

Quattroflow™ QF2500

QF2500 Quaternary
Diaphragm Pump

New Multiple-Use and Single-Use Pump Size Available

With a maximum flow rate of 2,500 lph, the new Quattroflow™ QF2500 pumps are located between the existing QF1200 (max. 1,200 lph) and QF4400 (max. 5,000 lph) pump sizes.

The complete Quattroflow pump range covers a flow capacity between 0.06 and 16,000 lph with eight pump sizes now available – the right Quattroflow pump for all applications.

The QF2500 pumps offer the following main features and benefits:

- New pump chamber design (patent pending), available as Multiple-Use and Single-Use model
- Self-draining design
- Up to 125:1 turn-down ratio
- Linear flow performance
- 50-2,500 lph flow range, max. 4/6 bar (58/87 psi)
- High flow stability even at low flow rates
- Clean-In-Place (CIP), Steam-In-Place (SIP), autoclavable
- Available accessories: Control box, power box, diaphragm sensor, PID pressure controller
- Typical applications include: Chromatography, TFF, virus filtration, sterile filtration, depth filtration

Quattroflow™ has extended the Multiple-Use and Single-Use product lines of Quaternary (Four-Piston) Diaphragm Pumps with the new QF2500 size pumps.



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™ QF2500

Flow Rate Maximum:

Eccentric Shaft 5° 2,500 lph (41 lpm)

Flow Rate Minimum:

Eccentric Shaft 5° 50 lph (0.8 lpm)

Pressure:

Temperature of Fluid < 40° C (104° F) MU/SU 6/4 bar (87/58 psi)

Temperature of Fluid > 40° C (104° F) 4 bar (58 psi)

Maximum Temperature:

Fluid MU/SU 80/60°C (176/140°F)

CIP MU only 90°C (194°F)

Autoclave 130°C (260°F)

Pump Speed Range:

rpm 30-1,750

Suction Lift Dry at Maximum Speed:

Eccentric Shaft 5° 4-4.5 m (13.1-14.7 ft)

Volume Specifications:

Approximated Volume per Revolution at Free Output 27 ml

Approximated Filling Volume Without Connectors 210 ml

Connection Specification (Standard):

Connectors 1" TC

Position of Connectors Front

MU = Stainless steel pump chamber (Multiple-Use), SU = Plastic pump chamber (Single-Use)

Product Wetted Materials (Standard):

| | |
|--------------------|-----------|
| Pump Chamber MU/SU | SS316L/PP |
| Valve Plate MU/SU | SS316L/PP |
| 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:

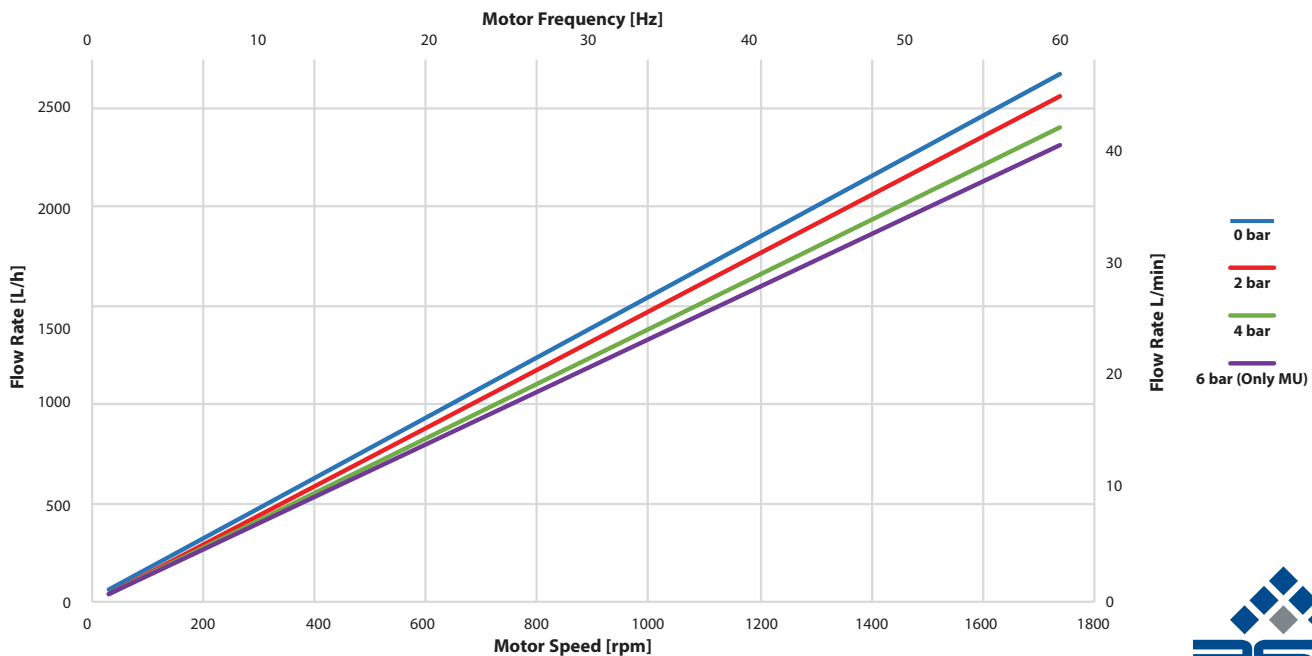
| | |
|--------------------|-------------|
| Rated speed @ 50Hz | 1,445 min-1 |
| Voltage | 230/400 V |
| Power | 1.5 kW |

Pump Dimension with Motor and Housing:

| | |
|--------|-----------------|
| Length | 815 mm (32.09") |
| Width | 215 mm (8.46") |
| Height | 295 mm (11.61") |

Pump Weight with Motor and Housing:

| | |
|----|-----------------|
| MU | 63 kg (139 lb.) |
| SU | 56 kg (123 lb.) |



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