

Quattroflow™ QF10k

QF10k Multiple-Use
Quaternary Diaphragm
Pump

New Multiple-Use Pump Size Available

With a maximum flow rate of 10,000 lph, the new Quattroflow™ QF10k pump fills the gap between the existing QF4400 (max. 5,000 lph) and the QF20k (max. 20,000 lph) pump sizes.

The complete Quattroflow Multiple-Use pump range covers a flow capacity between 1 and 20,000 lph with six pump sizes now available — the right Quattroflow pump for all applications.

The QF10k offers the following main features and benefits:

- New stainless steel pump chamber design (patent pending)
- Excellent drainability to maximize product recovery
- 20:1 turn-down ratio
- Linear flow performance
- 500 – 10,000 lph flow range, max 6 bar (87 psi)
- High flow stability even at low flow rates
- Clean-In-Place/Steaming-In-Place (CIP/SIP) and autoclavability
- Available accessories: Control box, power box, diaphragm sensor, PID pressure controller
- Typical applications include: Chromatography and cross-flow filter systems

Quattroflow™ has extended the Multiple-Use product line of Quaternary (Four-Piston) Diaphragm Pumps with the new QF10k size pump.



Quattroflow develops and manufactures, in close cooperation with its customers, specific Quaternary (Four-Piston) Diaphragm Pumps for critical applications in the pharmaceutical and biotech industries. The method of operation of Quattroflow pumps allows them to gently, safely and securely convey aqueous solutions and biological products that are sensitive to shear force. The four-piston design does not feature a mechanical shaft seal or wetted rotating parts, ensuring total product containment without abrasion. Additionally, the four-piston pumping principle enables risk-free dry-running, low pulsation, self priming, and minimal particle generation.

Quattroflow™ QF10k

Flow Rate Maximum:		
Eccentric Shaft 6°	10,000 lph (167 lpm)	
Flow Rate Minimum:		
Eccentric Shaft 6°	500 lph (8.3 lpm)	
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	50 - 900	
Suction Lift Dry at 1800 rpm:		
Eccentric Shaft 6°	4-4.5 m (13.1-14.7 ft)	
Volume Specifications:		
Approximated Volume per Revolution at Free Output	194 ml	
Approximated Filling Volume Without Connectors	1,300 ml	
Connection Specification (Standard):		
Connectors	2" TC	
Position of Connectors	Front	

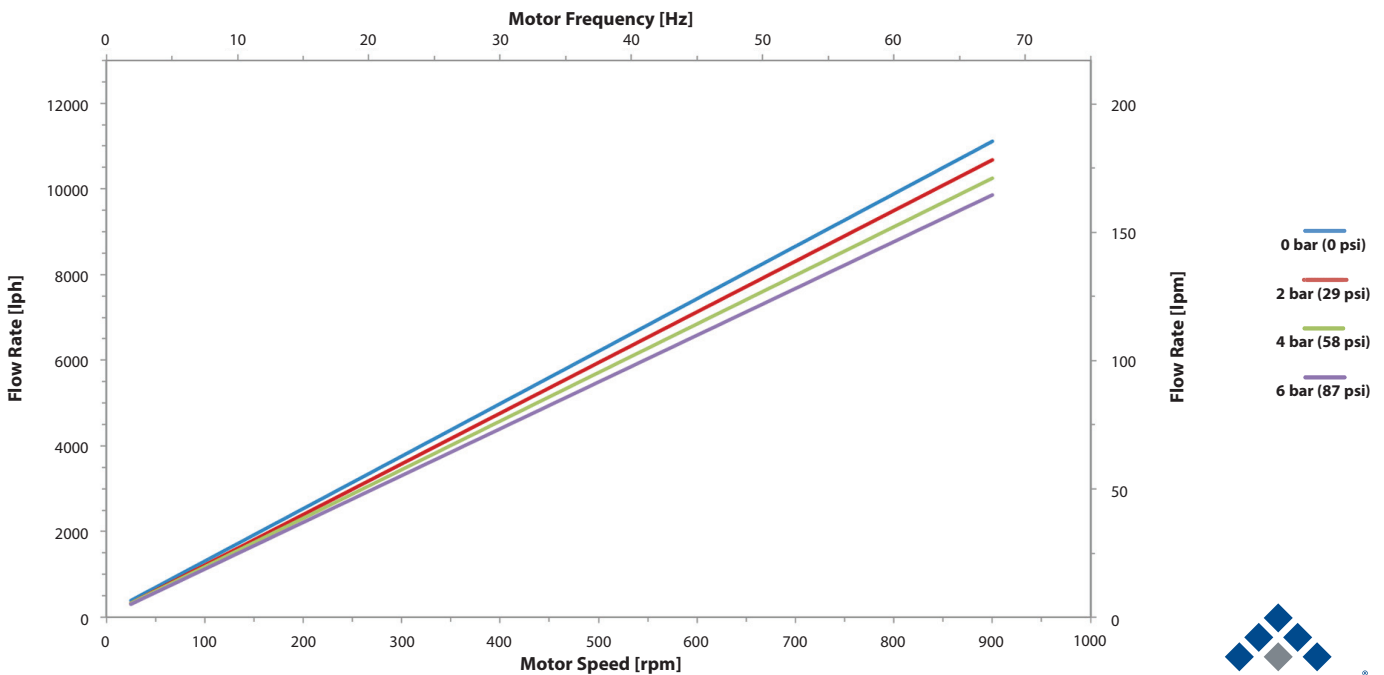
Product Wetted Materials (Standard):		
Pump Chamber	SS316L	
Valve Plate	SS316L	
Diaphragms	TPE	
Valves	EPDM	
O-rings	EPDM	

Certificates/Proofs (Optional):		
Elastomer (product wetted)	USP <88> Cl. VI; FDA21CFR177; BSE/TSE Safe	
Stainless Steel Parts (product wetted)	3.1; Surface Roughness; Ferrite Content	

Motor:		
Rated speed @ 50Hz	2,894 min-1	
Voltage	230/400 V	
Power	3.0 kW	
Gear	4.32:1	

Pump Dimension with Motor and Housing:		
Length	1,155 mm (45.48")	
Width	437 mm (17.20")	
Height	430 mm (16.93")	

Pump Weight with Motor and Housing:		
	185 kg (408 lb.)	



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