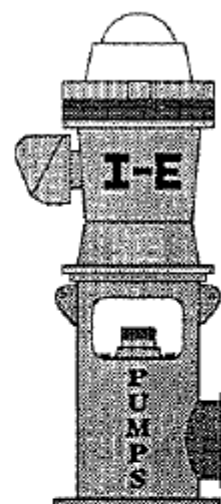
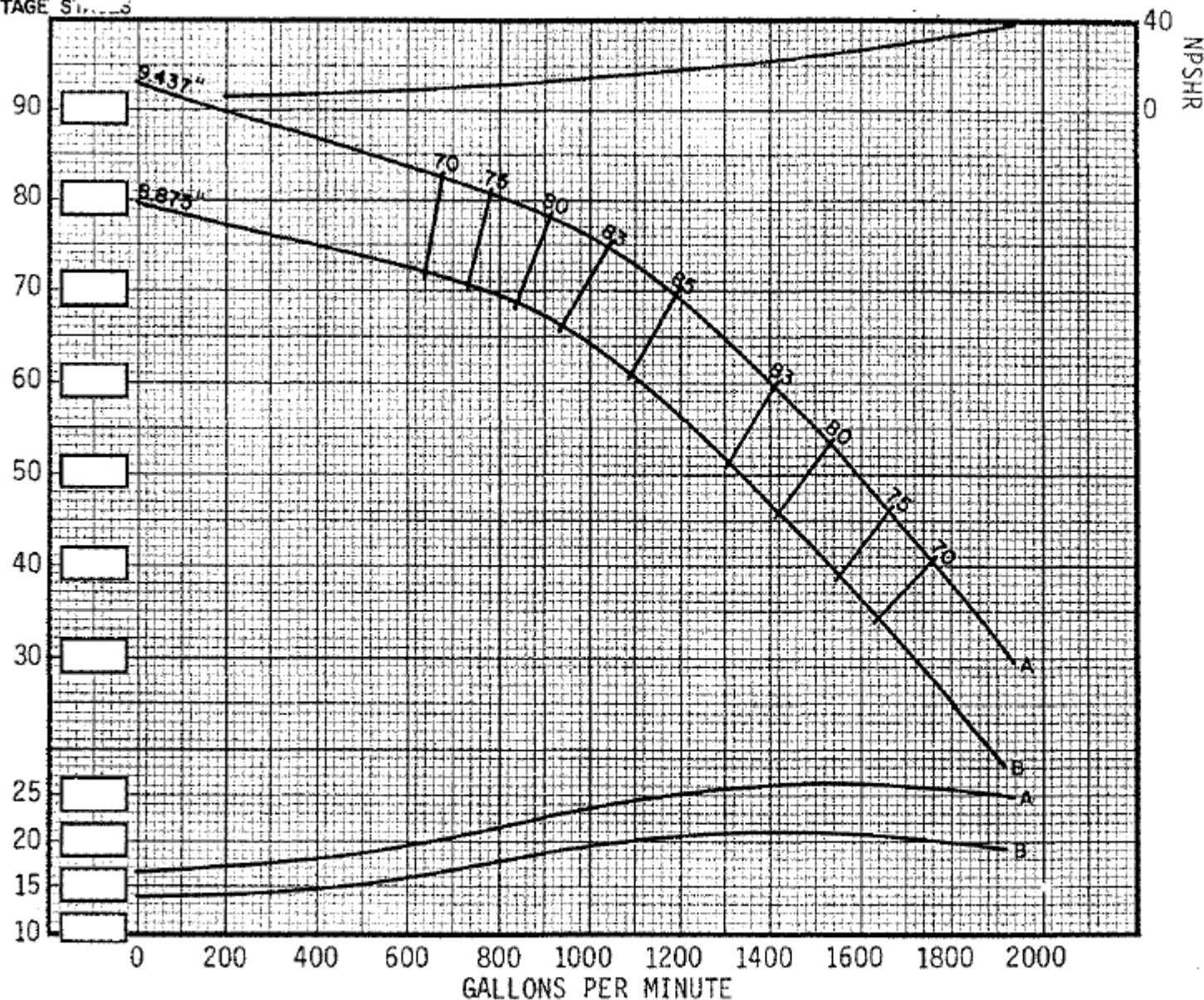


ONE
STAGE SERIES

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"

13CM-1200
DESIGN

1770
R.P.M.

SECTION N
PAGE 233
DATE 10-11-90

IMPELLER DATA

TRIM DIAMETER: A 9.437 " B 8.875 " C _____ " _____ " _____ " _____ "
One stage deduct -2 %, 2 stage deduct -1 %, 3 stage deduct 0 %
EFFICIENCY CORRECTION: _____ stage add _____ %, _____ stage add _____ %, _____ stage add _____ %
EFFECTIVE IMPELLER EYE AREA 28.24 sq. inches NUMBER OF IMPELLER VANES _____
THRUST CONSTANT (K) 11.0 Lbs./Ft. WR^2 (See Note #) 804 Lbs. Ft.² MAXIMUM SPHERE SIZE .875 "
IMPELLER EYE FLUID VELOCITY CONSTANT (K_e) _____ IMPELLER PERIPHERAL SPEED CONSTANT (N_e) _____ (Ft./Sec.) _____ (Ft./Min.) _____

BOWL ASSEMBLY DATA

NOMINAL DIAMETER = 12" , MINIMUM DIAMETER = 11.75" , BELL DIAMETER 13.875" , MIN. BELL DIAMETER 12.875"
 MAXIMUM NO. STAGES (Std. Constr.) 4 MAXIMUM HEAD (Std. Constr.) 635 Ft.
 DIAMETER IMPELLER SHAFT 16.875" MINIMUM IMPELLER SHAFT THREADS _____"
 LATERAL (See explanation below)* NOMINAL _____" MINIMUM _____" STANDARD 875" MAXIMUM _____"
 WEAR RING CLEARANCE (Nominal) .012" SHAFT / BEARING CLEARANCE (Nominal) .007"
 FORMULAS: HYDRAULIC THRUST = K Factor x Laboratory Head in feet = 275 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. WR² 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

- 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]