

ONE
STAGE

AGES

HEAD IN FEET

HORSEPOWER

250

200

150

100

50

0

100

50

0

0 200 400 600 800 1000 1200 1400 1600
US GALLONS PER MINUTE

I-E

"TOP-O-THE LINE"

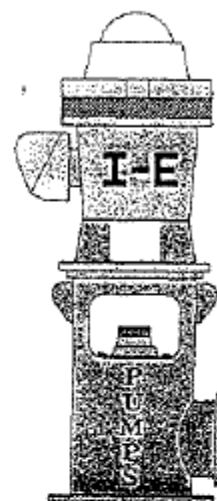
11SH-920

DESIGN

3450

R.P.M.

$1 = 8.062"$
 $2 = 7.000"$



100
50
0
NPSHR

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

(719) 852-5174

SECTION 0
PAGE 818
DATE 4-18-91

IMPELLER DATA

TRIM DIAMETER: A 8.062 ", B 7.00 ", C -- ", -- ", -- ", -- "

One stage deduct 4 %, two stage deduct 3 %, three stage deduct 2 %

EFFICIENCY CORRECTION: 5 stage add 0 %, -- stage add -- %, -- stage add -- %

EFFECTIVE IMPELLER EYE AREA 13.22 sq. inches NUMBER OF IMPELLER VANES --

THRUST CONSTANT (K) 5.3 Lbs./Ft. WR_1 (See Note 6) .315 Lbs./Ft. 2 MAXIMUM SPHERE SIZE .625

IMPELLER EYE FLUID VELOCITY CONSTANT (K_v) -- IMPELLER PERIPHERAL SPEED CONSTANT (N_1) -- (Ft/Sec) -- (Ft/Min)

BOWL ASSEMBLY DATA

NOMINAL DIAMETER = 10.1875 ", MINIMUM DIAMETER = -- ", BELL DIAMETER 11.375 ", MIN. BELL DIAMETER -- "

MAXIMUM NO. STAGES (Std. Constr.) 4 MAXIMUM HEAD (Std. Constr.) 867 Ft

DIAMETER IMPELLER SHAFT 1.5 ", MINIMUM IMPELLER SHAFT THREADS -- "

LATERAL (See explanation below) * NOMINAL -- ", MINIMUM -- ", STANDARD -- ", MAXIMUM -- "

WEAR RING CLEARANCE (Nominal) .012 ", SHAFT/BEARING CLEARANCE (Nominal) .007 "

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

IMPELLER PERIPHERAL SPEED (U_1) = N_1 Constant x Impeller Diameter -- Ft/Sec or -- Ft/Min

IMPELLER EYE FLUID VELOCITY (V_1) = K_v Constant x GPM = -- Ft/Sec

NOTE: % = per impeller. WR_1 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 lip
- 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

DIMENSION	A	B	C	D	E	F	G	J	K	L	M	N	P	R	S
INCHES	32.375	--	7.25	10.1875	--	3.5	--	--	14	--	--	--	--	--	--

