Your supplier of high pressure laboratory instruments

BTSP-SERIES HIGH PRESSURE SYRINGE PUMP

Description

The BTSP-series are meticulously engineered for advanced applications requiring ultra-precise, pulse-free regulation of fluid flow, suitable for both inorganic fluids (e.g., brine, solvents) and organic fluids (e.g., hydrocarbons, microbial solutions). Capable of delivering specified hydraulic pressures, volumetric flow rates, and dispensed volumes, these pumps are adaptable with pressure capacities reaching as high as 40,000 psi. The unit offers multiple operating modes, including constant-pressure and constant-flow rate settings, and incorporates a high-precision pressure transducer for real-time monitoring. A dual manually-operated isolation valves is provided for controlled fluid inlet and outlet. The system is further complemented with dedicated data acquisition and control software, capable of advanced data analytics and system supervision. As for optional customizations, a digital control panel interface can be integrated for direct, computer-independent pump manipulation. Additionally, a variable-temperature heating mantle is available for fluidic thermal control up to 150°C. For applications requiring temperatures below ambient, an optional cooling jacket is available. This jacket encases the pump cylinder, allowing for thermally stable liquid flow through both the upper and lower hose connectors, thus ensuring consistent fluid temperature during operation. Occasionally, the pump cylinders can be equipped with a magnetically actuated stirring mechanism, enabling in-situ, comprehensive fluid mixing across a broad spectrum of pressure and temperature conditions. In terms of volumetric dispensing, the BTSP series offers customizable cylinder capacities to meet specific application requirements. While the standard material for wetted parts is a high grade stainless steel, hastelloy can be requested for corrosive fluid applications.

Download: Floxlab_Pumps_Brochure.pdf

Specifications

Model	Volume (ml)	Pressure (psi)	Max. flow rate (ml/min)
BTSP 20-40	20	40,000	7.5
BTSP 50-30	50	30,000	20
BTSP 100-10	100	10,000	45
BTSP 125-20	125	20,000	30
BTSP 175-15	175	15,000	30
BTSP 250-10	250	10,000	60
BTSP 500- 5	500	5,000	130
BTSP 1000	1000	1,875	250

EXTENDED BTSP MODELS:

The extended BTSP-series of benchtop single syringe pumps are engineered to accommodate applications that demand elevated volumetric capacities, flow rates, and pressures, exceeding the

specifications of the standard BTSP series. Despite these advanced capabilities, both the hardware and software functionalities remain congruent across the series.

Model	Volume (ml)	Pressure (psi)	Max. flow rate (ml/min)
BTSP 150-30	150	30,000	20
BTSP 250-20	250	20,000	35
BTSP 300-15	300	15,000	40
BTSP 500- 10	500	10,000	70
BTSP 1000-5	1000	5,000	130

Benefits

Ready to use pump

Touch screen front panel (optional)

Pulse-free flow at all rates and pressures

Deliver or receive fluid

Control pump based on time, pressure, flow rate, fluid volume or events

Stainless steel or Hastelloy® wetted parts

High temperature operation (optional)

Mixer pump (optional)

Video presentation: