

# DINO



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## DRUM & CONTAINER PUMPS



**ASSEMBLY DETAIL**

**Safety Coupling**

Effectively prevent motor failure

**Compact Design**

Fast strip down for quick change of pump and motor

**Flange Connection**

PPHT - SUS304 - PVDF

**Barb Fittings**

Special design for quick and safe change of fittings.

**High Quality Shaft**

SS Series - SUS316  
PPHT - PVDF Series - Hastelloy®

**PTFE Guide Sleeve**

Ensure stability of the shaft.

**Rulon® Shaft Bushing**

Rulon® for better acid and alkali resistance, high wear resistance and low friction.



HD-E1-V  
HD-E2-V

HD-A1

HD-A2

HD-A3

HD-A10

**High Performance Bearing Sets**

For better performance and reduce power consumption.  
Stainless steel for high temperature application.



Industrial Automation  
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**Inner & Outer Tube**

PPHT - PVDF - SUS316

**Threaded Design**

Easy maintenance without any special tools required. Quick change of impeller and housing.

**PVDF Impeller**

Robust construction to improve abrasion resistance.

## ● PUMP SERIES

Special design for easy repair and quick change of spare parts without any special tool.

PTFE guide sleeve and PVDF impeller with abrasion resistant and to make shaft running more stable. Shaft bushing is made of Rulon<sup>®</sup> for best chemical resistance.

PPHT - PVDF - SUS316 tube available with drive shaft made of SUS316 or Hastelloy<sup>®</sup>. It's the best choice for transferring chemical fluid.

## ● INDUSTRY SERVED

Electronic · Optoelectronics ·  
Semi-conductor · Waste water ·  
Chemical industry · Petrochemical ·  
Laboratory · Food industry · Cosmetic  
Biochemistry · Paper making industry ·  
Painting industry · Pharmaceutical ·  
Ship industry · Automotive  
and other industries.



## APPLICATION

Container Type	Model	Length
90AL BOTTLES	HD-Material 700	700mm (27")
500AL Drums (200L)	HD-Material 1000	1000mm (39")
Barrels & Tanks	HD-Material 1200	1200mm (47")
IBC'S	HD-Material 1500	1500mm (59")
Large Storage Vessels	HD-Material 1800	1800mm (71")

## COMMON APPLICATIONS

Material	Max. Temp.	Common Applications
PPHT (Polypropylene)	80°C/176°F	<ul style="list-style-type: none"> <li>· Acetic Acid</li> <li>· Sulfuric Acid</li> <li>· Hydrochloric - 20%</li> <li>· Nitric Acid - 20%</li> <li>· Alkalies</li> <li>· Ferric Chloride</li> </ul>
PVDF	130°C/266°F	<ul style="list-style-type: none"> <li>· Concentrated Nitric Acid</li> <li>· Sulfuric Acid-66 (Baume)</li> <li>· Sodium Hypochlorite</li> <li>· Propionic Acid</li> <li>· Stearic Acid</li> <li>· Hydrofluoric Acid</li> </ul>
SS	100°C/212°F	<ul style="list-style-type: none"> <li>· Alcohol</li> <li>· Gasoline</li> <li>· Aqueous Ammonia</li> <li>· Isopropyl Ether</li> <li>· Solvents</li> <li>· Petroleum Products</li> </ul>

For safety, it's recommended to connect ground wire when pumping flammable or solvent liquids.

● AIR MOTOR & VARIABLE SPEED CONTROL MOTOR



High pressure (High volume)  
Test conditions:  
• Air: 40-50°C dry  
• Flow: 1000 l/min (21.2 gpm) with 1" inlet  
• Performance curve may vary 10% based on application

● NOT suitable for pumping flammable or combustible liquid



High pressure (High volume)  
Test conditions:  
• Air: 40-50°C dry  
• Flow: 1000 l/min (21.2 gpm) with 1" inlet  
• Performance curve may vary 10% based on application

● Please install an Air Filter - Regulator - Lubricator

VARIABLE SPEED CONTROL MOTOR

HD-E1-V 110 V / 1.1 p / 50-60Hz / 550w

HD-E2-V 230 V / 1.1 p / 50-60Hz / 550w

Max. Viscosity: 1,800cps

Max. RPM: 10,000rpm

Overheated Protector

Safety Handling Switch

Chemical Resistant Casing

5m SUT Electronic Wire & Plug Included

Protection: IP44

Weight: 3 kg

HD-A1 AIR MOTOR

Max. Inlet Air Pressure: 87psi(6bar)

Air Consumption: 0.55Nm³/min@6kg/cm²

Joint (air): 1/4"

Accessories: Muffler - Air Regulator

Casing: Aluminum (Chromium)

Max. Viscosity: 700cps

RPM: 7,500 (5bar Air Pressure)

RPM: 10,000 (1bar Air Pressure)

Horsepower: 420w (0.56HP)

Weight: 1 kg



High pressure (High volume)  
Test conditions:  
• Air: 40-50°C dry  
• Flow: 1000 l/min (21.2 gpm) with 1" inlet  
• Performance curve may vary 10% based on application

● Please install the air filter for reduce moisture from the compressed air supply.



High pressure (High volume)  
Test conditions:  
• Air: 40-50°C dry  
• Flow: 1000 l/min (21.2 gpm) with 1" inlet  
• Performance curve may vary 10% based on application

● Please install an Air Filter - Regulator - Lubricator

HD-A2 OIL FREE AIR MOTOR

Max. Inlet Air Pressure: 87psi (6bar)

Air Consumption: 0.55Nm³/min@6kg/cm²

Joint (air): 1/4"

Casing: Aluminum (Epoxy)

Max. Viscosity: 1,200cps

RPM: 5,800 (5bar Air Pressure)

RPM: 10,000 (1bar Air Pressure)

Horsepower: 580w (0.75HP)

Weight: 1.2 kg

HD-A1G AIR MOTOR

Max. Inlet Air Pressure: 100psi (7bar)

Air Consumption: 280CFM@100psi

Joint (air): 1/4"bap

Accessories: Muffler - Air Regulator

Casing: Cast Iron

Max. Viscosity: 100,000cps

Max. RPM: 2,000rpm

Horsepower: 7.5kw (10-HP)

Frame: 145FC

Weight: 36 kg

## ● HD HIGH VISCOSITY SCREW PUMP



### Applications

From high to low viscosity liquid - aggressive or neutral liquid - polymer - lubricator - ink - shampoo - PU & PVC - resin and so on.

### W Motor:



HD-A1



HD-A2



HD-A3



HD-B1-V  
HD-B2-V



HD-A5



HD-A4



HD-A1 (●) HD-A2 (●) HD-A3 (●) HD-B1-V (●) HD-B2-V (●)

Test conditions:

• Viscosity: 100cP

• Performance curves may vary 10% based on application.



Rotor  
SUS316



Stator  
PTFE

### HD-HV High viscosity series

Model: HD-SS700-HV Size: 700mm (27") 5 GAL. Bottles

HD-SS1000-HV 1000mm (39") 95 GAL. (200L) Drum

HD-SS1200-HV 1200mm (42") Barrels & Tanks

Max. Temp.: 120°C/248°F

Outlet Diameter: 27.5mm / 30mm

Pump: SUS304 / SUS316

Rotor: SUS316

Stator: PTFE

Max. Viscosity: 100,000cP

Mechanical Seal: SIC

O-ring: PTFE

Max. Flow Rate: 50L/min (tested with 2000cp epoxy and HD-A5 air motor)

Max. Pressure: 174psi / 12bar

Weight: 12kg

## ● HD-LB LABORATORY PUMP

### Application

Laboratory - small volume dispensing

**HD-LB700** Length: 700mm(27")

**HD-LB1000** Length: 1000mm(39")

### PUMP TUBE

Material: Polypropylene (PP)

Outlet Diameter: 21mm (0.83")

Inlet Diameter: 27mm (1.06")

Max. Viscosity: 150cP

Max. Inlet Pressure: 0.3kg

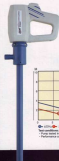
Max. Flow Rate: 32L/min

### MOTOR

With 5 Meter Electronic Wire, IP44, CE Certification

220V/110V 1 φ / 50 Hz-60Hz100W

Weight: 2.3 kg



HD-LB700 (●) HD-LB1000 (●)

Test conditions:

• Viscosity: 100cP

• Performance curves may vary 10% based on application.

**● OPTIONS**

**NOZZLES**

- Control the flow rate easily.
- Keep the operating environment clean.
- Design to transfer to small containers safely.
- Body : Polypropylene & PVDF
- O-Ring : PFA or Viton
- Shaft & Spring : Hastelloy®

**GROUND WIRE**

- It's important to connect ground wire when pumping flammable or explosive liquids.
- Each 5M length 16ga electronic wire set comes with clip for connects.

**ADAPTORS**

- Barrel Adaptor**  
- Material : PVDF - PP  
- 41 - 43mm(1.6 - 1.7 inch) thread
- Air Leaking Adaptor**  
- Material : PP - SS  
- With adaptor to prevent corrosive air from leaking.

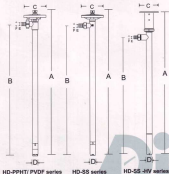
**WALL BRACKET**

- Stainless Steel

**STRAINERS**

- Recommended when pumping dirty chemical liquids containing particles.
- Material : PP - PVDF & SS316
- PP mesh : 2mm
- PP inner : 1.5" (38mm)
- outer : 2" (52mm)

**● DIMENSION**



Material	Length	A	B	C	D	E	F
PPHT	1700	815	710	110	41	54	21
	1800	920	815	110	41	54	21
	1900	1025	920	110	41	54	21
	2000	1130	1025	110	41	54	21
	2100	1235	1130	110	41	54	21
PVDF	1700	815	710	110	41	54	21
	1800	920	815	110	41	54	21
	1900	1025	920	110	41	54	21
	2000	1130	1025	110	41	54	21
	2100	1235	1130	110	41	54	21
SS	1700	815	710	110	41	54	21
	1800	920	815	110	41	54	21
	1900	1025	920	110	41	54	21
	2000	1130	1025	110	41	54	21
	2100	1235	1130	110	41	54	21
SS&V	1700	815	710	110	41	54	21

(Unit: millimeter)



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