

# QF1200SU

## Quaternary Diaphragm Pumps

### Single-Use – Biotech/Biopharma

#### Features

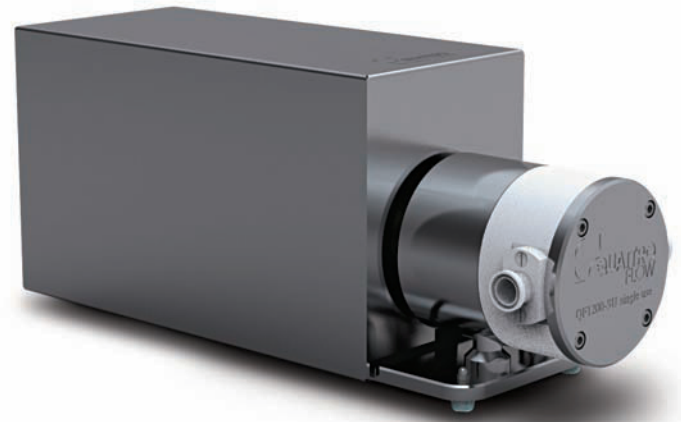
- Fully disposable machined polypropylene pump chamber
- Easy replacement
- 4-piston technology
- Gentle product treatment
- No particle generation
- Low pulsation
- Linear flow characteristic
- Self-priming
- Safe dry-run operation
- Elimination of cleaning validation and cross contamination

#### Applications

- Filtration systems (TFF, etc.)
- Chromatography systems
- Feeding pump
- Virus filtration
- Sterile filtration

#### Technical Data

QF1200SU Standard Motor	
<b>Flow Rate Maximum:</b>	
Eccentric Shaft 3°	800 l/h (211 gph)
Eccentric Shaft 5°	1,200 l/h (317 gph)
<b>Flow Rate Minimum*:</b>	
Eccentric Shaft 3°	10 l/h (2.64 gph)
Eccentric Shaft 5°	20 l/h (5.3 gph)
<b>Pressure:</b>	
Temperature of Fluid < 40° C (104° F)	4 bar (58 psi)
Temperature of Fluid > 40° C (104° F)	4 bar (58 psi)
<b>Maximum Temperature:</b>	
Fluid	60° C (140° F)
Autoclave	130° C (260° F)
<b>Pump Speed Range:</b>	
rpm	30 - 2,400
<b>Suction Lift Dry at 1800 rpm:</b>	
Eccentric Shaft 3°	2.5 - 3 m (8.2-9.8 ft)
Eccentric Shaft 5°	4 - 4.5 m (13.1-14.7 ft)
<b>Volume Specifications:</b>	
Approximated Volume per Revolution at Free Output	9.6 ml (5°) 5.8 ml (3°)
Filling Volume Without Connectors	75 ml



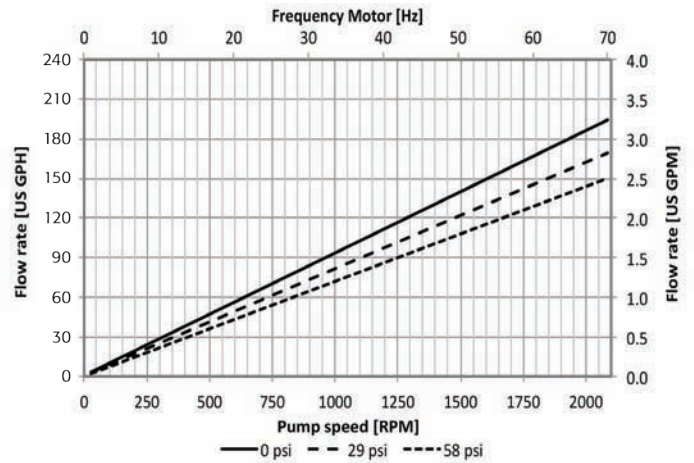
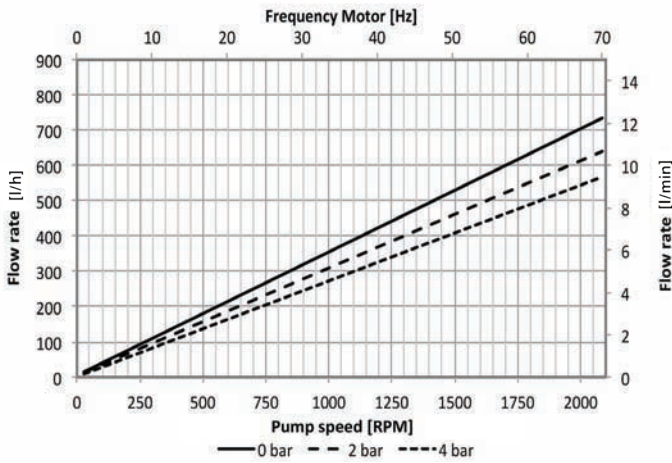
QF1200SU Standard Motor	
<b>Connection Specification (Standard):</b>	
Connectors	3/4" TC
Position of Connectors	Inline
Number of Flow Directions	4
<b>Product Wetted Materials (Standard):</b>	
Pump Chamber	PP
Valve Plate	PP
Diaphragms	TPE
Valves	EPDM
O-rings	EPDM
<b>Certificates/Proofs (Optional):</b>	
Elastomere (product wetted)	USP <88> Cl. VI; FDA21CFR177; BSE/TSE Safe; USP 87/381/661
<b>Motor (Standard):</b>	
Rated speed	1375 min-1 (50 Hz)
Voltage	230/400 V
Power	0.37 KW
<b>Pump Dimension with Motor and Housing:</b>	
Length	497 mm (19.56")
Width	159 mm (6.26")
Height	210 mm (8.27")
<b>Pump Weight with Motor and Housing:</b>	
	21 kg (46 lb.)

Other connection specifications, materials and motors available on request.

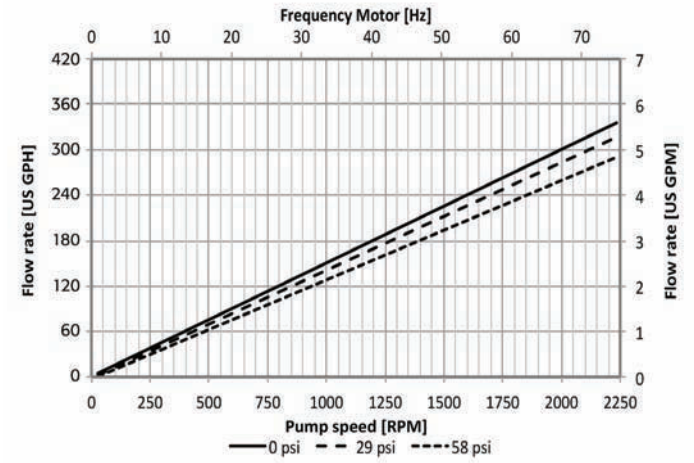
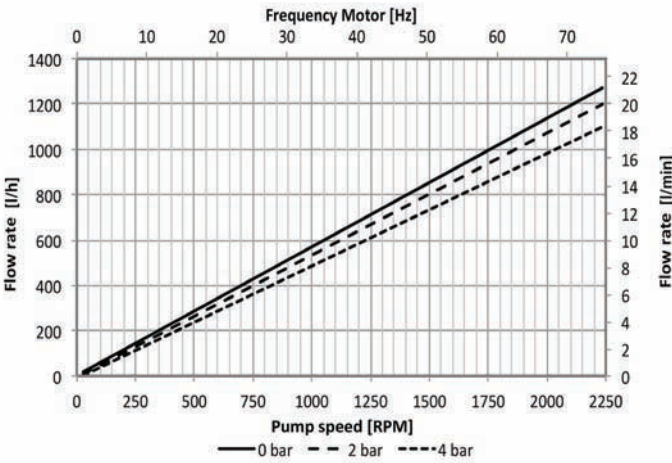
\* When using pump with control box: 20 l/h (5.28 gph) and 40 l/h (10.6 gph)

# Performance Charts

## Eccentric Shaft: 3°



## Eccentric Shaft: 5°



Depending on the selected motor/frequency drive combination, the motor frequency and the resulting pump speed might differ.

## Accessories



### Control Box

- Variable speed controller with integrated touch pad for manual speed control
- Configurable for remote speed control with 4-20 mA analogue input
- 230V / 50 Hz or 115 V / 60 Hz
- Hygienic 1.4301 housing, IP 54
- Easy plug & play installation

### Diaphragm Sensor

- Sensor installed in ring drive unit
- Detection of all liquids
- Signal output to a controller, if diaphragm is ruptured

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