

TABER 1000
Bearing Selection Table

TABER 1000 SERIES PUMPS										
NUMBER OF INTERMEDIATE BEARINGS REQUIRED (60 HZ OPERATION)										
SHAFT DIA.	1-1/4"			1-5/8"			2"		2-1/2"	
PUMP MODELS	1001-1002-1005 1008-1009-1010			1020-1030 1040-1050 1060-1070		1050 1060 1070	1080		1090	
SPEED-RPM	1150	1750	3500	1150	1750	3500	1150	1750	1150	1750
PUMP SETTING										
18" (1'-6")										
24" (2'-0")			NONE							
30"		NONE				NONE				
36" (3'-0")	NONE				NONE					
42"				NONE				NONE		
48" (4'-0")							NONE			NONE
54"									NONE	
60" (5'-0")			1			1				
66"										
72" (6'-0")										
78"		1								
84" (7'-0")					1					
90"										
96" (8'-0")						2		1		
102"			2	1		2				
108" (9'-0")	1									1
114"							1			
120" (10'-0")										
126"										
132" (11'-0")		2	3		2	3			1	
138"										
144" (12'-0")					2					
150"										
156" (13'-0")	2							2		
162"										
168" (14'-0")			4			4				2
174"		3								
180" (15'-0")				2						
186"										
192" (16'-0")										
198"					3		2			
* 204" (17'-0")			5			5				
210"										
216" (18'-0")	3							3	2	
222"		4								
228" (19'-0")										
234"										
240" (20'-0")			6	3		6				3
246"										
252" (21'-0")					4					
258"										
264" (22'-0")										
270"										
276" (23'-0")	4	5				7	3	4	3	
282"										
288" (24'-0")			7	4	5					4
294" (24'-6")										

Note:

* 2 piece shaft with splicer coupling required for pump setting lengths above 204" (17'-0")

TABER 1000 SERIES PUMPS												
NUMBER OF INTERMEDIATE BEARINGS REQUIRED (50 HZ OPERATION)												
SHAFT DIA.	1-1/4"			1-5/8"			2"			2-1/2"		
PUMP MODELS	1001-1002-1005 1008-1009-1010			1020-1030 1040-1050 1060-1070		1050 1060 1070	1080			1090		
SPEED-RPM	980	1450	2900	980	1450	2900	980	1450	2900	980	1450	2900
PUMP SETTING												
18" (1'-6")												
24" (2'-0")			NONE									
30"		NONE				NONE						NONE
36" (3'-0")	NONE				NONE				NONE		NONE	
42"				NONE				NONE			NONE	
48" (4'-0")							NONE			NONE		
54"												
60" (5'-0")			1									
66"						1						
72" (6'-0")									1			
78"												
84" (7'-0")		1										1
90"												
96" (8'-0")					1				1			
102"			2									
108" (9'-0")	1			1		2	1					
114"												
120" (10'-0")										2	1	1
126"												
132" (11'-0")			3									
138"												
144" (12'-0")		2										2
150"												
156" (13'-0")					2	3						
162"												
168" (14'-0")			4						2	3		
174"	2											
180" (15'-0")				2								
186"												
192" (16'-0")												
198"		3					4	2				3
204" (17'-0")			5								2	
210"												
216" (18'-0")					3						2	
222"												
228" (19'-0")										4		
234"												
240" (20'-0")	3		6				5		3			
246"												
252" (21'-0")		4										4
258"				3								
264" (22'-0")												
270"											3	
276" (23'-0")					4		6	3		5		
282"												
288" (24'-0")	4	5	7						4		3	5
294" (24'-6")												

Note:

* 2 piece shaft with splicer coupling required for pump setting lengths above 204" (17'-0")

TABER 1000 DIMENSIONAL DATA

PUMP		IMPELLER DIAMETER		Shaft Diameter	Support Column Diameter	Support Plate Thickness X O.D.	Minimum Nozzle Opening	Minimum Submergence
Model	Size Suction X Discharge	Maximum	Minimum					
1001	1 1/2" X 1"	6 3/8"	4"	1 1/4"	4"	7/8" x 23 1/2"	15 1/2"	7"
1002	3" X 1 1/2"	6 3/8"	4"	1 1/4"	4"	7/8" x 25"	15 3/4"	7"
1005	2" X 1"	10"	7"	1 1/4"	4"	7/8" x 27 1/2"	19 1/2"	7"
1008	1 1/2" X 1"	8 1/4"	6"	1 1/4"	4"	7/8" x 25"	16 1/2"	7"
1009	3" X 1 1/2"	8 1/4"	5"	1 1/4"	4"	7/8" x 25"	17"	7"
1010	3" X 2"	7"	5"	1 1/4"	4"	7/8" x 27 1/2"	19"	7"
1020	3" X 1 1/2"	13"	9"	1 5/8"	4"	1" x 34 1/4"	24"	7"
1030	3" X 2"	13"	9"	1 5/8"	4"	1" x 36 1/2"	26"	7"
1040	4" X 3"	13"	9"	1 5/8"	4"	1 1/8" x 41 3/4"	30"	7"
1050	3" X 1 1/2"	10"	6"	1 5/8"	4"	1" x 29 1/2"	20"	7"
1060	3" X 2"	10"	6"	1 5/8"	4"	1" x 32"	22"	7"
1070	4" X 3"	10"	6"	1 5/8"	4"	1" x 36 1/2"	26 1/4"	7"
1080	6" X 4"	13"	9"	2"	6"	1 1/8" x 41 3/4"	31 1/2"	7"
1090	8" X 6"	14"	10"	2 1/2"	6"	1 1/4" x 55 1/4"	43"	13"
1120	10" X 8"	15"	12"	2 1/2"	6"	1 1/4" x 55 1/4"	43"	13"

(Sales>Q90TA1000 Page7)

Rev: 10/92

TABER 1000 DIMENSIONAL DATA

PUMP		CASING			STUFFING BOX DATA					
Model	Size Suction X Discharge	Minimum Casing Thickness	Casing Corrosion Allowance	Maximum Diameter Solids	Bore	Depth	Stuffing Box Sleeve Length	Packing Size Square	Number of Rings	Lantern Ring Width
1001	1 1/2" X 1"	7/16"	1/8"	0.40	2"	6"	3"	3/8"	5	0.75
1002	3" X 1 1/2"	7/16"	1/8"	0.56	2"	6"	3"	3/8"	5	0.75
1005	2" X 1"	7/16"	1/8"	0.44	2"	6"	3"	3/8"	5	0.75
1008	1 1/2" X 1"	7/16"	1/8"	0.34	2"	6"	3"	3/8"	5	0.75
1009	3" X 1 1/2"	7/16"	1/8"	0.34	2"	6"	3"	3/8"	5	0.75
1010	3" X 2"	1/2"	1/8"	0.40	2"	6"	3"	3/8"	5	0.75
1020	3" X 1 1/2"	1/2"	1/8"	0.22	2 5/8"	6 5/8"	3"	1/2"	5	0.75
1030	3" X 2"	1/2"	1/8"	0.38	2 5/8"	6 5/8"	3"	1/2"	5	0.75
1040	4" X 3"	1/2"	1/8"	0.68	2 5/8"	6 5/8"	3"	1/2"	5	0.75
1050	3" X 1 1/2"	7/16"	1/8"	0.25	2 5/8"	6 5/8"	3"	1/2"	5	0.75
1060	3" X 2"	1/2"	1/8"	0.50	2 5/8"	6 5/8"	3"	1/2"	5	0.75
1070	4" X 3"	1/2"	1/8"	0.64	2 5/8"	6 5/8"	3"	1/2"	5	0.75
1080	6" X 4"	9/16"	1/8"	0.70	3"	9 5/8"	5 5/8"	1/2"	6	0.75
1090	8" X 6"	9/16"	1/8"	1.75	3 1/2"	9 1/2"	5 1/2"	1/2"	6	0.75
1120	10" X 8"	9/16"	1/8"	1.25	3 1/2"	9 1/2"	5 1/2"	1/2"	6	0.75

(Sales> Q90TA1000 Page7 & Page 8)

Rev: 10/92

TABER 1000 BEARING MATERIALS		
<p>The use of sleeve bearings in Taber vertical pumps reflectst he latest advances in metallurgy and engineering materials technology. They have advantages of quietness and freedom from fatigue. Wear develops gradually and can usually be detected before break-down occurs. Non-metallic bearing materials as graphite, ceramic, and glass-filled teflon can operate with little or no lubrication. Metallic bearings are not as reliable under these conditions.</p>		
MATERIAL	AMB. TEMP. LIMITS	CHARACTERISTICS
Bronze	300 F	Moderate to heavy loads Good resistance to wear Good resistance to shock loads
Cast Iron	300 F	Low Cost Moderate loads at low speeds 150-250 BHN hardness on shaft recommended Possible seisure of sleeve to steel shaft
Carbon Graphite	300-700 F	Self-Lubricating Chemical Inertness Subject to mechanical shock Places low friction film on shaft Poor abrasion resistance
Ceramic	300-700 F	Subject to mechanical shock, mis-alignment abrasion resist, for slurry service Operates with marginal lubrication Dimensionally stable Low co-efficient of expansion
Glass-Filled Teflon	200-300 F	Self-lubricating Chemical inertness, corrosion resistance Poor thermal conductivity
Fluted Rubber	150 F	Requires lubrication at all times Light loads and moderate speeds Good on water and slurry services

**TABER 1000
 Gall
 Resistance**

TABER 1000 GALL RESISTANCE								
Shaft Material	BEARING MATERIAL							
	Cast Iron	Ductile Iron	Ni Resist 1-2	Bronze	316SS	Alloy 20	Hast C (Y17)	Hast B (Y30)
Steel-SAE 1000 TO 6000 -Ht Trtd.	S	S	S	S	P	F	F	P
	S	S	S	S	F	S	S	F
400 Series Stainless	S	S	S	F	F	F	F	P
400 Series * Ht. Trtd.	S	S	S	S	S	S	S	F
316ss	S	S	S	F	P	F	F	P
Bronze	S	S	S	F	F	S	S	F
Alloy 20 (Elcomet K)	S	S	S	S	F	F	S	S
Nickel	S	S	S	S	F	S	S	S
Hast C (Y17)	S	S	S	S	F	S	F	F
Hast B (Y30)	S	S	S	S	P	S	F	P
Stellited	S	S	S	S	S	S	S	S
Nitronic	S	S	S	S	S	S	S	S

S = Satisfactory
F = Fair
P = Poor

1000 SERIES STANDARD MATERIALS OF CONSTRUCTION

PIECE NO.	PART NAME	MATERIAL DESIGNATION										
		D.I. / 316SS	316SS	316L	304SS	304L	Elcomet K†	A-48†	R-55†	Ni	Y-17†	Y-30†
29	Suction Strainer	C.I.	316SS	316L	304SS	304L	Elcomet K†	A-48†	R-55†	Ni	Y-17†	Y-30†
22	Casing	D.I.	316SS	316L	304SS	304L	Elcomet K†	A-48†	R-55†	Ni	Y-17†	Y-30†
23	Head	D.I.	316SS	316L	304SS	304L	Elcomet K†	A-48†	R-55†	Ni	Y-17†	Y-30†
31	Impeller	316SS		316L	304SS	304L	Elcomet K†	A-48†	R-55†	Ni	Y-17†	Y-30†
17	Intermediate & Head Brg. Sleeve	Glass Filled Teflon ³						Fluted Rubber	Ruion ⁴ 123			
RP	Retaining Pin	316SS			304SS		20SS	316SS	Hastelloy ¹ C	Ni	Hastelloy ¹ C	Hastelloy ¹ B
-	Gasket - Casing	Non-Asbestos							Teflon ³			
-	Hardware (Wetted)	Steel	316SS		304SS		20SS	316SS	Hastelloy ¹ C	Ni	Hastelloy ¹ C	Hastelloy ¹ B
75	Support Column	Steel	316SS	316L	304SS	304L	20SS	Steel	Hastelloy ¹ C	Ni	Hastelloy ¹ C	Hastelloy ¹ B
46	Support Plate	Steel										
94A / 94	Tripod - Motor / Thrust	Cast Iron										
-	Tripod Guards	30 Gauge Steel										
-	Coupling	Flexible Non-Spacer										
-	Hardware (Non-Wetted)	Steel										
112	Discharge Elbow	D.I.	316SS	316L	304SS	304L	Elcomet K†	A-48†	R-55†	Ni	Y-17†	Y-30†
93	Discharge Pipe	Steel	316SS	316L	304SS	304L	20SS	Duplex Stainless	Hastelloy ¹ C	Ni	Hastelloy ¹ C	Hastelloy ¹ B
-	Discharge Flange	Steel	316SS		304SS		20SS	A-48†	Hastelloy ¹ C	Ni	Hastelloy ¹ C	Hastelloy ¹ B
61	Discharge Pipe Clamp	Ductile Iron										
X	Packing -Discharge Pipe Clamp	TFE / Graphite										
33	Shaft	C.R.S.	316SS	316L	304SS	304L	20SS	Duplex Stainless	Hastelloy ¹ C22		Hastelloy ¹ B	
69	Impeller Nut	316SS			304SS		20SS	Duplex Stainless	Hastelloy ¹ C22	Ni	Hastelloy ¹ C	Hastelloy ¹ B
CP	Impeller Pin (Cotter Pin)	316SS			304SS		20SS	Duplex Stainless	Hastelloy ¹ C22	Ni	Hastelloy ¹ C	Hastelloy ¹ B
62	Impeller Key	316SS			304SS		20SS	316SS	Hastelloy ¹ C22	Ni	Hastelloy ¹ C	Hastelloy ¹ B
88	Impeller Washer	316SS			304SS		20SS	Duplex Stainless	Hastelloy ¹ C22	Ni	Hastelloy ¹ C	Hastelloy ¹ B
-	Coupling Key	Steel										
71	Thrust Bearing	Ball Bearing in Flanged Cast Iron Housing (Grease Lube)										
63	Stuffing Box	D.I.	316SS	316L	304SS	304L	Elcomet K†	D.I.	R-55†	Ni	Y-17†	Y-30†
21	Split Gland (2 Piece)	D.I.	316SS		304SS		Elcomet K†	D.I.	R-55†	Ni	Y-17†	Y-30†
18	Stuffing Box Sleeve	Carbon Graphite										
XX	Packing - Stuffing Box	Die Formed Graphite Rings										
-	Gasket - Stuffing Box	Non-Asb.							Teflon ³			

NOTES: 1. † = LaBour Proprietary Material. 2. Materials may change without notice. 3. Custom material combinations to suite a special application are available.

1. Registered trademark of Haynes International. 2. Registered trademark of SEPCO. 3. Registered trademark of E.I. duPont de Nemours. 4. Registered trademark of Dixon Corporation.

