

ITT

Commercial Water

Goulds Pumps G&L Series Technical Data Section 10

BOILER – PUMP SELECTION

Boiler HP	Pump Flow*	Boiler PSI Pump PSI Pump TDH	15	22	35	50	75	90	100	125	150	175	200	250	300
			18	26	40	56	84	99	110	136	164	177	219	260	310
			42	60	92	130	193	229	253	315	379	410	505	600	716
Pump Flow*		Continuous	On/Off												
25	5.5	3.5	1ST .5HP 1 Stage	1ST .5HP 1 Stage	1SV .5HP 2 Stage	1SV .5HP 3 Stage	1SV 1HP 4 Stage	1SV 1.5HP 5 Stage	1SV 2HP 6 Stage	1SV 2HP 7 Stage	1SV 3HP 8 Stage	1SV 3HP 9 Stage	1SV 3HP 11 Stage	1SV 5HP 13 Stage	1SV 5HP 16 Stage
50	8.3	6.9	1ST .5HP 1 Stage	1ST .5HP 1 Stage	1SV .5HP 2 Stage	1SV .75HP 3 Stage	1SV 1.5HP 5 Stage	1SV 2HP 6 Stage	1SV 2HP 7 Stage	1SV 2HP 8 Stage	1SV 3HP 9 Stage	1SV 3HP 11 Stage	1SV 3HP 13 Stage	1SV 5HP 16 Stage	
80	11.3	11	1ST .5HP 1 Stage	1SV .5HP 2 Stage	1SV .75HP 3 Stage	1SV 1HP 4 Stage	1SV 1.5HP 5 Stage	1SV 2HP 6 Stage	1SV 2HP 7 Stage	1SV 3HP 8 Stage	1SV 3HP 11 Stage	1SV 3HP 11 Stage	1SV 5HP 13 Stage	2SV 5HP 15 Stage	
100	13.4	13.8	1ST .5HP 1 Stage	1SV .5HP 2 Stage	1SV .75HP 3 Stage	1SV 1HP 4 Stage	1SV 2HP 6 Stage	1SV 2HP 7 Stage	1SV 3HP 8 Stage	1SV 3HP 9 Stage	1SV 3HP 11 Stage	1SV 5HP 13 Stage	1SV 5HP 15 Stage		
125	18.9	17.3	1ST .5HP 1 Stage	1ST .75HP 1 Stage	2SV 1HP 3 Stage	2SV 1.5HP 4 Stage	2SV 2HP 6 Stage	2SV 3HP 7 Stage	2SV 3HP 8 Stage	2SV 3HP 9 Stage	2SV 5HP 11 Stage	2SV 5HP 13 Stage	2SV 5HP 15 Stage	3SV 10HP 11 Stage	3SV 15HP 13 Stage
150	21.6	20.7	1ST .5HP 1 Stage	1ST .75HP 1 Stage	2SV 1HP 3 Stage	2SV 1.5HP 4 Stage	2SV 2HP 6 Stage	2SV 3HP 7 Stage	2SV 3HP 8 Stage	2SV 3HP 9 Stage	2SV 5HP 11 Stage	2SV 5HP 13 Stage	2SV 5HP 15 Stage	3SV 10HP 11 Stage	3SV 15HP 13 Stage
200	26.7	27.6	1SV .75HP 1 Stage	2SV .75HP 1 Stage	2SV 1HP 3 Stage	2SV 2HP 5 Stage	2SV 3HP 7 Stage	2SV 3HP 8 Stage	2SV 3HP 9 Stage	2SV 5HP 11 Stage	2SV 5HP 13 Stage	2SV 5HP 15 Stage	3SV 10HP 9 Stage	3SV 10HP 11 Stage	3SV 15HP 13 Stage
250	37	34.5	1ST .75HP 1 Stage	1ST 1HP 1 Stage	3SV 2HP 2 Stage	3SV 3HP 3 Stage	3SV 5HP 4 Stage	3SV 5HP 5 Stage	3SV 5HP 5 Stage	3SV 5HP 6 Stage	3SV 7.5HP 7 Stage	3SV 7.5HP 8 Stage	3SV 7.5HP 9 Stage	3SV 10HP 11 Stage	3SV 15HP 13 Stage
300	42.5	41.4	2ST 1HP 1 Stage	2ST 1.5HP 1 Stage	3SV 2HP 2 Stage	3SV 3HP 3 Stage	3SV 5HP 4 Stage	3SV 5HP 5 Stage	3SV 5HP 5 Stage	3SV 7.5HP 6 Stage	3SV 7.5HP 7 Stage	3SV 7.5HP 8 Stage	3SV 10HP 10 Stage	3SV 15HP 13 Stage	4SV 20HP 10 Stage
350	47.6	48.3	2ST 1HP 1 Stage	2ST 1.5HP 1 Stage	3SV 2HP 2 Stage	3SV 3HP 3 Stage	3SV 5HP 4 Stage	3SV 5HP 5 Stage	3SV 5HP 5 Stage	3SV 7.5HP 6 Stage	3SV 7.5HP 7 Stage	3SV 7.5HP 8 Stage	3SV 10HP 10 Stage	3SV 15HP 12 Stage	4SV 20HP 10 Stage
400	58.4	55.2	3ST 1.5HP 1 Stage	3ST 3HP 1 Stage	9ST 3HP 1 Stage	9ST 5HP 1 Stage	10ST 7.5HP 1 Stage	4SV 7.5HP 4 Stage	4SV 7.5HP 4 Stage	4SV 10HP 5 Stage	4SV 10HP 5 Stage	4SV 15HP 6 Stage	4SV 15HP 7 Stage	4SV 20HP 9 Stage	33SV 30HP 6 Stage
500	68.8	69	3ST 1.5HP 1 Stage	3ST 3HP 1 Stage	9ST 5HP 1 Stage	9ST 5HP 1 Stage	10ST 7.5HP 1 Stage	4SV 7.5HP 4 Stage	4SV 7.5HP 4 Stage	4SV 10HP 5 Stage	4SV 15HP 6 Stage	4SV 15HP 7 Stage	4SV 15HP 8 Stage	4SV 20HP 9 Stage	33SV 30HP 6 Stage
600	79.8	82.8	3ST 1.5HP 1 Stage	3ST 3HP 1 Stage	9ST 5HP 1 Stage	9ST 5HP 1 Stage	4SV 7.5HP 3 Stage	4SV 7.5HP 4 Stage	4SV 7.5HP 4 Stage	4SV 10HP 5 Stage	4SV 15HP 6 Stage	4SV 15HP 7 Stage	4SV 15HP 8 Stage	4SV 20HP 10 Stage	33SV 30HP 6 Stage
750	106	95.5	3ST 2HP 1 Stage	3ST 3HP 1 Stage	4ST 5HP 1 Stage	4ST 7.5HP 1 Stage	7ST 10HP 1 Stage	7ST 15HP 1 Stage	7ST 15HP 1 Stage	33SV 15HP 3 Stage	33SV 20HP 4 Stage	33SV 20HP 4 Stage	33SV 20HP 4 Stage	33SV 30HP 6 Stage	
800	110.8	110.4	3ST 2HP 1 Stage	3ST 3HP 1 Stage	4ST 5HP 1 Stage	4ST 7.5HP 1 Stage	7ST 10HP 1 Stage	7ST 15HP 1 Stage	7ST 15HP 1 Stage	33SV 15HP 3 Stage	33SV 20HP 4 Stage	33SV 20HP 4 Stage	33SV 20HP 4 Stage	33SV 30HP 6 Stage	
900	121.2	124.2	5ST 3HP 1 Stage	5ST 5HP 1 Stage	5ST 7.5HP 1 Stage	5ST 10HP 1 Stage	7ST 15HP 1 Stage	7ST 15HP 1 Stage	33SV 15HP 3 Stage	33SV 15HP 3 Stage	33SV 20HP 4 Stage	33SV 20HP 4 Stage	33SV 25HP 5 Stage	33SV 30HP 6 Stage	
1000	131.5	138	5ST 3HP 1 Stage	5ST 5HP 1 Stage	5ST 7.5HP 1 Stage	5ST 10HP 1 Stage	7ST 15HP 1 Stage	7ST 15HP 1 Stage	33SV 15HP 3 Stage	33SV 20HP 4 Stage	33SV 20HP 4 Stage	33SV 20HP 4 Stage	33SV 25HP 5 Stage	33SV 40HP 7/2 Stage	

Continuous feed boiler pump flow required calculated by multiplying boiler evaporation rate by 1.5 and adding by-pass flow required. On/off boiler pump flow calculated by multiplying boiler evaporation rate by 2.

NOTE:

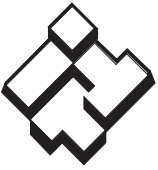
- A. Selections provide higher pump pressure than boiler pressure.
- B. Refer to pump performance curves to check NPSHR.
- C. Refer to orifice selection chart for proper required by-pass size. All continuous feed boiler pumps require a by-pass to maintain minimum flow.
- D. If boiler demand permits the pump to exceed pump maximum flows shown on the performance curve, a discharge flow valve should be used to prevent cavitation.



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BY-PASS ORIFICE SIZE – SELECTION CHART – 3500 RPM

Mini Flow (GPM)									2	6	11	17	30	45	70	90
Stages	Pump Sizes															
	1ST	2ST	3ST	4ST	5ST	7ST	9ST	10ST	1SV	2SV	3SV	4SV	33SV	46SV	66SV	92SV
1	1/8"	3/16"	1/4"	3/8"	3/8"	3/8"	1/4"	3/8"					1/2"	9/16"	5/8"	11/16"
2									1/8"	1/4"	5/16"	5/16"	7/16"	7/16"	9/16"	5/8"
3									1/8"	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"
4, 5									1/8"	3/16"	1/4"	1/4"	3/8"	7/16"	7/16"	1/2"
6									1/8"	3/16"	1/4"	1/4"	5/16"	3/8"	7/16"	
7									1/8"	3/16"	1/4"	1/4"	5/16"	3/8"		
8									1/8"	3/16"	3/16"	1/4"	5/16"	3/8"		
9									1/8"	3/16"	3/16"	3/16"	5/16"	5/16"		
10											3/16"	3/16"	5/16"	5/16"		
11									1/8"	1/8"	3/16"					
12											3/16"					
13									1/8"	1/8"	3/16"					
14																
15									1/8"	1/8"						
16									1/8"							

• Optional by-pass orifice fittings are now available for use where pumps are in danger of operating dead head. A typical application might be boiler feed. The material is 316 stainless steel, and the ends are 1" NPT under the parts category. A selection chart is given in the recently updated SSV product training manual.

Size	1/8"	3/16"	1/4"	5/16"	3/8"	7/16"	1/2"	5/8"	3/4"
Part	6K126	6K127	6K128	6K129	6K130	6K131	6K132	6K134	6K136



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