QUATTROFLOW™
Fluid Systems

Quattroflow™ QF4400HT

QF4400HT SERIES
Quaternary Diaphragm Pumps

Integrated controller and high turn-down ratio

The new QF4400HT model is similar to the standard QF4400 pump, but has integrated the pump chamber, pump drive, motor and control box into one unit. The elimination of a separate control box results in a more compact design, a smaller footprint, and an easier handling.

The QF4400HT offers the following features and benefits:

- "All-in-One" technology; integration of pump chamber, pump drive, motor, controller and pump housing into one unit
- Extended turn-down ratio for a wider range of flow rates than the standard QF4400 model with optimal linearity
- High accuracy in controlling flow rates
- Compact design
- Keypad for manual control and display of motor speed
- Easy "Plug and Play" installation and startup with one power cable
- Three phase 400V power supply
- Available as Multiple-Use (pump chamber SS316L) and Single-Use (machined polypropylene)
- Clean-In-Place/Steaming-In-Place (CIP/SIP) and autoclavability for Multiple-Use models
- Autoclavability for Single-Use models
- Analog input (4-20mA) as standard
- Compatible with Quattroflow PID controller

Quattroflow™ has extended the HT product line of Quaternary (Four-Piston) Diaphragm Pumps with the new size QF4400HT. Whereas the existing QF1200HT pump size achieves a flow rate of 1,200 lph, the QF4400HT covers higher performance requirements with a flow rate of 5,000 lph.

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.

Where Innovation Flows

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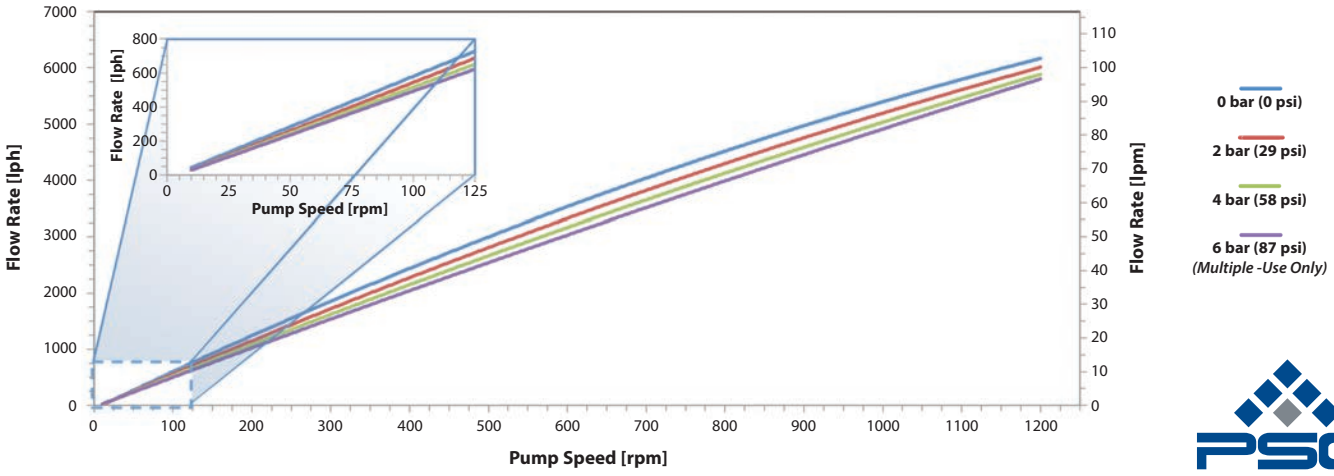
Quattroflow™ QF4400HT

Model Pump Type	QF4400S-HT Multiple-Use	QF4400SU-HT Single-Use
Flow Rate Maximum:		
Eccentric Shaft 6°	5,000 lph (83 lpm)	5,000 lph (83 lpm)
Flow Rate Minimum:		
Eccentric Shaft 6°	50 lph (0.83 lpm)	50 lph (0.83 lpm)
Pressure:		
Temperature of Fluid < 40° C (104° F)	6 bar (87 psi)	4 bar (58 psi)
Temperature of Fluid > 40° C (104° F)	4 bar (58 psi)	4 bar (58 psi)
Maximum Temperature:		
Fluid	80° C (176° F)	60° C (140° F)
CIP	90° C (194° F)	—
SIP	130° C (260° F)	—
Autoclave	130° C (260° F)	130° C (260° F)
Pump Speed Range:		
rpm	10 - 1,200	10 - 1,200
Suction Lift Dry at 1800 rpm:		
Eccentric Shaft 6°	4 - 4.5 m (13.1-14.7 ft)	4 - 4.5 m (13.1-14.7 ft)
Volume Specifications:		
Approximated Volume per Revolution at Free Output	95 ml	95 ml
Filling Volume Without Connectors	820 ml	820 ml
Connection Specification (Standard):		
Connectors	1 1/2" TC	1 1/2" TC
Position of Connectors	Front	Front

Model Pump Type	QF4400S-HT Multiple-Use	QF4400SU-HT Single-Use
Product Wetted Materials (Standard):		
Pump Chamber	SS316L	PP
Valve Plate	SS316L	PP
Diaphragms	TPE	TPE
Valves	EPDM / SS316L	EPDM / SS316L
O-rings	EPDM	EPDM
Certificates/Proofs (Optional):		
Elastomer (product wetted)	USP <88> Cl. VI; FDA21CFR177; BSE/TSE Safe	USP <88> Cl. VI; FDA21CFR177; BSE/TSE Safe; USP 87/381/661
Stainless Steel Parts (product wetted)	3.1; Surface Roughness; Ferrite Content	—
Motor:		
Maximum speed	1,200 min-1	1,200 min-1
Voltage	400 V	400 V
Power	4.0 kW	4.0 kW
Pump Dimension with Motor and Housing:		
Length	790 mm (31.10“)	790 mm (31.10“)
Width	275 mm (10.83“)	275 mm (10.83“)
Height	393 mm (15.47“)	393 mm (15.47“)
Pump Weight with Motor and Housing:		
	90 kg (198 lb.)	75 kg (165 lb.)



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