

# CHEMICAL FEED PUMPS



## DOUBLE HEAD ADJUSTABLE OUTPUT PUMPS



SWT's double head adjustable metering pump is built with four detachable components; the motor, feed rate control, and two pump heads. The output is determined by three factors; the rpm of the motor gears, the percentage setting on the feed rate control, and the size of the pump tubes in both heads. The motor shaft rotates at a fixed rpm, which drives the feed rate control to intermittently engage the roller assembly within the pump head according to the setting on the external dial ring. The dial ring is labeled L to 10 and has a 20:1 turndown.

### SPECIFICATIONS

Max Operating Temperature:  
125°F (52°C)  
Max Suction Lift:  
25 ft (7.6 m) vertical lift,  
based on water  
Motor Type:  
1/30 HP, shaded pole, class B  
Duty Cycle:  
Continuous  
Motor Voltage (Amp Draw):  
120V 60Hz 1PH (1.7)  
220V 60Hz 1PH (0.9)  
230V 50Hz 1PH (0.9)  
250V 50Hz 1PH (0.9)  
Power Cord Type:  
SJTOW  
Power Cord Plug End:  
120V 60Hz NEMA 5/15  
220V 60Hz NEMA 6/15  
230V 50Hz CEE 7/VII  
250V 50Hz CEE 7/VII

| Part Number | Tube Size | Output      |             | Connection Size |
|-------------|-----------|-------------|-------------|-----------------|
|             |           | GPD @ 60 Hz | LPD @ 50 Hz |                 |

### Double Head Adjustable — 26 rpm — Low Pressure: 0 to 25 psi (1.7 bar)

|            |    |            |               |          |
|------------|----|------------|---------------|----------|
| TS100DM1   | #1 | 0.3 to 6   | 0.9 to 18.2   | 1/4 inch |
| TS100DM2   | #2 | 1.0 to 20  | 3.0 to 60.6   | 1/4 inch |
| TS100DM3   | #3 | 2.2 to 44  | 6.7 to 133.2  | 1/4 inch |
| TS100DM4   | #4 | 3.5 to 70  | 10.6 to 212.0 | 1/4 inch |
| TS100DM5   | #5 | 5.0 to 100 | 15.1 to 302.8 | 1/4 inch |
| TS100DM1-3 | #1 | 0.3 to 6   | 0.9 to 18.2   | 3/8 inch |
| TS100DM2-3 | #2 | 1.0 to 20  | 3.0 to 60.6   | 3/8 inch |
| TS100DM3-3 | #3 | 2.2 to 44  | 6.7 to 133.2  | 3/8 inch |
| TS100DM4-3 | #4 | 3.5 to 70  | 10.6 to 212.0 | 3/8 inch |
| TS100DM5-3 | #5 | 5.0 to 100 | 15.1 to 302.8 | 3/8 inch |

### Double Head Adjustable — 26 rpm — High Pressure: 0 to 100 psi (6.9 bar)

|               |    |           |             |          |
|---------------|----|-----------|-------------|----------|
| TS100DMHP5    | #1 | 0.3 to 6  | 0.9 to 18.2 | 1/4 inch |
| TS100DMHP20   | #2 | 1.0 to 20 | 3.0 to 60.6 | 1/4 inch |
| TS100DMHP5-3  | #1 | 0.3 to 6  | 0.9 to 18.2 | 3/8 inch |
| TS100DMHP20-3 | #2 | 1.0 to 20 | 3.0 to 60.6 | 3/8 inch |

### Double Head Adjustable — 44 rpm — Low Pressure: 0 to 25 psi (1.7 bar)

|            |    |            |               |          |
|------------|----|------------|---------------|----------|
| TS170DM1   | #1 | 0.5 to 10  | 1.5 to 30.3   | 1/4 inch |
| TS170DM2   | #2 | 1.7 to 34  | 5.1 to 102.6  | 1/4 inch |
| TS170DM3   | #3 | 4.0 to 80  | 12.1 to 242.2 | 1/4 inch |
| TS170DM4   | #4 | 6.0 to 120 | 18.2 to 363.4 | 1/4 inch |
| TS170DM5   | #5 | 8.5 to 170 | 25.7 to 514.8 | 1/4 inch |
| TS170DM1-3 | #1 | 0.5 to 10  | 1.5 to 30.3   | 3/8 inch |
| TS170DM2-3 | #2 | 1.7 to 34  | 5.1 to 102.6  | 3/8 inch |
| TS170DM3-3 | #3 | 4.0 to 80  | 12.1 to 242.2 | 3/8 inch |
| TS170DM4-3 | #4 | 6.0 to 120 | 18.2 to 363.4 | 3/8 inch |
| TS170DM5-3 | #5 | 8.5 to 170 | 25.7 to 514.8 | 3/8 inch |

### Double Head Adjustable — 44 rpm — High Pressure: 0 to 100 psi (6.9 bar)

|               |    |           |              |          |
|---------------|----|-----------|--------------|----------|
| TS170DMHP9    | #1 | 0.5 to 10 | 1.5 to 30.3  | 1/4 inch |
| TS170DMHP34   | #2 | 1.7 to 34 | 5.1 to 102.6 | 1/4 inch |
| TS170DMHP9-3  | #1 | 0.5 to 10 | 1.5 to 30.3  | 3/8 inch |
| TS170DMHP34-3 | #2 | 1.7 to 34 | 5.1 to 102.6 | 3/8 inch |

Refer to Tube Output Tables on the flip side of this page to match the required gallon-per-day metering pump output with the appropriate model. System output is determined by the motor RPM, pump tube, and feed rate control setting.

# CHEMICAL FEED PUMPS



## DOUBLE HEAD ADJUSTABLE OUTPUT PUMPS

### Tube Output — 26 rpm Models — Gallons per Day @ 60 Hz

| Model | Tube Size | Approximate Output In Gallons Per Day (24 Hours) @ 60 Hz |      |      |      |      |      |      |      |      |      |       |
|-------|-----------|--|------|------|------|------|------|------|------|------|------|-------|
|       |           | L  | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10    |
| TS100 | #1        | 0.3  | 0.6  | 1.2  | 1.8  | 2.4  | 3.0  | 3.6  | 4.2  | 4.8  | 5.4  | 6.0   |
|       | #2        | 1.0  | 2.0  | 4.0  | 6.0  | 8.0  | 10.0 | 12.0 | 14.0 | 16.0 | 18.0 | 20.0  |
|       | #3        | 2.2  | 4.4  | 8.8  | 13.2 | 17.6 | 22.0 | 26.4 | 30.8 | 35.2 | 39.6 | 44.0  |
|       | #4        | 3.5  | 7.0  | 14.0 | 21.0 | 28.0 | 35.0 | 42.0 | 49.0 | 56.0 | 63.0 | 70.0  |
|       | #5        | 5.0  | 10.0 | 20.0 | 30.0 | 40.0 | 50.0 | 60.0 | 70.0 | 80.0 | 90.0 | 100.0 |

### Tube Output — 26 rpm Models — Liters per Day @ 50 Hz

| Model | Tube Size | Approximate Output In Liters Per Day (24 Hours) @ 50 Hz |      |      |      |       |       |       |       |       |       |       |
|-------|-----------|---|------|------|------|-------|-------|-------|-------|-------|-------|-------|
|       |           | L   | 1    | 2    | 3    | 4     | 5     | 6     | 7     | 8     | 9     | 10    |
| TS100 | #1        | 0.9   | 1.8  | 3.6  | 5.5  | 7.3   | 9.1   | 10.9  | 12.7  | 14.5  | 16.4  | 18.2  |
|       | #2        | 3.0   | 6.1  | 12.1 | 18.2 | 24.2  | 30.3  | 36.4  | 42.4  | 48.5  | 54.5  | 60.6  |
|       | #3        | 6.7   | 13.3 | 26.7 | 40.0 | 53.3  | 66.6  | 79.9  | 93.3  | 106.6 | 119.9 | 133.2 |
|       | #4        | 10.6  | 21.2 | 42.4 | 63.6 | 84.8  | 106.0 | 127.2 | 148.4 | 169.6 | 190.8 | 212.0 |
|       | #5        | 15.1  | 30.3 | 60.6 | 90.8 | 121.1 | 151.4 | 181.7 | 212.0 | 242.2 | 272.5 | 302.8 |

### Tube Output — 44 rpm Models — Gallons per Day @ 60 Hz

| Model | Tube Size | Approximate Output In Gallons Per Day (24 Hours) @ 60 Hz |      |      |      |      |      |       |       |       |       |       |
|-------|-----------|--|------|------|------|------|------|-------|-------|-------|-------|-------|
|       |           | L  | 1    | 2    | 3    | 4    | 5    | 6     | 7     | 8     | 9     | 10    |
| TS170 | #1        | 0.5  | 1.0  | 2.0  | 3.0  | 4.0  | 5.0  | 6.0   | 7.0   | 8.0   | 9.0   | 10.0  |
|       | #2        | 1.7  | 3.4  | 6.8  | 10.2 | 13.6 | 17.0 | 20.4  | 23.8  | 27.2  | 30.6  | 34.0  |
|       | #3        | 4.0  | 8.0  | 16.0 | 24.0 | 32.0 | 40.0 | 48.0  | 56.0  | 64.0  | 72.0  | 80.0  |
|       | #4        | 6.0  | 12.0 | 24.0 | 36.0 | 48.0 | 60.0 | 72.0  | 84.0  | 96.0  | 108.0 | 120.0 |
|       | #5        | 8.5  | 17.0 | 34.0 | 51.0 | 68.0 | 85.0 | 102.0 | 119.0 | 136.0 | 153.0 | 170.0 |

### Tube Output — 44 rpm Models — Liters per Day @ 50 Hz

| Model | Tube Size | Approximate Output In Liters Per Day (24 Hours) @ 50 Hz |      |      |       |       |       |       |       |       |       |       |
|-------|-----------|---|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
|       |           | L   | 1    | 2    | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    |
| TS170 | #1        | 1.5   | 3.0  | 6.1  | 9.1   | 12.1  | 15.1  | 18.2  | 21.2  | 24.2  | 27.3  | 30.3  |
|       | #2        | 5.1   | 10.3 | 18.2 | 28.8  | 39.1  | 51.5  | 61.8  | 72.1  | 82.4  | 92.7  | 102.6 |
|       | #3        | 12.1  | 24.2 | 48.5 | 72.7  | 96.9  | 121.1 | 145.4 | 169.6 | 193.8 | 218.0 | 242.2 |
|       | #4        | 18.2  | 36.3 | 72.7 | 109.0 | 145.3 | 181.7 | 218.0 | 254.4 | 290.7 | 327.0 | 363.4 |
|       | #5        | 25.7  | 51.5 | 86.0 | 154.4 | 205.9 | 257.4 | 308.9 | 360.4 | 411.8 | 463.3 | 514.8 |

NOTE: The above information is solely intended for use as a guide. The output data is an approximation based on pumping water under a controlled testing environment. Many variables can affect the output of the pump. The manufacturer recommends that all metering pumps undergo field calibration by means of analytical testing to confirm their outputs.