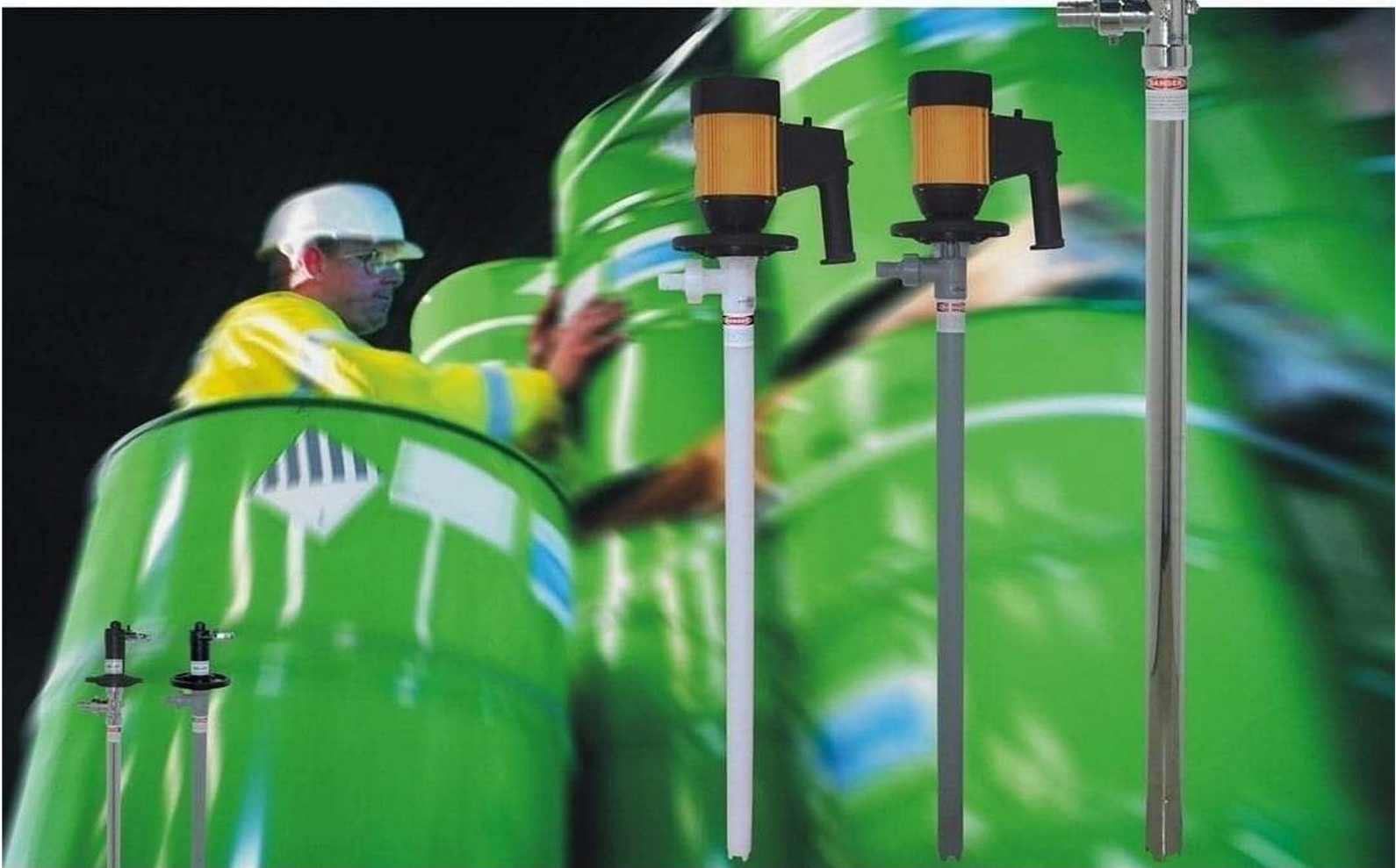


# CATALOG DRUM PUMP



HD SERIES



# HD Series Drum pump

## MOTOR MODEL NUMBER KEY

<b>HD</b>	-	<b>E</b>	<b>2-V</b>
<b>Name</b>		<b>Type</b>	<b>Voltage</b>
High performance Drum		E (Variable speed control motor) EX(SB-3) (EX motor) A1 (Air motor) SB-550W (Electronic motor) SB-880W (Electronic motor) SB-1100W (Electronic motor)	220V 220V 1=1/2HP 375W 220V 220V 220V

## HD Variable Speed Control Pneumatic Motor

Model	Voltage	Speed	Hertz	Power
HD-E2-V	1 φ 220V	0~10000	50-60Hz	800W
HD-EX2-V(SB-3)	1 φ 220V	12000	50-60Hz	880W
HD-A1		0~10000	3~7 bar	375W
SB-550W	1 φ 220V	8000	50-60Hz	550W
SB-880W	1 φ 220V	10000	50-60Hz	880W
SB-1100W	1 φ 220V	10000	50-60Hz	1100W

## PUMP MODEL NUMBER KEY

Example: HD-SS304-1000(high volume/material:SS304)

HD-PPHT-1000-HP(high pressure/material:PPHT)

<b>HD</b>	-	<b>SS</b>	<b>1000</b>	-	<b>HP</b>
<b>Name</b>		<b>Material</b>	<b>Length</b>		<b>Type</b>
High performance Drum		SS 304 PVDF PPHT SS316L AL PTFE	700:700mm(27") 1000:1000mm(39") 1200:1200mm(47") 1500:1500mm(60") 1800:1800mm(72")		HP:High Pressure HV: High Volume (Do not bid) HV:High Viscosity 3A:3A Sanitary Standard

# HD Series Drum pump

## PUMP ASSEMBLY DETAIL



### Compact Design

Fast strip down for quick change of motor and pump

### Safety Coupling

Effectively prevent motor talvre

### Flange Connection

PPHT\PVDF\SUS316L\304\PTFE\AL

### Barb Filings

Spadal dusion for quick and safa change of fillings.

### High quality shaft

SUS316L

PPHT、PVDF、PTFE Hastelloy

### TEF Guide sleeve finned design

Enare good statllty and flcodbley

PVDF

### High perfcenance impeler

Robust construction to improve capacity and abrasion resistance.

### High performance Bearing Sets

For better perffnace and reduce power consumption.

Stainless steel beffer corrosion resistance and hig temperature appli cation.

Manufacturers registered trademark convex casting LOGO design, to ensure that products pure

### Threaded Design (Carbon brush housing)

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

### Shaft Bushing

Rulon® not only for better acid and alk resistance, but also high wear resista and low friction.



Special impeller design allows run dry up to 30 minutes.



# HD Series Drum pump

HD-E2-V	HD-A1	HD-EX2-V	SB-1100W	SB-800W	SB-550W

Faststrip down for quick change of motor and pump




<p>HD-PPHT-1000</p> <p>SS D=42 PPHT D=41 PVDF D=41 PTFE D=50 AL D=41 mm</p>					
	SS	PPHT	PVDF	PTFE	AL

# HD Series Drum pump

## COMMON APPLICATIONS

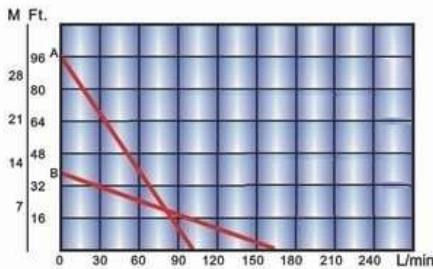
Material	Max.Temp.	Common Applications
PPHT	80°C/175°F	<ul style="list-style-type: none"> <li>• Acetic Acid</li> <li>• Sulfuric Acid</li> <li>• Hydrochloric-20%</li> <li>• Nitric Acid-20%</li> <li>• Alkalies</li> <li>• Ferric Chloride</li> </ul>
PVDF	100°C/212°F	<ul style="list-style-type: none"> <li>• 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>
PTFE	110°C/230°F	<ul style="list-style-type: none"> <li>• Sulfuric acid</li> <li>• Hydrochloric acid</li> <li>• Phosphoric acid</li> <li>• Hydrofluoric acid</li> <li>• Sodium hydroxide</li> <li>• Chromic acid</li> <li>• Aqua regia</li> <li>• Formic acid</li> <li>• Methane</li> <li>• Benzene</li> <li>• Alcohol</li> <li>• Acetone</li> <li>• Ester</li> </ul>
SS304	100°C/212°F	<ul style="list-style-type: none"> <li>• Alcohol • Gasoline</li> <li>• Aqueous Ammonia</li> <li>• Isopropyl Ether</li> <li>• Solvents</li> <li>• Petroleum Products</li> </ul>
SS316L	100°C/212°F	<ul style="list-style-type: none"> <li>• Alcohol • Gasoline</li> <li>• Aqueous Ammonia</li> <li>• Isopropyl Ether</li> <li>• Solvents</li> <li>• Petroleum Products</li> </ul>
AL	100°C/212°F	<ul style="list-style-type: none"> <li>• Sewage</li> <li>• Diesel oil</li> <li>• Low viscosity oil</li> <li>• Lubricating oil</li> </ul>

 Conveying liquids such as solvent, must use of explosion-proof motor or pneumatic motor, and then on the ground, in order to ensure the safety of the use of

# HD Series Drum pump

## ARIABLE SPEED CONTROL MOTOR

### HD-E2-V



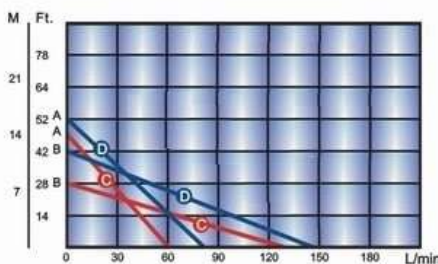
A HP  
B

Type	HD-E2-V	
Flow	(Max.)165L	HP (Max.)100L/min
Head	(Highest)10M	HP (Highest)30M
Speed	0~10000(r/min)	
Power	800W	
Viscosity	800CPS,HP 1000CPS	
Weight	3.55Kg	

Run dry protector  
Safety handling switch  
Chemical resistant casing

220V Models–Included 5 m SJT electronic wire& plug  
Protection: IP44

### HD-A1



A(D) HP (7Bar)  
A(C) HP (4Bar)  
B(D)(7Bar)  
B(C)(4Bar)

Type	HD-A1	
Flow	(Max.)150L(7bar)	HP(Max.)80L/min
	(Max.)120L(4bar)	HP(Max.)60L/min
Head	(Highest)10M(7bar)	HP (Highest)16M
	(Highest)8M(4bar)	HP (Highest)13M
Speed	0~10000(r/min)	
Power	375W	
Viscosity	700CPS	
Weight	1.23Kg	

Max. Inlet air pressure: 102 psi(7bar)  
Air consumption: 22CFM@92psi(10.38liter/sec@6.3bar)  
Joint (air): 8mm  
Accessory: Muffler, Air regulator

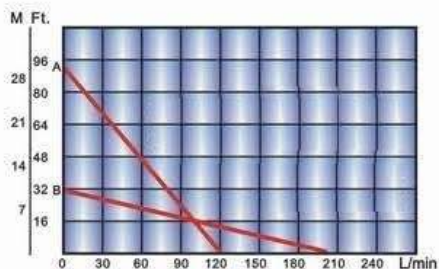
Option: air filter, pressure regulator, lubricator (F,R,L combination)  
Casing: Stainless steel, Aluminum



# HD Series Drum pump

## ADJUSTABLE SPEED CONTROL MOTOR

### HD-EX2-V(SB-3)



A HP  
B

Type	HD-EX2-V(SB-3)	
Flow	(Max.)198L	HP(Max.)120L/min
Head	(Highest)12M	HP(Highest)30M
Speed	12000(r/min)	
Power	880W	
Viscosity	50 CPS,HP型80 CPS	
Weight	4.4Kg	

Chemical resistant casing

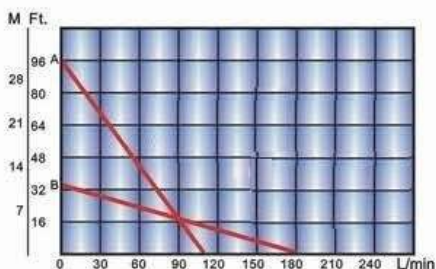
220V EX. Models–Included 3 m electronic wire

Protection: IP55

CN Ex11.0331

Explosion proof grade: d II BT4

### SB-1100W



A HP  
B

Type	SB-1100W	
Flow	(Max.)180L	HP (Max.)110L/min
Head	(Highest)11M	HP (Highest)30M
Speed	10000(r/min)	
Power	1100W	
Viscosity	500CPS,HP800CPS	
Weight	3.38Kg	

Chemical resistant casing

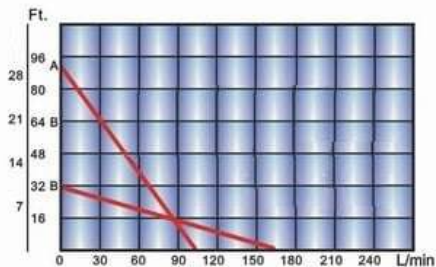
220V Models–Included 3 m 245IEC53 electronic wire& plug

Protection: IP20

# HD Series Drum pump

## ARIABLE SPEED CONTROL MOTOR

### SB-880W



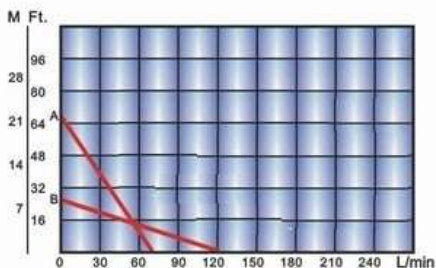
A HP  
B

Type	SB-880W	
Flow	(Max.)170L	HP(Max.)105L/min
Head	(Highest)10M	HP(Highest)29M
Speed	10000(r/min)	
Power	880W	
Viscosity	500CPS,HP 800CPS	
Weight	3.3Kg	

Chemical resistant casing

220V Models–Included 3 m 245IEC53 electronic wire& plug  
Protection: IP20

### SB-550W



A HP  
B

Type	SB-550W	
Flow	(Max.)120L	HP(Max.)70L/min
Head	(Highest)8M	HP (Highest)22M
Speed	8000(r/min)	
Power	550W	
Viscosity	500CPS,HP 800CPS	
Weight	2.3Kg	

Chemical resistant casing

220V Models–Included 3 m 245IEC53 electronic wire& plug  
Protection: IP20



# HD Series Drum pump

## GENERAL INFORMATION/UPON RECEIVING



Read and understand operation and service guide before commissioning.

### GENERAL INFORMATION

1. Check chemical chart to match the suitable material of the pump to the Drum you wish to pump. When selecting a pump, please take into account of criteria such as capacity, head, temperature, viscosity, Drum, solid size and chemical resistance before ordering.
2. Check power, voltage, fitting conditions, electrical connections and working conditions before commissioning.
3. Hose barbs are standard size 1"(25.4mm) or special size 3/4"(22mm), 1 1/4"(32mm)

## APPLICATIONS

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')
BC'S	HD- material 1500	1500mm(60')
Large Storage Vessels	HD- material 1800	1800mm(72')

### UPON RECEIVING

1. Please check if pump model on the name plate corresponds to your order.
2. Check motor and pump for any damages upon receiving.
3. Make sure motor and pump has been fully installed and all connections and pipes have been connected

# HD Series Drum pump

## OPERATING INSTRUCTIONS

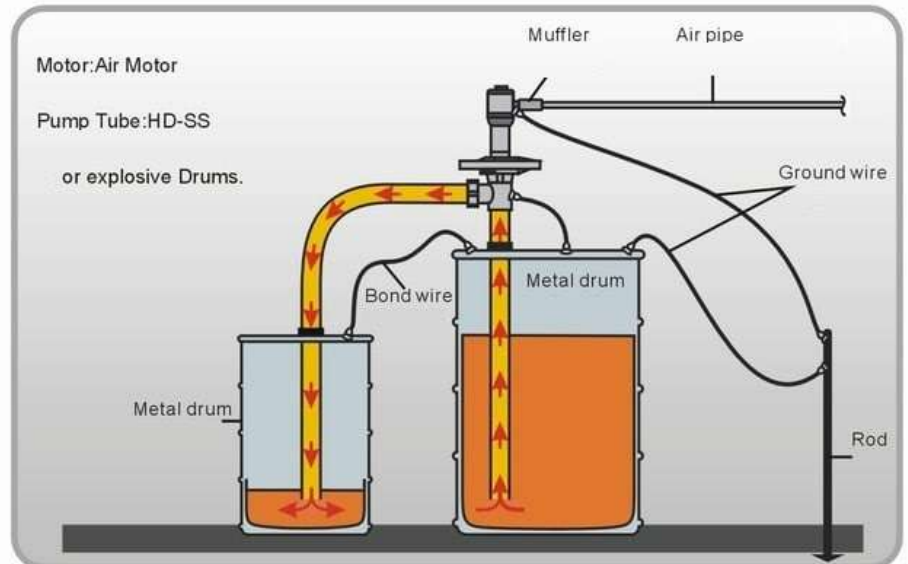
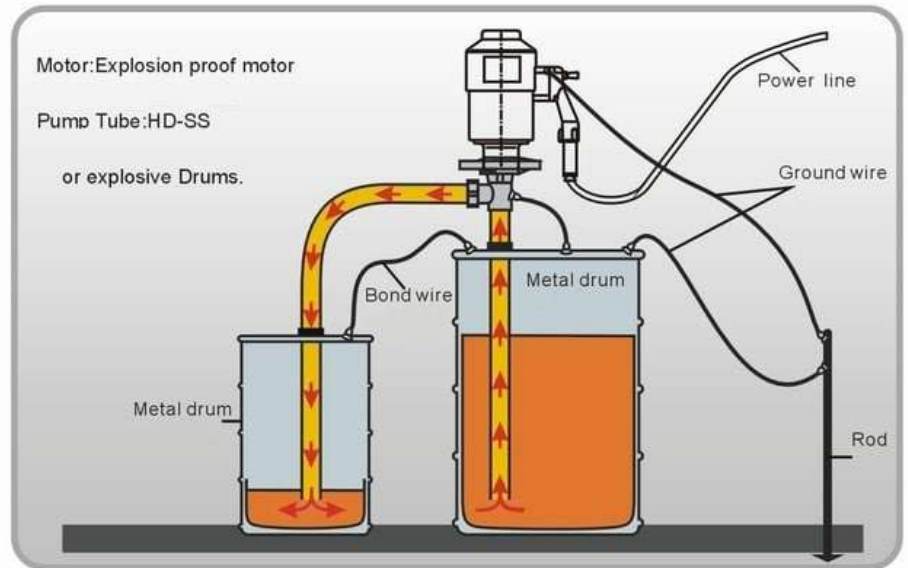
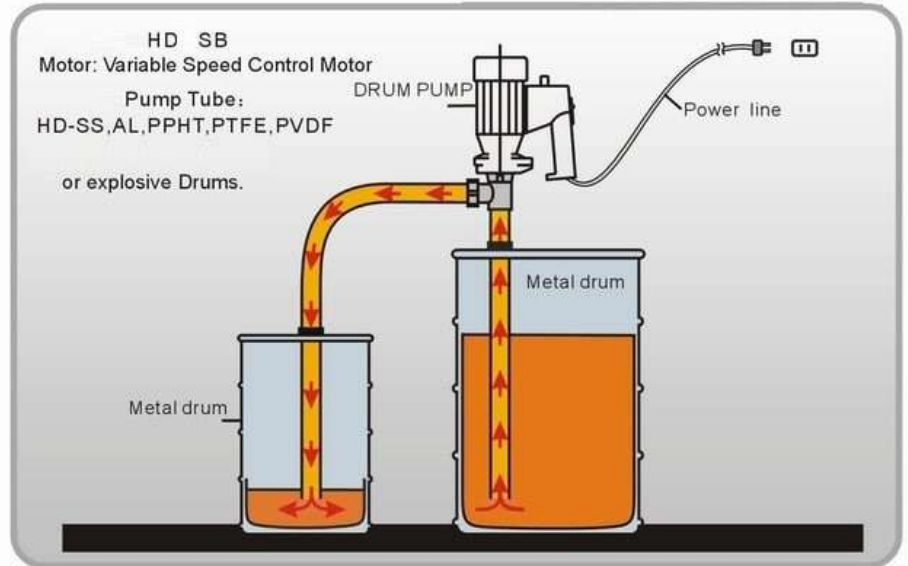
1. Make sure hand wheel and all connections are securely fastened.
2. The maximum particle size must not exceed 3 mm. Use strainer for size over 3mm.
3. Do not store pump in a humid and corrosive environment.
4. Handle motor and pump with care.
5. Use F.R.L. combination unit (Air Filter, Regulator and Lubricator) for HD-A series air motors.  
Note: Lubricating oil turbine oil by ISO VG32 ( 1# turbine oil)
6. Turn on the air or power only after pump and pipes are in place.
7. Always start the air from low to high to extend the life time of the pump.
8. Make sure the voltage is connected according to correct electrical specification.
9. Motor is equipped with overload protection switch to allow dry running.
10. Do not leave pump unattended during operation.
11. Drum Pump is suitable to handle fluids with viscosity up to 800 CPS and up to 1000 CPS with high pressure impeller . Use high viscosity screw pump or (FY Pneumatic slurry pump, RW air diaphragm pump, ZB Rotor pump, CG screw pump)  
Air operated double-diaphragm pump for transferring high viscosity fluids.
12. If strange noise occurs, check if the suction hose is obstructed by particles and colliding with impeller.
13. For safety, please properly bond and ground when handling solvent or flammable fluids.
14. Make sure pump and motor is properly and securely fasten, or otherwise, could result in serious damage to the couplings.
15. Set the switch "OFF" position before installation of motor and pump.
16. Never submerge motor in Drum or splash motor with Drum.
17. HD series drum pump the elevation shall not exceed 1,000m

# HD Series Drum pump

## DRUM PUMP SUGGESTED INSTALLATION



For safety, please properly bond and ground when handling solvent or flammable fluids as a static electric discharge could result in fire, explosion, injury or death. Do not start the pump in case of any doubt, and contact with local distributor.





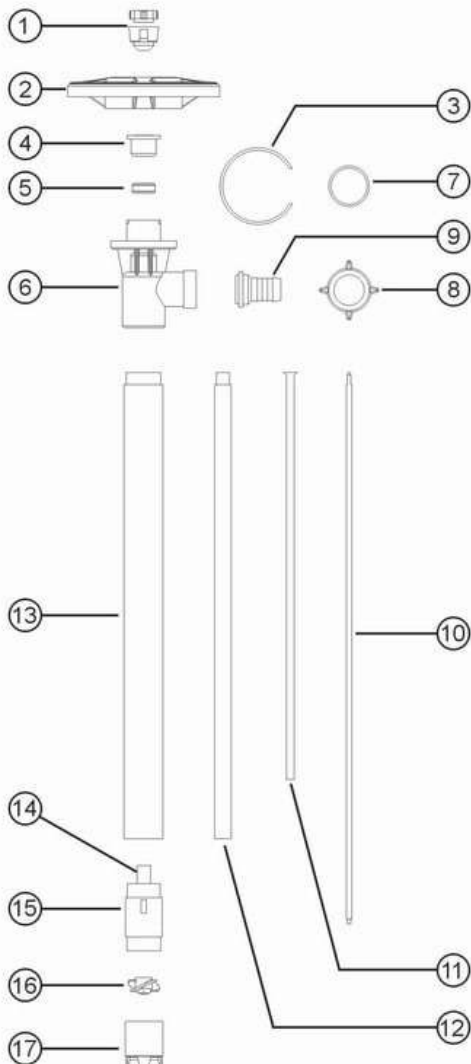
# HD Series Drum pump

## HD-PPHT DRUM PUMP SERIES

Model	Length	Material	Shaft	Impeller
HD-PPHT-700	700mm(27")	Polypropylene	SS316L/Hastelloy	PVDF High Pressure
HD-PPHT-1000	1000mm(39")			
HD-PPHT-1200	1200mm(47")			
HD-PPHT-1500	1500mm(60")			
HD-PPHT-1800	1800mm(72")			
HD-PPHT-700-HP	700mm(27")	Polypropylene	SS316L/Hastelloy	PVDF High Pressure
HD-PPHT-1000-HP	1000mm(39")			
HD-PPHT-1200-HP	1200mm(47")			
HD-PPHT-1500-HP	1500mm(60")			
HD-PPHT-1800-HP	1800mm(72")			

(Max Temp):80°F/175°C  
 (Viscosity):1000Cps/mPas(HD-E)  
 700Cps/mPas(HD-A1)  
 500Cps/mPas(HD-EX(SB-3))

(Max Specific Gravity):1.8  
 (Discharge Options):1"(25mm)barb  
 3/4"(22mm)barb  
 (weight):1-2kg



No.	Name	No.
01	Pump coupling	810.804
02	Hand wheel	818.842
03	Snap ring	815.808
04	Bearing unit assembled-2	810.838
05	V-Seal-VT	840.800
06	Connection flange	860.828
07	TEL seal	821.895
08	Wing nut	861.806
09	Hose barb, 1"	860.882
10	Drive shaft	700mm(27") 815.843+L (Hastelloy/SS316L) 1000mm(39") 815.844+L 1200mm(47") 815.845+L 1500mm(60") 815.846+L 1800mm(72") 815.847
11	Guide sleeve	700mm (27") 815.814 (FEP) 1000mm(39") 815.815 1200mm(47") 815.816 1500mm(60") 815.817 1800mm(72") 815.818
12	Inner tube	700mm (27") 866.800 (PP) 1000mm(39") 866.801 1200mm(47") 866.802 1500mm(60") 866.815 1800mm(72") 866.816
13	Outer tube	700mm (27") 866.803 (PP) 1000mm(39") 866.804 1200mm(47") 866.805 1500mm(60") 866.817 1800mm(72") 866.818
14	Pure carbon brush	816.806
15	Carbon brush housing	865.824
16	PVDF impeller	846.808
	High pressure impeller	846.808HP
17	Pump foot	816.809
	High pressure pump foot	816.809HP

# HD Series Drum pump

## HD-PVDF DRUM PUMP SERIES

Model	Length	Material	Shaft	Impeller
HD-PVDF-700	700mm(27")	PVDF	Hastelloy	PVDF High Volume
HD-PVDF-1000	1000mm(39")			
HD-PVDF-1200	1200mm(47")			
HD-PVDF-1500	1500mm(60")			
HD-PVDF-1800	1800mm(72")			
HD-PVDF-700-HP	700mm(27")	PVDF	Hastelloy	PVDF High Pressure
HD-PVDF-1000-HP	1000mm(39")			
HD-PVDF-1200-HP	1200mm(47")			
HD-PVDF-1500-HP	1500mm(60")			
HD-PVDF-1800-HP	1800mm(72")			

(Max Temp):100°C/212°F

(Viscosity):1000Cps/mPas(HD-E)

700Cps/mPas(HD-A1)

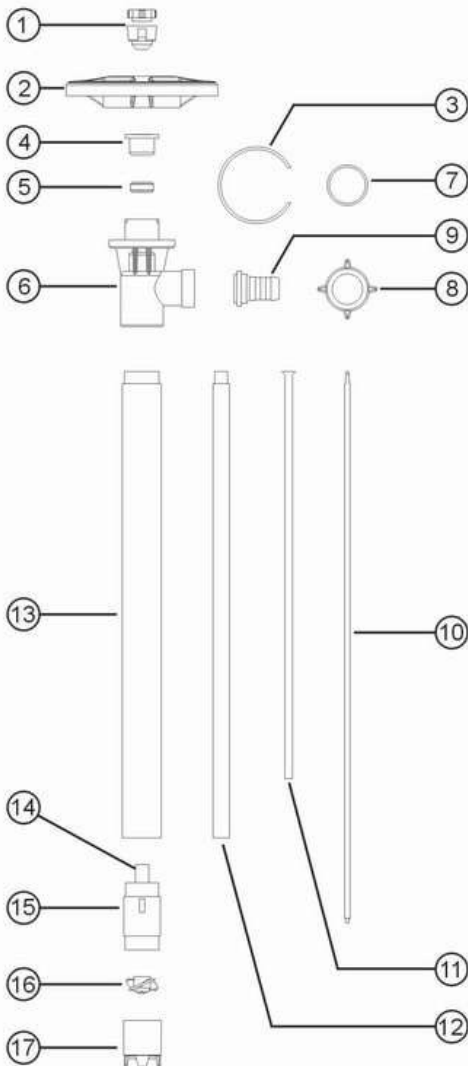
500Cps/mPas(HD-EX(SB-3))

(Max Specific Gravity):1.8

(Discharge Options):1"(25mm)barb

3/4"(22mm)barb

(weight):1.2-2.4kg



No.	Name	No.
01	Pump coupling	810.804
02	Hand wheel	818.842
03	Snap ring	815.808
04	Bearing unit assembled-2	810.838
05	V-Seal-VT	840.800
06	Connection flange	840.728
07	TEL seal	821.895
08	Wing nut	841.706
09	Hose barb,1"	840.882
10	Drive shaft	815.843
	(Hastelloy)	815.844
		815.845
		815.846
		815.847
11	Guide sleeve	815.814
	(FEP)	815.815
		815.816
		815.817
		815.818
12	Inner tube	846.800
	(PVDF)	846.801
		846.802
		846.811
		846.812
13	Outer tube	846.803
	(PVDF)	846.804
		846.805
		846.813
		846.814
14	Pure carbon brush	816.806
15	Carbon brush housing	846.807
16	PVDF impeller	846.808
	High pressure impeller	846.808HP
17	Pump foot	846.809
	High pressure pump foot	846.809HP



# HD Series Drum pump

## HD-SS DRUM PUMP SERIES

Model	Length	Material	Shaft	Impeller
HD-SS304-700SS 316L	700mm(27")	SUS304/ SUS 316L	Stainless 316L	PVDFHigh Volume
HD-SS304-1000SS 316L	1000mm(39")			
HD-SS304-1200 SS 316L	1200mm(47")			
HD-SS304-1500SS 316L	1500mm(60")			
HD-SS304-1800SS 316L	1800mm(72")			
HD-SS304-700-HPSS 316L	700mm(27")	SUS304/ SUS 316L	Stainless 316L	PVDF High Pressure
HD-SS304-1000-HPSS 316L	1000mm(39")			
HD-SS304-1200-HPSS 316L	1200mm(47")			
HD-SS304-1500-HPSS 316L	1500mm(60")			
HD-SS304-1800-HPSS 316L	1800mm(72")			

(Max Temp):100°C/212°F

(Viscosity):1000Cps/mPas(HD-E)

700Cps/mPas(HD-A1)

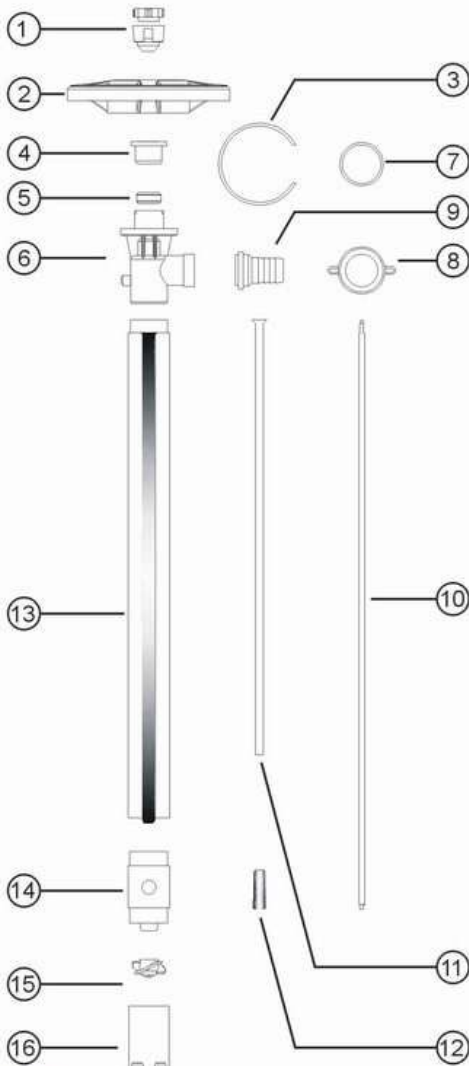
500Cps/mPas(HD-EX(SB-3))

(Max Specific Gravity):1.8

(Discharge Options):1"(25mm)barb

3/4"(22mm)barb

(weight):3.8-5.8kg



No.	Name	No.
01	Pump coupling	810.804
02	Hand wheel	818.842
03	Snap ring	815.808
04	Bearing unit assembled-2	810.838
05	V-Seal-VT	840.800
06	Connection flange (304, 316L)	820.800+L
07	TEL seal	821.895
08	Wing nut (304, 316L)	821.868+L
09	Hose barb,1" (304, 316L)	821.896+L
10	Drive shaft	700mm (27") 820.827
	(316L)	1000mm(39") 820.828
		1200mm(47") 820.829
		1500mm(60") 827.809
		1800mm(72") 827.810
11	Guide sleeve	700mm (27") 820.831
	(FEP)	1000mm(39") 827.815
		1200mm(47") 820.832
		1500mm(60") 827.811
		1800mm(72") 827.812
12	Pure carbon brush	816.806
13	Inner/outer tube assembly	700mm (27") 827.800+L
	(304, 316L)	1000mm(39") 827.801+L
		1200mm(47") 827.802+L
		1500mm(60") 827.813+L
		1800mm(72") 827.814+L
14	Carbon brush housing (304, 316L)	827.804+L
15	PVDF impeller	827.806
	High pressure impeller	827.806HH
16	Pump foot	827.808+L
	High pressure pump foot	827.808HH+L



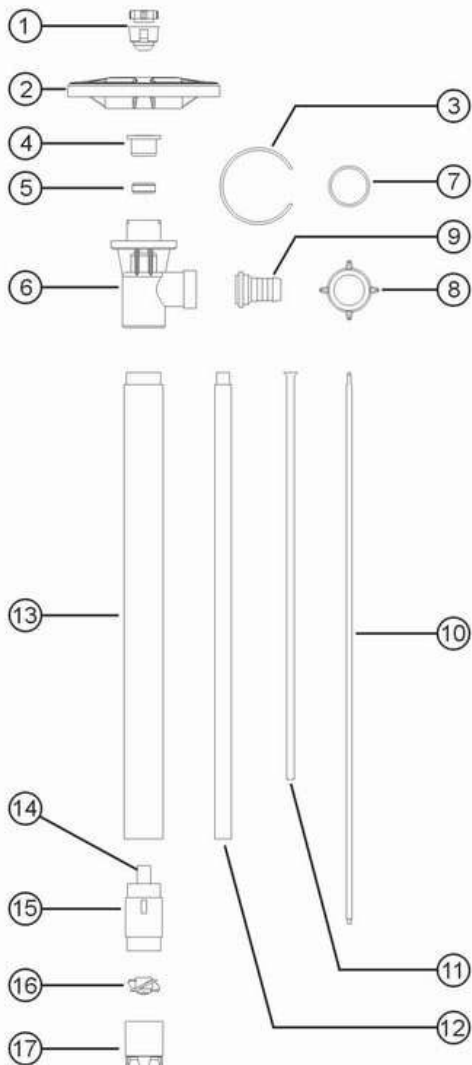
# HD Series Drum pump

## HD-PTFE DRUM PUMP SERIES

Model	Length	Material	Shaft	Impeller
HD-PTFE-700	700mm(27")	PTFE	Hastelloy	PTFE High Volume
HD-PTFE-1000	1000mm(39")			
HD-PTFE-1200	1200mm(47")			
HD-PTFE-1500	1500mm(60")			
HD-PTFE-1800	1800mm(72")			
HD-PTFE-700-HP	700mm(27")	PTFE	Hastelloy	PTFE High Pressure
HD-PTFE-1000-HP	1000mm(39")			
HD-PTFE-1200-HP	1200mm(47")			
HD-PTFE-1500-HP	1500mm(60")			
HD-PTFE-1800-HP	1800mm(72")			

(Max Temp): 110°C/230°F  
 (Viscosity): 1000Cps/mPas(HD-E)  
 700Cps/mPas(HD-A1)  
 500Cps/mPas(HD-EX(SB-3))

(Max Specific Gravity): 1.8  
 (Discharge Options): 1"(25mm)barb  
 3/4"(22mm)barb  
 (weight): 1-2kg



No.	Name	No.
01	Pump coupling	810.804
02	Hand wheel	818.842
03	Snap ring	815.808
04	Bearing unit assembled-2	810.838
05	V-Seal-VT	840.800
06	Connection flange	940.728
07	TEL seal	821.895
08	Wing nut	941.706
09	Hose barb, 1"	940.882
10	Drive shaft	700mm(27") 815.843
	(Hastelloy)	1000mm(39") 815.844
		1200mm(47") 815.845
		1500mm(60") 815.846
		1800mm(72") 815.847
11	Guide sleeve	700mm (27") 815.814
	(FEP)	1000mm(39") 815.815
		1200mm(47") 815.816
		1500mm(60") 815.817
		1800mm(72") 815.818
12	Inner tube	700mm (27") 946.800
	(PTFE)	1000mm(39") 946.801
		1200mm(47") 946.802
		1500mm(60") 946.811
		1800mm(72") 946.812
13	Outer tube	700mm (27") 946.803
	(PTFE)	1000mm(39") 946.804
		1200mm(47") 946.805
		1500mm(60") 946.813
		1800mm(72") 946.814
14	Pure carbon brush	816.806
15	Carbon brush housing	946.807
16	PTFE impeller	946.808
	High pressure impeller	946.808HP
17	Pump foot	916.809
	High pressure pump foot	916.809HP

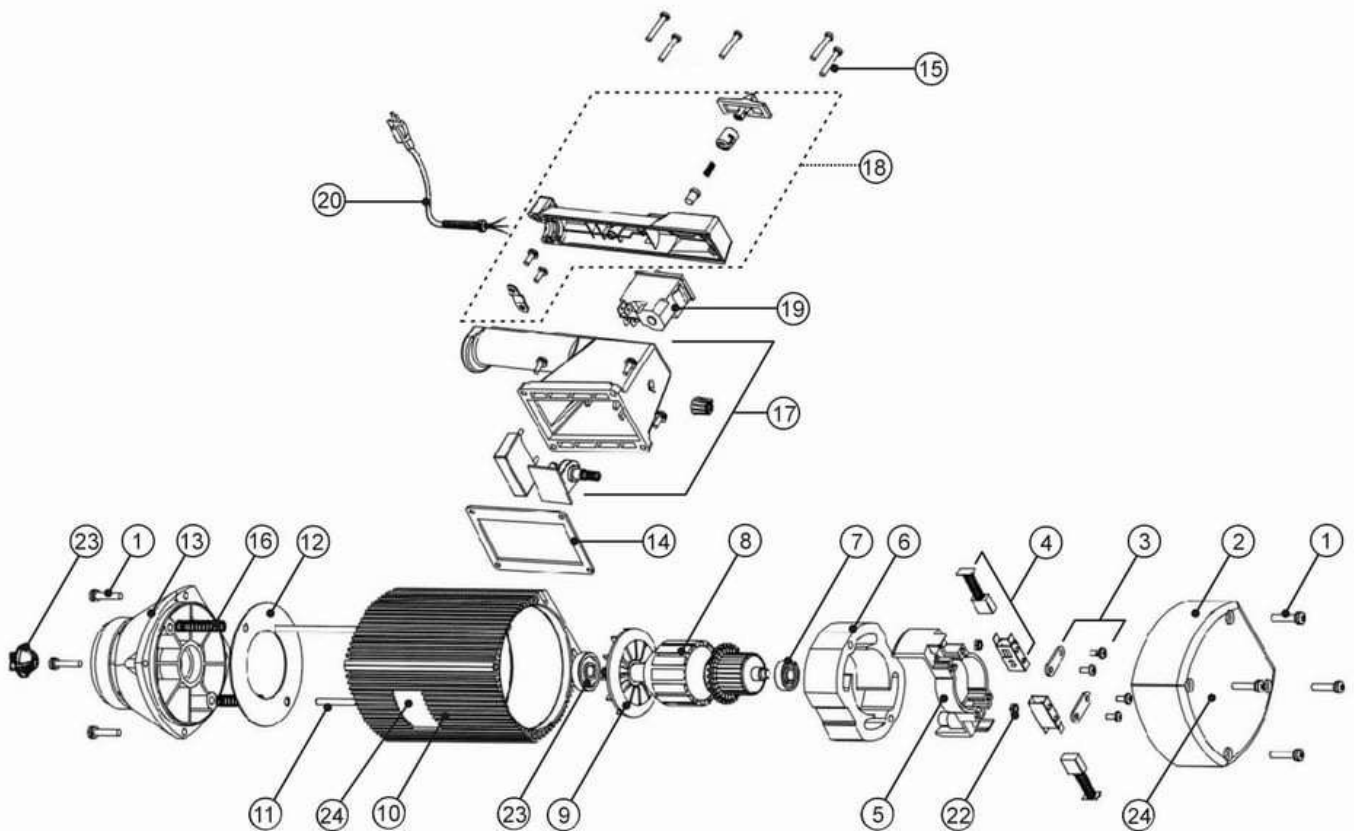
# HD Series Drum pump

## HD-E2-V VARIABLE SPEED CONTROL MOTOR SERIES

Model	Power
HD-E2-V	220V/1 $\phi$ /50-60Hz/800W

(Weight):3.55kg

Do Not Pump Flammable or Explosive Fluids.



No.	Name	No.	No.	Name	No.
01	Screw for plastic housing	881.830P	13	Lower housing	881.800
02	Motor cover	880.800	14	Gasket	881.867
03	Cross screw with gasket	810.840	15	Screw	881.831
04	Carbon brush	887.803	16	Pressure Spring	885.807
05	Brush holder	885.808	17	Switch housing for variable speed includes potentiometer	880.805
06	Stator	887.802	18	Switch cover	880.802
07	Ball bearing	881.826	19	Overload switch	887.804
08	Armature	887.801	20	Power cord w/strain relief&plug	887.805
09	Fan	885.812	21	Bearing	883.831
10	Motor housing, plastic	885.810P	22	Hexagon nut	884.848
11	Rod connector	885.806	23	Motor coupling	883.833
12	Guide disc	885.804	24	Logo	