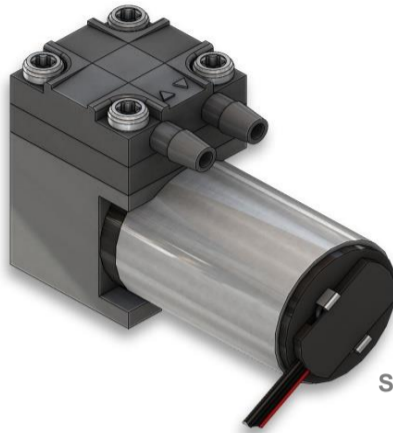
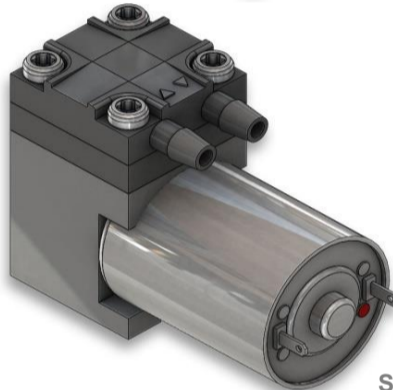


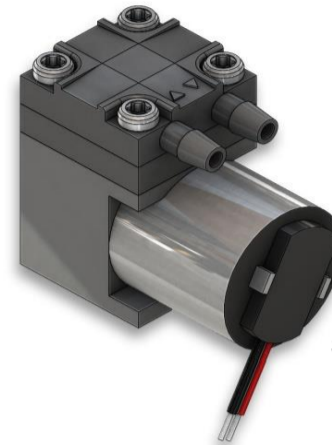
SP 200 EC-LC



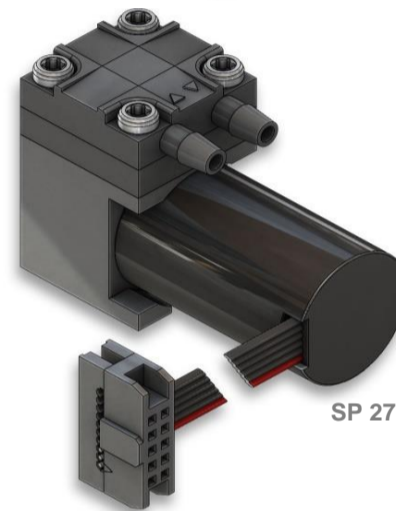
SP 270 EC



SP 270 EC-LC



SP 250 EC



SP 270 EC-BL

## We care.

Customised Pumps - No Additional Costs!

### Product Features

- Micro diaphragm pump for gases
- Applicable as vacuum or pressure pump
- High efficiency
- 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!

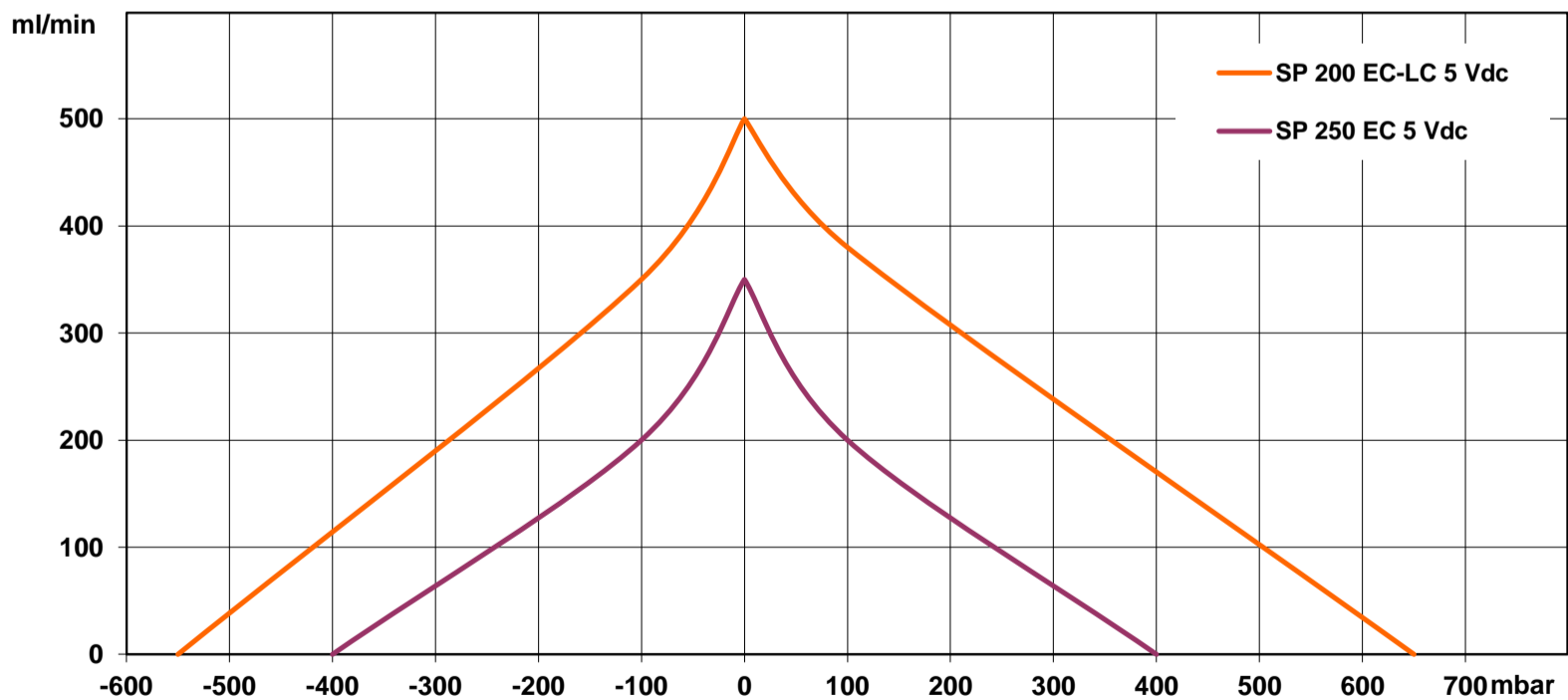


# SP 200 / 250 / 270 EC

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 200 EC-LC	SP 250 EC
Operating Voltage [Vdc]	5	5
Art. No.	7s55025	7s55050
<b>Pneumatic Performance</b>		
Free Flow [ml/min]	500	350
<b>Pressure Side</b>		
Flow at 100 mbar [ml/min]	380	200
max. Pressure [mbar]	650	400
<b>Vacuum Side</b>		
Flow at -100 mbar [ml/min]	350	200
max. Vacuum [mbar]	-550	-400
<b>Motor / Power Consumption</b>		
Standard Motor Type	iron core / sintered bearings	skew wound / sintered bearings
max. Nominal Current [mA]	150	70
Optional Motor Type	-	ball bearings
<b>Construction</b>		
Pump Head	standard optional	PPS PA 6
Diaphragm, Valves	standard optional	EPDM FKM / Silicone
Weight [g]	17.1	20.4

## Performance Curves



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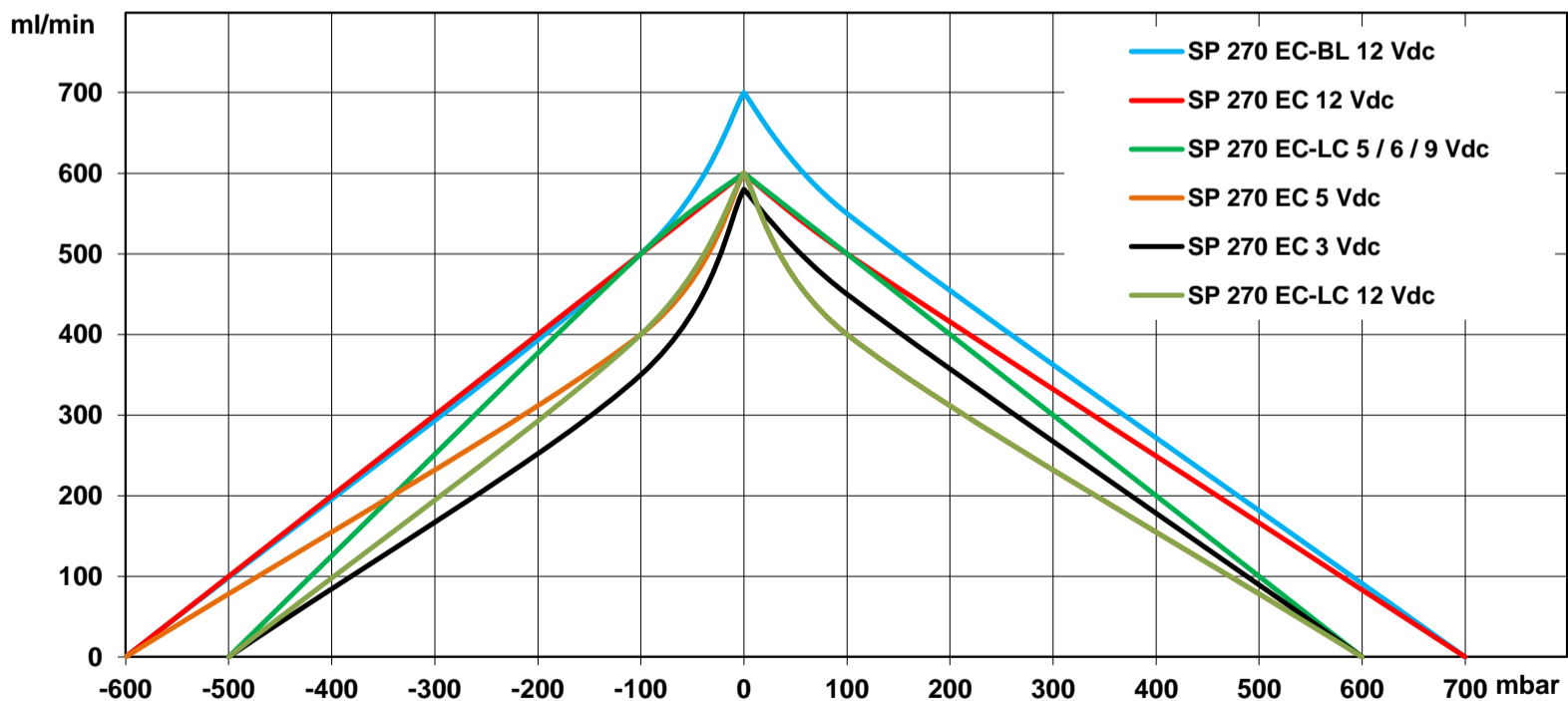


# SP 200 / 250 / 270 EC

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				SP 270 EC-BL
Operating Voltage [Vdc]	3	5	12	5	6	9	12	12
Art.No.	7s55100	7s55076	7s55077	7s55087	7s55138	7s55044	7s55084	7s55146
<b>Pneumatic Performance</b>								
Free Flow [ml/min]	580	600	600	600	600	600	600	700
<b>Pressure Side</b>								
Flow at 100 mbar [ml/min]	450	400	500	500	500	500	400	550
max. Pressure [mbar]	600	600	700	600	600	600	600	700
<b>Vacuum Side</b>								
Flow at -100 mbar [ml/min]	400	400	500	500	500	500	400	500
max. Vacuum [mbar]	-500	-600	-600	-500	-500	-500	-500	-600
<b>Motor / Power Consumption</b>								
Standard Motor Type	skew wound / sintered bearings			iron core / sintered bearings				brushless, analog or PWM control / ball bearings
max. Nominal Current [mA]	120	100	55	120	120	80	60	160
Optional Motor Type	ball bearings			-				-
<b>Construction</b>								
Pump Head	standard optional	PPS customer specific - upon request						
Diaphragm, Valves	standard optional	EPDM FKM / Silicone						
Weight [g]	30.3			25.3				23.0

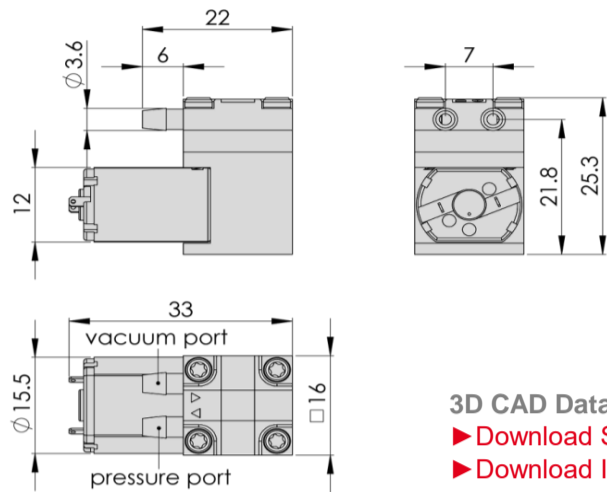
## Performance Curves



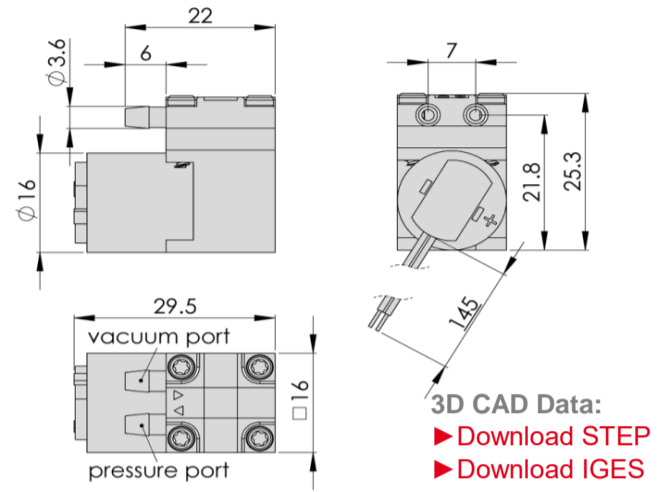
Am Lichtbogen 7 • 45141 Essen • Germany  
 Phone: +49 201 31697-0 • Fax: +49 201 31697-29  
 e-mail: [info@schwarzer.com](mailto:info@schwarzer.com) • <http://www.schwarzer.com>



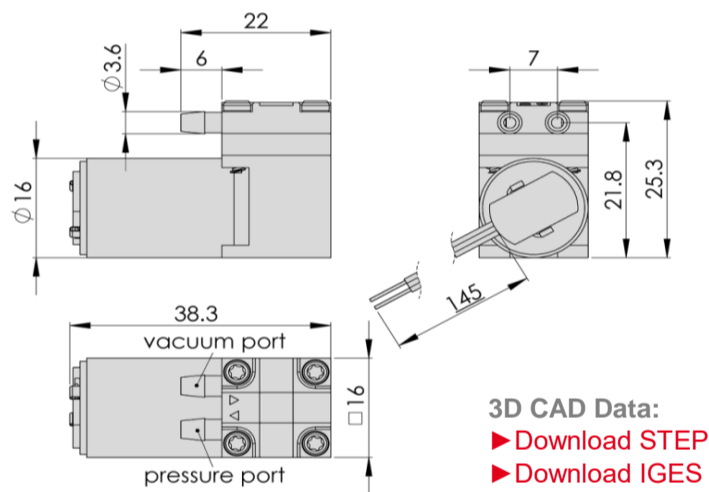
## SP 200 EC-LC



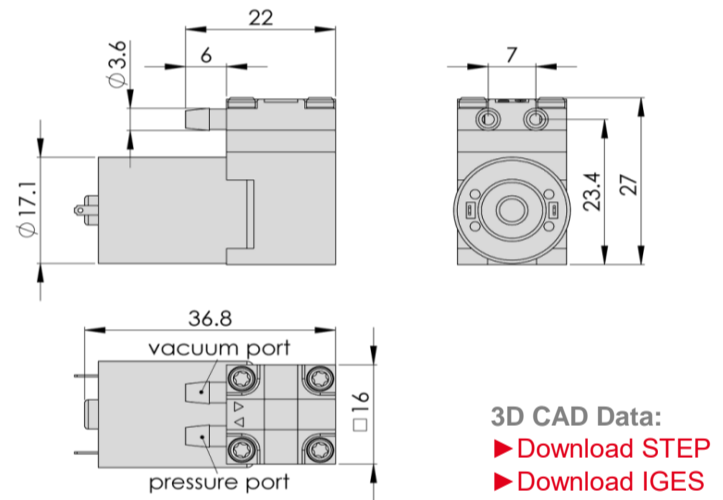
## SP 250 EC



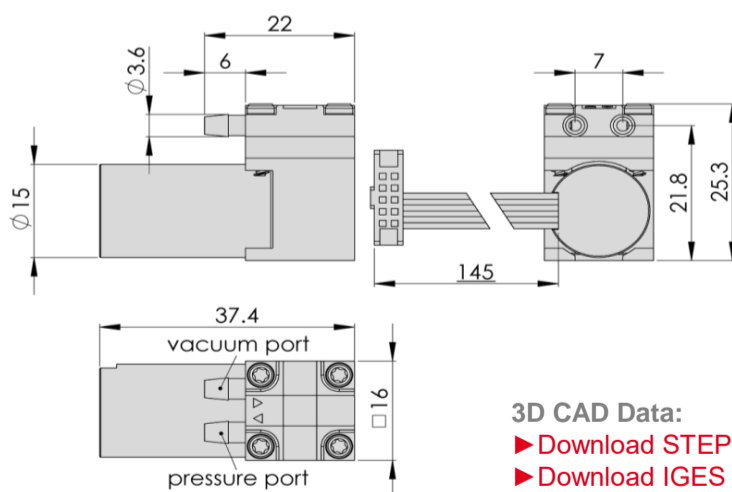
## SP 270 EC



## SP 270 EC-LC



## SP 270 EC-BL



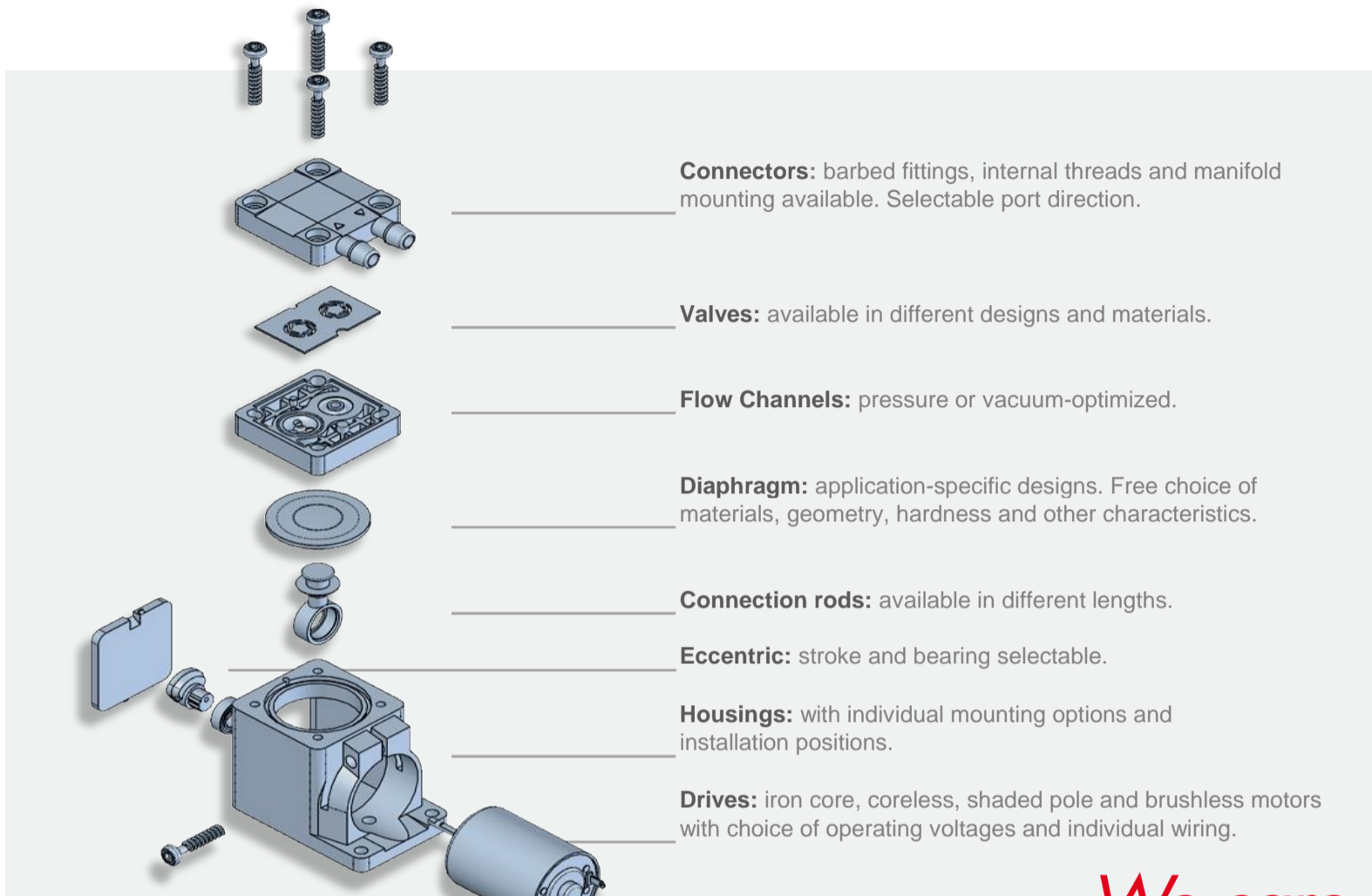
Standard: connection ports as shown  
Optional: 3 other port positions possible

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

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](http://www.schwarzer.com/accessories)