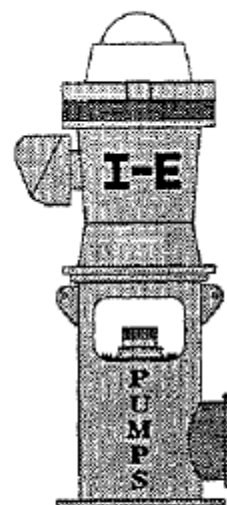
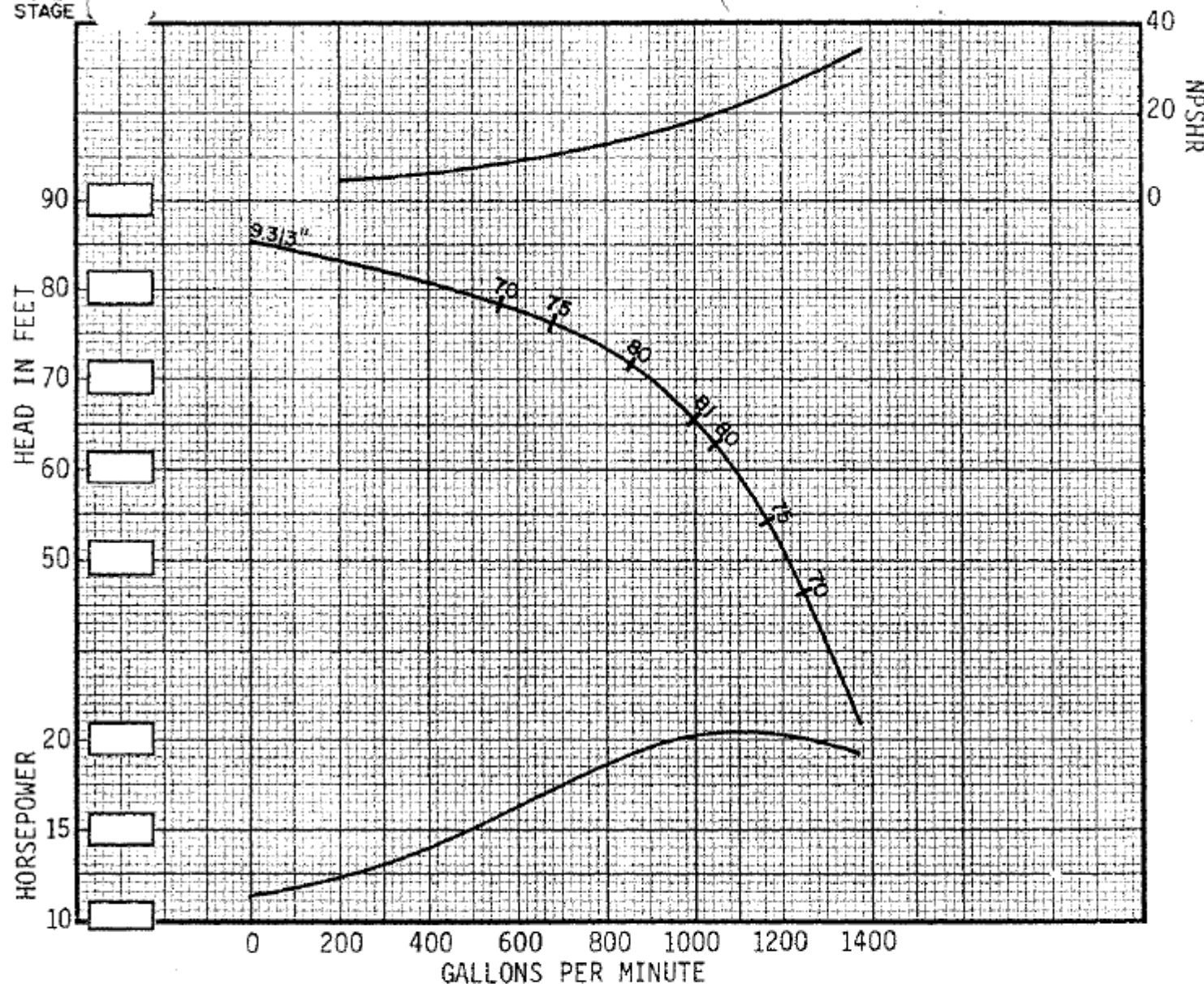


ONE
STAGE

HEAD IN FEET

HORSEPOWER

NPSHR



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

(719) 852-5174

I-E
"TOP-O-THE LINE"

12HM-1000
DESIGN

1770
R.P.M.

SECTION N
PAGE 228
DATE 10-11-90

IMPELLER DATA

TRIM DIAMETER: A 9.313 " B 8 " C 8 " D 8 " E 8 " F 8 " G 8 " H 8 " I 8 " J 8 " K 8 " L 8 " M 8 " N 8 " O 8 " P 8 " Q 8 " R 8 " S 8 " T 8 " U 8 " V 8 " W 8 " X 8 " Y 8 " Z 8 "

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

EFFICIENCY CORRECTION: 1 stage add 0 %, 2 stage add 0 %, 3 stage add 0 %.

EFFECTIVE IMPELLER EYE AREA 15.69 sq. inches NUMBER OF IMPELLER VANES 12

THRUST CONSTANT (K) 11.9 Lbs./Ft. WR^2 (See Note W) 375 Lbs. Ft.² MAXIMUM SPHERE SIZE .750 "

IMPELLER EYE FLUID VELOCITY CONSTANT (K_e) 1.0 IMPELLER PERIPHERAL SPEED CONSTANT (N_e) 1.0 (Ft./Sec.) 1.0 (Ft./Min.)

BOWL ASSEMBLY DATA

NOMINAL DIAMETER = 11.625" , MINIMUM DIAMETER = 11.375" , BELL DIAMETER 13.875" , MIN. BELL DIAMETER 12.875" .
 MAXIMUM NO. STAGES (Std. Constr.) 6 MAXIMUM HEAD (Std. Constr.) 940 Ft.
 DIAMETER IMPELLER SHAFT 1.6875" , MINIMUM IMPELLER SHAFT THREADS _____"
 LATERAL (See explanation below)* NOMINAL _____" , MINIMUM _____" , STANDARD 1.062" , 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 x Impeller Diameter _____ Ft./Sec. or _____ Ft./Min.
 IMPELLER EYE FLUID VELOCITY (V_e) = K_e Constant x GPM = _____ Ft./Sec.

A - Length one-stage assembly / threaded suction
 B - Length one-stage assembly / bell suction
 C - Additional stage length
 D - Bowl diameter

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 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

[illegible]