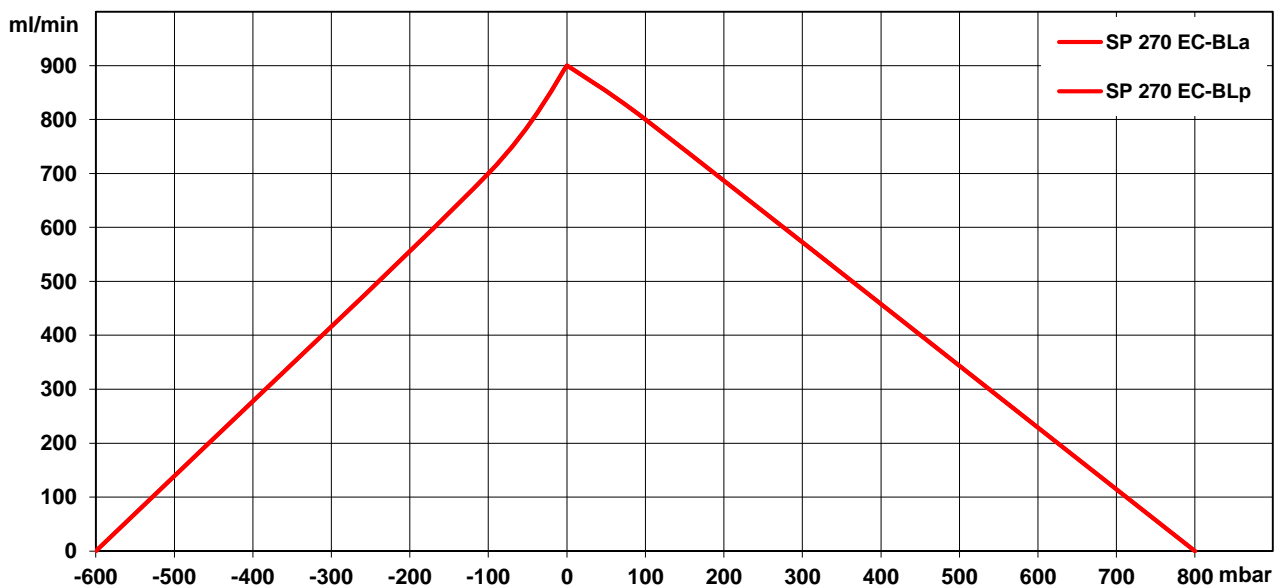




The pumps listed below represent a typical selection of our wide range of eccentric pumps and are intended for initial tests. **Customised versions** for your individual application would be made without additional costs - please contact us! All flow values given under norm conditions (according to DIN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

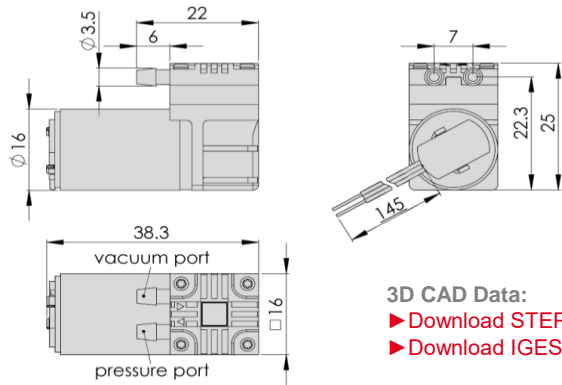
Designation	SP 270 EC-BLa	SP 270 EC-BLp
Operating Voltage [Vdc]	12	12
Art.No.	7s20100	7s20101
<b>Pneumatic Performance</b>		
Free Flow [ml/min]	900	900
<b>Pressure Side</b>		
Flow at 100 mbar [ml/min]	800	800
max. Pressure [mbar]	800	800
<b>Vacuum Side</b>		
Flow at -100 mbar [ml/min]	700	700
max. Vacuum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

**Performance Curves**



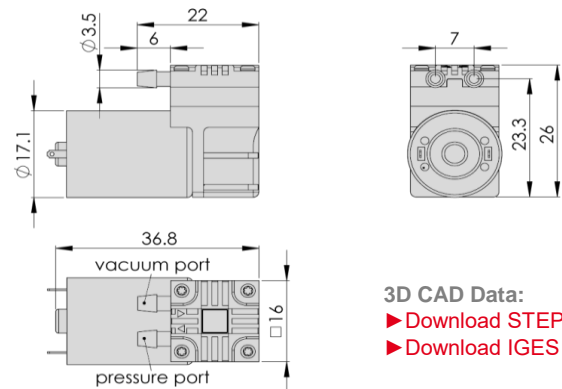


### SP 270 EC



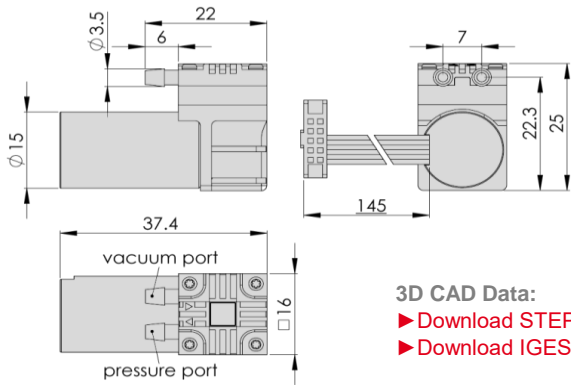
3D CAD Data:  
 ▶ Download STEP  
 ▶ Download IGES

### SP 270 EC-LC



3D CAD Data:  
 ▶ Download STEP  
 ▶ Download IGES

### SP 270 EC-BLa / -BLp

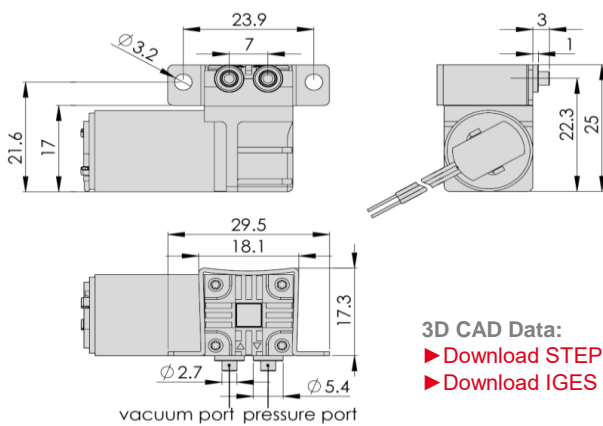


3D CAD Data:  
 ▶ Download STEP  
 ▶ Download IGES

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

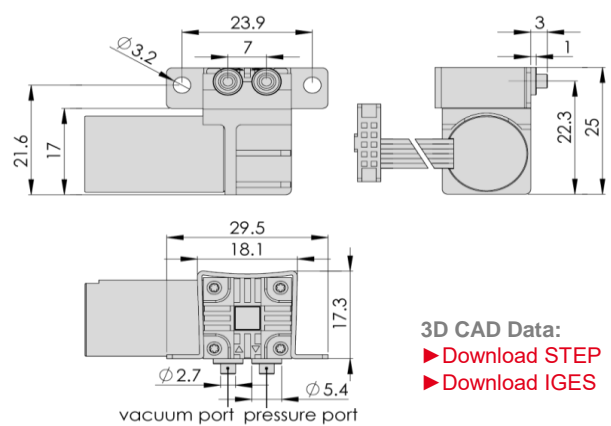
You can also download the 3D CAD data on the SP website:  
 ▶ [www.schwarzer.com/download](http://www.schwarzer.com/download)

### Optional: SP 270 EC with Manifold Mounting



3D CAD Data:  
 ▶ Download STEP  
 ▶ Download IGES

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

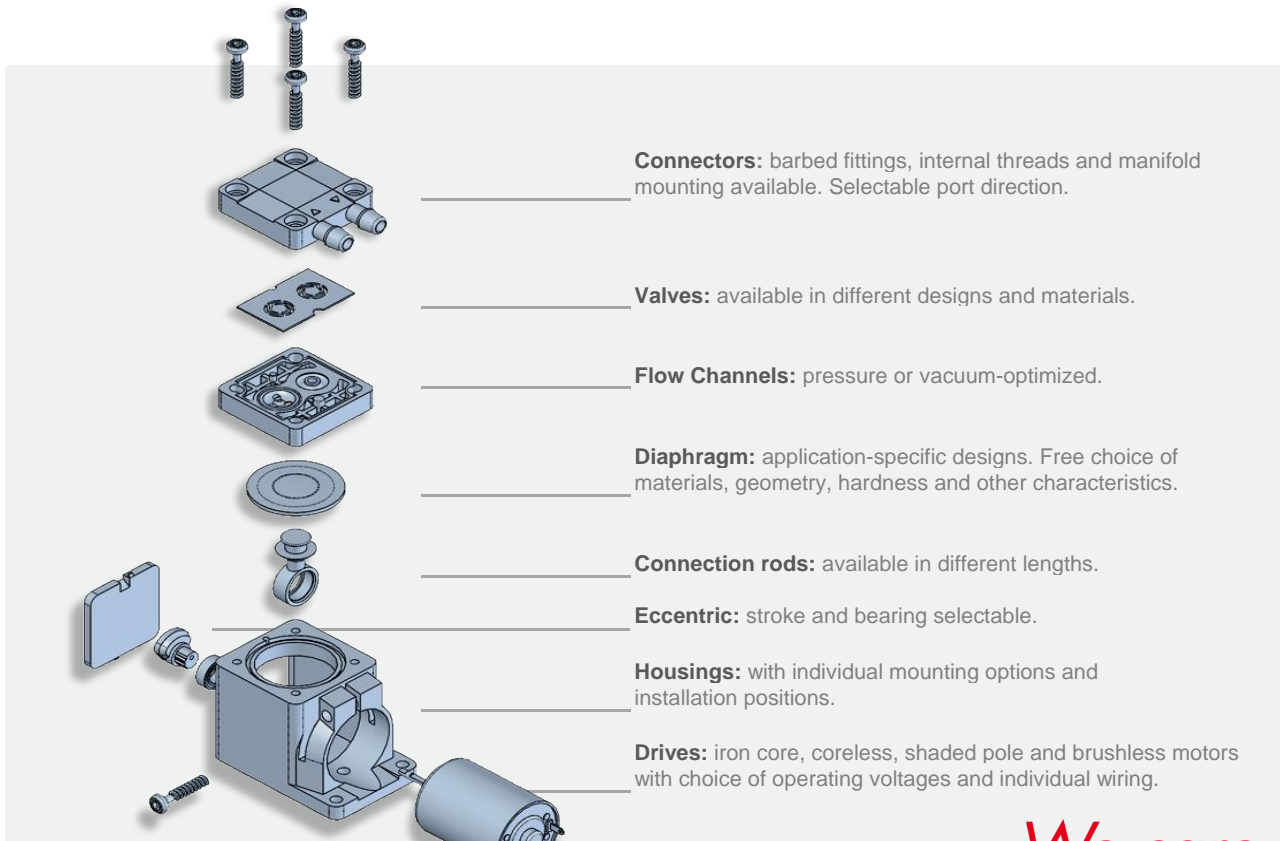


3D CAD Data:  
 ▶ Download STEP  
 ▶ Download IGES



### 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.



*We care.*

### 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