

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 de
- Self-priming
- Safe dry-run
- · Also availab

Technical Data

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rechincal 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 l/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)	
Aaximum 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)	
/olume 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. * When using pump with control box: 20 l/h (5.28 gph) and 40 l/h (10.6 gph)

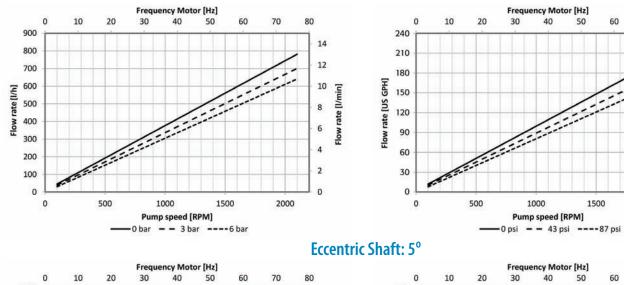
Applications

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

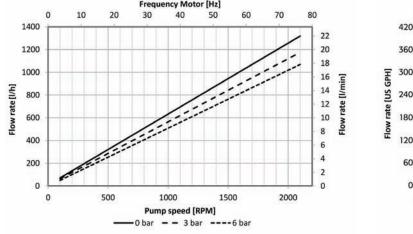
	QF1200S Standard Motor		
Connection Specification (Standard):			
Connectors	3/4" TC		
Position of Connectors	Inline		
Number of Flow Directions	4		
Product Wetted Materials (Standard):			
Pump Housing	SS316L		
Valve Plate	SS316L		
Diaphragms	TPE		
Valves	EPDM		
0-rings	EPDM		
Certificates/Proofs (Optional):			
Elastomere (product wetted)	USP <88> CI. VI; FDA21CFR177; 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:			



Performance Charts



Eccentric Shaft: 3°



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



230V / 50 Hz or 115 V / 60 Hz

analogue input

- Hygienic 1.4301 housing, IP 54
- · Easy plug & play installation



- **Power Box**
 - Plug & Play installation
 - · Protects system and pump from overpressure
 - Configurable pressure switch
 - 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

70

80

4.0

3.5

3.0

2.5

2.0

1.5

1.0

0.5

0.0

80

7

2000

70

Flow rate [US GPM]



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setpoint



180 120

6 5 Flow rate [US GPM] 4 3 2 60 1 0 0 0 500 1000 1500 2000 Pump speed [RPM] 0 psi - - 43 psi ----87 psi