

**PUMP**
**UNIT: PUM042**
**PERFORMANCE**

|                             |                |
|-----------------------------|----------------|
| Maximum Operating Pressure* | 275 psi ( kPa) |
|-----------------------------|----------------|

**DRIVE**

|             |         |
|-------------|---------|
| Model       | Toshiba |
| Horse Power | 5       |
| RPM         | 3500    |
| Volts       | 460     |
| Amps        | 5.8     |
| Hertz       | 60      |

**PUMP**

|                           |                     |
|---------------------------|---------------------|
| Model                     | MN#1196             |
| Flow Rate                 | 240 m3/day          |
| Oulet                     | 25.4 (mm) 1 inch    |
| Inlet                     | 38.1 (mm) 1.5" inch |
| Impellor                  | 152.4 (mm) 6 inch   |
| Net Positive Suction Head | 2.37 (m) 7.8 feet   |


**SHIPPING DIMENSIONS**

|                 |                    |
|-----------------|--------------------|
| Width           | 254 (mm) 10 inches |
| Length          | 990 (mm) 39 inches |
| Height          | 355 (mm) 14 inches |
| Weight Estimate | 141 (kg) 311 lbs.  |

**CERTIFICATION**

|       |                |
|-------|----------------|
| Drive | Class 1, Div 1 |
| Pump  | CSA            |



Company:  
Name:  
Date: 06/10/2024



**Pump:**

Size: 1X1.5-6 AA  
Type: ANSI 1196  
Synch Speed: 3600 rpm  
Dia: 6.0625 in  
Curve: ---

Dimensions:  
Suction: 1.5 in  
Discharge: 1 in

**Fluid:**

Name: Water  
SG: 1  
Density: 62.4 lb/ft<sup>3</sup>  
Viscosity: 1.1 cP  
Temperature: 60 °F

Vapor Pressure: 0.256 psi a  
Atm Pressure: 14.7 psi a  
Margin Ratio: 1

**Search Criteria:**

Flow: --- Near Miss: ---  
Head: --- Static Head: 0 ft

**Pump Limits:**

Temperature: --- Sphere Size: 0.344 in  
Wkg Pressure: ---

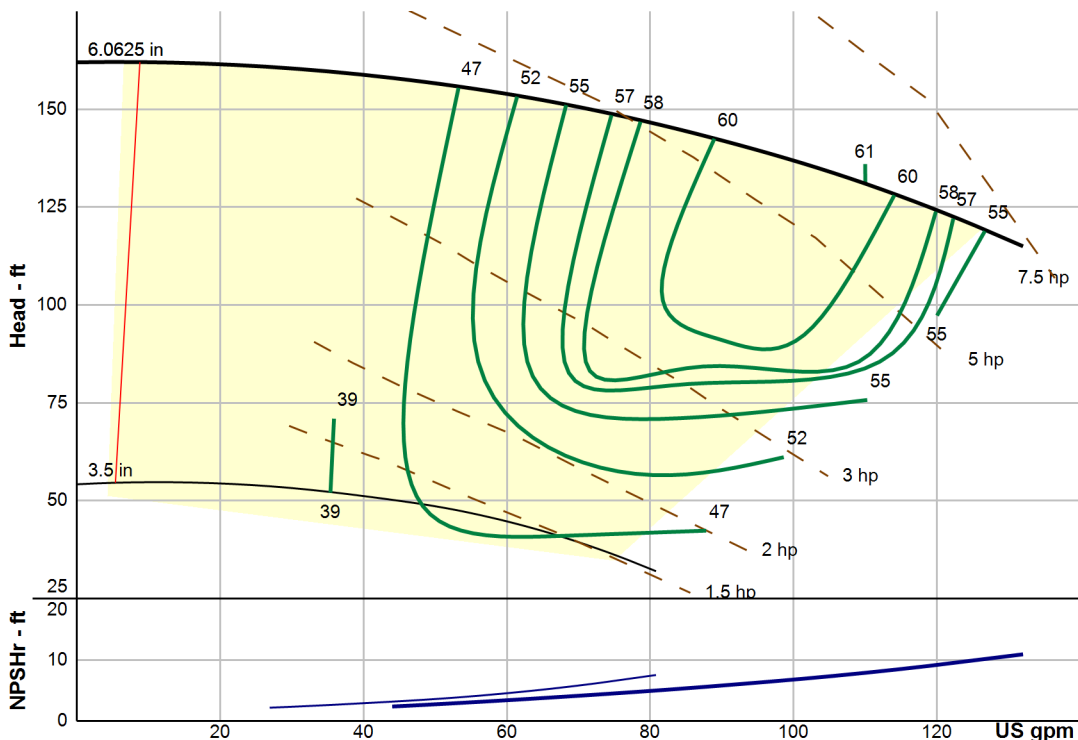
**Motor:**

Standard: NEMA Size: 7.5 hp  
Enclosure: TEFC Speed: 3600 rpm  
Frame: 213T  
Sizing Criteria: Max Power on Design Curve

**Pump Selection Warnings:**

None

| --- Duty Point ---   |                      |
|----------------------|----------------------|
| Flow:                | 110 US gpm           |
| Head:                | 131 ft               |
| Eff:                 | 61%                  |
| Power:               | 5.97 hp              |
| NPSHr:               | 7.88 ft              |
| Speed:               | 3550 rpm             |
| --- Design Curve --- |                      |
| Shutoff Head:        | 162 ft               |
| Shutoff dP:          | 70.2 psi             |
| Min Flow:            | 8.8 US gpm           |
| BEP:                 | 61% @ 110 US gpm     |
| NOL Power:           | 7.37 hp @ 132 US gpm |
| --- Max Curve ---    |                      |
| Max Power:           | 7.37 hp @ 132 US gpm |



**Performance Evaluation:**

| Flow<br>US gpm | Speed<br>rpm | Head<br>ft | Efficiency<br>% | Power<br>hp | NPSHr<br>ft |
|----------------|--------------|------------|-----------------|-------------|-------------|
| 127            | 3550         | 119        | 54              | 7.05        | 10.2        |
| 106            | 3550         | 133        | 60.8            | 5.84        | 7.47        |
| 84.8           | 3550         | 144        | 59.1            | 5.21        | 5.36        |
| 63.6           | 3550         | 153        | 52.6            | 4.65        | 3.67        |
| 42.4           | 3550         | 158        | 40.1            | 4.25        | 2.37        |