QUATTROFLOW™
Fluid Systems

Quattroflow™ QF1200HT Compact Version

With extended turn-down ratio (200:1)

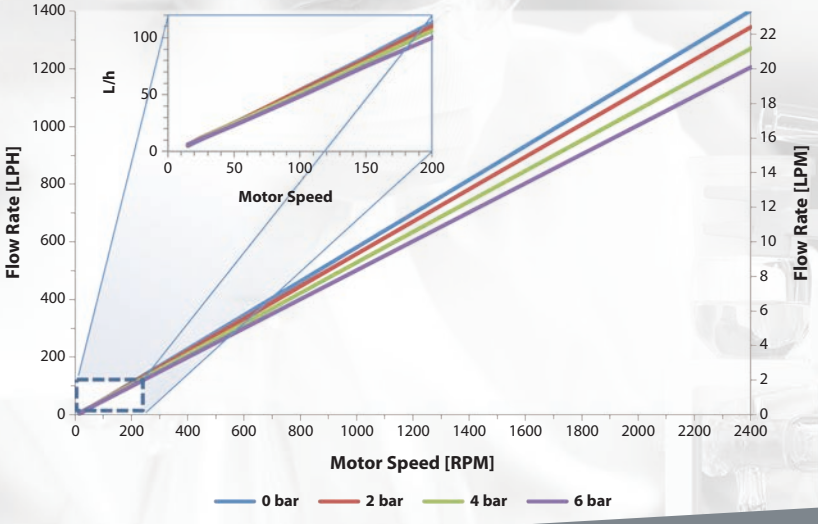
QF1200HT SERIES
Quaternary Diaphragm Pumps

Quattroflow™ has answered the needs of labs that have strict space-use requirements with the design and release of the QF1200HT (Compact Version) Quaternary (Four-Piston) Diaphragm Pump.

The new QF1200HT model is similar to Quattroflow's QF1200 pump with one significant space-saving exemption: the pump chamber, pump drive, motor and control box are all integrated into one unit. The elimination of a separate control box gives the QF1200HT a more compact design and a smaller footprint, which is ideal for lab applications that require a smaller pump model, but for whom the QF150 model with integrated controller does not have enough flow capacity.

In addition, the QF1200HT offers the following features and benefits:

- Extended high turn-down ratio (200:1) for a wider range of flow rates than the standard QF1200 model
- Keypad for manual control and display of motor speed
- Easy "Plug and Pump" installation and startup with one power cable
- Flexible single-phase 110-230V power supply
- Availability in Multiple-Use or Single-Use options
- Machined polypropylene (PP) or injection-molded polyethylene (PE) materials of construction for Single-Use models
- Clean-In-Place/Steaming-In-Place (CIP/SIP) and autoclavability for Multiple-Use models
- Autoclavability for PP Single-Use models
- Ideal for tabletop applications
- Analogue input (0-10V, 4-20mA) available as option



Space-Saving Pump Solutions for Biopharma Applications

Quattroflow™ QF1200HT Compact Version

With extended turn-down ratio (200:1)

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 or particle generation. Additionally, the four-piston pumping principle enables risk-free dry-running, low pulsation, self priming, and minimal particle generation.

Quattroflow pumps are available in two variations: traditional Multiple-Use and the increasingly popular Single-Use:

- **Multiple-Use:** Quattroflow stainless-steel Multiple-Use pumps deliver the highest level of purity, containment and, perhaps most important, cleanability in biopharmaceutical-manufacturing operations, from simple product transfer to critical and demanding filtration and chromatography applications. These pumps are suitable for clean-in-place/steaming-in-place (CIP/SIP) operations, as well as offering autoclave capability.

- **Single-Use:** Quattroflow Single-Use pumps have a disposable product wetted chamber constructed of solid polypropylene (PP) or injection-molded polyethylene (PE) that can be replaced as a complete unit. The simple disposability of the pump chamber saves time and money by eliminating cleaning validation, sterilization and product cross-contamination. Single-Use pumps are critical to reduce equipment turnaround times in the development biosimilar processes. In general, multi-product facilities are the typical field of application of the Single-Use pumps (e.g. process development, production of clinical reference samples, contract manufacturing).

QF1200HT Diaphragm Pump Technical Data

MODEL	QF1200S-HT	QF1200SU-HT	QF1200SU-HT-M
Pump Type	Multiple-Use	Single-Use	Single-Use
Flow Rate	6 - 1200 lph (0.1 - 20 lpm)	6 - 1200 lph (0.1 - 20 lpm)	6 - 1200 lph (0.1 - 20 lpm)
Max. Temperature: • Fluid • CIP • SIP • Autoclave	 80°C (176°F) 90°C (194°F) 130°C (266°F) 130°C (266°F)	 60°C (140°F) - - 130°C (266°F)	 50°C (122°F) - - -
Standard Connection	3/4" TC, inline	3/4" TC, inline	3/4"TC, front
Power Supply	110 - 230 V, 1-phase	110 - 230 V, 1-phase	110 - 230 V, 1-phase
Materials: • Pump Chamber • Diaphragms • Valves • Housing	 316L SS TPE EPDM 304 SS	 Machined PP TPE EPDM 304 SS	 Injection-Molded PE TPE EPDM 304 SS

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