

## FEATURES

- > Protection of the tubing due to spring loaded rollers and guiding side rollers
- > Quick and easy change of the tubing
- > Roller carrier with two rollers
- > Also suitable for continuous operation, depending on the drive
- > If stored longer than three months, we recommend to remove the tubing.
- > Different gear motors available (DC, AC and stepper motor)

## TYPICAL APPLICATIONS

- > Deaeration of dialysate in dialysis devices
- > Condensate removal in environmental emissions monitoring

## BASE MODEL

- DC Performance
- AC Shaded Pole
- AC Synchronous
- Stepper



Peristaltic

# SR25 DC Performance

## 12/24 V, Direct current motor

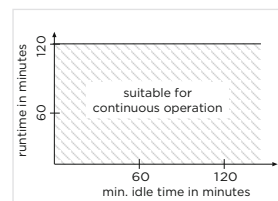
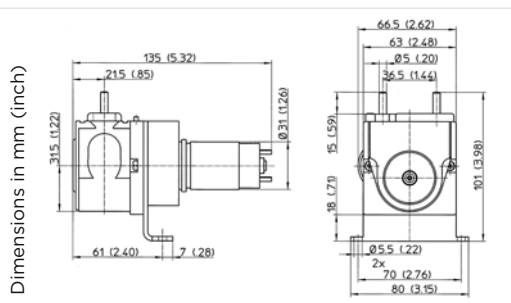
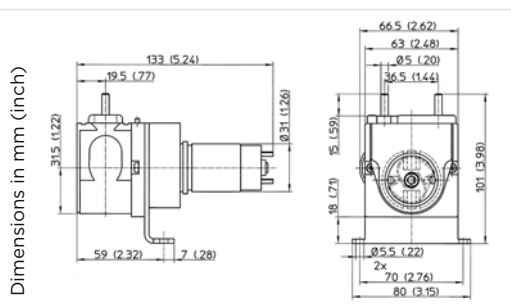
**Flow** 2 - 287 ml/min



**SR25, 10 to 80 rpm**  
Direct current motor



**SR25 -170 rpm<sup>1)</sup>**  
Direct current motor



## Nominal speed

	10 rpm	30 rpm	65 rpm	80 rpm	170 rpm <sup>1)</sup>
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## Tubing Novoprene Flow<sup>2)</sup> ml/min

N 1.6 x 1.6 mm	2	7			
Part number 12 V		20251397			
Part number 24 V	<b>20251388</b>	20251401			
N 3.2 x 1.6 mm	8.4	25	56		
Part number 12 V		20251398	20251411		
Part number 24 V		<b>20251255</b>			
N 4.1 x 1.6 mm		36	82	102	204
Part number 12 V		20251399	20250083		20251261
Part number 24 V		20251402	20250082	20251010	20250396
N 4.8 x 1.6 mm	17	48	125	132	285
Part number 12 V		20251400	20250426		<b>20251224</b>
Part number 24 V	20251247	20251403	<b>20251413</b>	20250287	<b>20250130</b>

## Tubing Silicone Flow<sup>2)</sup> ml/min

S 2.0 x 1.0 mm	3.5				
Part number 12 V					
Part number 24 V	<b>20251394</b>				
S 3.0 x 1.5 mm	6.5	19			
Part number 12 V		20251405			
Part number 24 V	20251395	20251408			
S 4.0 x 1.5 mm	13	38		103	
Part number 12 V		20250302			
Part number 24 V	20251396			20251434	
S 5.0 x 1.5 mm	18	54		143	287
Part number 12 V		20251406			20251441
Part number 24 V	20250092	20251366		20251435	20251444

## Electrical Data

Motor	Direct current motor		
Power consumption	2 W	3.5 W	7 W

## General Data

Weight	0.6 kg
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1) Pump with counter bearing **2025...** Stock programme

### Material of tubing connectors:

Tubing Silicone: for all Ø PVC  
Tubing Novoprene: Ø 1.6/3.2 mm - PVC  
Ø 4.1/4.8 mm - PP

Option: Recommended inference suppression according to EN 55011 B (CE-conform) 12/24 V DC - with additional circuit board (on request)

2) Note: The indicated values are average measured with water. The actual values depend on different parameters like quality and age of tubing, pressure of tubing beds, pressure ratios, viscosity. Please see page 4 for recommended running times and general data.

3) tested at 10 rpm

## Duty cycles

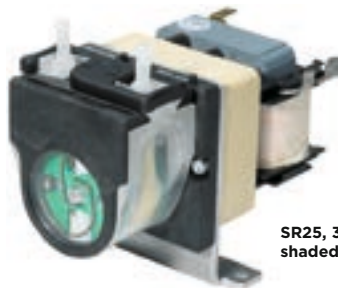
Tube lifetime	
Novoprene	> 5000 h <sup>3)</sup>
PharMed BPT®	
Silicone	500 h <sup>3)</sup>
Other wearing parts	
Roller carrier	5000 h <sup>3)</sup>
Rolling band/lid	
Drive	
DC Performance Motor	3000 h <sup>3)</sup>

# SR25 AC Shaded Pole

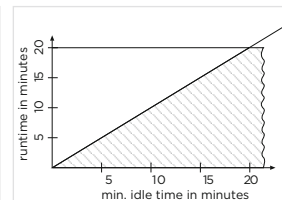
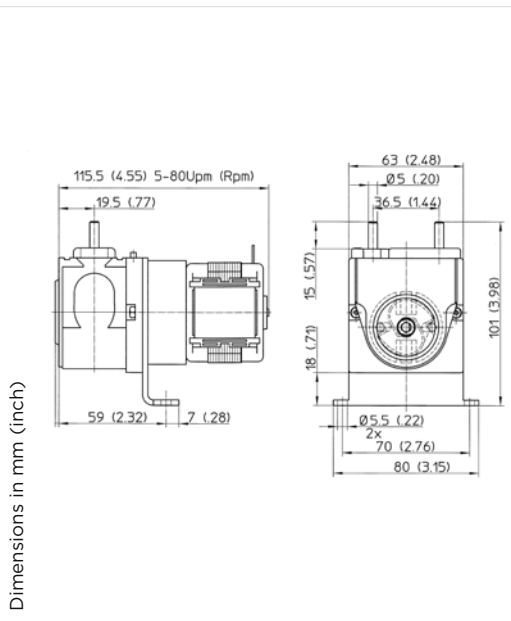
**230 V/50 Hz, shaded pole motor  
For short time operation only**

**Flow**

**6 - 119 ml/min**



**SR25, 30 bis 80 rpm shaded pole motor**



Nominal speed			
	30 rpm	65 rpm	80 rpm
<b>Tubing Novoprene</b>			
	<b>Flow<sup>2)</sup> ml/min</b>		
N 1.6 x 1.6 mm	6	12	15
Part number	20250009		<b>20250893</b>
N 3.2 x 1.6 mm	21	47	56
Part number	<b>20250010</b>		20250892
N 4.1 x 1.6 mm	30	68	85
Part number	20250881	20250886	20250891
N 4.8 x 1.6 mm	40 <sup>≠</sup>	90	110
Part number	<b>20250880</b>	20250884	20250020
<b>Tubing Silicone</b>			
	<b>Flow<sup>2)</sup> ml/min</b>		
S 4.0 x 1.5 mm	32	70	86
Part number	20251280	20250888	
S 5.0 x 1.5 mm	45	88	119
Part number	20250047	20250887	20250057
<b>Electrical Data</b>			
Voltage	230 V/50 Hz		
Motor	Shaded pole motor		
Power consumption	16 W		
Motor insulation class	E		
<b>General Data</b>			
Protection class	IP00		
Weight	0.7 kg		
<b>Duty cycles</b>			
	Tube lifetime		
Novoprene	> 5000 h <sup>4)</sup>		
PharMed BPT®			
Silicone	500 h <sup>4)</sup>		
	Other wearing parts		
Roller carrier	5000 h <sup>4)</sup>		
Rolling band/lid			
	Drive		
AC Shaded Pole Motor	5000 h <sup>4)</sup>		

**2025...** Stock programme

**Material of tubing connectors:**  
 Tubing Silicone: for all Ø PVC  
 Tubing Novoprene: Ø 1.6/3.2 mm - PVC  
 Ø 4.1/4.8 mm - PP

- 1) Pump with counter bearing
- 2) Note: The indicated values are average measured with water. The actual values depend on different parameters like quality and age of tubing, pressure of tubing beds, pressure ratios, viscosity. Please see page 4 for recommended running times and general data.
- 3) Fan
- 4) tested at 10 rpm

# SR25 AC Synchronous

**230 V/50 Hz, synchronous motor**  
**Suitable for continuous operation**

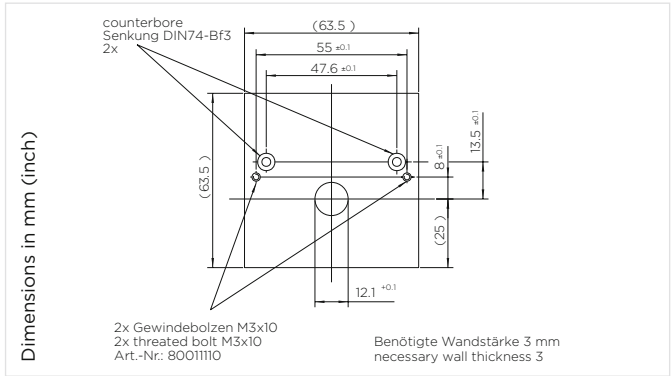
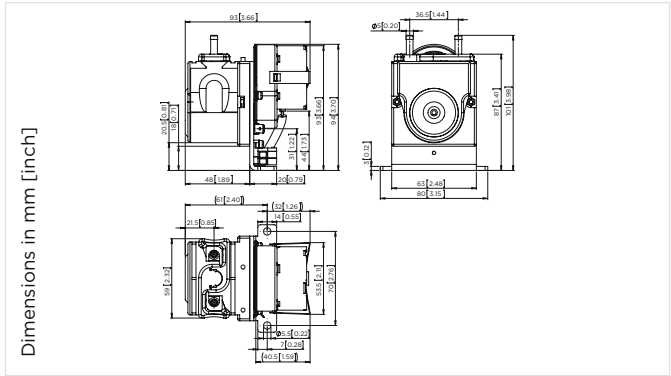
**Flow**

**0.2 – 14 ml/min**



**SR25, 1 to 10 rpm**  
**Synchronous motor**

**Bore pattern to fit in a housing**  
 (not illustrated)



## Nominal speed

	1 rpm	5 rpm	10 rpm
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## Tubing Novoprene Flow<sup>2)</sup> ml/min

N 1.6 x 1.6 mm	0.2		
Part number	20251737		
N 3.2 x 1.6 mm		3.5	7.0
Part number		<b>20251351</b>	<b>20251355</b>
N 4.1 x 1.6 mm	1.0	5.0	10
Part number	20251739	<b>20251352</b>	<b>20251356</b>
N 4.8 x 1.6 mm	1.3	6.8	14
Part number	20251740	<b>20251353</b>	<b>20251357</b>

## Electrical Data

Voltage	230 V/50 Hz
Motor	Synchronous
Power consumption	2 W
Motor insulation class	E

## General Data

Protection class	IP00
Weight	0.39 kg

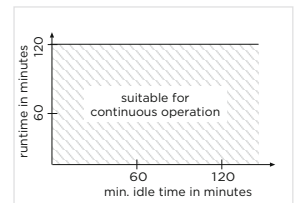
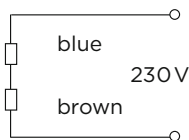
**2025...** Stock programme

## Duty cycles

Tube lifetime	
Novoprene	> 5000 h <sup>3)</sup>
PharMed BPT®	
Silicone	
Other wearing parts	
Roller carrier	5000 h <sup>3)</sup>
Rolling band/lid	
Drive	
AC Synchronous Motor	10000 h <sup>3)</sup>

3) tested at 10 rpm

## Electrical wiring:



**Material of tubing connectors:**  
 Tubing Novoprene: Ø 1.6/3.2 mm - PVC  
 Ø 4.1/4.8 mm - PP

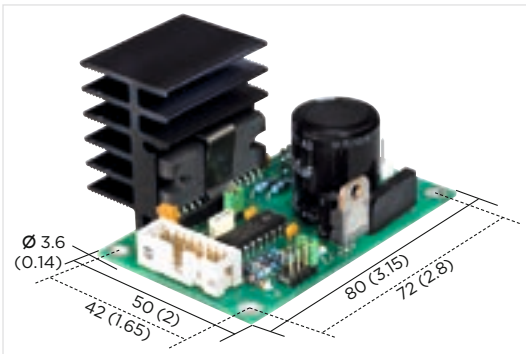
2) Note: The indicated values are average measured with water. The actual values depend on different parameters like quality and age of tubing, pressure of tubing beds, pressure ratios, viscosity. Please see page 4 for recommended running times and general data.

# SR25 Stepper

**24 V DC with stepper motor**  
**Circuit board recommended for test purposes**

**Flow**

**0.1 – 430 ml/min**

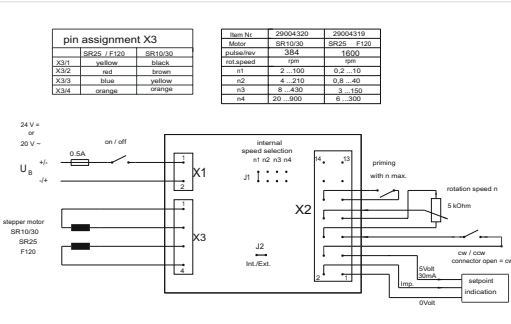
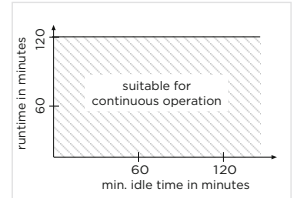
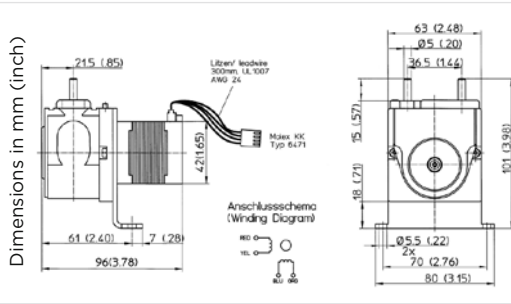


### 4 possible operating methods

- internal speed selection via jumper – option with wiring set<sup>1)</sup>
- external speed selection
- analog input via pc
- digital input (clocked pulse)

### Features

- speed pre-selection
- clockwise, counter clockwise operation
- instant priming
- selective operating method



### Duty cycles

Speed	10 rpm	300 rpm
Tube lifetime		
Novoprene	> 5000 h	500 h
PharMed BPT®		
Silicone	500 h	100 h
Other wearing parts		
Roller carrier		
Rolling band/lid	5000 h	500 h
Drive		
Stepper Motor	10000 h	10000 h

Adjustable range	I	II	III	IV
Speed	0.4 – 10 rpm	1.6 – 40 rpm	6 – 150 rpm	12 – 300 rpm

Tubing Novoprene	Max. flow <sup>2)</sup> ml/min			
N 1.6 x 1.6 mm	0.1 – 2	0.3 – 7	1 – 26	2 – 55
Part number – pump without circuit board	20252200			
Part number – pump with circuit board	20252100			
N 3.2 x 1.6 mm	0.3 – 7	1 – 30	4 – 110	9 – 210
Part number – pump without circuit board	20252201			
Part number – pump with circuit board	20252101			
N 4.8 x 1.6 mm	0.6 – 14	2 – 60	9 – 215	20 – 430
Part number – pump without circuit board	20252202			
Part number – pump with circuit board	20252102			

Running Data	
On-time	Continuous operation
Recommended rotating direction at continuous operation	Clockwise

Electrical Data	
Nominal voltage (drive through electronic board)	24 V/DC oder 20 V/AC
Motor	Stepper motor, bipolar, stepping angle 1.8°
Current consumption	0.8 A
Max. restart consumption	5 A*
Inductance at 1 kHz, 1 V	14 mH
Winding resistance	6 Ω
Motor insulation class	B

General Data	
Material of the hose clip	PVDF
Weight of the pump	0.5 kg

\* Delay fuse to be used.

1) Option: 14-pole connecting cable with plug, rocker switch for clockwise and lefthanded running Potentiometer and speed-push-button, part number 29000702

2) Note: The indicated values are average measured with water. The actual values depend on different parameters like quality and age of tubing, pressure of tubing beds, pressure ratios, viscosity. Please see page 4 for recommended running times and general data.

# Spare parts SR25

## Tubing with connectors



Tubing	Diameter x wall thickness	Connectors	Part number
Novoprene	1.6 x 1.6 mm	PVC	92025500
Novoprene	3.2 x 1.6 mm	PVC	92025501
Novoprene	4.1 x 1.6 mm	PE	92025502
Novoprene	4.8 x 1.6 mm	PE	92025503
Test-set with all tubings			92025856
Silicone	2.0 x 1.0 mm	PVC	92025507
Silicone	3.0 x 1.5 mm	PVC	92025508
Silicone	4.0 x 1.5 mm	PVC	92025509
Silicone	5.0 x 1.5 mm	PVC	92025532
Test-set with all tubings			92025857
Option			
PharMed BPT*	4.0 x 1.6 mm	PVDF	92025849
PharMed BPT*	4.8 x 1.6 mm	PVDF	92025843
Novoprene	1.6 x 1.6 mm	PVDF	92025552
Novoprene	3.2 x 1.6 mm	PVDF	92025533
Novoprene	4.1 x 1.6 mm	PVDF	92025549
Novoprene	4.8 x 1.6 mm	PVDF	92025563

## Roller carrier



Speed	SR25 AC	SR25 12 V DC	SR25 24 V DC	SR25 Synchron
1 rpm	-	-	-	92025799 <sup>2)</sup>
5 rpm	-	-	-	92025799 <sup>2)</sup>
10 rpm	-	-	92025804 <sup>1)</sup>	92025799 <sup>2)</sup>
30 rpm	92025803 <sup>1)</sup>	92025803 <sup>1)</sup>	92025803 <sup>1)</sup>	-
65 rpm	92025803 <sup>1)</sup>	92025803 <sup>1)</sup>	92025803 <sup>1)</sup>	-
80 rpm	92025803 <sup>1)</sup>	-	92025803 <sup>1)</sup>	-
170 rpm	92025801 <sup>1)</sup>	92025806 <sup>1)</sup>	92025806 <sup>1)</sup>	-
300 rpm	-	-	92025801 <sup>1)</sup>	(Steppermotor)

## Rolling band



Part number
29028215

- 1) Clockwise direction
- 2) Counter clockwise direction

# General Tubing Information

Tubing Properties		
Tube	Characteristics	Limitations
Novoprene	Standard tubing for the SR10/30, SR10/50 and SR25 Long lifetime Wide range of applications	May swell up with oil or oily liquids
PharMed BPT™	High quality for medical, laboratory and research use Homogeneous structure and therefore comparatively better chem. resistance Autoclavable Biocompatible Long lifetime	
Silicone	Suitable for polar solvents (with the exception of chlorinated aliphatic and aromatized hydrocarbon) No detachment of softening agents Very stable elasticity over a wide temperature range (-30 bis 180 °C)	Not recommended with strong acids or alkaline solutions Swells up in many organic solutions

Choice of tubing depending on flow medium					
		Novoprene	PharMed BPT	Silicone	
Acids	weak medium strong	very good good not recommended		good unsatisfactory not recommended	
Alkaline solution	weak medium strong	very good good not recommended	very good very good good	good unsatisfactory not recommended	
Hydro-carbons	aliphatic aromatized halogenated	not recommended			
Standards/ physiological behaviour		basis material meets FDA (21 CFR 177.2600) doesn't fulfill the EU food requirement 2002/72/EC	USP, class VI ISO 10993 Parts 4,5 and 11	physiologically inert	
Chemical structure		thermoplastic elastomer on PP-Basis with cross linked EPDM parts	thermoplastic elastomer on PP-Basis	high cross linked Polysiloxane with anorganic fillers	

# Chemical Compatibility

Chemical Resistance of Tubing Materials								
N = Novoprene    Nor = Norprene*    Ph = PharMed BPT / Pharm-A-Line™    S = Silicone								
	N	Ph/Nor	S		N	Ph/Nor	S	
Acetaldehyde	C	C	C	Hydrogen peroxide	A	A	C	
Acetate	C	B	D	Hydrogen sulphide	A	A	C	
Acetic acid	A	A	A	Isopropyl alcohol	A	B	A	
Acetic anhydride	A	A	C	Jodine	A	A	C	
Acetone	C	C	A	Kaliumhydroxyde	A	A	C	
Aluminium chloride	A	A	D	Ketones	C	C	-	
Aluminium sulfate	A	A	A	Lactic acid	A	A	C	
Ammonia	A	A	C	Magnesium chloride solution	A	A	A	
Amyl acetate	C	B	C	Mercury salts	A	A	C	
Amyl alcohol	A	C	C	Methanol	A	A	A	
Amyl chloride	C	C	C	Methyl ethyl ketone	B	C	C	
Aniline	A	B	C	Nitrous acid 10 %	B	A	C	
Aqua regia	C	C	C	Oil, animal	B	B	B	
Arsenic acid	C	C	A	Oil, hydraulic	C	C	D	
Barium hydroxide	A	A	A	Oil, linseed	B	B	A	
Benzaldehyde	C	C	C	Oil, mineral	C	C	C	
Benzene	C	C	C	Oil, vegetable	C	B	A	
Benzoic acid	A	B	B	Oleic acid	C	C	C	
Benzylalcohol	-	A	B	Oxalic acid	B	B	B	
Bleaching agent	B	A	A	Paraffins	C	C	-	
Boric acid	A	A	A	Perchloric acid	C	C	C	
Break liquid	A	A	A	Perchloroethylene	C	C	C	
Bromine	C	C	C	Petrol	C	C	C	
Butane	A	A	C	Phenol	A	A	C	
Butanol	B	C	C	Phosphoric acid, 25 %	A	A	C	
Calcium hypochlorite	A	A	B	Photographic solutions	B	B	A	
Carbon disulphide	C	C	C	Phtalic acid, 9 %	-	A	A	
Chloracetic acid	A	B	-	Potassium salts	A	A	A	
Chlorine, liquid	C	C	C	Pyridine	C	C	C	
Chlorobenzene	C	C	C	Soap solution	A	A	A	
Chloroform	C	C	C	Sodium carbonate	A	A	A	
Chromic acid 50 %	C	C	C	Sodium chloride	A	A	A	
Chromium salts	A	A	C	Sodium hydroxide 40 %	A	A	B	
Citric acid	B	B	A	Sodium hypochlorite <5%	A	A	B	
Cyclohexane	C	C	C	Sodium hypochlorite 12 %	A	A	B	
Diesel fuel	C	C	C	Sodium salt	A	A	A	
Ethanol	A	A	C	Stearic acid, 5 %	B	A	B	
Ether	C	C	C	Sulphurdioxide, wet gas	A	A	B	
Ethyl alcohol	A	A	A	Sulphuric acid, 30 %	A	A	C	
Ethyl chloride	A	A	C	Sulphuric acid, 75-100%	C	C	C	
Ethylene glycol	-	A	A	Sulphurtrioxide	-	B	-	
Ferric sulfate	A	A	A	Tannic acid	A	B	A	
Fluor silicium acid	C	C	-	Tetrahydrofurane	C	C	C	
Fluoroboric acid, 48 %	B	B	-	Toluole	C	C	C	
Formaldehyde	B	C	B	Trichloroethylene	B	B	C	
Formamide	A	B	-	Turpentine	C	C	C	
Formic acid	A	B	A	Urea	A	A	A	
Furfural	C	C	-	Uric Acid	A	A	-	
Hydrochloric acid	A	A	C	Xylene	C	C	C	
Hydrocyanic acid	A	A	C	Zinc chloride	B	B	B	

A = small or no effect

B = minor or moderate effect

C = severe effect

D = no reliable data, please test before use

- = no available data

Norprene®, PharMed BPT®, Norton Co. Reg. TM's,

The material resistance is influenced by temperature and concentration of the medium.  
The data have to be seen as indications and do not guarantee the material properties.





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