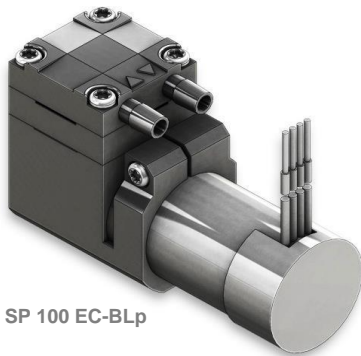


SP 100 EC



SP 100 EC-BLp



SP 100 EC-LC

## We care.

Customised Pumps - No Additional Costs!

### Product Features

- Micro diaphragm pump for gases
- Applicable as vacuum or pressure pump
- Optimized for battery powered devices
- From low-cost to durable brush-less drives
- Low weight and extremely 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
- Negative pressure wound therapy (NPWT)
- Pipetting devices

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!

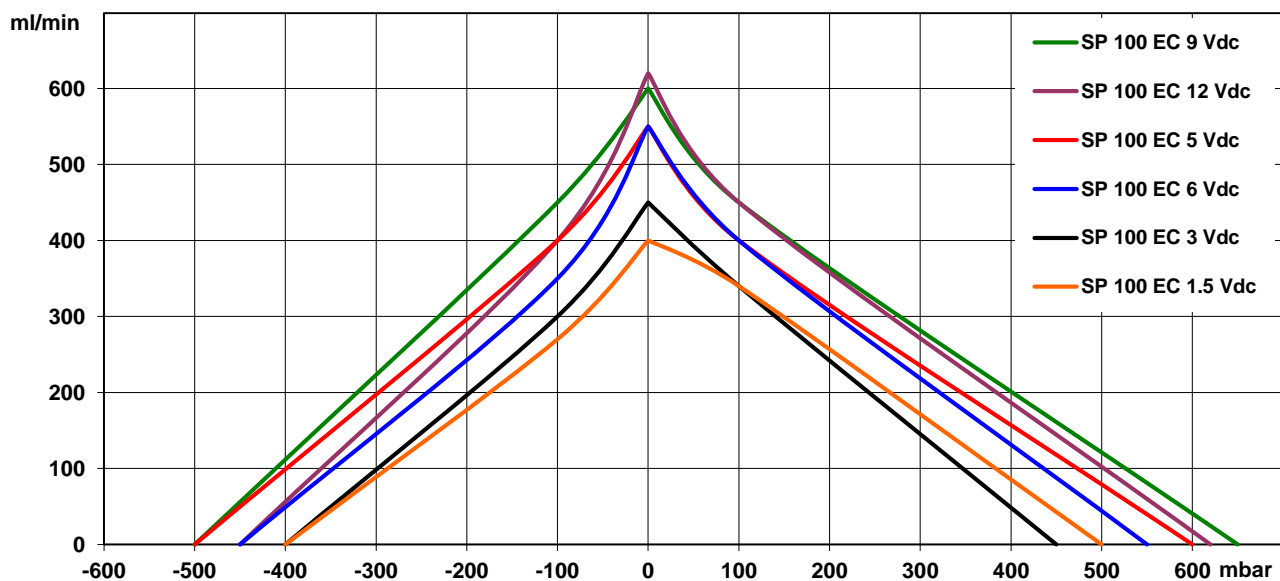




The pumps listed below represent a typical selection of our wide range of eccentric pumps and are intended for initial tests. **Customised versions** for your individual application would be made without additional costs - please contact us! All flow values given under norm conditions (according to DIN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

Designation		SP 100 EC					
Operating Voltage [Vdc]		1.5	3	5	6	9	12
Art. No.		7s50170	7s50171	7s50172	7s50173	7s50174	7s50175
<b>Pneumatic Performance</b>							
Free Flow [ml/min]		400	450	550	550	600	620
<b>Pressure Side</b>							
Flow at 100 mbar [ml/min]		340	340	400	400	450	450
max. Pressure [mbar]		500	450	600	550	650	620
<b>Vacuum Side</b>							
Flow at -100 mbar [ml/min]		270	300	400	350	450	400
max. Vacuum [mbar]		-400	-400	-500	-450	-500	-450
<b>Motor / Power Consumption</b>							
Standard Motor Type		skew wound / sintered bearings					
max. Nominal Current [mA]		230	100	100	70	50	45
Optional Motor Type		-	ball bearings	-		ball bearings	
<b>Construction</b>							
Pump Head	standard optional	PPS customer specific - upon request					
Diaphragm, Valves	standard optional	EPDM FKM					
Weight [g]		15.5					

## Performance Curves

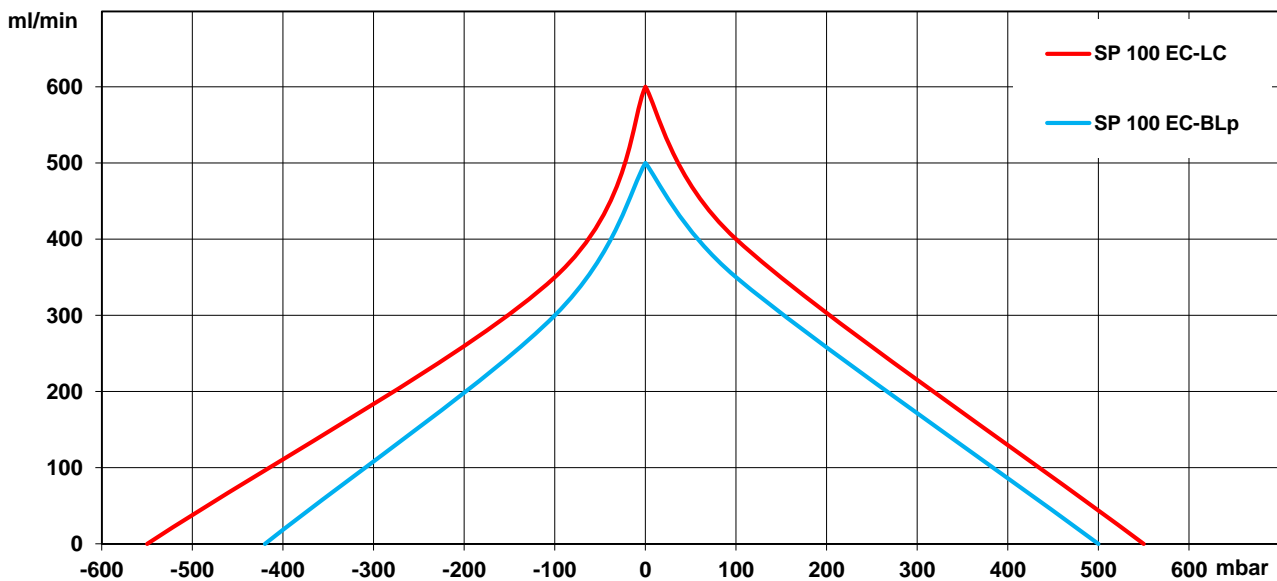




The pumps listed below represent a typical selection of our wide range of eccentric pumps and are intended for initial tests. **Customised versions** for your individual application would be made without additional costs - please contact us! All flow values given under norm conditions (according to DIN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

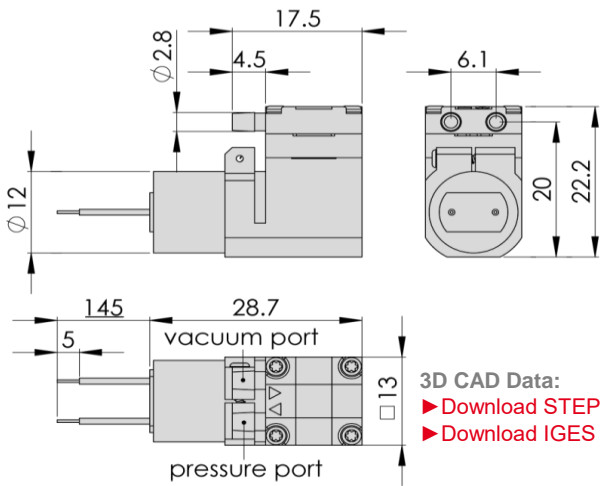
Designation	SP 100 EC-LC		SP 100 EC-BLp
Operating Voltage [Vdc]	3	5	3
Art.No.	7s50140	7s50141	7s20044
<b>Pneumatic Performance</b>			
Free Flow [ml/min]	600	600	500
<b>Pressure Side</b>			
Flow at 100 mbar [ml/min]	400	400	350
max. Pressure [mbar]	550	550	500
<b>Vacuum Side</b>			
Flow at -100 mbar [ml/min]	350	350	300
max. Vacuum [mbar]	-550	-550	-420
<b>Motor / Power Consumption</b>			
Standard Motor Type	iron core / sintered bearings		brushless / double ball bearings
max. Nominal Current [mA]	150	100	120
Optional Motor Type	-		-
<b>Construction</b>			
Pump Head	standard optional	PPS customer specific - upon request	
Diaphragm, Valves	standard optional	EPDM FKM	
Weight [g]	12.3		18.0

## Performance Curves

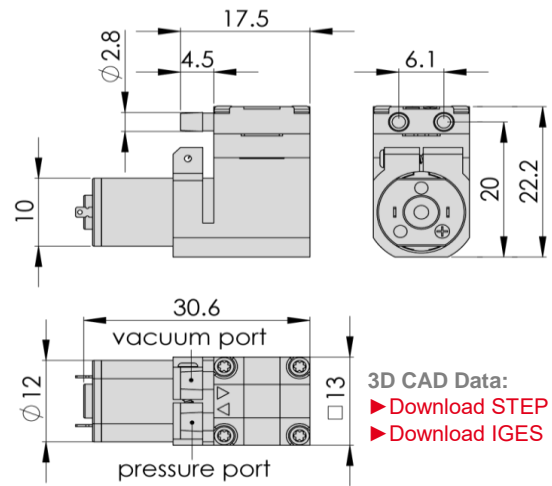




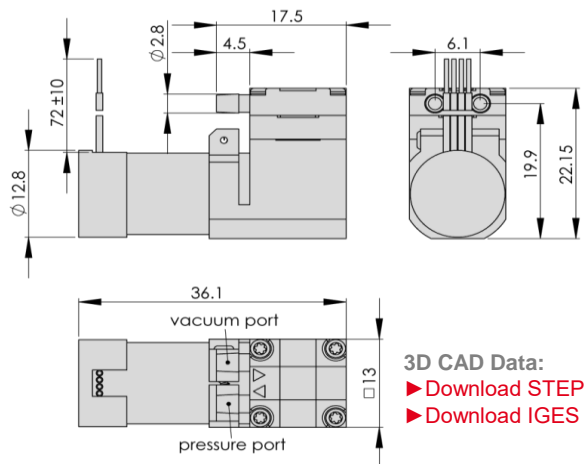
## SP 100 EC



## SP 100 EC-LC



## SP 100 EC-BLp



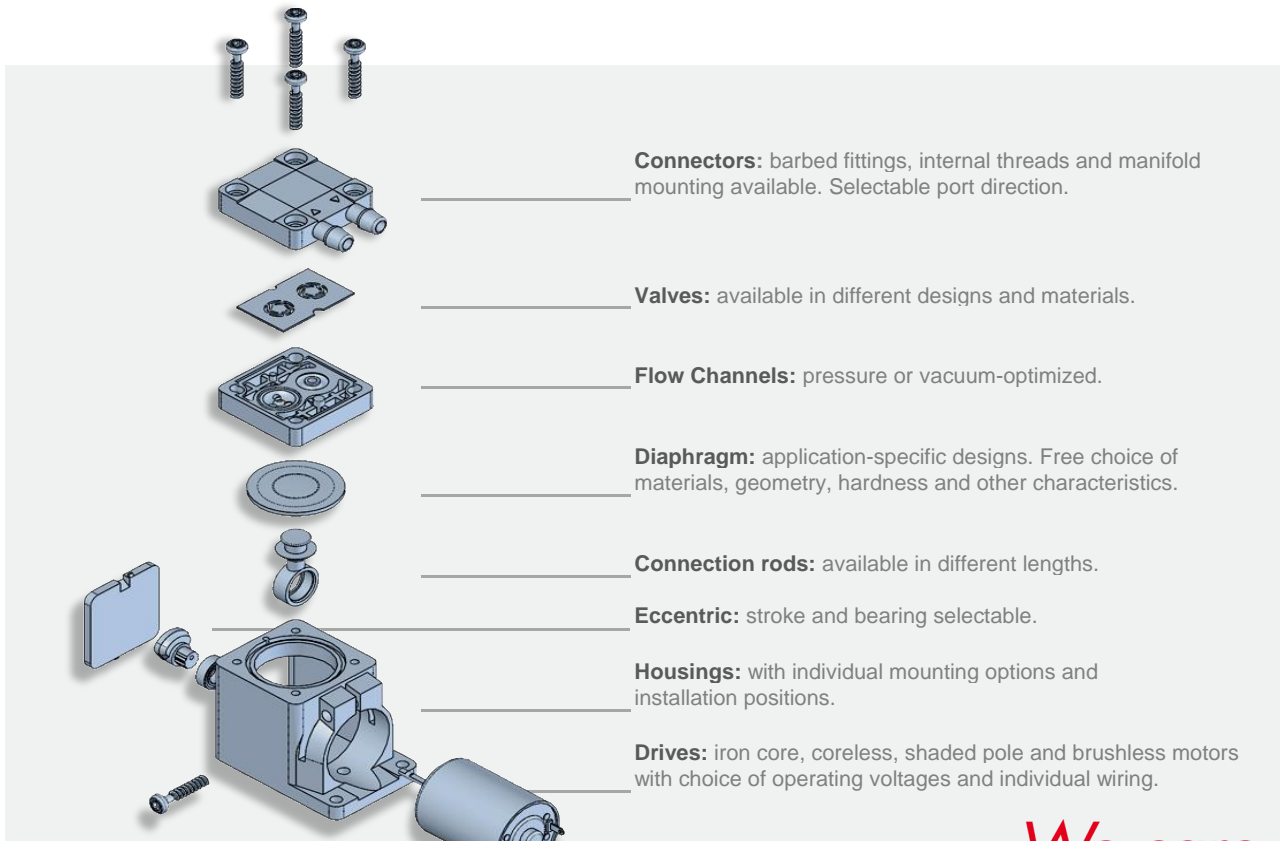
Standard: connection ports as shown  
Optional: 3 other port positions possible

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



### 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