

PilotGenizer Series High Pressure Homogenizer

Nanoemulsion | Cell Disruption | Nanodispersion | Deagglomeration | Liposome

Unique Benefits

- **Flexible Operation:** Independent, parallel, or series pump configuration
- **Continuous Processing:** Supports precise dual-stream mixing in parallel mode
- **Smart:** Programming control systems confer diligent and foolproof functions
- **Strong:** More than 30L/hr at 30,000 psi
- **CE compliant and RoHs compliant**



PilotGenizer series is a high-pressure homogenization system designed for flexible laboratory and pilot-scale processing. The dual-pump architecture enables multiple operation modes: independent pump use for flexible formulation screening, parallel configuration for microfluidic mixing, and series operation for continuous-flow processing and scale-up development. The system is widely used for the preparation of lipid emulsions, liposomes, nanosuspensions, microemulsions, lipid microspheres, nanoemulsions, and cell disruption applications. It is built with FDA-compliant materials including 316L stainless steel, titanium alloy, tungsten carbide, PTFE, and UHMWPE.

Specifications

Catalog No.	Pilot-15K	Pilot-20K	Pilot-25K	Pilot-30K	Pilot-45K
Flow rate	60L/hr	45L/hr	35L/hr	30L/hr	20L/hr
Min. Sample	200mL	100mL	100mL	100mL	100mL
Max. Pressure	15,000psi	20,000psi	25,000psi	30,000psi	45,000psi
Dimensions (cm)	145×75×50	145×75×50	165×90×65	165×90×65	165×90×65
Weight (kg)	260	260	320	320	320
Max. Temp.	80 °C (176 °F)				
Power	380V/440V				
Cleaning	CIP/SIP/Flush to clean				
Features	Digital display of pressure or pressure gauge				



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https://www.genizer.com/pilotgenizer-high-pressure-homogenizer-dual-pump_p0007.html

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PilotGenizer Series High Pressure Homogenizer



MixGenizer-Pilot



Touch Screen



Diamond Interaction Chamber

Standard Features

Parts	Multi-Slotted Y-type Diamond interaction chamber with cooling option
Control System	High pressure programming control systems [®] : Touch Screen, Speed/Hydraulic pressure dual control, Auto stop control by volume, time, pressure or temperature, settable volume control as low as 100mL, display of flow rate and time, overload protection
Pressure Gauge	Electric
Inlet Type	Tri-Clamp or Luer
Outlet Type	Tri-Clamp or Luer
Feed Reservoir	Online, 2L SUS316 Cylinder
Product Material	316L stainless steel, Tungsten Carbide, Viton, Teflon, UHMWPE
Material Standard	Sanitary Grade, FDA & GMP approvable
Warranty	1 year against any manufacturing defects

Available Option

Parts	Liposome Extruders, Homogenizing valves - Two stages, Heat Exchanger
Control System	Mechanical control, Speed, start, stop control
Compliance	SIP/CIP/IQ/OQ/Audit/Explosion-proof
Detector	Pressure gauge, Pressure and Temp. sensor
Outlet type	Tri-Clamp or Luer
Feed Reservoir	1L, 2L Cylinder or
Collector Reservoir	Online: 1" or 2" Tri-Clamp
Cylinder	Titanium High pressure Cylinder (Resistant to strong acid and base)

