

### Spec Sheet QF1200S

Effective: October 2014

Replaces: NEW

## **QF1200S**

# Quaternary Diaphragm Pumps Multiple-Use — Biotech/Biopharma

#### **Features**

- · 4-piston technology
- Gentle product treatment
- No particle generation
- Low pulsation
- Linear flow characteristic
- · Hygienic design
- Self-priming
- Safe dry-run operation
- · Also available as single-use version

## **Applications**

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



#### **Technical Data**

	QF1200S Standard Motor
Flow Rate Maximum:	
Eccentric Shaft 3°	800 l/h (211 gph)
Eccentric Shaft 5°	1,200 l/h (317 gph)
Flow Rate Minimum*:	
Eccentric Shaft 3°	10 l/h (2.64 gph)
Eccentric Shaft 5°	20 I/h (5.3 gph)
Pressure:	
Temperature of Fluid < 40° C (104° F)	6 bar (87 psi)
Temperature of Fluid > 40° C (104° F)	4 bar (58 psi)
Maximum Temperature:	
Fluid	80° C (176° F)
CIP	90° C (194° F)
SIP	130° C (260° F)
Autoclave	130° C (260° F)
Pump Speed Range:	
rpm	30 - 2,400
Suction Lift Dry at 1800 rpm:	
Eccentric Shaft 3°	2.5 - 3 m (8.2-9.8 ft)
Eccentric Shaft 5°	4-4.5 m (13.1-14.7 ft)
Volume Specifications:	
Approximated Volume per	9.6 ml (5°)
Revolution at Free Output	5.8 ml (3°)
Filling Volume Without Connectors	75 ml

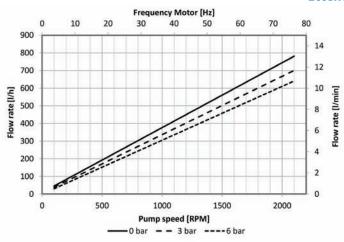
Other connection specifications, materials and motors available on request.

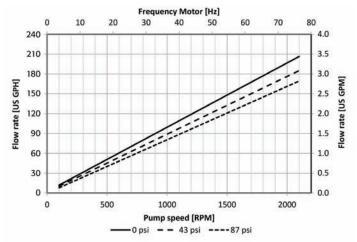
#### **QF1200S Standard Motor Connection Specification (Standard):** Connectors 3/4" TC **Position of Connectors** Inline **Number of Flow Directions Product Wetted Materials (Standard): Pump Housing** SS316L Valve Plate SS316L Diaphragms TPE Valves **EPDM** 0-rings **EPDM Certificates/Proofs (Optional):** USP <88> CI. VI; FDA21CFR177; Elastomere (product wetted) BSE/TSE Safe Stainless Steel Parts (product wetted) 3.1; Surface Roughness; Ferrite Content Motor (Standard): Rated speed 1375 min-1 (50 Hz) Voltage 230/400 V Power 0.37 KW **Pump Dimension with Motor and Housing:** Length 487 mm (19.17") Width 159 mm (6.26") Height 210 mm (8.27") **Pump Weight with Motor and Housing:** 24 kg (53 lb.)

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

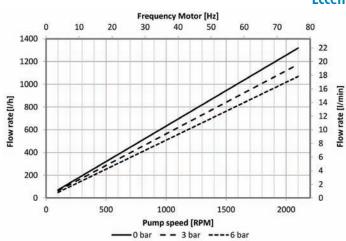
#### **Performance Charts**

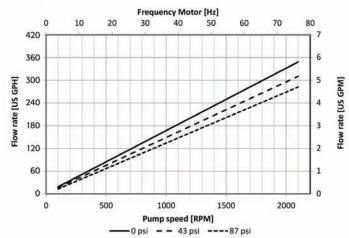






#### Eccentric Shaft: 5°





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



#### **Power Box**

- · Plug & Play installation
- Protects system and pump from overpressure
- Configurable pressure switch setpoint
- Reset button for pump reset
- To be used with pressure switch (also available)

#### 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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