

Spec Sheet QF5050SU Effective: December 2014

Replaces: NEW

QF5050SU Quaternary Diaphragm Pumps Single-Use — Biotech/Biopharma

Gentle product treatment

• Wide range of flow with linear turndown

• Safe dry-run operation

• Elimination of cleaning

validation and cross

contamination

Virus filtration

Sterile filtration

Low pulsation

• Self-priming

Features

- Fully disposable
 machined polypropylene
 pump chamber
- Easy replacement
- 4-piston technology
- Multi-option installation flexibility
- Complete flow range with one drive

Applications

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

Technical Data

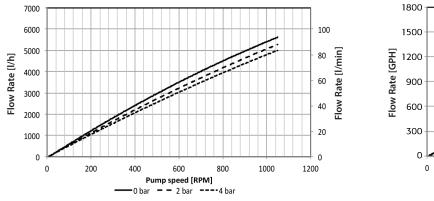
	QF5050SU Servo Motor			
Flow Rate Maximum:				
Eccentric Shaft 6°	5000 l/h (1321 gph)			
Flow Rate Minimum:				
Eccentric Shaft 6°	50 l/h (13 gph)			
Pressure:				
Temperature of Fluid $<$ 40° C (104° F)	4 bar (58 psi)			
Temperature of Fluid $>$ 40° C (104° F)	4 bar (58 psi)			
Maximum Temperature:				
Fluid	60° C (140° F)			
Autoclave	130° C (260° F)			
Suction Lift Dry at 1200 rpm:				
Eccentric Shaft 6°	4-4.5 m (13.1-14.7 ft)			
Volume Specifications:				
Approximated Volume per Revolution at Free Output	95 ml			
Filling Volume Without Connectors	820 ml			
Connection Specification (Standard):				
Connectors	1.5" TC			
Position of Connectors	Front			

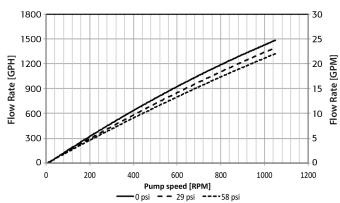
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	QF5050SU Servo Motor			
Product Wetted Materials (Standard):				
Pump Chamber	Chamber PP			
Valve Plate	РР			
Diaphragms	TPE			
Valves	EPDM / SS316L			
0-rings	EPDM			
Certificates/Proofs (Optional):				
Elastomere (product wetted)	USP <88> Cl. VI; FDA21CFR177; BSE/TSE Safe; USP 87/381/661			
Motor (Standard):				
Rated speed	3000 min -1 (2.662:1 reduction)			
Voltage	400 V			
Power	3 KW			
Pump Dimension with Motor and Housing:				
Length	440 mm (17.32")			
Width	325 mm (12.80")			
Height	320 mm (12.60")			
Pump Weight with Motor and Housing:				
	51 kg (112 lb.)			

Other connection specifications, materials and motors available on request.

Performance Charts





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

Accessories



Image may differ from product

Control Box

- Variable speed controller with integrated touch pad for manual speed control
- Configurable for remote speed control with 4-20 mA analogue input
- 400 V, 3P
- 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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