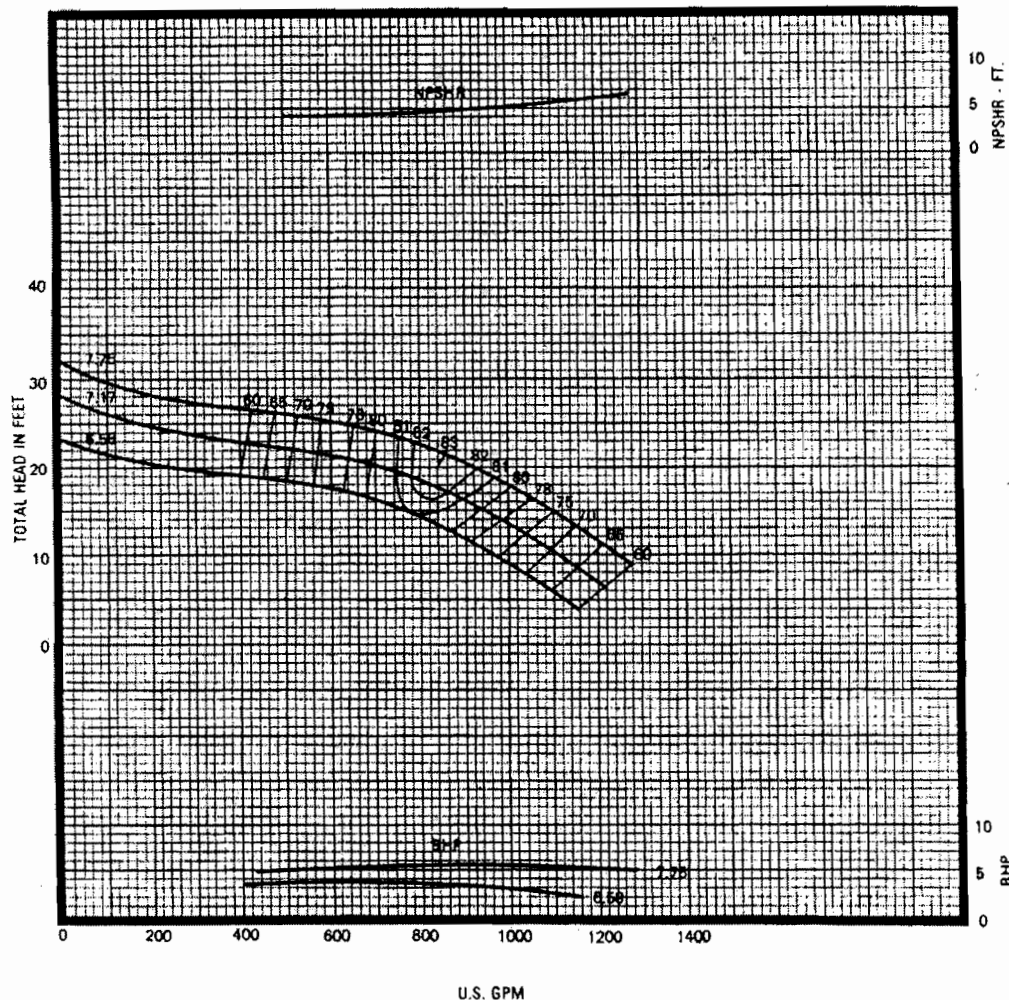


# VERTICAL TURBINE PUMPS SINGLE STAGE PERFORMANCE



**11H  
7000  
1170  
RPM**

ENCLOSED  
IMPELLER  
T7DKA99

## EFFICIENCY CORRECTIONS<sup>(1)</sup>

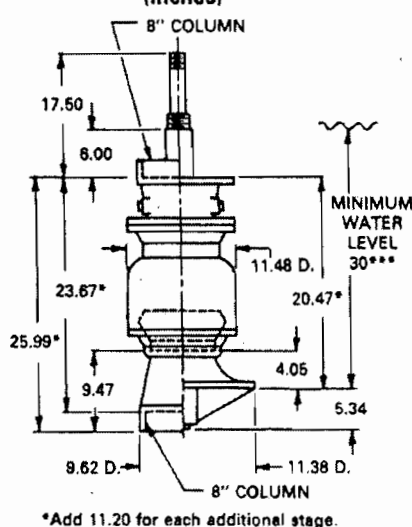
| NUMBER OF STAGES | EFFICIENCY CHANGE |
|------------------|-------------------|
| 1                | -2.5 POINTS       |
| 2                | -1.5 POINTS       |
| 3                | -0.5 POINTS       |
| 4                | NO CHANGE         |
| 5                | NO CHANGE         |
| 6 OR MORE        | NO CHANGE         |

| BOWL MATERIAL | EFFICIENCY CHANGE |
|---------------|-------------------|
| CAST IRON     | -2.0 POINTS       |
| ENAMELED C.I. | NO CHANGE         |

| IMPELLER MATERIAL | EFFICIENCY CHANGE |
|-------------------|-------------------|
| CAST IRON         | -1.0 POINTS       |
| BRONZE            | NO CHANGE         |
| ENAMELED C.I.     | +1.0 POINTS       |

(1) Refer to "Application and Reference Data" for head correction.

## DIMENSIONS (Inches)



\*Add 11.20 for each additional stage.

## TECHNICAL DATA

| DATA                                 | VALUE                      |
|--------------------------------------|----------------------------|
| MAXIMUM OPERATING SPEED              | 2700 RPM                   |
| MAXIMUM NUMBER OF STAGES             | 18**                       |
| PUMP SHAFT DIAMETER                  | 1 1/4 IN.                  |
| IMPELLER EYE AREA                    | 22.40 SQ. IN.              |
| MAXIMUM SPHERE SIZE                  | .88 IN.                    |
| K <sub>t</sub> (THRUST FACTOR)       | 8.71 LBS.-FT.              |
| K <sub>r</sub> (ROTOR WT. PER STAGE) | 33 LBS.                    |
| BOWL WT. (FIRST STAGE)               | 236 LBS.                   |
| BOWL WT. (EACH ADD'L. STAGE)         | 115 LBS.                   |
| ALLOWABLE SHAFT STRETCH              | .80 IN. **                 |
| WK <sup>2</sup> (FIRST STAGE)        | 1.90 LBS.-FT. <sup>2</sup> |
| WK <sup>2</sup> (EACH ADD'L. STAGE)  | 1.87 LBS.-FT. <sup>2</sup> |
| BOWL RING CLEARANCE                  | .014/.018 IN.              |

\*\* These are nominal values. Refer to "Application and Reference Data" for information further limiting or extending these values.

\*\*\* This value is the minimum submergence required to prevent vortexing only. This value may need to be increased to provide adequate NPSHA.

**FAIRBANKS MORSE PUMPS**