

## TP series

### Compact structure, mini size

Electrical motor, pump, valves are integrated inside a aluminum housing, Mini size, low noise, better heat-sink, strong corrosion resistance.

### IP68 Protection

High protection grade IP68, benefit from total enclosure structure.

### All-weather Capability

It is capable of working in the ambient temperature -40°C to 50°C. Optional built-in heater will help the unit keep normal performance in extremely cold weather.

### Flexible Dimension on Length

What ever you want it shorter or longer according to your actual applications, we can built it easily.

### Optional Accumulator Module

The optional accumulator module will bring you faster action in case of emergency situations, such as terror attack.



## TP Series

- Functions & Options:
- Emergency override valve (DC12V)
  - Pressure Switch (Optional)
  - Built-in Heater (Optional)

	Code	Rated Power (W)	Voltage (V)	Amp (A)	Flow Rated (LPM)	Max Pressure	Duty Cycle
Standard Duty	TP S*	300W	Single Phase 220-240V, 50Hz	2.7- 3.0A	4.8LPM	50Bar	30 cycles/hour
	TP T*	300W	Three Phase 380-415V, 50Hz	1.7- 1.9A	5.0LPM	60Bar	40 cycles/hour
Heavy Duty	TP S*	650W	Single Phase, 220-240V, 50Hz	4.0 - 4.5A	5.0LPM	130Bar	45 cycles/hour
	TP T*	700W	Three Phase, 380-415V, 50Hz	2.1 - 3.5A	5.0LPM	140Bar	45 cycles/hour

Note: 1. Above data based on ambient temperature 0°C. t may different in actual working condition.  
 . ts duty cycle will be effect by ambient temperature very much.

## TP +Accumulator Module

With accumulator Module, the TP series power unit is capable of double output flow rate. It is very suitable for High Class vehicle barrier. But, its duty cycle will be lowered 30%-50% .

Code	Voltage	Amps	Power	Flow Rate	Max Pressure	最高工作频度
TP-D	220-240V,50Hz, Single Phase	4.8- 5.5A	650W	10LPM	130Bar	20 cycles/hour
TP-D	380-415V, 50Hz, Three Phase	3.0- 3.5A	700W	10LPM	140Bar	20 cycles/hour

Note: 1. Above data based on ambient temperature 0°C. t may different in actual working condition.  
 . ts duty cycle will be effect by ambient temperature very much.

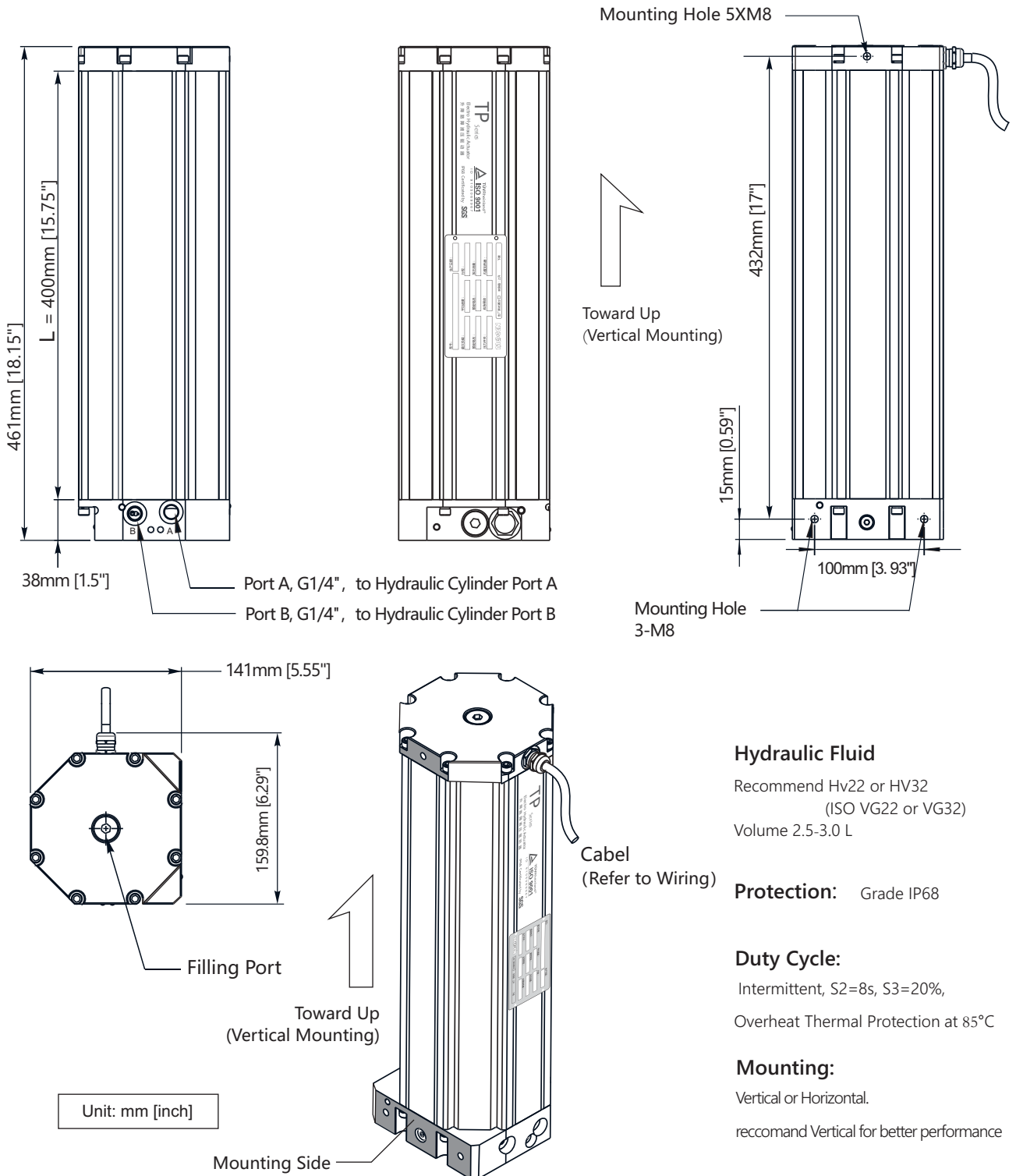


1	TP	Mini Hydraulic Power Unit
2	Rated Power	Rated Power: 30- 300W , 65 -650W , 70-700
3	Voltage	S - 220/240V Single Phase, 50/60Hz F - 115V Single Phase, 50/60Hz T - 380/415V Three Phase, 50/60Hz G - 230V Three Phase, 50/60Hz
4	Pump Disp.	1 - 1.5cc , 2 - 2.0cc
5	Pressure Switch	N - None, P- with Built-in pressure switch
6	Emergency Override	N - None, E - with 2-Way Solenoid Valve (DC12V), M - with Manual Override Valve
7	Accumulator Module	N - None, Y - with Accumulator Module
8	Design Code	Assigned by Mocen

**TP Series**

Comparing with TS series, TP series is bigger and better performance

Standard tank size is L=400mm, volume 2.5升. We are able to custom built this unit according to your requirements.



**Hydraulic Fluid**

Recommend Hv22 or HV32  
(ISO VG22 or VG32)  
Volume 2.5-3.0 L

**Protection:** Grade IP68

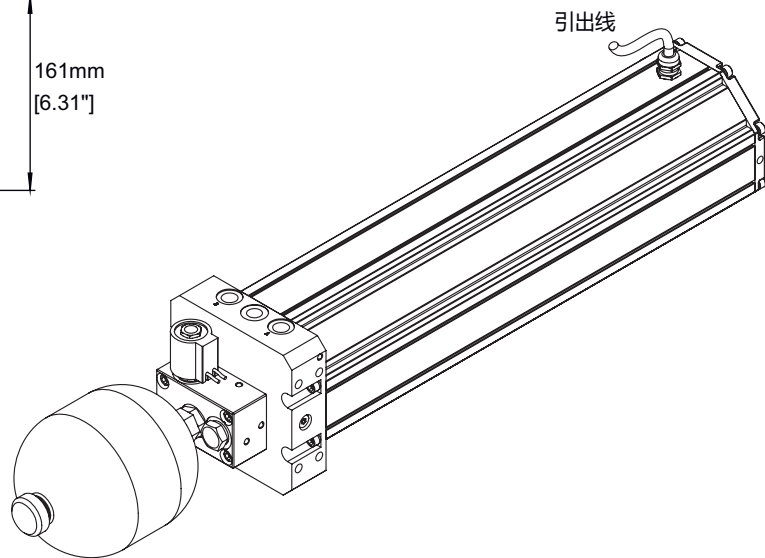
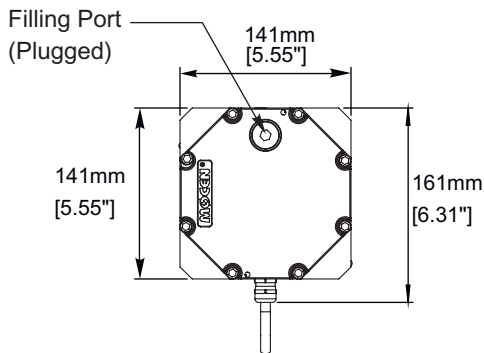
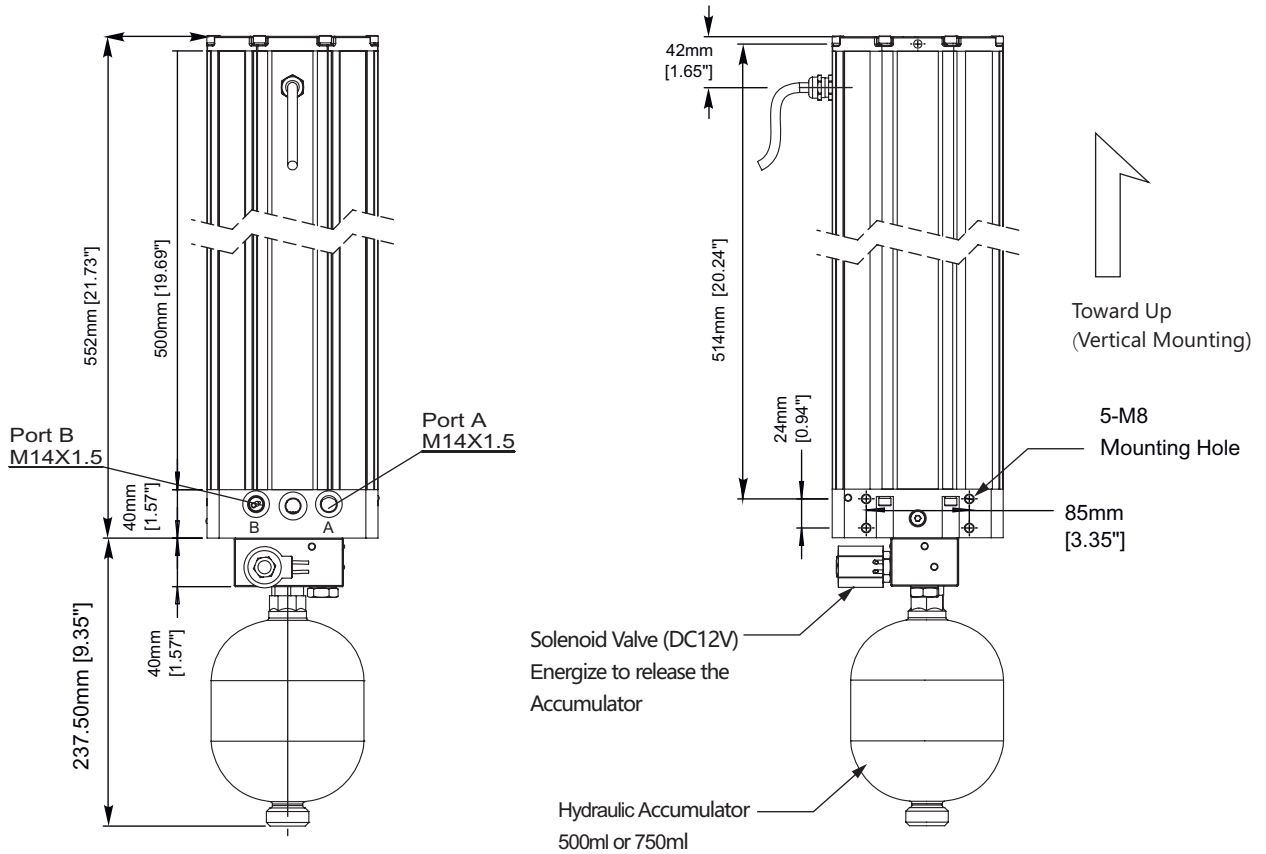
**Duty Cycle:**

Intermittent, S2=8s, S3=20%,  
Overheat Thermal Protection at 85°C

**Mounting:**

Vertical or Horizontal.  
reccomand Vertical for better performance

**TP** Series + Accumulator Module

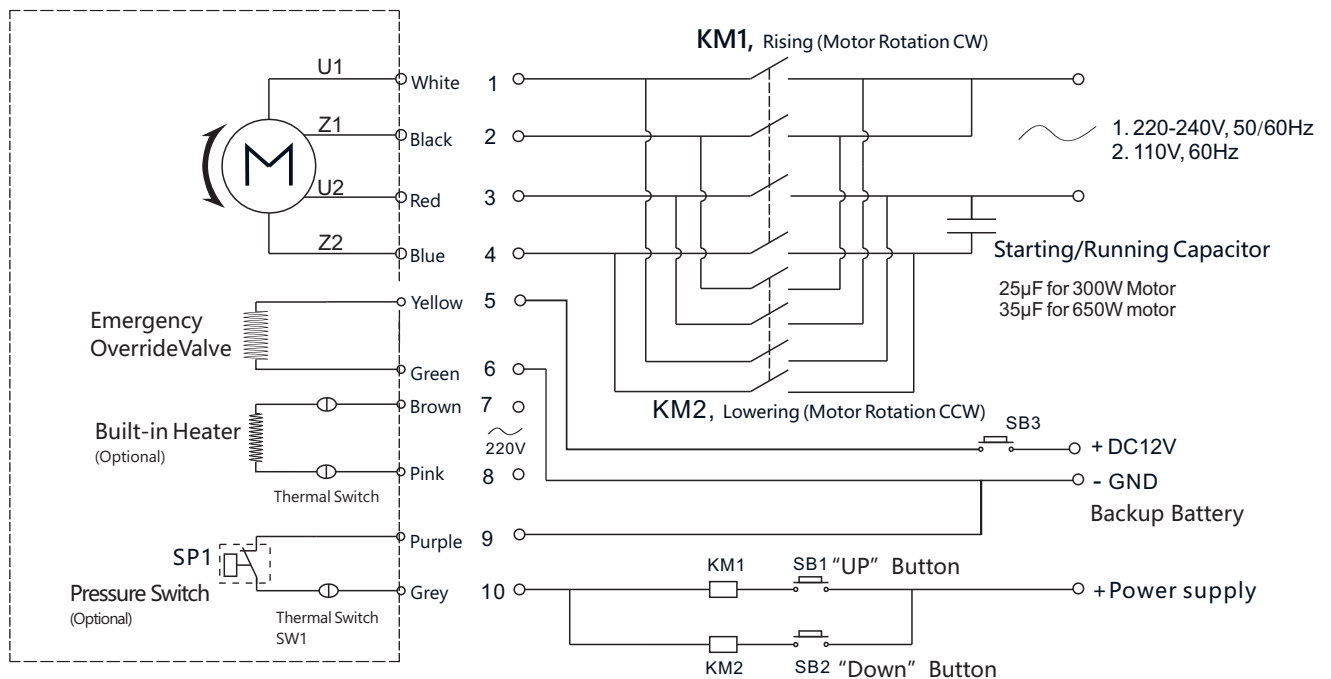


## Wiring Diagram

**TP** Series

### Single Phase

Main Winding: Red and White  
Secondary Winding: Blue and Black



\* The optional Pressure switch SP1 is Normally Closed, to cutoff the power supply to motor when cylinder extended or retracted to end.

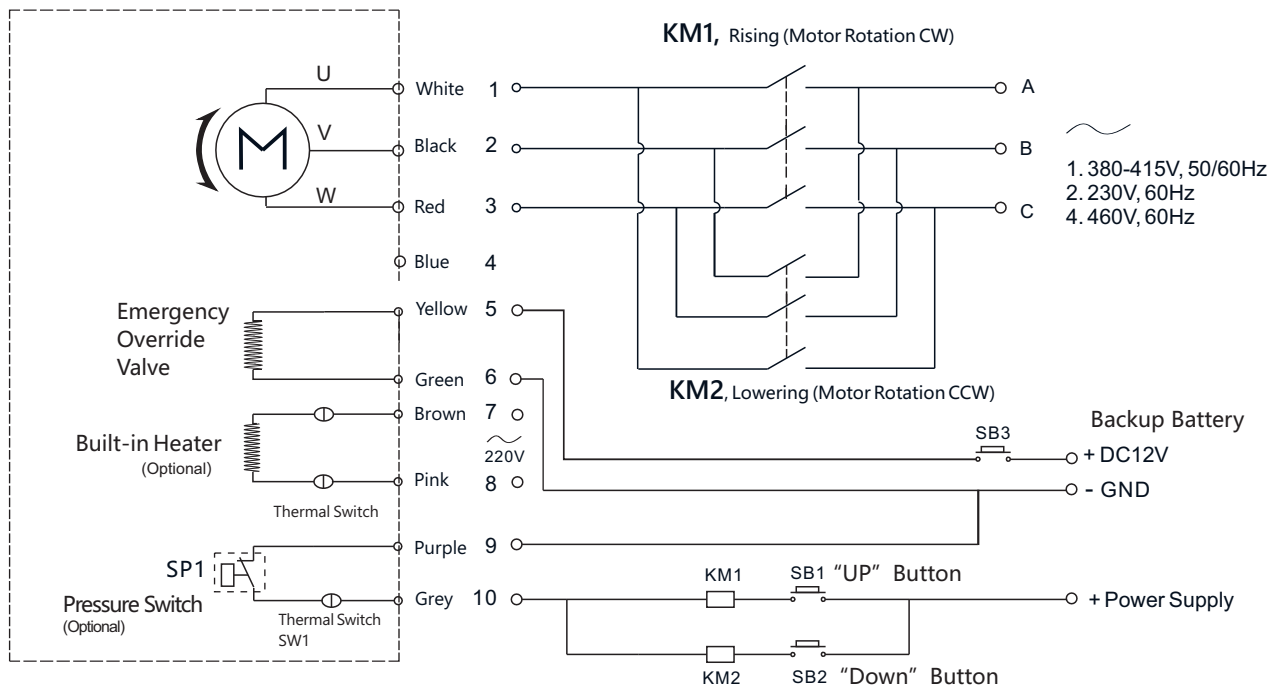
#### Operation:

1. Push the button SB1, motor run in CW, cylinder extending.
2. The pressure switch SP1 (if installed) will be triggered to open when cylinder extended to end.
3. Push the button SB2, motor run in CCW, cylinder retracting.
4. The pressure switch SP1 (if installed) will be triggered to open when cylinder retracted to end.
5. Energize the Emergency Override Valve with a DC12V battery in case of blackout or motor failed.
6. Turn on the built-in heater (optional, if installed) in extremely cold weather, to reach better performance.
7. Thermal Switch Sw1 is Normally Closed, it will be triggered to OPEN

## Wiring Diagram

**TP** Series

Three Phase



Pressure switch SP1 is Normally Closed, for power cutoff to motor when cylinder extended or retracted to end.

### Operation:

1. Push the button SB1, motor run in CW, cylinder extending.
2. The pressure switch SP1 (if installed) will be triggered to open when cylinder extended to end.
3. Push the button SB2, motor run in CCW, cylinder retracting.
4. The pressure switch SP1 (if installed) will be triggered to open when cylinder retracted to end.
5. Energize the Emergency Override Valve with a DC12V battery in case of blackout or motor failed.
6. Turn on the built-in heater (optional, if installed) in extremely cold weather, to reach better performance.