

# ELECTRIC HYDRAULIC PUMP

# UP-73/UP-153/UP-223

(0.75kW)

(1.5kW)

(2.2kW)

**Model : UP-153**

- Standard Tank Oil : 24 Litres
- 1.5kW



**Model : UP-73**

- Standard Tank Oil : 24 Litres
- 0.75kW

**Model : UP-223**

- Standard Tank Oil : 24 Litres
- 2.2kW

## Industrial

- Power supply is three phase (from 200V).
- Various valves and accessories can be stacked for many applications.
- Caster can be installed as option.
- Structure is very simple because there is no piping in the pump body.
- When continuous operation, please use oil cooler (on request) to prevent oil temperature rise.
- Pump parts Assy are available on request.

Model	Motor (50/60Hz)					Pump (50/60Hz)		Oil	
	Insulation class	kW	Voltage	Amps	RPM	Output flow rate (L / m)		Tank size (Litre)	Effectiv (Litre)
						High 70 MPa	Low 7.0 MPa		
<b>UP-73</b>	TEFC (Totally Enclosed Fan Cooled) E-type	0.75	200 / 220 Three-phase	3.8/3.4	1,440/1,730	0.45/0.54	4.5/5.4	Standard 24	17
<b>UP-153</b>		1.5		6.8/6.4	1,445/1,740	0.9/1.1	8.4/10	Small 12	6
<b>UP-223</b>		2.2		10.6/9.4	1,460/1,755	1.45/1.75	11/13	Standard 24	17
								Small 12	6

## Single Acting

**UP-73HS-0** (0.75kW) Weight (Incl.oil) 67kg

**UP-153HS-0** (1.5kW) Weight (Incl.oil) 78kg

**UP-223HS-0** (2.2kW) Weight (Incl.oil) 83kg

With P.T manifold  
There is no valve

Valve type	Without valve type
Switch	Pressure Switch
Accesaries	Pressure Gauge Ø60

**UP-73HS-1** (0.75kW) Weight (Incl.oil) 70kg

**UP-153HS-1** (1.5kW) Weight (Incl.oil) 83kg

**UP-223HS-1** (2.2kW) Weight (Incl.oil) 87kg

Valve type	Manual 2 position Holding type
Switch	Pressure Switch
Accesaries	Pressure Gauge Ø60

### Advance

When the manual valve lever is set to the right, and press ON of the pendant switch, the motor rotates, and the cylinder advances. When ON switch is released, the cylinder can be stopped and hold on advance.

### Retraction

When the manual valve lever is set to the left, the cylinder returns. There is no OFF button.

**UP-73HS-4** (0.75kW) Weight (Incl.oil) 70kg

**UP-153HS-4** (1.5kW) Weight (Incl.oil) 83kg

**UP-223HS-4** (2.2kW) Weight (Incl.oil) 91kg

Valve type	Solenoid 2 position Holding type
Switch	Pressure Switch
Accesaries	Pressure Gauge Ø60

### Advance

When ON switch is pressed, then the motor starts as well as a cylinder extends. When ON switch is released, the cylinder can be stopped and hold on advance.

### Retraction

When OFF switch is pressed, then the cylinder starts to retract. When OFF switch is released, the cylinder can be stopped on retraction.

**UP-73HS-2** (0.75kW) Weight (Incl.oil) 70kg

**UP-153HS-2** (1.5kW) Weight (Incl.oil) 83kg

**UP-223HS-2** (2.2kW) Weight (Incl.oil) 91kg

Valve type	Solenoid 2 position
Switch	Pressure Switch
Accesaries	Pressure Gauge Ø60

### Advance

When ON switch is pressed, then the motor starts as well as a cylinder extends.

### Retraction

When ON switch is relased, the cylinder automatically retracts at once. The cylinder cannot be stopped on retraction. There is no "OFF" button.

## Double Acting

**UP-73HS-7 (0.75kW)** Weight (Incl.oil) 67kg

**UP-153HS-7 (1.5kW)** Weight (Incl.oil) 78kg

**UP-223HS-7 (2.2kW)** Weight (Incl.oil) 83kg

Valve type	Without valve type
Switch	Pressure Switch
Accessaries	Pressure Gauge Ø60

### Advance

When the manual valve lever is set to the left (A), and press ON of the pendant switch, the motor rotates, and the cylinder advances. When ON switch is released, the cylinder can be stopped and hold on advance.

### Retraction

When the manual valve lever is set to the right (B), and press ON of the pendant switch, the motor rotates, and the cylinder retracts. When ON switch is released, the cylinder can be stopped and hold on retraction.

**UP-73HS-8SP / 8WP (0.75kW)** Weight (Incl.oil) 70kg

**UP-153HS-8SP / 8WP (1.5kW)** Weight (Incl.oil) 83kg

**UP-223HS-8SP / 8WP (2.2kW)** Weight (Incl.oil) 87kg

Valve type	Manual 2 position Holding type
Switch	Pressure Switch
Accessaries	Pressure Gauge Ø60

### Advance

When A switch is pressed, then the motor starts as well as a cylinder extends. When ON switch is released, the cylinder can be stopped and hold on advance.

### Retraction

When B switch is pressed, then the cylinder starts to retract. When B switch is released, the cylinder can be stopped on retraction.

- 8SP model : Can be hold on A port
- 8WP model : Can be hold on A & B port

**UP-73HS-8A (0.75kW)** Weight(Incl.oil) 70kg

**UP-153HS-8A(1.5kW)** Weight(Incl.oil) 83kg

**UP-223HS-8A(2.2kW)** Weight(Incl.oil) 91kg

Valve type	Solenoid 2 position Holding type
Switch	Pressure Switch
Accessaries	Pressure Gauge Ø60

### Advance

When A switch is pressed, then the motor starts. When A switch is released, the cylinder can be stopped but not hold on advance. (For hold type, 8SP is recommended)

### Retraction

When B switch is pressed, then the motor starts as well as a cylinder extends. When B switch is released, the cylinder can be stopped but not hold on retraction.

**UP-73HS-8R (0.75kW)** Weight(Incl.oil) 70kg

**UP-153HS-8R(1.5kW)** Weight(Incl.oil) 83kg

**UP-223HS-8R(2.2kW)** Weight(Incl.oil) 91kg

Valve type	Solenoid 4way 3 position Adjustable pressure relief valve
Switch	Pressure Switch
Accessaries	Pressure Gauge Ø60

### Advance

When A switch is pressed, then the motor starts. When A switch is released, the cylinder can be stopped. (NOT hold pressure)

### Retraction

When B switch is pressed, then the cylinder starts to retract. When B switch is released, the cylinder can be stopped on retraction.(NOT hold pressure)

\*By additional pilot check valve, pressure can be hold. (on request)

# UP-73series (0.75kW)

## <Outline drawing> (mm)

**UP-73HS-7** Standard tank : 24 ℓ

Motor 750W IE-3  
Manual 4way 3 position Pressure Switch  
Pressure gauge ø63×100MPa  
A port Rc3/8 B port Rc3/8  
Eye bolt  
Oil gauge  
Oil tank  
Oil Drain Rc1/2  
Name Plate  
M12×1.25 280

Motor Switch  
Electric Box  
65 395 425 10 235.5 285.5

560

**<Electric circuit>**  
AC200V  
E R S T  
I 3 3 13 A1  
2 4 6 14 98 A2  
95  
ON  
OFF  
M  
Plug (need discussion) Code (3m)

**UP-73HS-8WP** Standard tank : 24 ℓ

Motor 750W IE-3  
Solenoid 4way 3 position  
Pilot check valve  
Pressure Switch  
Pressure gauge ø63×100MPa  
A port Rc3/8 B port Rc3/8  
Eye bolt  
Oil gauge  
Oil tank  
Oil Drain Rc1/2  
Name Plate  
M12×1.25 280

Motor Switch  
Electric Box  
65 395 425 10 235.5 285.5

560

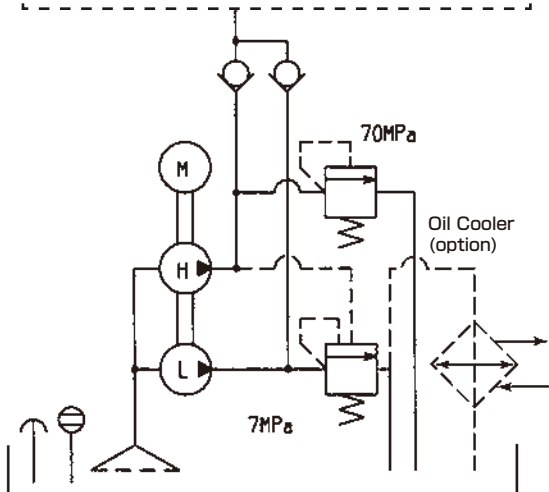
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E U V W  
ON  
OFF  
200V  
24V  
R2 R1  
B A COM  
Pendant switch  
Pressure switch  
M  
B A SOL  
Plug (need discussion) Code (3m)  
Pendant Switch Code (3m)

**<Option>**

## <Hydraulic circuit>

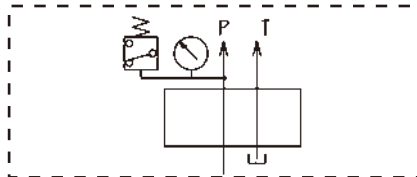
### Pump Hydraulic Circuit

Refer to the right

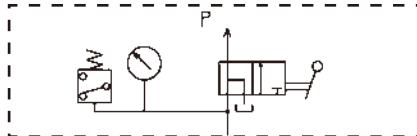


### Single Acting

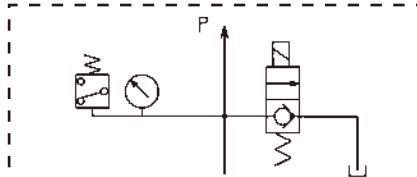
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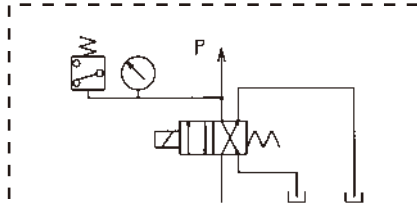
#### UP-73HS-1



#### UP-73HS-4

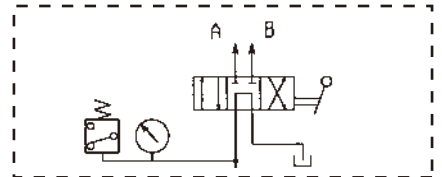


#### UP-73HS-2

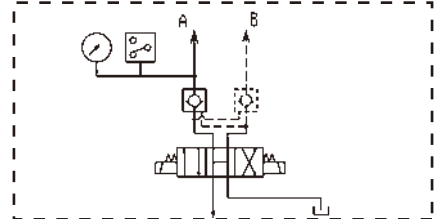


### Double Acting

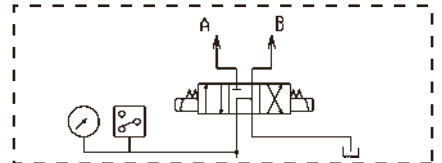
#### UP-73HS-7



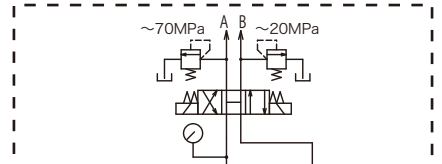
#### UP-73HS-8WP/8SP



#### UP-73HS-8A



#### UP-73HS-8R



# UP-153series (1.5kW)

## <Outline drawing> (mm)

**UP-153HS-7** Standard tank : 24 ℓ

Motor Switch  
Electric Box

Motor 1500W IE-3  
Manual 4way 3 position Pressure Switch  
Pressure gauge  $\phi 63 \times 100\text{MPa}$   
A port Rc3/8  
B port Rc3/8  
Eye bolt  
Oil gauge  
Oil tank  
Name Plate  
Oil Drain Rc1/2

554.5  
235.5  
285.5  
65  
395  
425  
10  
M12×1.25  
280

**<Electric circuit>**

AC200V

Plug (need discussion) Code (3m)

**UP-153HS-8WP** Standard tank : 24 ℓ

Motor Switch  
Electric Box

Solenoid 4way 3 position  
Pilot check valve  
Motor 1500W IE-3  
Pressure Switch  
Pressure gauge  $\phi 63 \times 100\text{MPa}$   
A port Rc3/8  
B port Rc3/8  
Eye bolt  
Oil gauge  
Oil tank  
Name Plate  
Oil Drain Rc1/2

554.5  
235.5  
285.5  
65  
395  
425  
10  
M12×1.25  
280

**<Electric circuit>**

E U V W

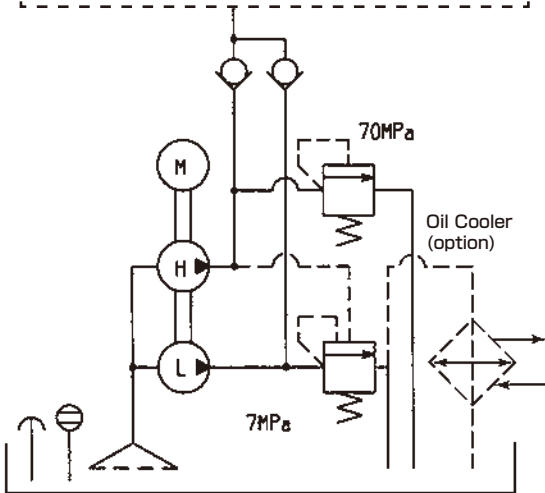
Plug (need discussion) Code (3m)  
Pendant Switch Code (3m)

**<Option>**

## <Hydraulic circuit>

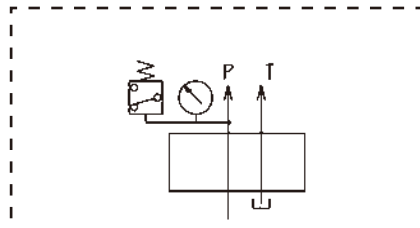
### Pump Hydraulic Circuit

Refer to the right

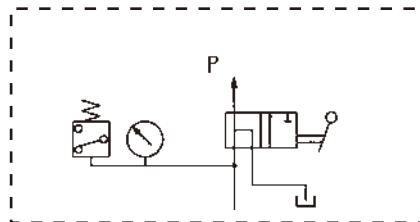


### Single Acting

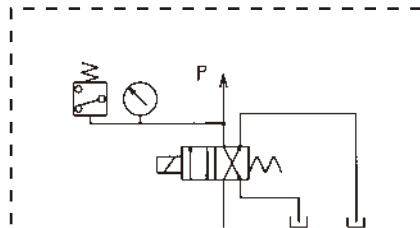
UP-153HS-0



UP-153HS-1

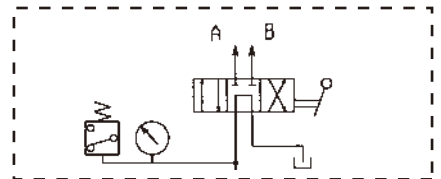


UP-153HS-2

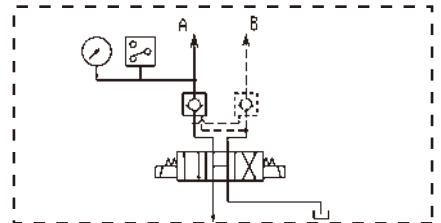


### Double Acting

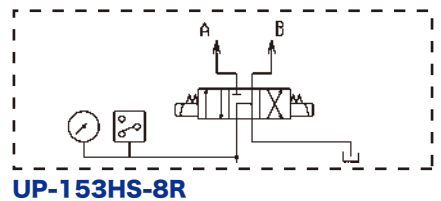
UP-153HS-7



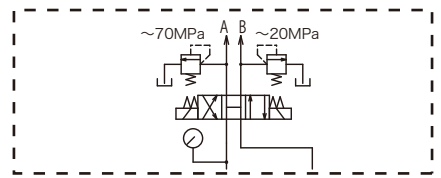
UP-153HS-8WP/8SP



UP-153HS-8A

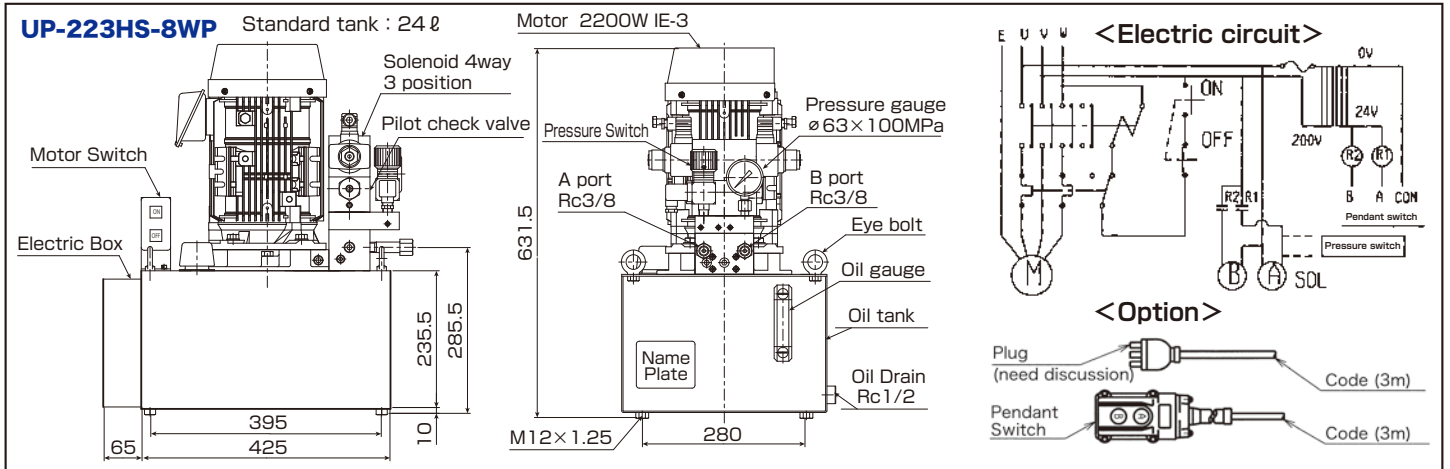
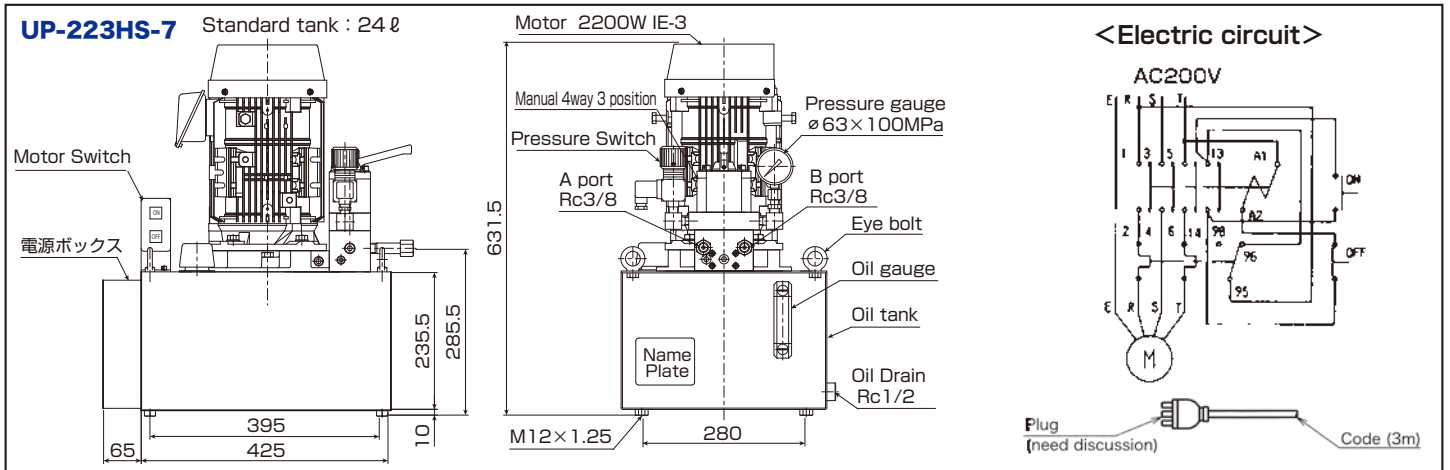


UP-153HS-8R



# UP-223series (2.2kW)

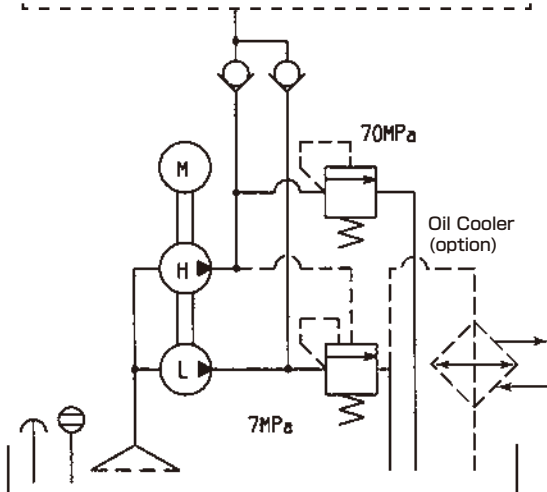
## <Outline drawing> (mm)



## <Hydraulic circuit>

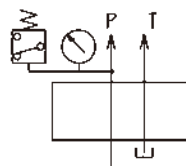
### Pump Hydraulic Circuit

Refer to the right

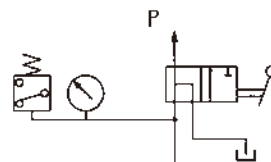


### Single Acting

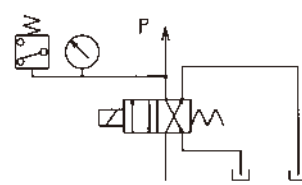
UP-223HS-0



UP-223HS-1

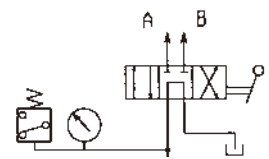


UP-223HS-2

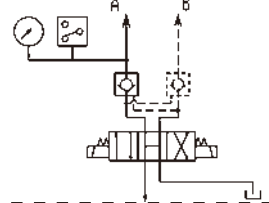


### Double Acting

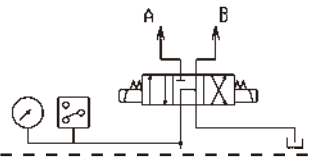
UP-223HS-7



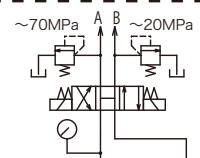
UP-223HS-8WP/8SP



UP-223HS-8A



UP-223HS-8R



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