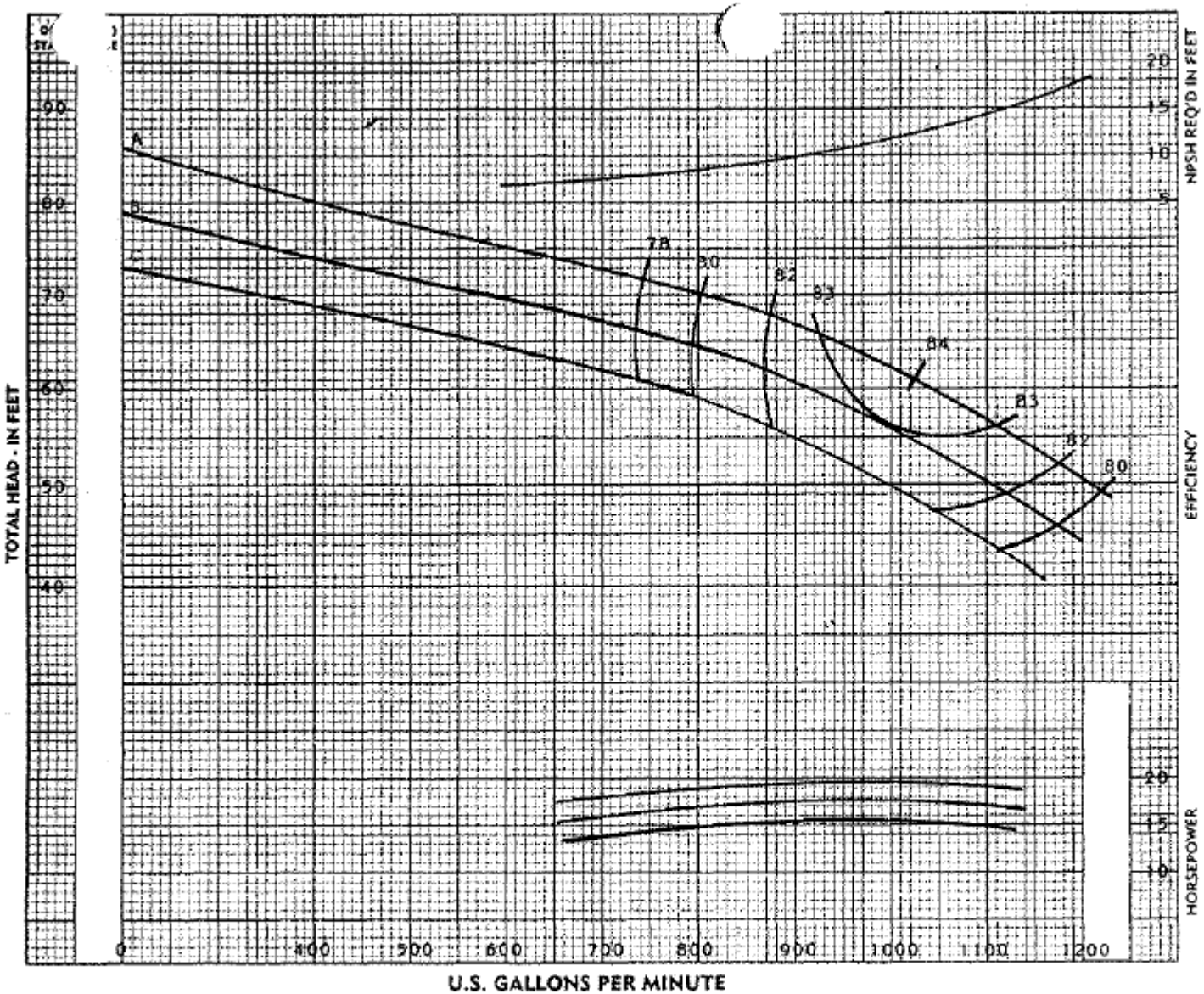

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SECTION N
PAGE 125
DATE 12-21-90

I-E
"TOP-O-THE LINE"

12~~PM~~-1025
DESIGN

1770
R.P.M.

IMPELLER DATA

TRIM DIAMETER: A 9.18 ", B 8.94 ", C 8.62 ", — ", — ", — "

One stage deduct 4 %, 2 stage deduct 2 %, 3 stage deduct 1 %

EFFICIENCY CORRECTION: 4 stage add 0 %, -- stage add -- %, — stage add — %

EFFECTIVE IMPELLER EYE AREA 15.95 sq. inches NUMBER OF IMPELLER VANES SEVEN

THRUST CONSTANT (K) 8.85 Lbs./Ft. WR_2 (See Note 6) 1.5 Lbs./Ft.2 MAXIMUM SPHERE SIZE .875

IMPELLER EYE FLUID VELOCITY CONSTANT (K_e) .020 IMPELLER PERIPHERAL SPEED CONSTANT (N_1) 7.68 (Ft/Sec) -- (Ft/Min)

BOWL ASSEMBLY DATA

NOMINAL DIAMETER = 11-5/8 ", MINIMUM DIAMETER = 11-5/8 ", BELL DIAMETER -- ", MIN. BELL DIAMETER -- "

MAXIMUM NO. STAGES (Std. Constr.) 9 MAXIMUM HEAD (Std. Constr.) 577 Ft

DIAMETER IMPELLER SHAFT 1-11/16 ", MINIMUM IMPELLER SHAFT THREADS 14 "

LATERAL (See explanation below)* NOMINAL -- ", MINIMUM - ", STANDARD .375 ", MAXIMUM .750 "

WEAR RING CLEARANCE (Nominal) .015 ", SHAFT/BEARING CLEARANCE (Nominal) 0.010 "

FORMULAS: HYDRAULIC THRUST=K Factor x Laboratory Head in feet= 8.85 Lbs

IMPELLER PERIPHERAL SPEED (U_2)=N_1 Constant x Impeller Diameter 7.68 Ft/Sec or -- Ft/Min

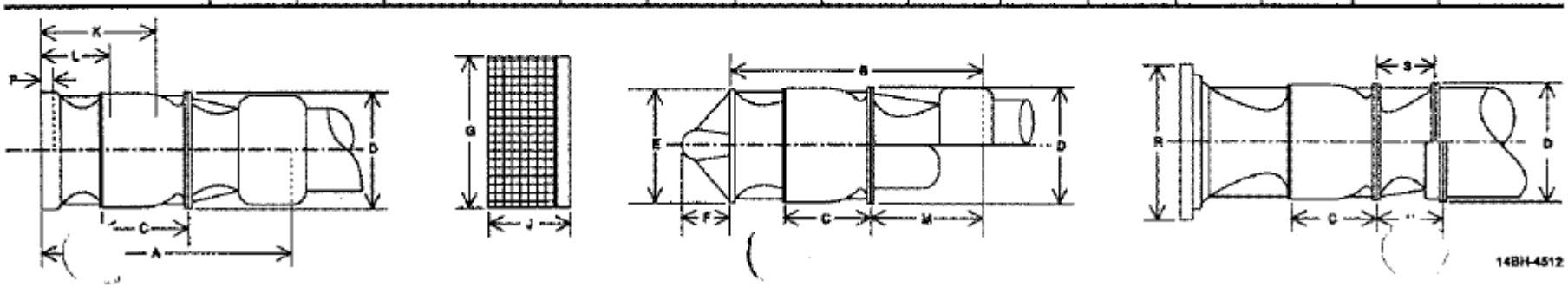
IMPELLER EYE FLUID VELOCITY (V_e)=K_e Constant x GPM= .020 Ft/Sec

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

DIMENSION	A	B	C	D	E	F	G	J	K	L	M	N	P	R	S
INCHES	25-3/8	21-11/16	9-1/4	11-5/8	-	3-1/4	-	-	18	-	-	-	-	-	-