

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

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|---|------------------------|--|
| 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 | |

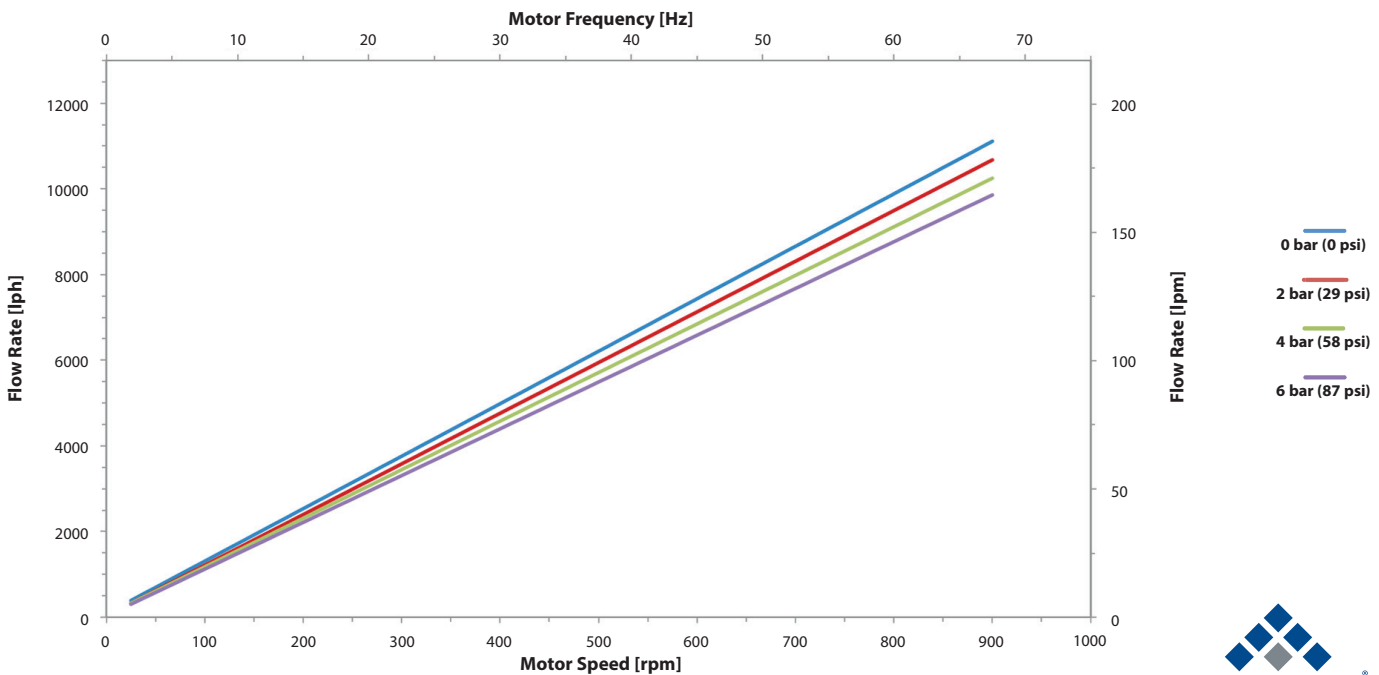
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| Product Wetted Materials (Standard): | | |
| Pump Chamber | SS316L | |
| Valve Plate | SS316L | |
| Diaphragms | TPE | |
| Valves | EPDM | |
| O-rings | EPDM | |

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| 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 | |

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

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



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