



## Compare Table about performance and construction between Mepcato 24V CARRY 3000 and Sample 24V fuel transfer pump

Report no.: WI-TD-11-110005

### A. Performance

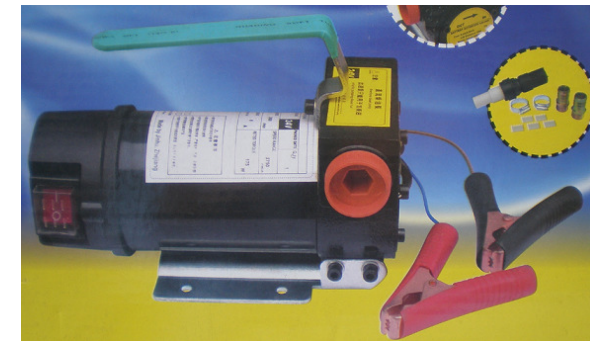
#### 1. Mepcato CARRY 3000:

Flow (L/h)	Head (M)	Load power (W)	Load current (A)	Voltage (V)
1845	3.5	206	8.6	24.00
0	13.5	277	11.83	23.91



#### 2. Sample pump:

Flow (L/h)	Head (M)	Load power (W)	Load current (A)	Voltage (V)
1174	4	180	7.45	24.11
0	28	363	15.44	23.88

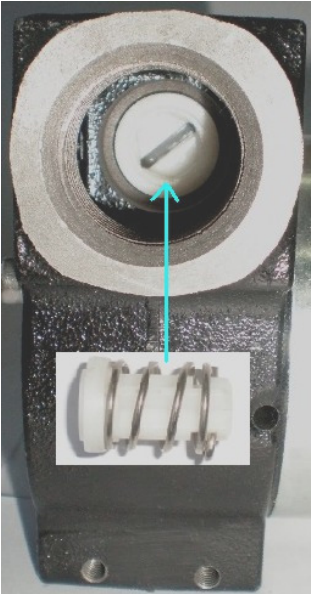





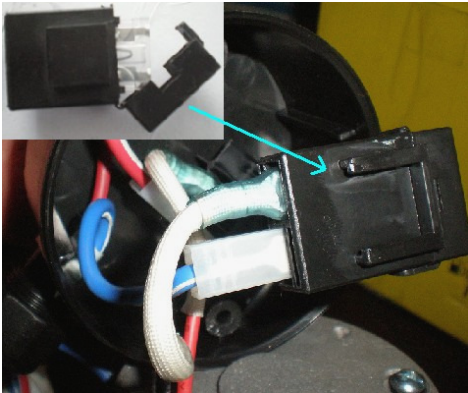

### Description:





(1) When the tube is fully open, flow rate of Mepcato Carry 3000 is larger than Sample pump. Mepcato Carry 3000's load power and load current are higher than Sample pump obviously.

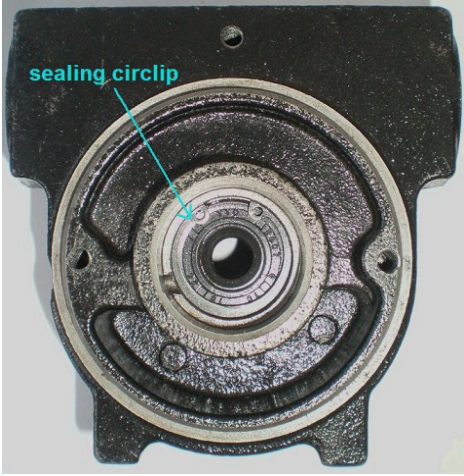
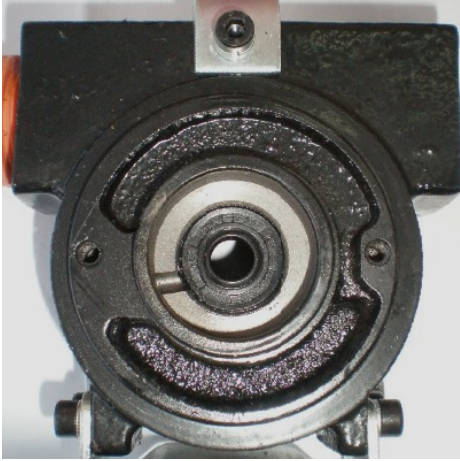



(2) When the tube is fully close, Mepcato Carry 3000 head is 13.5m while Sample pump head is 28m. Moreover, Sample pump's load power and load current are much higher than Mepcato Carry 3000. (During test, Sample pump has strong vibration and pressure gauge hand vacillate.) The main reason for Sample pump with high head and strong vibration is: Sample pump don't have a pressure control valve. Please refer to detail analyze report below.



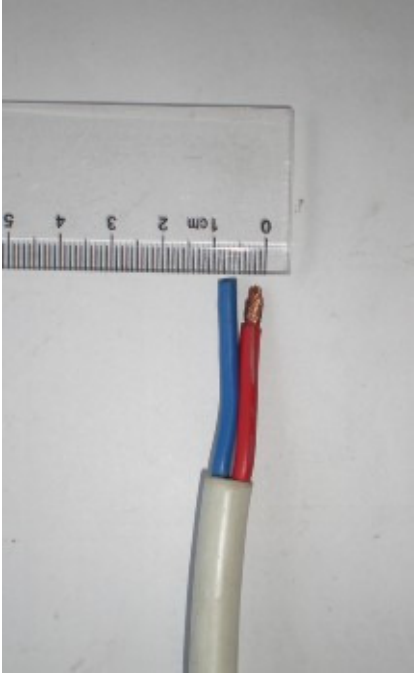
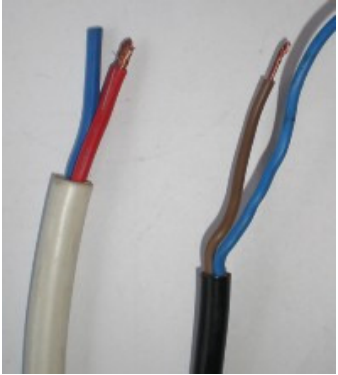
## B. Construction

Item	Mepcato Carry 3000	Photo Ref.	Construction and material comparison	Sample pump	Photo Ref.
1	With pressure control valve		<p>When pump is running and the oil gun is close, the pressure in pump body will increase, the motor load and current will rise also. All of these will cause motor easy to break. Moreover, because of the high pressure in pump body, the pressure for oil seal will increase; it may lead to oil leaking.</p> <p>If adopt a pressure control valve, when pump body pressure is higher than setting pressure, the pressure control valve will open and fuel will return to pump body through it to protect the motor and oil seal. The pump use life will be extending also.</p>	N/A	

2	Enclosed switch	 A close-up photograph of a black, cylindrical enclosed switch. The switch has a rectangular window on its front face, revealing a white rocker switch with a vertical line and a circle symbol.	When the pump use outdoor, enclosed switch has more advantage and protection on rain-proof, dust-proof and keep motor running normally.	Normal switch	 A close-up photograph of a standard red rocker switch. The switch is mounted on a black plastic housing and features a white vertical line and a circle symbol on its red face.
3	Overload protector	 A photograph showing the internal wiring of a motor. A black overload protector is mounted on the motor's frame. A blue arrow points to the protector. An inset image in the top left corner shows a close-up of the protector's terminal block with several wires connected.	If any reason cause motor current overload during running, the overload protector will open to ensure motor will be burn by overload current.	N/A	 A photograph showing the internal components of a motor, including the stator windings and the overload protector. The protector is a black rectangular component mounted on the motor's frame. Wires of various colors (red, blue, white) are connected to the protector.

4	<p>3/4 inch copper joint. Weight: 80g, with a rubber seal for each joint.</p>		<ol style="list-style-type: none"> <li>1. Because iron product is easier to get rust by kerosene, use copper material can help to extend the use life of a joint.</li> <li>2. Add a rubber seal can prevent oil leaking and keep safe use.</li> </ol>	<p>3/4 inch iron joint, Weight: 50g, without rubber seal.</p>	
5	<p>SUS304 powder die-casting pump core</p>		<p>Compare with plastic pump core, SUS304 powder die-casting pump core is more durable, high temperature resistant, corrosion resistant, and deformation resistant, it ensure the long time running and extend pump use life.</p>	<p>Plastic pump core</p>	

6	With sealing circlip		<p>When there is pressure inside pump body, sealing circlip can prevent bearing from moving, to ensure the oil seal working normally.</p>	N/A	
7	SUS304 stainless steel Hose clip		<p>Because iron product is easier to get rust by kerosene, use copper material can help to extend the use life of a hose clip.</p> 	Galvanized iron hose clip	

8	<p>Pincer size: 11.5×11.5 CM</p>		<p>Meccato pincer size is bigger and easier to use by customer.</p>	<p>Pincer size: 7.5×7.5CM</p>	
9	<p>Cable size: 2mm<sup>2</sup> ×2M</p>		<ol style="list-style-type: none"> <li>1. Use 2mm<sup>2</sup> cable is safer for pump and user.</li> <li>2. Use 2m cable can suitable for different customers requirement.</li> </ol> 	<p>Cable size: 1mm<sup>2</sup> ×1M</p>	