

# CHEONSEI DRUM PUMPS

DRUM AND CONTAINER PUMPS



# Cheonsei Drum and Container Pumps

## Features

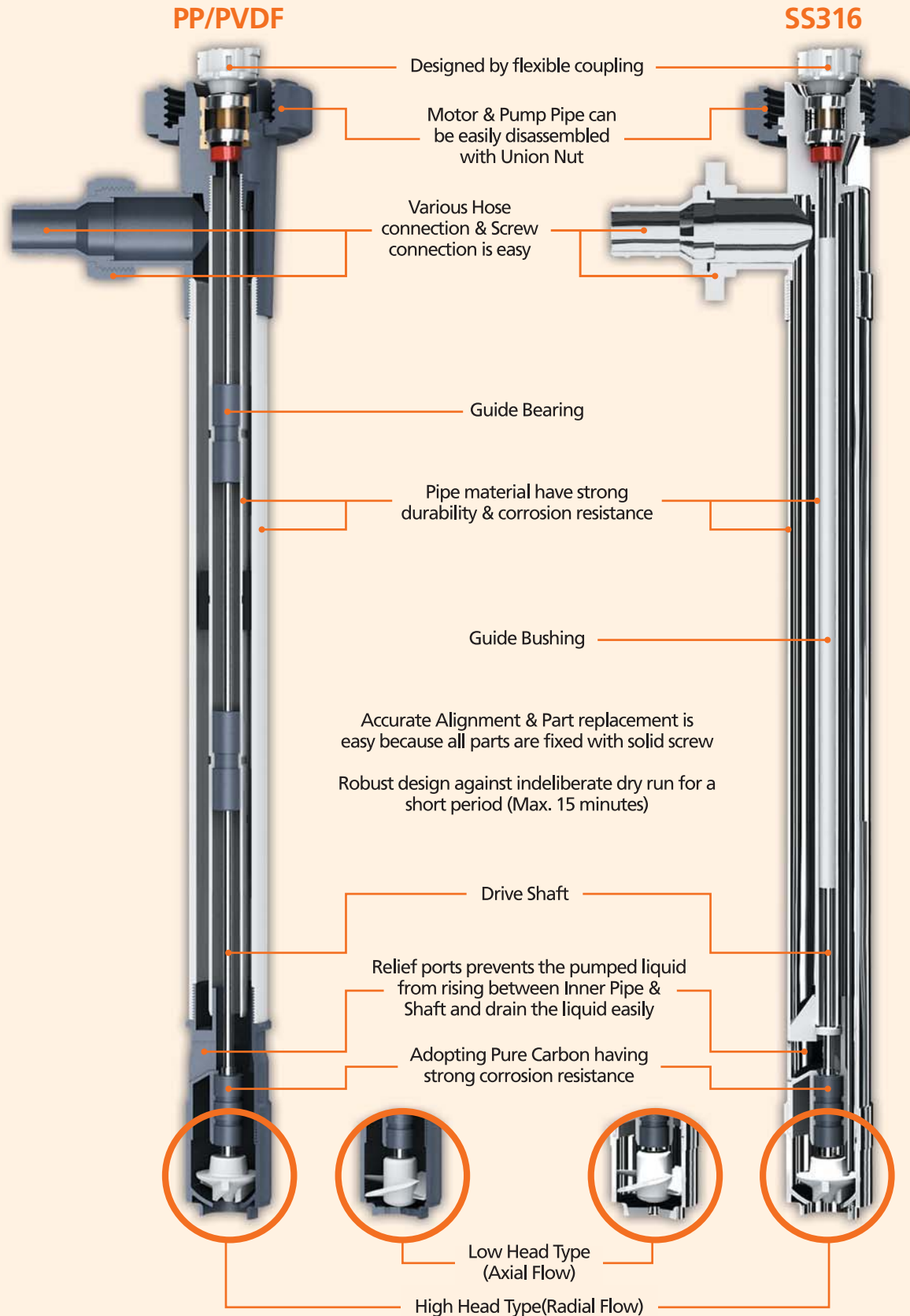
- Removing unstable elements of pump performance with sealless structure
- Maintenance cost can be reduced remarkably due to the robust design against the indeliberate dry run for a short period. (Max. 15 minutes)
- Preventing motor damage by installing of dual safety device in the motor
- Easy operation and simple part replacement

## Applications

- To transfer from plating facility, chemical plant or chemical warehouse, or to decant into small units
- To transfer or refill chemicals in metal factory or waste processing facilities
- To refill chemicals in research centers or hospitals
- To transfer chemicals in power plants and public institutes
- To decant organic/inorganic chemicals and high viscosity chemicals into small units from drum, container or can



# Drum Pump Pipe (Sealless Structure)





## Drum Pump | Electric Motor

- Dual prevention of motor from damage caused by overload through installing Thermal Protection device(TP) and over-current breaker internally
- By installing low voltage release device(Optional), preventing motor damage caused by low voltage
- Dual wall type motor housing prevents damages from external impacts
- 5m long power cable is equipped with plug as standard item.



### Speed control device (Optional)

Flow can be controlled easily with the motor speed(RPM)dial, so that stability can be improved in transferring corrosive liquid, and operating cost can be reduced as well by decreasing of motor power consumption with the low speed

#### Specification

Power	480W	RPM	9,000RPM
Voltage	220~230VAC	Protection grade	IP44
Frequency	50/60Hz	Insulation grade	B
Current	2.4A	Weight	3.2~3.3kg

### Model Code

**DR - P L S - 10 - U 4 S - S**

Pump model

Pipe material

P:PP  
F:PVDF  
S:SS316

Motor voltage S:220~230V 50/60Hz

Motor option S:Standard type

A:Speed control

B:Speed control &

Low voltage release

Motor power 4:480W

Motor type U:Universal motor

Pipe length 07:700mm 10:1000mm 12:1200mm

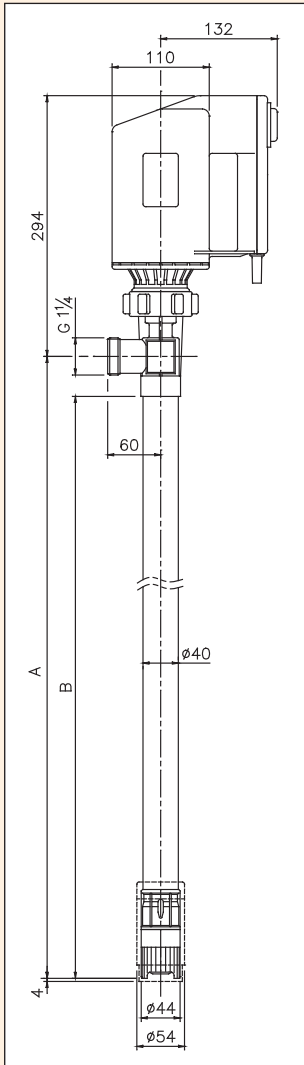
Shaft material S:SS316 H:HASTELLOY T:TITANIUM

Capacity features L:Low head H:High head

### Liquid End Material

Pump Type	DR-P□S	DR-P□H(T)	DR-F□H(T)	DR-S□S
Pipe	PP	PP	PVDF	SS316
Impeller	ETFE	ETFE	ETFE	ETFE
Bearing	CARBON	CARBON	CARBON(PTFE)	CARBON
Guide Bearing(Bushing)	PTFE	PTFE	PTFE	PTFE
Drive Shaft	SS316	HASTELLOY(TITANIUM)	HASTELLOY(TITANIUM)	SS316

# Pump Pipe PP (Polypropylene)



## Application

For transferring slight neutrality & liquid Acid, Alkali, Oil & etc.

## Examples of liquids to be pumped

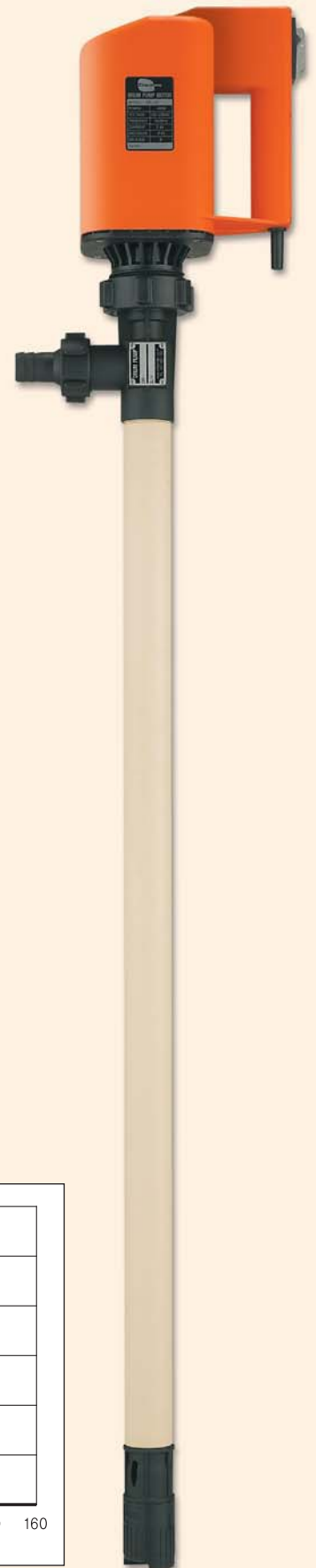
Sulphuric Acid, Acetic Acid, Phosphoric Acid, Alkali liquids & etc.

## Specification

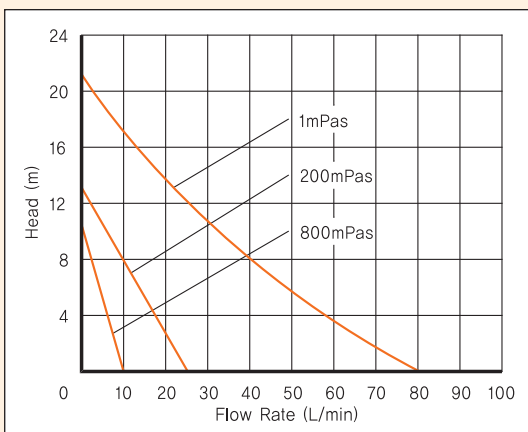
	DR-PH	DR-PL
Max. Flow Rate (L/min)	80	130
Max. Head (m)	21	8
Max. Viscosity (mPas)	800	200
Max. Specific Gravity	1.6	1.3
Dia. of Insertion (mm)	44	44
Dia. for Hose Connection (mm)	25	25
Limit of liquid Temp (°C)	50	50
Weight (kg)	700mm	4.1
	1,000mm	4.3
	1,200mm	4.5

## Pipe Length

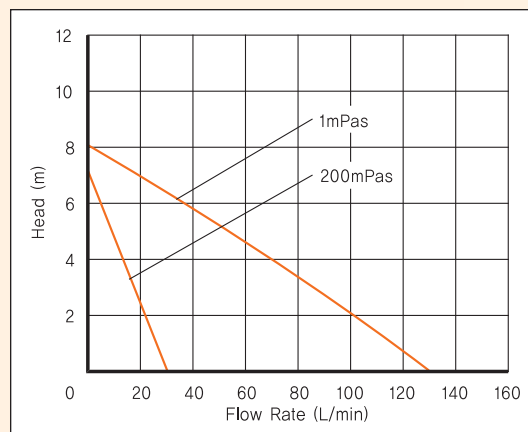
Length	A	B
700	700	655
1,000	1,000	955
1,200	1,200	1,155



## PH (High Head Type)

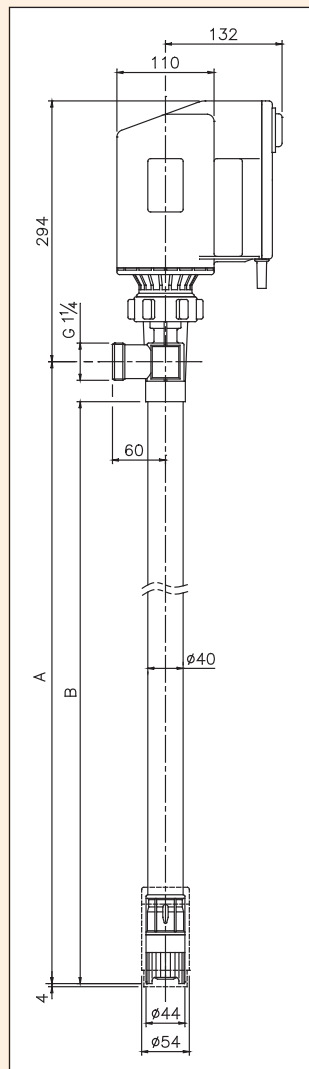


## PL (Low Head Type)



※ Performance curves can be somewhat different accordance with application of job site

## Pump Pipe PVDF (Polyvinylidene Fluoride)



### Application

For transferring strong Corrosive liquid

### Examples of liquids to be pumped

Strong Acid, Sodium Hypochlorite, Hydrofluoric Acid & etc.

### Specification

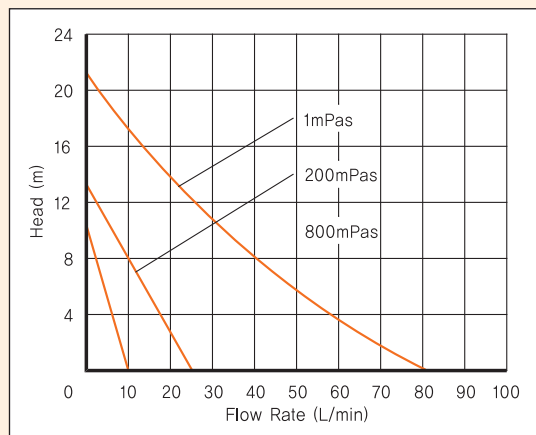
	DR-FH	DR-FL
Max. Flow Rate (L/min)	80	130
Max. Head (m)	21	8
Max. Viscosity (mPas)	800	200
Max. Specific Gravity	1.6	1.3
Dia. of Insertion (mm)	44	44
Dia. for Hose Connection (mm)	25	25
Limit of liquid Temp (°C)	80	80
Weight (kg)	700mm	4.3
	1,000mm	4.6
	1,200mm	4.8

### Pipe Length

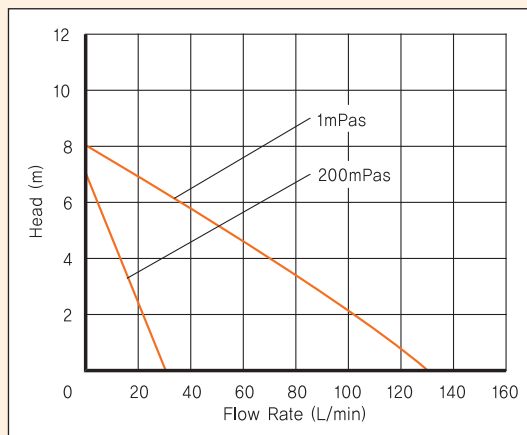
Length	A	B
700	700	655
1,000	1,000	955
1,200	1,200	1,155



### FH (High Head Type)

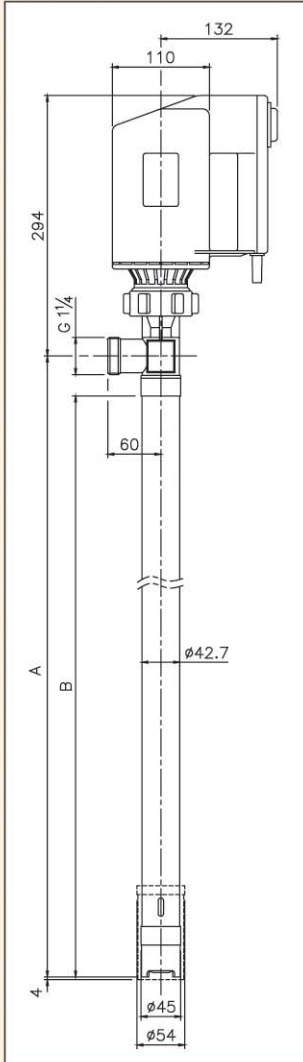
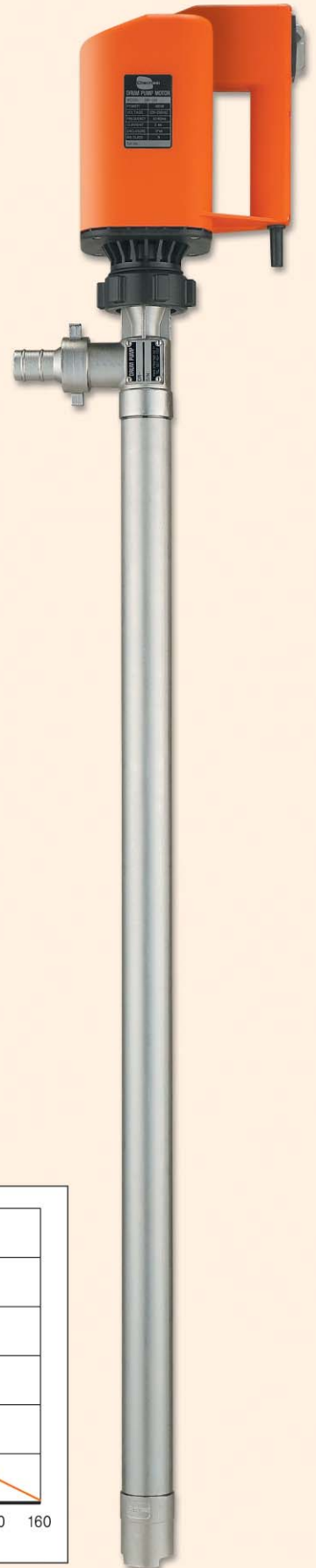


### FL (Low Head Type)



※ Performance curves can be somewhat different accordance with application of job site

# Pump Pipe SS316 (Stainless Steel)



## Application

For transferring Oil & Corrosive liquid

## Examples of liquids to be pumped

Oil, Ammonia, Solution, Foot additive & etc.

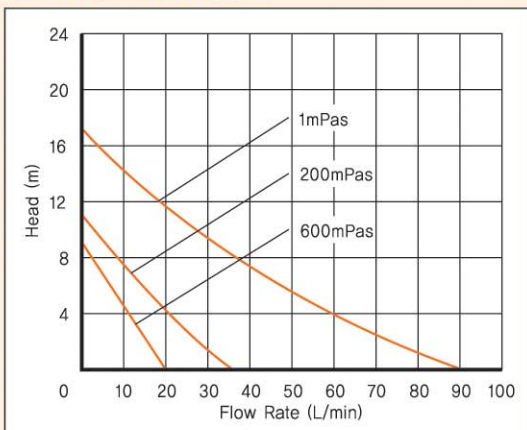
## Specification

	DR-SH	DR-SL
Max. Flow Rate (L/min)	90	160
Max. Head (m)	17	7.5
Max. Viscosity (mPas)	600	150
Max. Specific Gravity	1.6	1.3
Dia. of Insertion (mm)	45	45
Dia. for Hose Connection (mm)	25	25
Limit of liquid Temp (°C)	100	100
Weight (kg)	700mm	6.6
	1,000mm	7.7
	1,200mm	8.5

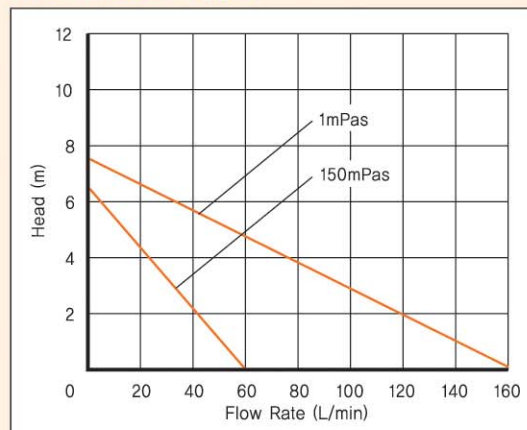
## Pipe Length

Length	A	B
700	700	655
1,000	1,000	955
1,200	1,200	1,155

## SH (High Head Type)



## SL (Low Head Type)



※ Performance curves can be somewhat different accordance with application of job site



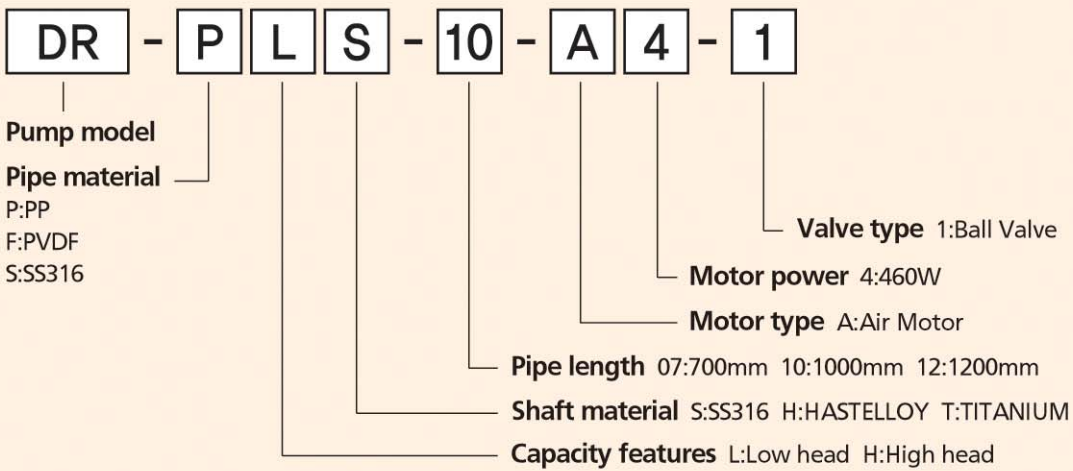
## Drum Pump | Air Motor

- Simple structure.
- Can be used for explosion proof area because it don't use electric power. (Ex II 2G)
- More light than electric motor
- Easy speed control by supply pressure.
- Suction Dia.(Rc1/4), Discharge Dia.(Rc1/2)



Specification			
Permission Supply Pressure	3~6bar	Rated Output	460W
Rated RPM	10,000rpm	Air Consumption	920L/min
Weight	1.2kg		

### Model Code

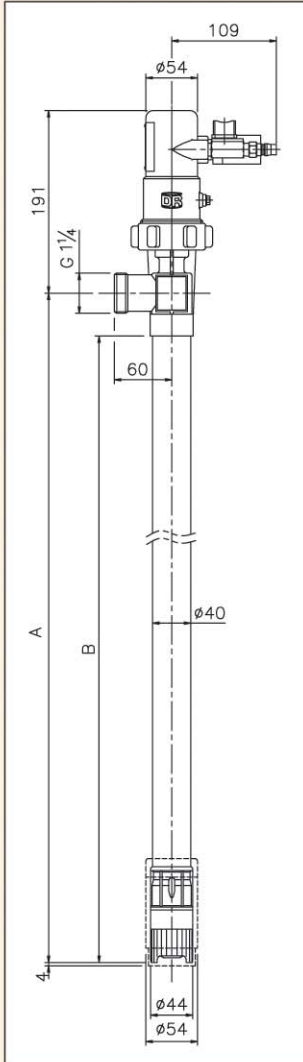
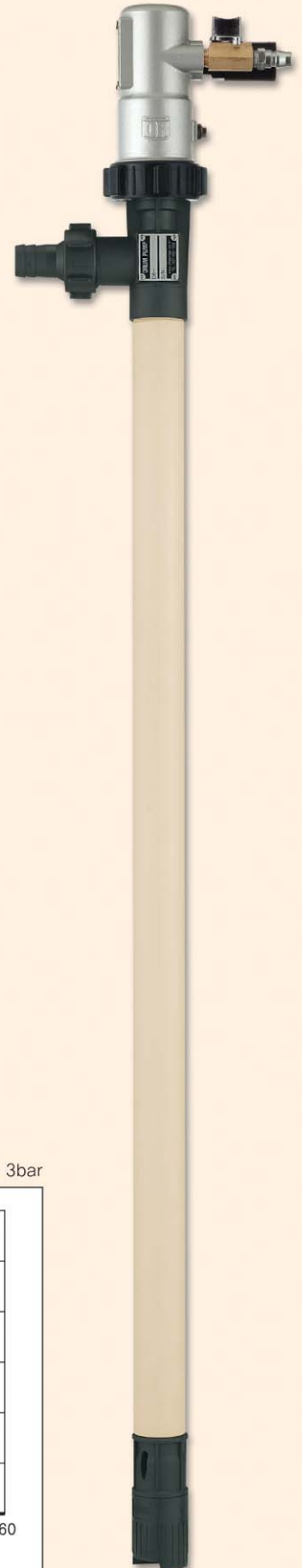


### Liquid End Material

Pump Type	DR-P□S	DR-P□H(T)	DR-F□H(T)	DR-S□S
Pipe	PP	PP	PVDF	SS316
Impeller	ETFE	ETFE	ETFE	ETFE
Bearing	CARBON	CARBON	CARBON(PTFE)	CARBON
Guide Bearing(Bushing)	PTFE	PTFE	PTFE	PTFE
Drive Shaft	SS316	HASTELLOY(TITANIUM)	HASTELLOY(TITANIUM)	SS316



# Pump Pipe PP (Polypropylene)



## Application

For transferring slight neutrality & liquid  
Acid, Alkali, Oil & etc.

## Examples of liquids to be pumped

Sulphuric Acid, Acetic Acid, Phosphoric Acid,  
Alkali liquids & etc.

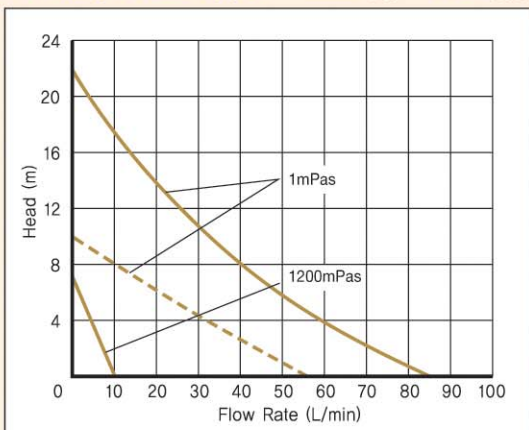
## Specification

	DR-PH	DR-PL
Max. Flow Rate (L/min)	85	135
Max. Head (m)	22	8.5
Max. Viscosity (mPas)	1200	1000
Max. Specific Gravity	1.8	1.4
Dia. of Insertion (mm)	44	44
Dia. for Hose Connection (mm)	25	25
Limit of liquid Temp (°C)	50	50
Weight (kg)	700mm	2.1
	1,000mm	2.3
	1,200mm	2.5

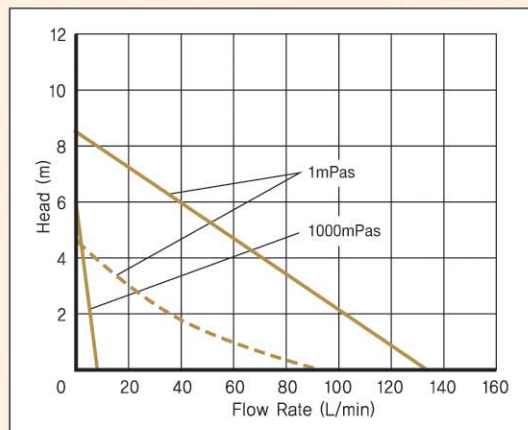
## Pipe Length

Length	A	B
700	700	655
1,000	1,000	955
1,200	1,200	1,155

**PH (High Head Type)** — 6bar - - - 3bar

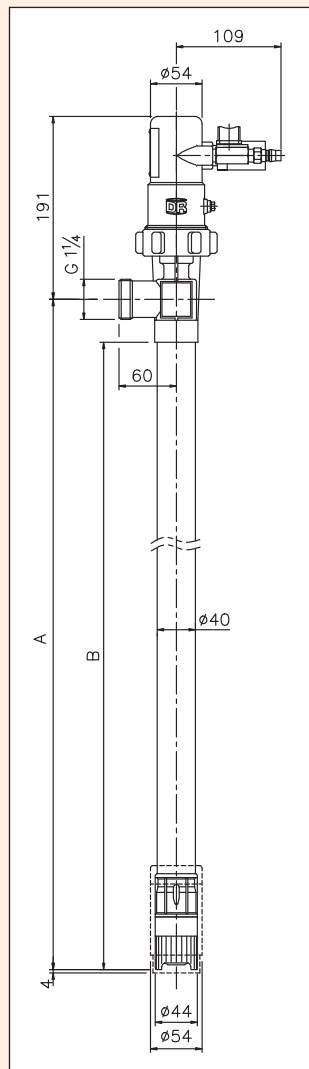


**PL (Low Head Type)** — 6bar - - - 3bar



※ Performance curves can be somewhat different accordance with application of job site

# Pump Pipe PVDF (Polyvinylidene Fluoride)



## Application

For transferring strong Corrosive liquid

## Examples of liquids to be pumped

Strong Acid, Sodium Hypochlorite, Hydrofluoric Acid & etc.

## Specification

	DR-FH	DR-FL
Max. Flow Rate (L/min)	85	135
Max. Head (m)	22	8.5
Max. Viscosity (mPas)	1200	1000
Max. Specific Gravity	1.8	1.4
Dia. of Insertion (mm)	44	44
Dia. for Hose Connection (mm)	25	32
Limit of liquid Temp (°C)	80	80
Weight (kg)	700mm	2.3
	1,000mm	2.6
	1,200mm	2.8

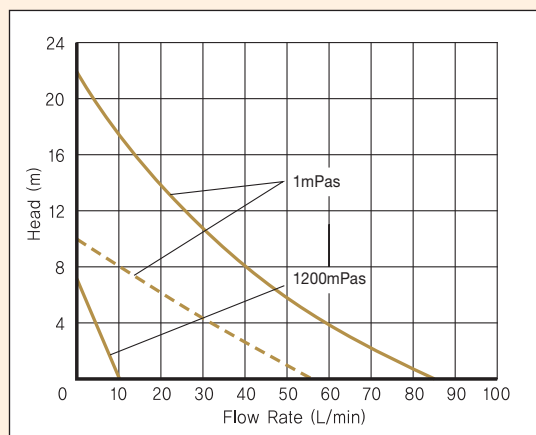
## Pipe Length

Length	A	B
700	700	655
1,000	1,000	955
1,200	1,200	1,155



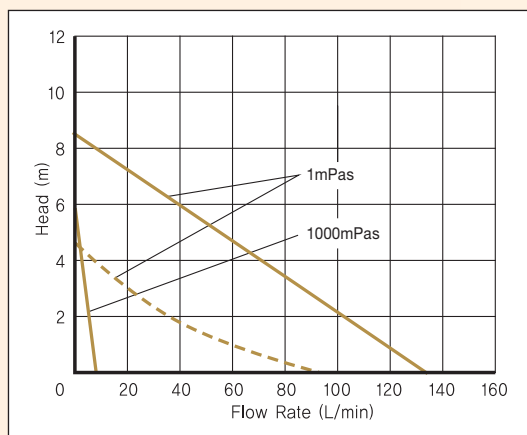
## FH (High Head Type)

— 6bar - - - 3bar



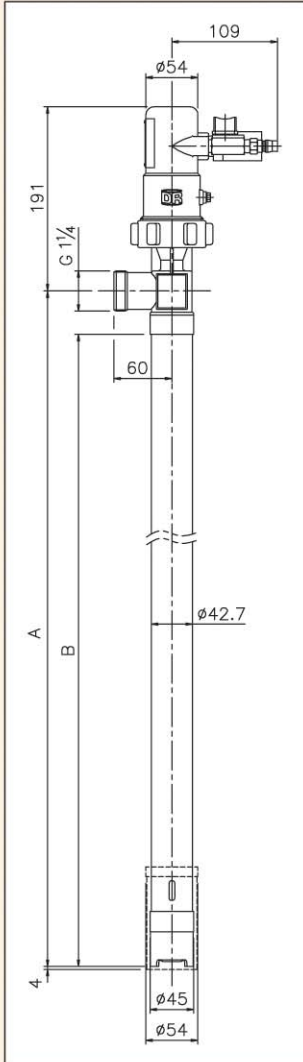
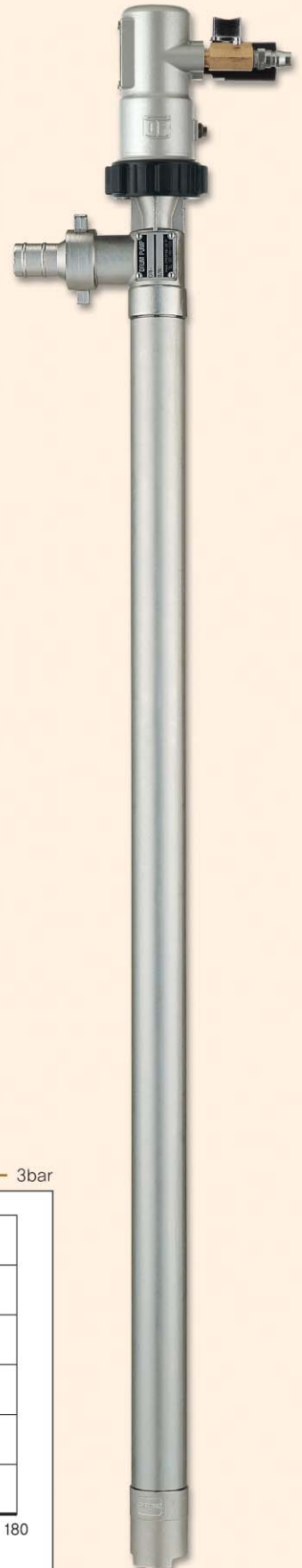
## FL (Low Head Type)

— 6bar - - - 3bar



※ Performance curves can be somewhat different accordance with application of job site

# Pump Pipe SS316 (Stainless Steel)



## Application

For transferring Oil & Corrosive liquid

## Examples of liquids to be pumped

Oil, Ammonia, Solution, Foot additive & etc.

## Specification

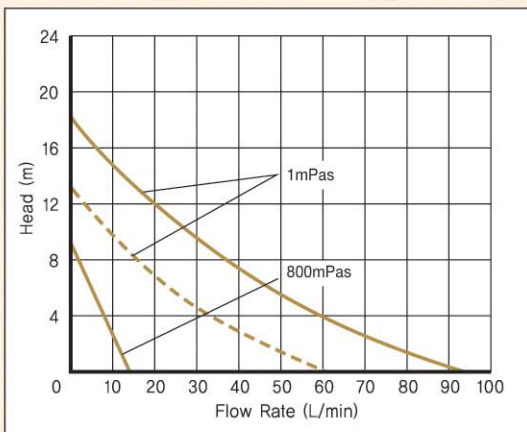
	DR-SH	DR-SL
Max. Flow Rate (L/min)	95	165
Max. Head (m)	18	8
Max. Viscosity (mPas)	800	400
Max. Specific Gravity	1.8	1.4
Dia. of Insertion (mm)	45	45
Dia. for Hose Connection (mm)	25	25
Limit of liquid Temp (°C)	100	100
Weight (kg)	700mm	4.6
	1,000mm	5.7
	1,200mm	6.5

## Pipe Length

Length	A	B
700	700	655
1,000	1,000	955
1,200	1,200	1,155

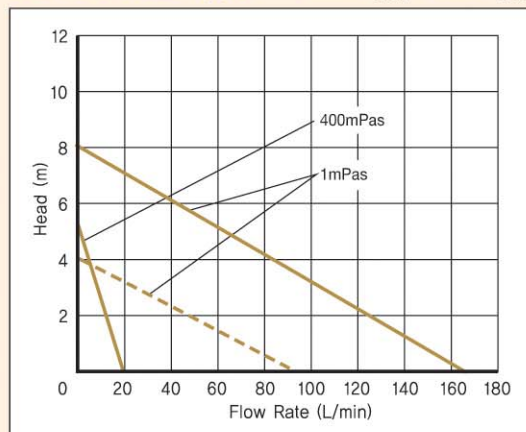
### SH (High Head Type)

— 6bar    - - - 3bar



### SL (Low Head Type)

— 6bar    - - - 3bar



※ Performance curves can be somewhat different accordance with application of job site

# Accessories

Classified by material - (\*) is Standard Accessories and others are option items.

	PP PIPE	PVDF PIPE	SS316 PIPE
<b>Hose Connector(*)</b> Hose Connector, Union Nut, Packing			
<b>Hose (1.5m)</b> PVC Spring Hose: 5bar 60°C (*) PTFE Flexible Hose: 3bar 260°C (*) SS Flexible Hose: 15bar 300°C			
<b>Drum Adapter</b> For fixing the pump pipe to the drum opening. Prevents the drum pump falling over in the empty drum			
<b>Strainer</b> Mounted on the pump suction and keep impurities away from the rotating parts			
<b>Ball Valve</b> Open & Close discharge port			

## Common use

<b>Hose Clamp(*)</b> For fixing of the hose inserted into the hose connector		<b>Wall Bracket</b> For safety storage of the pump		<b>Hose Clamp &amp; Hose Nipple</b> ø8~ø9 of internal Diameter	
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## Air Motor Accessories (\*)