



The pumps listed on this data sheet represent a cross-section of the large number of possibilities for each pump type. Based on our modular pump design, all pumps can be customised exactly to meet the needs of your application - within days and at standard pricing. Please contact us for details.



SP 680 EC
iron core motor with
ball bearings



SP 680 EC-LC
iron core motor with
sintered & ball bearings

PRODUCT FEATURES

- High efficiency
- Durable design
- Smallest size and low weight
- Low vibration and sound level
- Suitable for any mounting orientation
- Oil-free, maintenance-free, leak-tight

TYPICAL APPLICATIONS

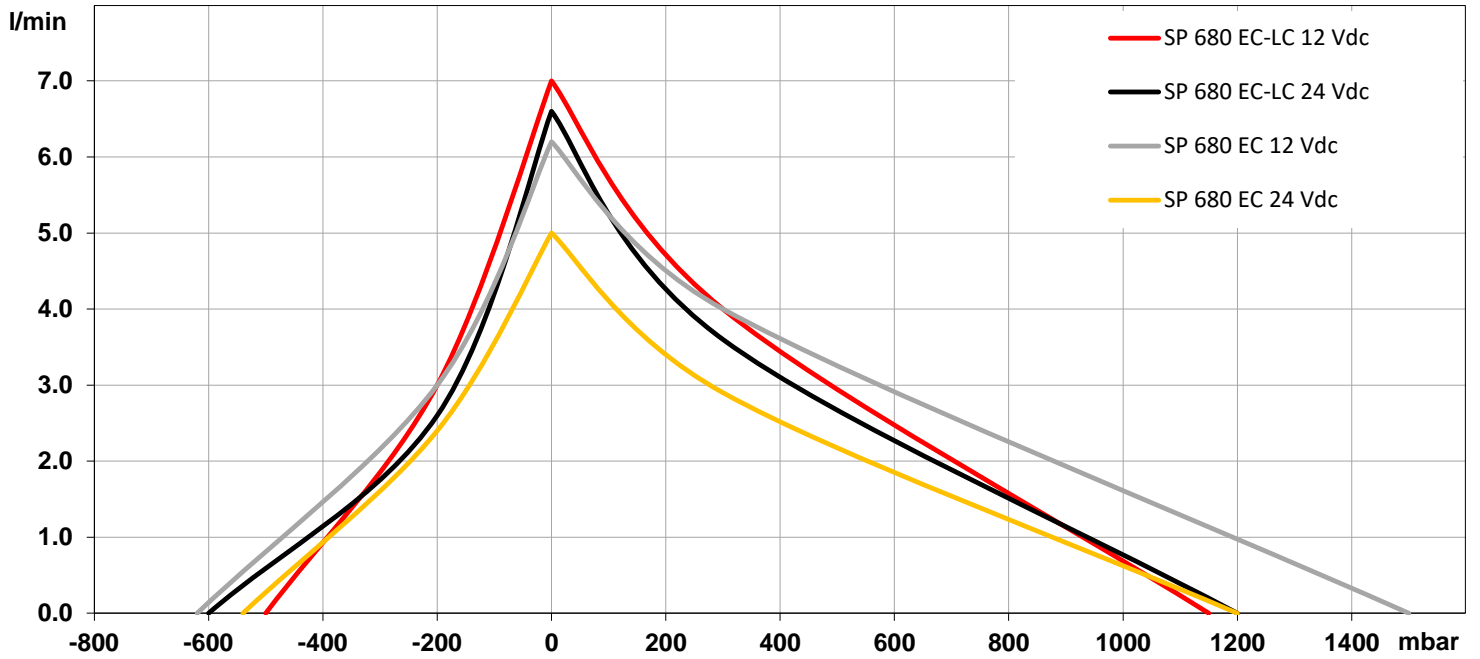
- Exhaust and flue gas analysis
- Auto samplers
- Blood pressure monitoring
- Chromatography
- Gas analysis
- Anaesthesia monitoring
- Pipetting



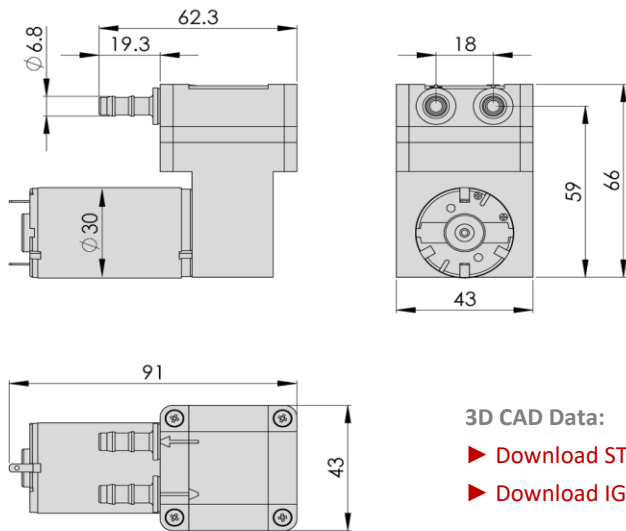
TYPE	SP 680 EC		SP 680 EC-LC	
Operating Voltage [Vdc]	12	24	12	24
Art. No.	7s52076	7s52077	7s52083	7s52084
max. Nominal Current [mA]	750	400	1200	700
PERFORMANCE				
max. Flow [l/min]	6.2	5.0	7.0	6.6
max. Pressure [bar]	1.5	1.2	1.15	1.2
max. Vacuum [mbar]	-620	-540	-500	-600
MOTOR				
Standard Motor	iron core		iron core	
Standard Bearings	ball bearings		sintered and ball bearings	
Motor Connection	2 wires	soldering lugs / flat connectors	soldering lugs	
Optional Motor	n/a		n/a	
Optional Bearings	n/a		n/a	
MATERIALS				
Standard Pump Head	PPS			
Optional Pump Head	customer specific (upon request)			
Standard Diaphragm	EPDM			
Optional Diaphragm	customer specific (upon request)			
Standard Valves	EPDM			
Optional Valves	customer specific (upon request)			
Standard Gaskets	EPDM			
Optional Gaskets	customer specific (upon request)			
PNEUMATIC CONNECTION				
Standard Connectors	barbed connectors			
Optional Connectors	n/a			
DIMENSIONS + WEIGHT				
Dimensions [mm] W x H x L	43 x 66 x 91		43 x 66 x 92	
Weight [g]	254		265	
OPERATING CONDITIONS				
Storage Temperature [°C]	-10 – +60 (extended temperature ranges on request)			
Ambient Temperature [°C]	-10 – +40 (extended temperature ranges on request)			
Temperature of Media [°C]	0 – +80 (extended temperature ranges on request)			
Acceptable Humidity [%rH]	5 – 80 (non condensing)			



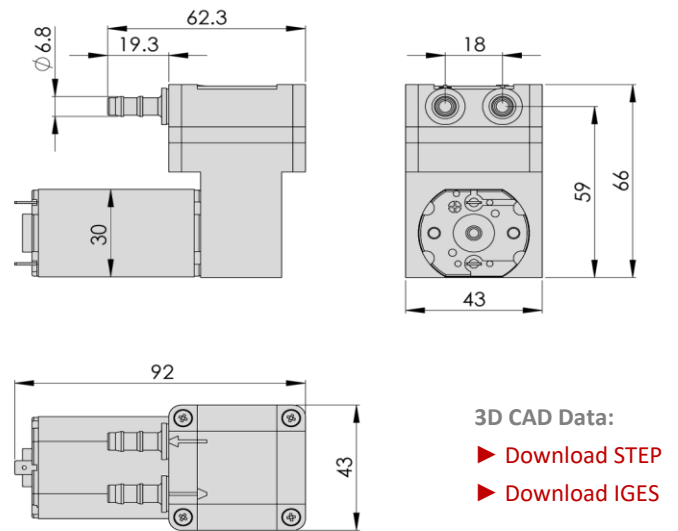
PERFORMANCE DIAGRAM | SP 680 EC - SP 680 EC-LC



DRAWING | SP 680 EC



DRAWING | SP 680 EC-LC



All dimensions given in [mm]. Drawing shows standard orientation of pneumatic connectors (3 alternative orientations possible).

You can also download the 3D CAD files from the SP website: www.schwarzer.com/download



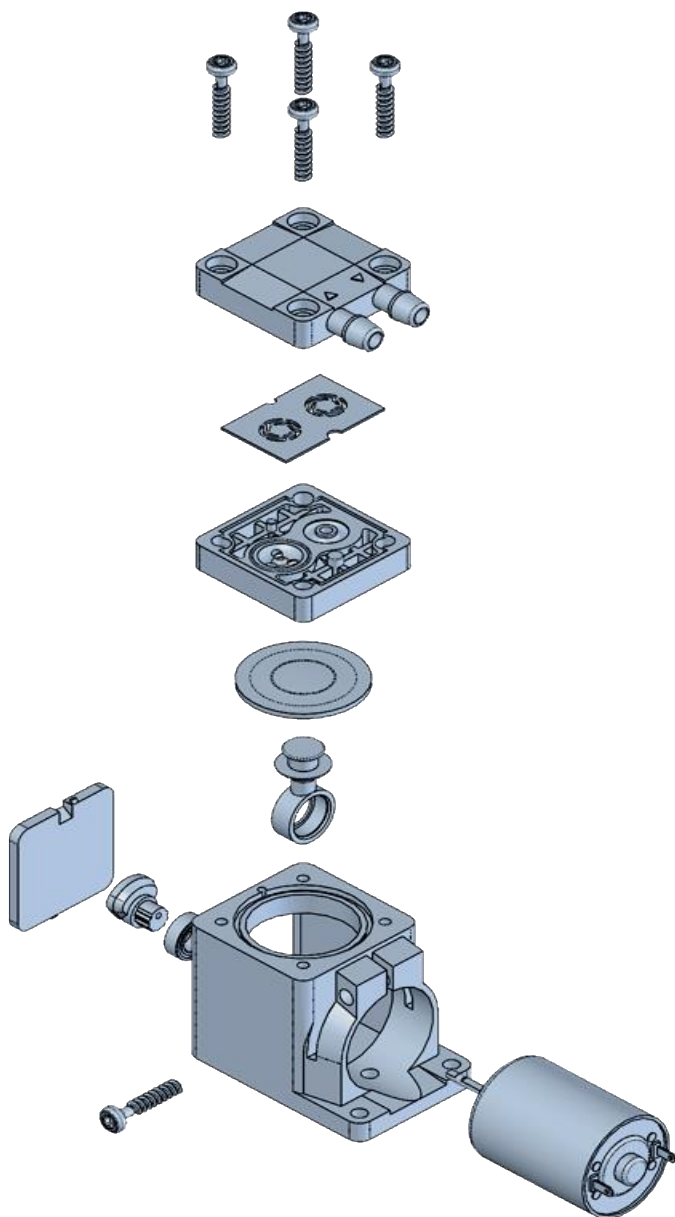
DISCLAIMER

Flow values are subject to the standard conditions specified in DIN 1343. The use of other materials may cause deviations in performance values. The technical data shown on this data sheet represents the typical mean values achieved by the products in our standard testing procedure. All data provided is for information only and does not represent production values. Standard products are subject to change without notice.

08.05.2025

CUSTOMISING

The pumps in this data sheet represent our standard types. All pumps can be customised exactly to your specific requirements in all parameters.



Pump heads

Different materials available

Connectors

Barbed fittings, internal threads and manifold mounting available. Selectable port direction.

Valves

Different designs and materials available.

Flow channels

Pressure- or vacuum-optimised.

Diaphragm

Application-specific designs. Free choice of materials, geometry, hardness, etc.

Connection rods

Available in different lengths.

Eccentric

Stroke and bearing selectable.

Housings

With individual mounting options and installation positions.

Drives

Iron core, coreless, shaded pole and brushless motors with choice of operating voltages and individual wiring.