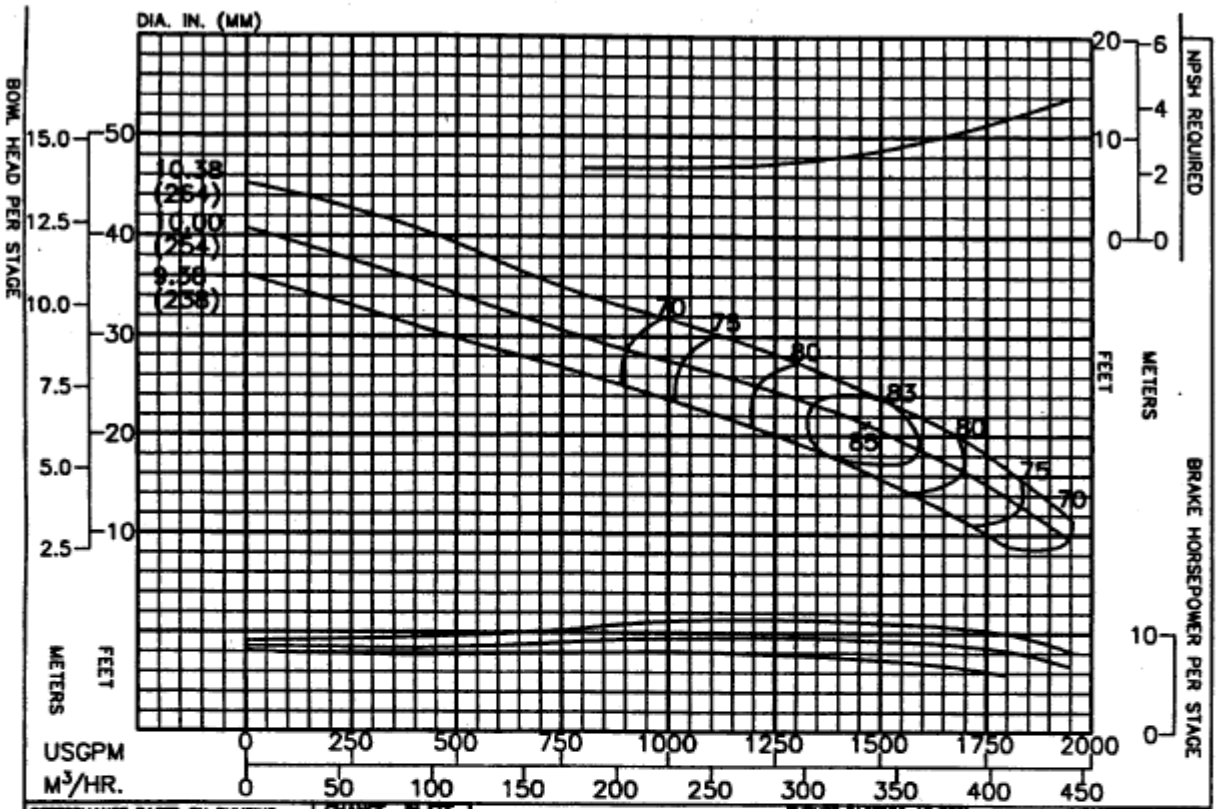
FLOWSERVE

14HH220

01-JUNE-2000
NEW SHEET
IMPELLER CURVES



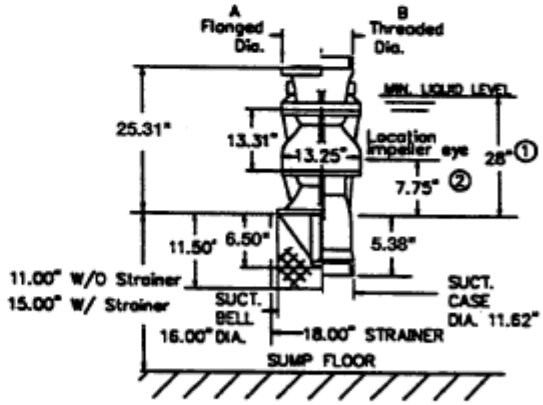
PERFORMANCE BASED ON PUMPING CLEAR WATER BELOW BST. WITH LISTED MATLS. COLUMN LOSSES NOT INCLUDED.	CHANGE STAGES	B. EFF. POINTS
BOWL – CAST IRON – LINED	2	0
IMPELLER – BRONZE	3	0

THRUST FACTORS AT BEP		
IMPELLER	LBS/FT	KG/M
STANDARD	15.6	23.2
EYE AREA– 44.2 SQ. IN.		

RPM	PUMP
1175	14HH220
ENCLOSED IMPELLER	CURVE NO.
N_s = 4330	EC–2421

Column	Nom. Size	Max. GPM	"A" Flanged	"B" Threaded
Optional				
Standard	10"	3000	15.00"	11.62"
Optional	12"	5000	16.50"	13.62"
RATINGS				
Max. Pressure = 411 psi based on Class 30 Iron bowls				
Impeller and Shaft Weight = 35.0 pounds per stage				
Pump Shaft	Diameter = 1.50 inches			
	Max. HP. = 133 with 416 SS Pump Shaft			
Line Shaft Size	1.00	1.25	1.50	
Line Shaft H.P.	38	77	133	

Additional Data	
Max. Operating Speed.	2100
Max. No. of Stages	10
Max. Sphere Size	.50
End Play	.75
WR 2 Per Stage	1.80
Bowl Ring Clearance	.004 - .006
Impeller Running Clearance (3)	.250



(1) Minimum submergence required to prevent vortex formation. The submergence needed to provide adequate NPSH to the first stage. Impeller may be greater or less than shown. The larger of the two values must be used to determine actual minimum allowable submergence.

(2) Location of eye of first stage impeller. Used to calculate NPSH. This is also the minimum priming submergence. (See note 1).

(3) Vertical Impeller to Bowl running clearance after shaft stretch.