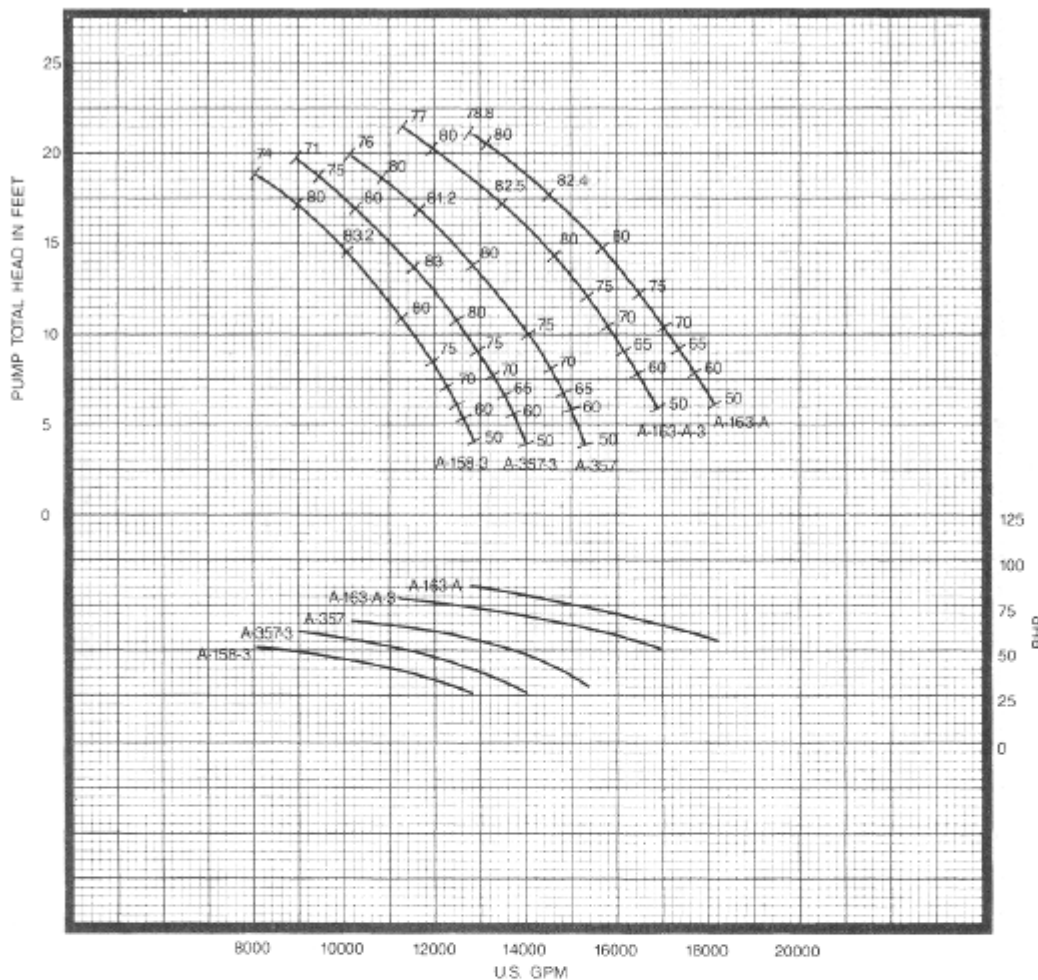


# 8000 PROPELLER PUMPS PUMP PERFORMANCE

327



**24"**  
**8211**

**705**  
**RPM**

**1**  
**STAGE**

24"  
COLUMN

24"  
FABRICATED  
STEEL ELBOW

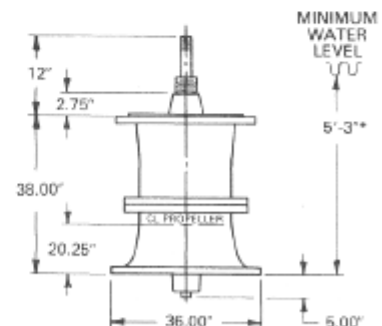
1-15/16"  
LINESHAFT

3"  
ENCLOSING  
TUBE

| DATA                                | VALUE                    |
|-------------------------------------|--------------------------|
| PUMP SHAFT DIAMETER                 | 2.1875 IN.               |
| MAXIMUM SPHERE SIZE                 | 3.75 IN.                 |
| K <sub>t</sub> (THRUST FACTOR)      | 150 LBS./FT.             |
| K <sub>a</sub> (TOTAL ROTOR WEIGHT) | 165 LBS.                 |
| K <sub>s</sub> (SETTING CONSTANT)   | 10.0 LBS./FT.            |
| WK <sup>2</sup>                     | 67 LBS.-FT. <sup>2</sup> |
| BOWL ASSEMBLY WEIGHT                | 1300 LBS.                |
| EYE AREA: PROPELLER NO. A-158-3     | 247.4 SQ. IN. 3 VANE     |
| PROPELLER NO. A-357-3               | 247.4 SQ. IN. 3 VANE     |
| PROPELLER NO. A-357                 | 271.7 SQ. IN. 3 VANE     |
| PROPELLER NO. A-163-A-3             | 247.4 SQ. IN. 4 VANE     |
| PROPELLER NO. A-163-A               | 271.7 SQ. IN. 4 VANE     |
| PROPELLER NO.                       |                          |

HYDRAULIC PERFORMANCE IS CONTINGENT ON FURNISHING THE PUMP WITH SPECIFIED AMOUNT OF CLEAR, FRESH, NON-AERATED WATER NOT TO EXCEED 85° F.

PUMP PERFORMANCE SHOWN IS BOWL ASSEMBLY WITH 10 FEET OF COLUMN INCLUDING A STANDARD ABOVE GROUND DISCHARGE ELBOW. ADDITIONAL COLUMN LOSSES SHOULD BE ADDED WHEN SETTINGS ARE DEEPER THAN 10 FEET AND/OR FOR OTHER DISCHARGE ARRANGEMENTS.



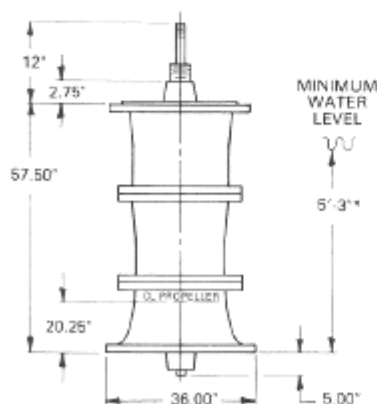
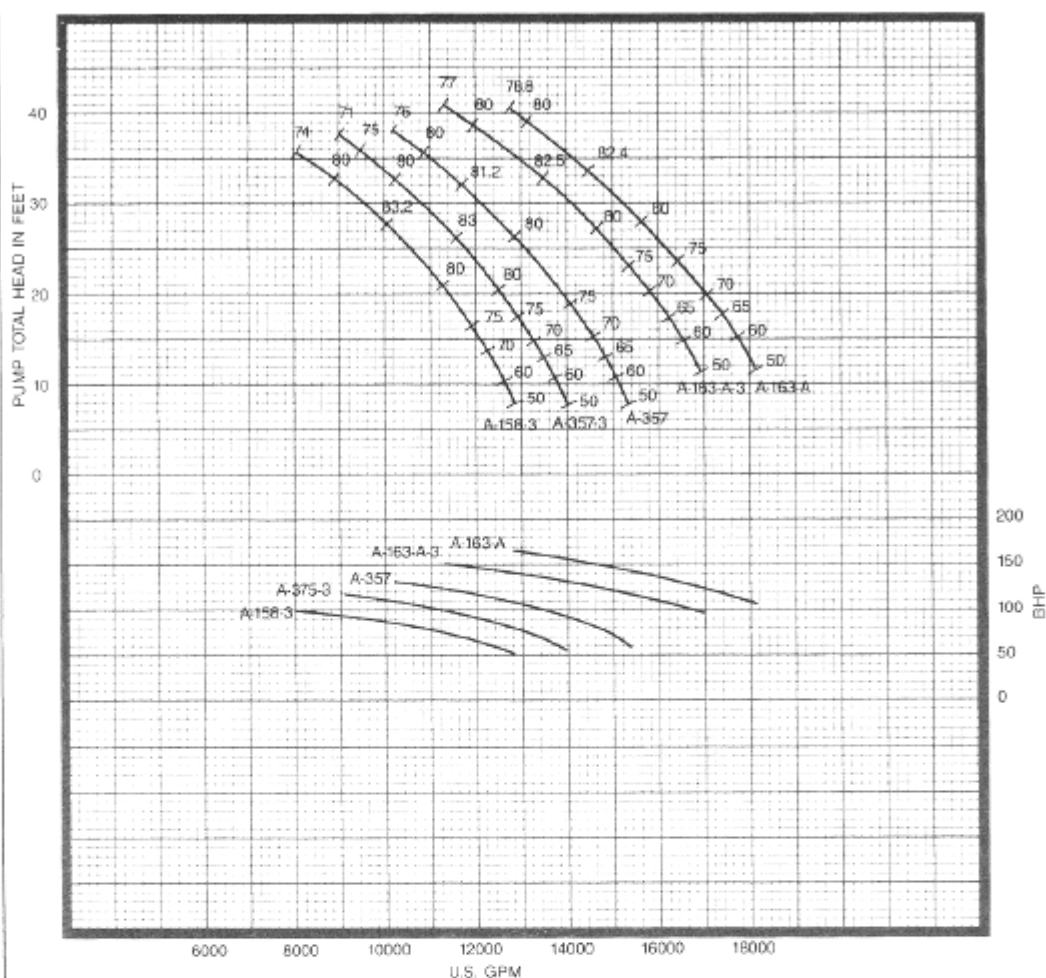
\*This value is the minimum submergence required to prevent vortexing only. This value may need to be increased to provide adequate NPSHA.

# 8000 PROPELLER PUMPS PUMP PERFORMANCE

328

**24"**  
**8211**  
**705**  
**RPM**  
**2**  
**STAGE**

24"  
COLUMN  
24"  
FABRICATED  
STEEL ELBOW  
2-3/16"  
LINESHAFT  
3"  
ENCLOSING  
TUBE



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

| DATA                                | VALUE                     |
|-------------------------------------|---------------------------|
| PUMP SHAFT DIAMETER                 | 2.1875 IN.                |
| MAXIMUM SPHERE SIZE                 | 3.75 IN.                  |
| K <sub>t</sub> (THRUST FACTOR)      | 150 LBS./FT.              |
| K <sub>a</sub> (TOTAL ROTOR WEIGHT) | 330 LBS.                  |
| K <sub>s</sub> (SETTING CONSTANT)   | 12.8 LBS./FT.             |
| WK <sup>2</sup>                     | 134 LBS.-FT. <sup>2</sup> |
| BOWL ASSEMBLY WEIGHT                | 1910 LBS.                 |
| EYE AREA: PROPELLER NO. A-158-3     | 247.4 SQ. IN. 3 VANE      |
| PROPELLER NO. A-357-3               | 247.4 SQ. IN. 3 VANE      |
| PROPELLER NO. A-357                 | 271.7 SQ. IN. 3 VANE      |
| PROPELLER NO. A-163-A-3             | 247.4 SQ. IN. 4 VANE      |
| PROPELLER NO. A-163-A               | 271.7 SQ. IN. 4 VANE      |
| PROPELLER NO.                       |                           |

HYDRAULIC PERFORMANCE IS CONTINGENT ON FURNISHING THE PUMP WITH SPECIFIED AMOUNT OF CLEAR, FRESH, NON-AERATED WATER NOT TO EXCEED 85° F.

PUMP PERFORMANCE SHOWN IS BOWL ASSEMBLY WITH 10 FEET OF COLUMN INCLUDING A STANDARD ABOVE GROUND DISCHARGE ELBOW. ADDITIONAL COLUMN LOSSES SHOULD BE ADDED WHEN SETTINGS ARE DEEPER THAN 10 FEET AND/OR FOR OTHER DISCHARGE ARRANGEMENTS.