

# **DiNO**

## **DRUM & CONTAINER PUMPS**



**ASSEMBLY DETAIL**



HD-E1-V  
HD-E2-V

HD-A1

HD-A2

HD-A6

**High Performance Bearing Sets**

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

**Safety Coupling**

Effectively prevent motor failure

**Compact Design**

Fast strip down for quick change of pump and motor

**Flange Connection**

PPHT · SUS316 · 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 shaft stability.

**Rulon® Shaft Bushing**

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

**Inner & Outer Tube**

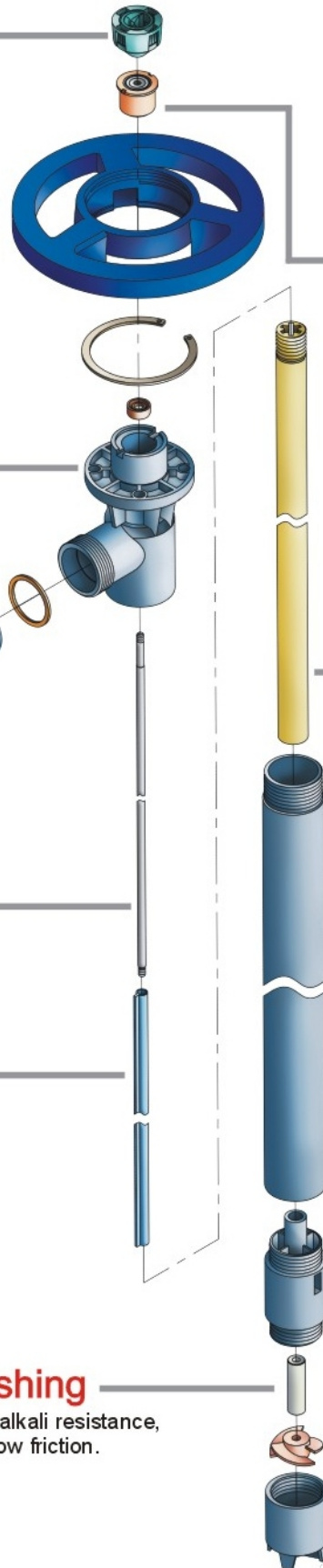
PPHT · PVDF · SUS316

**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® for best chemical resistance.

PPHT、PVDF、SUS316 tube available with drive shaft made of SUS316 or Hastelloy®. 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
5GAL Bottles	HD-Material 700	700mm (27")
55GAL Drums (200L)	HD-Material 1000	1000mm (39")
Barrels & Tanks	HD-Material 1200	1200mm (47")
IBC'S	HD-Material 1500	1500mm (60")
Large Storage Vessels	HD-Material 1800	1800mm (72")

### COMMON APPLICATIONS

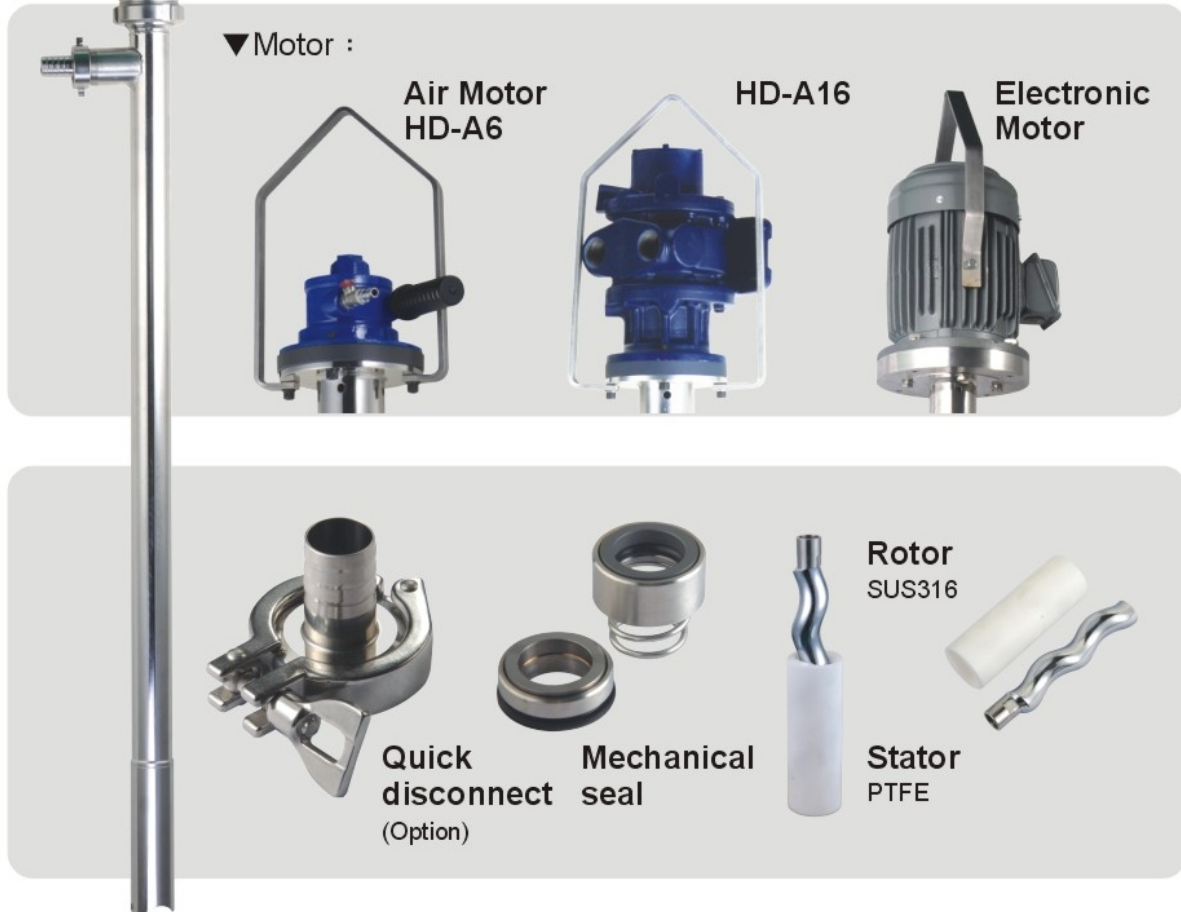
Material	Max. Temp.	Common Applications
PPHT (Polypropylene)	80°C/175°F	<ul style="list-style-type: none"> <li>Acetic Acid</li> <li>Sulfuric Acid</li> <li>Hydrochloric - 20%</li> <li>Nitric Acid - 20%</li> <li>Alkalies</li> <li>Ferric Chloride</li> </ul>
PVDF	100°C/212°F	<ul style="list-style-type: none"> <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.

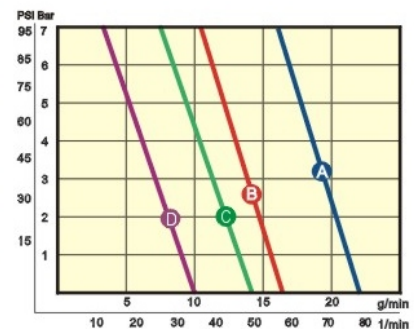
**● HD HIGH VISCOSITY SCREW PUMP**

**Applications**

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



<b>HD-HV High viscosity series</b>	
Model: HD-SS700-HV	Size : 700mm (27") 5 GAL. Bottles
HD-SS1000-HV	1000mm (39") 55 GAL. (200L) Drum
HD-SS1200-HV	1200mm (42") Barrels & Tanks
Max. Temp. : 120°C/248°F	
Outlet Dimension : 27.5mm / 33mm	
Pump : SUS304 / SUS316	
Rotor : SUS316	
Stator : PTFE	
Max. Viscosity : 100,000cps	
Mechanical Seal : SIC	
O-ring : PTFE	
Max. Flow Rate : 90L/min (Tested with 2000cps epoxy and HD-A6 air motor)	
Max. Pressure : 10bar	
Weight : 12kg	



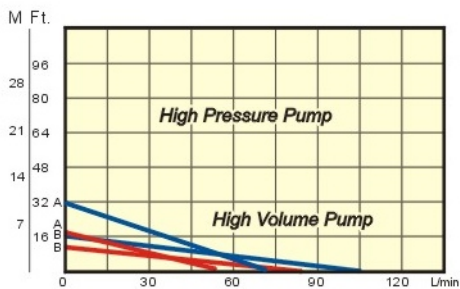
HD-A16: **A** 7bar **B** 4bar  
 HD-A6: **C** 7bar **D** 4bar

**Test conditions:**

- Viscosity: 5,000cps
- Performance curves may vary ±10% based on applications.

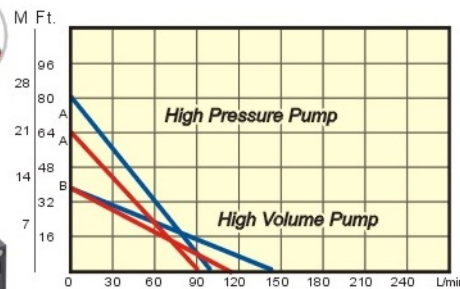


**● AIR MOTOR & VARIABLE SPEED CONTROL MOTOR**



A.High pressure B.High volume 4 bar — 6bar —  
**Test conditions :**  
 • With HD-SS1000 tube.  
 • Pump tested in 25 °C water, 500 L drum, with 1" outlet.  
 • Performance curves may vary ±10% based on applications.

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



A.High pressure B.High volume 60 Hz — 60 Hz —  
**Test conditions :**  
 • With HD-SS1000 tube.  
 • Pump tested in 25 °C water, 500 L drum, with 1" outlet.  
 • Performance curves may vary ±10% based on applications.

⚠ NOT suitable for pumping flammable or combustible liquid



**HD-A1 OIL FREE AIR MOTOR**

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

Air Consumption: 0.55Nm<sup>3</sup>/min@6kg/cm<sup>2</sup>

Joint (air): 1/4" NPT

Accessories: Muffler 、 Air Regulator

Casing: Aluminum (Epoxy)

Max. Viscosity: 700cps

RPM: 7,500 (3bar Air Pressure)

RPM: 18,000 (6bar Air Pressure)

Horsepower: 420w (0.56HP)

Weight: 1 kg

**VARIABLE SPEED CONTROL MOTOR**

HD-E1-V 110 V / 1 φ / 50-60Hz / 485w

HD-E2-V 220 V / 1 φ / 50-60Hz / 485w

Max. Viscosity: 1,000cps

Max. RPM: 20,000rpm

Overheated Protector

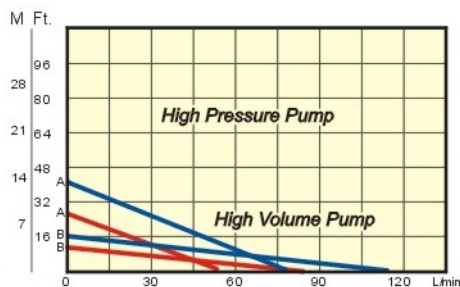
Safety Handling Switch

Casing use fireproof material

5m SJT Electronic Wire & Plug Included

Protection: IP44

Weight: 3 kg



A.High pressure B.High volume 4 bar — 6bar —  
**Test conditions :**  
 • With HD-SS1000 tube.  
 • Pump tested in 25 °C water, 500 L drum, with 1" outlet.  
 • Performance curves may vary ±10% based on applications.

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



**HD-A2 OIL FREE AIR MOTOR**

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

Air Consumption: 0.55Nm<sup>3</sup>/min@6kg/cm<sup>2</sup>

Joint (air): 1/4" NPT

Casing: Aluminum (Epoxy)

Max. Viscosity: 1,200cps

RPM: 8,000 (3bar Air Pressure)

RPM: 18,000 (6bar Air Pressure)

Horsepower: 560w (0.75HP)

Weight: 1.2 kg

**PUMP PACKAGE**

Special specification is available upon request.



**● OPTIONS**

**NOZZLES**

- Control the flow rate easily.
- Keep the operating environment clean.
- Design to transfer to small containers safely.
- Body : Polypropylene
- 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 : PE
- 41、43mm(1.6、1.7 inch) thread

**Air Leaking Adaptor**

- Material : PP、SS
- Viton barrier to prevent corrosive air from leaking.

**WALL BRACKET**

- SUS316



**TRANSFER HOSE**

- PFA Hose
  - 1000mm
  - 1500mm
  - 2000mm
  - Special length is available upon request.
- PVC Braided Hose.



**STRAINERS**

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

**DIGITAL FLOW METER**

- Casing : PP,PTFE
- Rotor : ECTFE
- Sensor : CPVC
- Inlet/Outlet : 1"PT
- LCD display

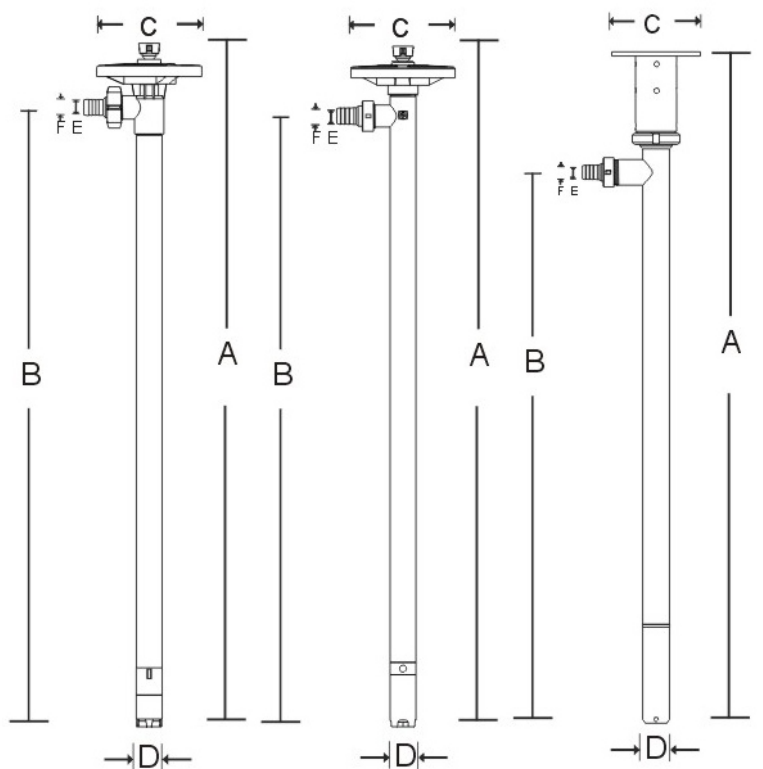


**Hanger**

- SUS304
- For high viscosity series.



**● DIMENSION**



HD-PPHT/ PVDF series

HD-SS series

HD-SS-HV series

Material	Length	A	B	C	D	E	F
PPHT	700	810	700	170	41	19	27
	1000	1100	1000	170	41	19	27
	1200	1290	1200	170	41	19	27
	1500	1590	1500	170	41	19	27
	1800	1890	1800	170	41	19	27
PVDF	700	810	700	170	41	19	26
	1000	1100	1000	170	41	19	26
	1200	1300	1200	170	41	19	26
	1500	1600	1500	170	41	19	26
SS	700	810	700	170	42	20	27
	1000	1100	1000	170	42	20	27
	1200	1300	1200	170	42	20	27
	1500	1600	1500	170	42	20	27
SS-HV	1000	1300	1025	166	56	28	33

※Dimension may vary ±1% based on product. (Unit: millimeter)  
 ※Special length is available upon request.



**DINO DRUM & CONTAINER PUMPS**

E-mail: info@dino.com.tw

Website: www.dino.com.tw

dino.trade-taiwan.org