



# We care.

**Customised Pumps - No Additional Costs!** 

#### Product Features

- Miniature diaphragm pump for gases
- Vacuum or pressure optimized pump design
- Use with two media or in serial or parallel operation
- High efficiency and available in common supply voltages
- From low-cost to durable drives
- Low weight and small size
- · Applicable for noise- and vibrationsensitive 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 and stationary devices such as:

Gas analysers

SP 625 EC-LC-DU

- Anaesthesia monitoring
- Auto samplers
- Dental vacuum pump
- Exhaust or flue gas analyzers
- Blood pressure monitoring
- Industrial pressure and vacuum
- Chromatography
- Pipetting devices

and many more ...

#### Customisation

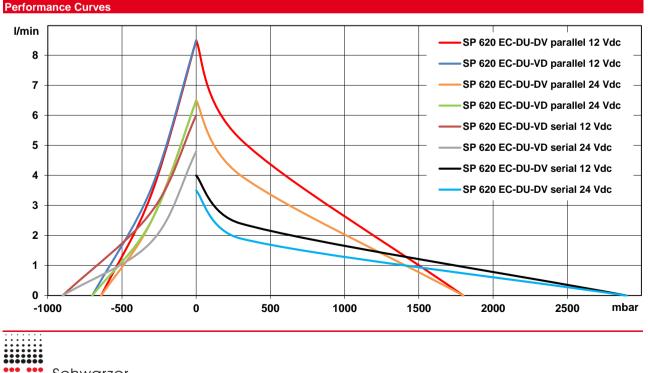
- We offer your customised precision pump without additional costs - even for small batches
- Our modular concept allows easy adaptions
- Outstanding quality Made in Germany
- Excellent technical consultation and service by experts
- More than 40 years experience in pump applications
- Manifold mounting
- 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 620 EC-DU-DV					SP 620 EC-DU-VD					
Art. No. Operating Voltage [Vdc]	7s57213 12 <b>se</b>	7s57214 24 rial	7s57082 12	Quick availability 7s57083 [1] 24 parallel	7s57211 12 <b>se</b>	7s57212 24 rial	7s57131 12 <b>par</b>	7s57132 24 <b>allel</b>			
Pneumatic Performance											
Free Flow [I/min]	4.0	3.5	8.5	6.5	6.0	4.8	8.5	6.5			
	Pressure Side										
Flow at 300 mbar [l/min] max. Pressure [mbar]	2.4 2900	1.9 2900	5.2 1800	4.0 1800	-	-	-	-			
	Vacuum Side										
Flow at -300 mbar [l/min] max. Vacuum [mbar]	-	-	3.4 -640	2.5 -640	2.8 -900	1.8 -900	3.6 -700	2.5 -700			
Motor / Power Consumption			1				1	U			
Standard Motor Type max. Nominal Current [mA]	980	510	900	Iron core / ball bear 490	rings 900	490	900	490			
Optional Motor Types				-							
Construction											
Pump Head											
standard optional	PPS Customer specific (upon request)										
Diaphragm, Valves											
standard optional Tubing	EPDM FKM / FFKM / PTFE PUR										
Weight [g]	230 230										

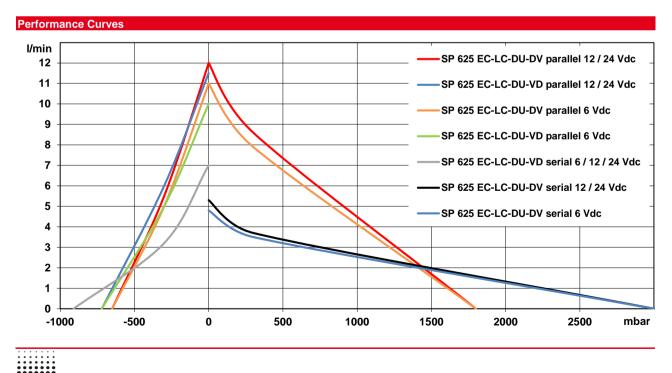
[1] These pumps are our basic types for initial tests. Quick availability: Shipping within 24 hours!



Schwarzer Precision

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.

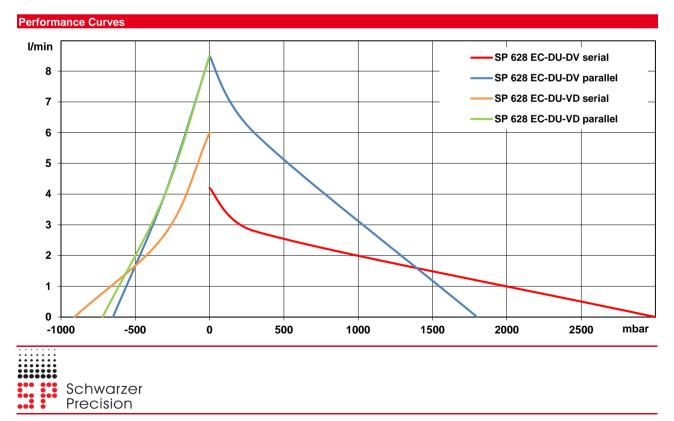
Designation	SP 625 EC-LC-DU-DV					SP 625 EC-LC-DU-VD						
Art. No. 7s Operating Voltage [Vdc]	57231 6	57232 12 <b>serial</b>	57233 24	57077 6	57078 12 <b>parallel</b>	57079 24	57147 6	57148 12 <b>serial</b>	57149 24	57095 6	57096 12 <b>parallel</b>	57097 24
Pneumatic Performance							1					
Free Flow [I/min]	4.8	5.3	5.3	11.0	12.0	12.0	7.0	7.0	7.0	10.0	11.5	11.5
							ure Side					
Flow at 300 mbar [l/min] max. Pressure [mbar]	3.5 3000	3.7 3000	3.7 3000	7.9 1800	8.6 1800	8.6 1800	-	-	-	-	-	-
		Vacuum Side										
Flow at -300 mbar [l/min] max. Vacuum [mbar]	-	-	-	5.0 -650	5.5 -650	5.5 -650	3.2 -910	3.2 -910	3.2 -910	5.0 -720	6.0 -720	6.0 -720
Motor / Power Consumption							1					
Standard Motor Type max. Nominal Current [mA]	2000	iron core / ball bearing and sintered bearing									800	
Optional Motor Types	2600	2600   1700   800   2700   1900   800   2600   1700   800   2600   1700   800 -										
Construction												
Pump Head standard optional	PPS Customer specific (upon request)											
Diaphragm, Valves standard optional Tubing	EPDM FKM / FFKM / PTFE PUR											
Weight [g]	250 250											



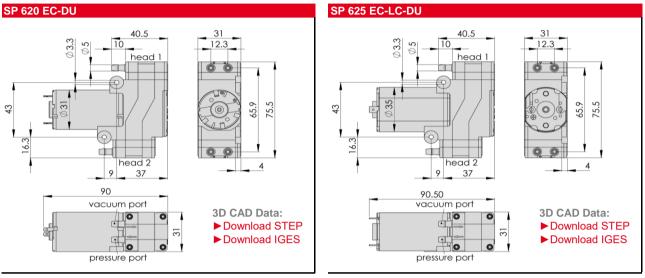
Schwarzer Precision

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 628 E	C-DU-DV		SP 628 EC-DU-VD					
Art. No. Operating Voltage [Vdc]	7s57234 12 <b>se</b>	7s57235 24 rial	7s57134 12 <b>par</b>	7s57135 24 <b>allel</b>	7s57145 12 <b>se</b>	7s57146 24 rial	7s57137 12 <b>pa</b> r	7s57138 24 allel		
Pneumatic Performance					1					
Free Flow [l/min]	4.2	4.2	8.5	8.5	6.0	6.0	8.5	8.5		
	Pressure Side									
Flow at 300 mbar [l/min] max. Pressure [mbar]	2.8 3000	2.8 3000	6.0 1800	6.0 1800	-	-	-	-		
				Vacu	um Side					
Flow at -300 mbar [l/min] max. Vacuum [mbar]	-	-	4.0 -650	4.0 -650	2.7 -910	2.7 -910	4.0 -720	4.0 -720		
Motor / Power Consumption					1					
Standard Motor Type max. Nominal Current [mA]	800	450	800	Iron core / b 440	all bearings 800	450	800	440		
Optional Motor Types					-					
Construction										
Pump Head standard optional	PPS Customer specific (upon request)									
Diaphragm, Valves standard optional Tubing	EPDM FKM / FFKM / PTFE PUR									
Weight [g]		32	20			3	20			

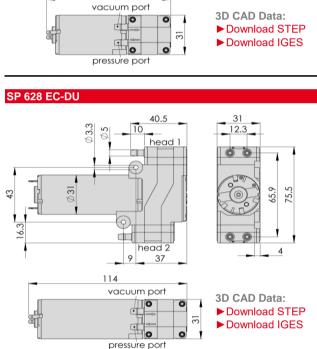


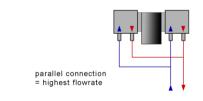
#### Subject to change without notice. Given values are for preliminary information only and not legally binding.

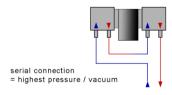


Standard: connection ports as shown Optional: 3 other port positions possible

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





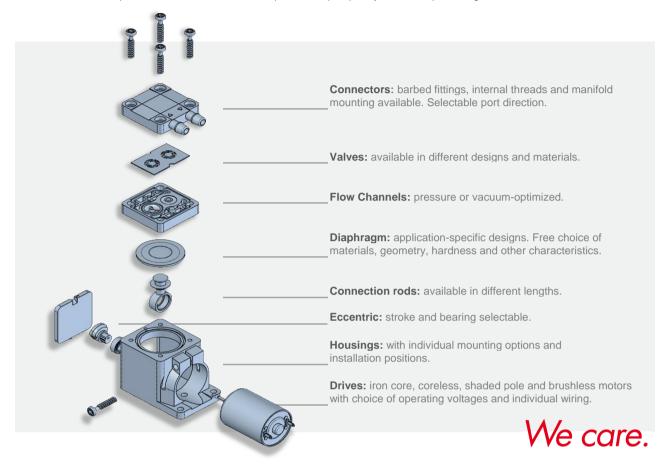






#### **Customising Examples**

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



http://www.schwarzer.cn