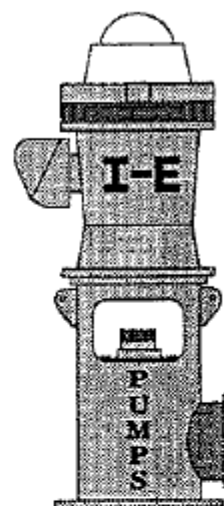
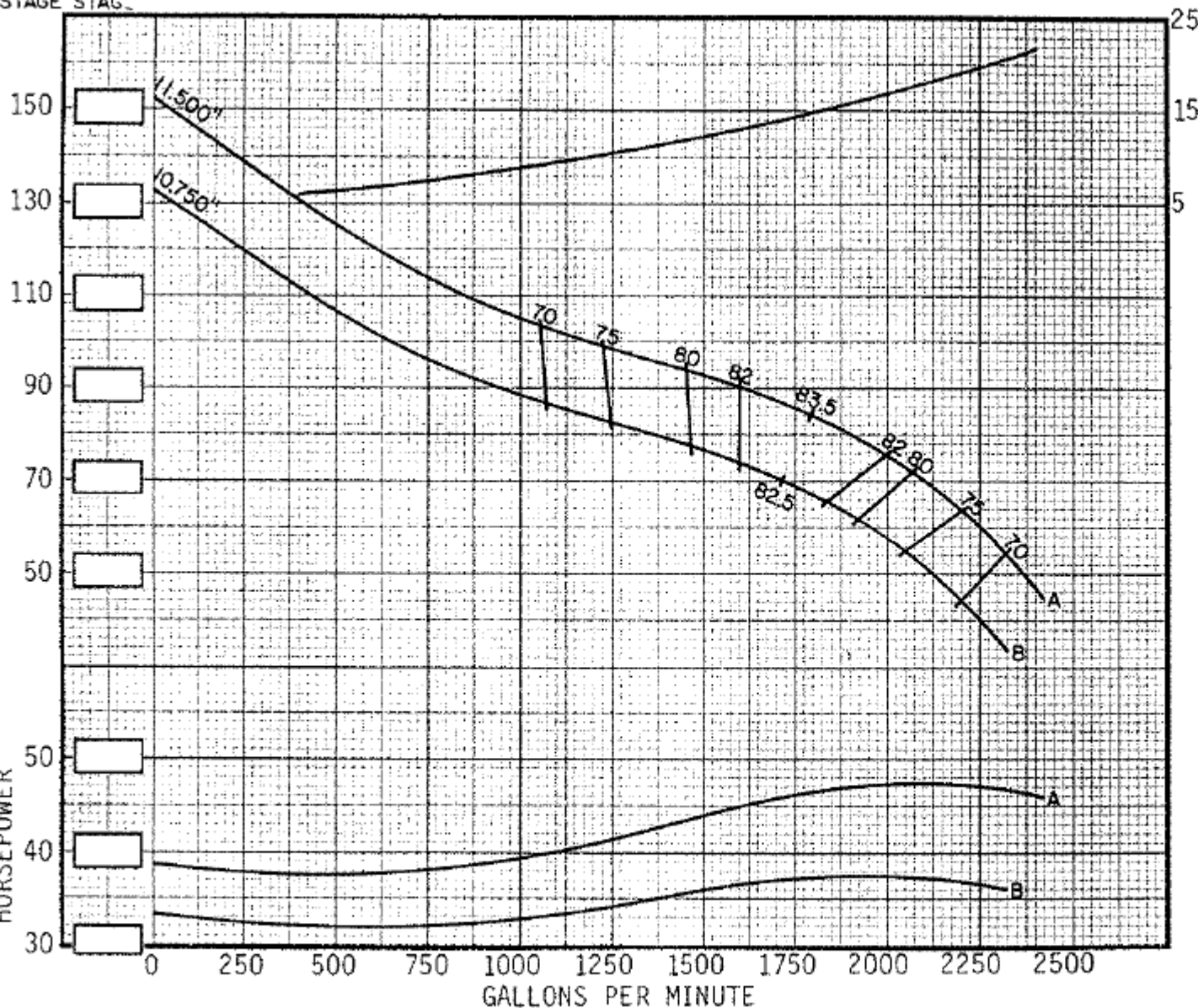


ONE ()
STAGE STAG

HEAD IN FEET

HORSEPOWER



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

(719) 852-5174

I-E
"TOP-O-THE LINE"

14CL-1800

DESIGN

1770

R.P.M.

SECTION N
PAGE 236
DATE 10-11-90

IMPELLER DATA

TRIM DIAMETER: A 11.5000 ", B 10.750 " 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 49.08 sq. inches NUMBER OF IMPELLER VANES

THRUST CONSTANT (K) 17.9 Lbs./Fr. WR^2 (See Note K) 1.933 Lbs. Ft.² MAXIMUM SPHERE SIZE 1.312 "

IMPELLER EYE FLUID VELOCITY CONSTANT (K_e) IMPELLER PERIPHERAL SPEED CONSTANT (N_1) (Fr./Sec.) (Fr./Min.)

BOWL ASSEMBLY DATA

NOMINAL DIAMETER = 14 ", MINIMUM DIAMETER = 13.75 ", BELL DIAMETER 18.125 ", MIN. BELL DIAMETER 17.125 "

MAXIMUM NO. STAGES (Std. Constr.) 3 MAXIMUM HEAD (Std. Constr.) 654 Ft.

DIAMETER IMPELLER SHAFT 2.1875 " MINIMUM IMPELLER SHAFT THREADS 1 "

LATERAL (See explanation below)* NOMINAL " MINIMUM " STANDARD 1.000 " MAXIMUM "

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

FORMULAS: HYDRAULIC THRUST = K Factor x Laboratory Head in feet = 283 Lbs.

IMPELLER PERIPHERAL SPEED (U_2) = N_1 Constant x Impeller Diameter Ft./Sec. or Ft./Min.

IMPELLER EYE FLUID VELOCITY (V_e) = K_e Constant x GPM = Ft./Sec.

NOTE @ = per impeller. WR^2 includes impeller, impeller collar, 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	33	37	13.5	14	18.125										

