

HEAD IN FEET

HORSEPOWER

NPSHR

GALLONS PER MINUTE

I-E

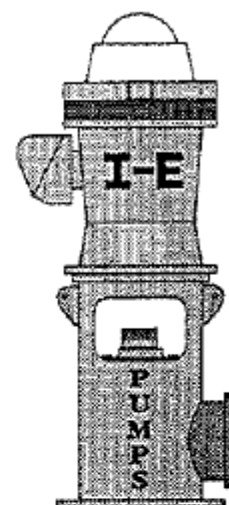
"TOP-O-THE LINE"

12HH-1200

DESIGN

1770

R.P.M.



1567 E. HWY. 160
P.O. BOX 112
MONTE VISTA
COLORADO 81144

(719) 852-5174

SECTION N
PAGE 229
DATE 10-11-90

90

70

50

30

30

20

10

40

20

0

9.625"

70

75

80

83

80

75

70

IMPELLER DATA

TRIM DIAMETER: A 9.625 " B _____ " C _____ " \ _____ " _____ "

One stage deduct -3 %, 2 stage deduct -2 %, 3 stage deduct -1 %

EFFICIENCY CORRECTION: _____ stage add _____ %, _____ stage add _____ %, _____ stage add _____ %

EFFECTIVE IMPELLER EYE AREA 21.39 sq. inches NUMBER OF IMPELLER VANES _____

THRUST CONSTANT (K) 13.0 Lbs./Ft. WR^2 (See Note #) .411 Lbs. Ft.² MAXIMUM SPHERE SIZE .750 "

IMPELLER EYE FLUID VELOCITY CONSTANT (K_e) _____ IMPELLER PERIPHERAL SPEED CONSTANT (N_e) _____ (Ft./Sec.) _____ (Ft./Min.) _____

BOWL ASSEMBLY DATA

NOMINAL DIAMETER = 11.625 ", MINIMUM DIAMETER = 11.375 ", BELL DIAMETER 13.875 ", MIN. BELL DIAMETER ±1.875 "
 MAXIMUM NO. STAGES (Std. Constr.) 6 MAXIMUM HEAD (Std. Constr.) 940 Ft.
 DIAMETER IMPELLER SHAFT _____ " MINIMUM IMPELLER SHAFT THREADS _____ "
 LATERAL (See explanation below)* NOMINAL _____ " MINIMUM _____ ", STANDARD .687 " MAXIMUM _____ "
 WEAR RING CLEARANCE (Nominal) .012 " SHAFT / BEARING CLEARANCE (Nominal) .007 "

FORMULAS: HYDRAULIC THRUST = K Factor x Laboratory Head in feet = 407 Lbs.

IMPELLER PERIPHERAL SPEED (U_2) = N_1 Constant $\times$ Impeller Diameter _____ Ft./Sec. or _____ Ft./Min.

IMPELLER EYE FLUID VELOCITY (V_e) = $K_{Constant} \times GPM = \underline{\hspace{2cm}}$ Ft./Sec.

NOTE @ = per impeller. WR^2 includes impeller, impeller collet, and a stage length of impeller shaft

NOTE * = see lateral definition on Page 8.1, Section 2.1, dated 2/15/63.

NOTE - NOMINAL PROJECTIONS ARE: SHAFT = 14" Tube = 6"

(referenced pipe butt or flange face)

- A - Length one-stage assembly / threaded suction
- B - Length one-stage assembly / bell suction
- C - Additional stage length
- D - Bowl diameter
- E - Bell diameter
- F - Projection of bearing hub / bell suction
- G - O.D. bell suction basket strainer
- J - Basket length below bell suction tip
- K - Minimum required submergence, above bottom of bearing hub
- L - Bottom of bearing hub to impeller eye
- M - Pipe butt to top bowl flange
- N - Column pipe flange to bowl flange
- P - Suction case (or coupling) thread engagement
- R - Suction case flange diameter
- S - Flange to flange / bowl to column

APPLICABLE DIMENSIONS

[illegible]