

D-160

Handheld Homogenizer

Features

- Portable, lightweight with ergonomic design ideal for manual operations
- Processing volumes from 0.1-50mL or 1-250mL
- Variable speed from 8,000 to 32,000 rpm
- 316L stainless steel shafts are fully autoclavable
- Interchangeable shafts for easy dismantling and cleaning

Applications

Designed for rapidly homogenize, emulsify, suspend and disrupt biological samples like tissue of animal, bacteria, yeast, plant samples, etc. in liquids. Ideal for samples from 0.1mL to 250mL depending on shaft chosen.



Specifications	D-160
Speed range	8000-32000rpm
Max linear velocity	6.3m/sec or 14m/sec
Speed level	10 stage
Working volume [H ₂ O]	0.1-50mL (Dispersing shaft DS-160/5)
	1-250mL (Dispersing shaft DS-160/10)
Max. viscosity	5,000mPas
Material of Dispersing Shaft	SS 316L stainless steel, PTFE
Noise Level	72 dB(A)
Protection class	IP20
Voltage, Frequency	110-120V/60Hz
	220-240V/50-60Hz
Power	160W
Motor Type	AC carbon brush motor
Dimension [WxDxH]	45mm x 55mm x 190mm
Weight	0.54 kg
Permissible ambient temperature and humidity	0-40°C, 85%RH

DS-160/5 Cat. No.18900543

Volume 0.1-50mL
Max. Circum. Speed 6.3m/sec
Material: 316L stainless steel
Application: small amounts of solid liquid mixed
Function: dispersing tool for solid/liquid media



DS-160/7 Cat. No.18900815

Volume 1-150mL
Max. Circum. Speed 10m/sec
Material: 316L stainless steel
Application: small amounts of solid liquid mixed
Function: dispersing tool for solid/liquid media



DS-160/10 Cat. No.18900544

Volume 1-250mL
Max. Circum. Speed 14m/sec
Material: 316L stainless steel
Application: small amounts of solid liquid mixed
Function: dispersing tool for solid/liquid media



NEW

D-500

High Shear Homogenizer

The high shear homogenizer D500 is applicable to various tasks from sample preparation to formulation study. The motor drives the rotor to rotate at high speed, and the sample is homogenized or dispersed by the gap between the rotor and stator, usually in a short period of time.

Features

- High quality 316L stainless steel with corrosion and autoclave resistance
- Rotor with simple design can be dismounted, cleaned, and sterilized conveniently
- 6 speed levels
- Applicable for sample with viscosity up to 10000mPa · s
- Replaceable rotors and stators sharing the same shaft, cost-effective
- Automatic overload protection mechanism maximizes the working life of motor.
- Smooth motor start, stable acceleration without spillage risk

Applications

Widely applied for histocyte lysis, cell homogenization, emulsion, nanometer scale dispersion process in biology, pharmaceutical, genetic and pathology study, dairy product or fruit homogenization, polymerization reaction, production of fragrance, cosmetics, textile auxiliary, food, ink, paints, asphalt, fine chemicals, agricultural chemicals, and analysis in mineral exploration, environmental protection and energy resource exploration.

- Routine homogenization, emulsion, depolymerization, dispersion application
- Disperse substance to form suspension and emulsion
- Disperse pigment and resin
- Disperse animal or human tissue into various solution
- Facilitate the dissolve of solid substances
- Sample preparation for quality control test
- Animal or plant cell lysis
- Emulsion, cream cosmetics, and food formulation study
- Extraction of active pharmaceutical ingredient from pills and tablets



Specifications	D-500
Speed range	10000-30000rpm
Max linear velocity	22.7-36m/sec
Speed Level	6 stage
Working volume	10-40000mL
Max. viscosity	10000mPa · s
Material of dispersing shaft	SS 316L stainless steel, PTFE
Noise Level	79dB(A)
Protection class	IP20
Voltage, frequency	110-120V/60Hz, 220-240V/50-60Hz
Power	500W
Motor type	AC carbon brush motor
Dimension [WxDxH]	75x75x280mm
Weight	1.7kg
Permissible ambient temperature and humidity	0-40°C, 85%RH

Dispersion Head Selection Guide

Material: All dispersion head components are made of high quality 316L stainless steel to ensure the mechanical performance while rotating at high speed of 30000rpm.

Bearing: Made of excellent material, the bearing is sturdy, durable and corrosion resistance. Its mechanical performance and chemical characteristics are stable.

Easy to clean: The dispersion head is designed to be easily dismantled and thus cleaned. The components can be cleaned manually or automatically, and can be autoclaved. Even the precision components can be removed to clean.



**DS-500/1** Cat No.18201331

Solid and liquid dispersion
Volume 10-5000mL
Max. circum. Speed 22.7m/sec
General purpose
Emulsion granularity range 1-10µm
Suspension granularity range 10-50µm

**DS-500/2** Cat No.18201332

Emulsion
Volume 10-5000mL
Max. circum. Speed 22.7m/sec
General emulsion purpose
Emulsion granularity range 1-10µm
Suspension granularity range 10-50µm

**DS-500/5** Cat No.18900117

Small amounts of solid and liquid dispersion
Volume 1-50mL
Max. circum. Speed 5.8m/sec
Compatible with 5mm stator and 3.8mm rotor
Special design for 1-50mL tissue
homogenization, mixing and suspension in
Eppendorf tube, tube strip and centrifuge
tubes for clinical and diagnostic application

Stator & Rotor		Purpose	Working Volume	Max. circum. Speed	Rotor Dia.	Stator Dia.	Min./Max.	Granularity (µm)		Application
			mL	m/s	mm	mm	Immersion Depth	Suspension	Emulsion	
18201331	SS20CSR20	Solid-liquid mix	10-5000	23.5	15	20	40/170	10-50	1-10	P,CI,PC,SD
18900205 18900215	S20C CR20	Fiber	10-5000	23.5	15	20	40/170	10-50	1-10	SP,M,F,PT,TI
18900205 18900216	S20C MR20	Solid-liquid mix	10-5000	23.5	15	20	40/170	10-50	1-10	CI,PI
18201332	SS20FER20	Emulsion	10-5000	23.5	15	20	40/170	10-50	1-10	SP,PI,PT,P
18900206 18900215	S20F CR20	Fiber	10-5000	23.5	15	20	40/170	10-50	1-10	SP,BT,M,F,PT,TI
18900206 18900216	S20F MR20	Solid-liquid mix	10-5000	23.5	15	20	40/170	10-50	1-10	CI,C,PI,F,PT,PC
18900213 18900216	S30C MR20	As stirring paddle	250-20000	36.1	15	30	40/170	High speed mixing		CI,F,SP
18900213 18900208	S30C SR30	Solid-liquid mix	100-8000	36.1	23	30	40/170	5-25	1-5	SP,M,F,PT,P
18900213 18900209	S30C CR30	Fiber	100-8000	36.1	23	30	40/170	5-25	1-5	SP,M,F,PT,P
18900213 18900229	S30C MR30	Solid-liquid mix	100-8000	36.1	23	30	40/170	5-25	1-5	CI,PI
18900228 18900208	S30F SR30	Solid-liquid mix	100-8000	36.1	23	30	40/170	5-25	1-5	SP,PI,PT,P
18900228 18900212	S30F ER30	Emulsion	100-8000	36.1	23	30	40/170	5-25	1-5	SP,PI,PT,P
18900228 18900229	S30F MR30	Solid-liquid mix	100-8000	36.1	23	30	40/170	5-25	1-5	CI,C,P,F,DT,TI
18900214 18900229	S40C MR30	As stirring paddle	1000-40000	36.1	23	40	40/170	High speed mixing		CI,F,SP
18900117	SS5CSR5	Small amount solid-liquid mix	1-50	6.3	4	5	40/60	10-50	1-10	BT,M

Note:

BT: Biotech; F: Food; P: Pharmaceuticals; C: Cosmetics; M: Medicine Analysis; PC: Petroleum Chemistry; PT: Paper and Pulp Industry; SP: Sewage Treatment; CI: Ceramic Industry; CH: Chemical Industry; PI: Paints Industry; TI: Tobacco Industry

The common combinations of rotor and stator are listed in the table above. Dispersion head can be mounted on the homogenizer main body and fixed on the holder with fixtures. All the components of dispersion head can be sterilized with all usual methods (including chemicals, autoclave, etc.)



WolfLabs

Pricing on any accessories shown can be found by keying the part number into the search box on our website.

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

www.wolflabs.co.uk

Tel : 01759 301142

Fax : 01759 301143

sales@wolflabs.co.uk

Please contact us if this literature doesn't answer all your questions.