



Selection tabulation for GHE - Pelton turbines

Types 06-09

Limits and parameters:

$$k = 0,48$$

$$B_1 = 3,2 \times d_o$$

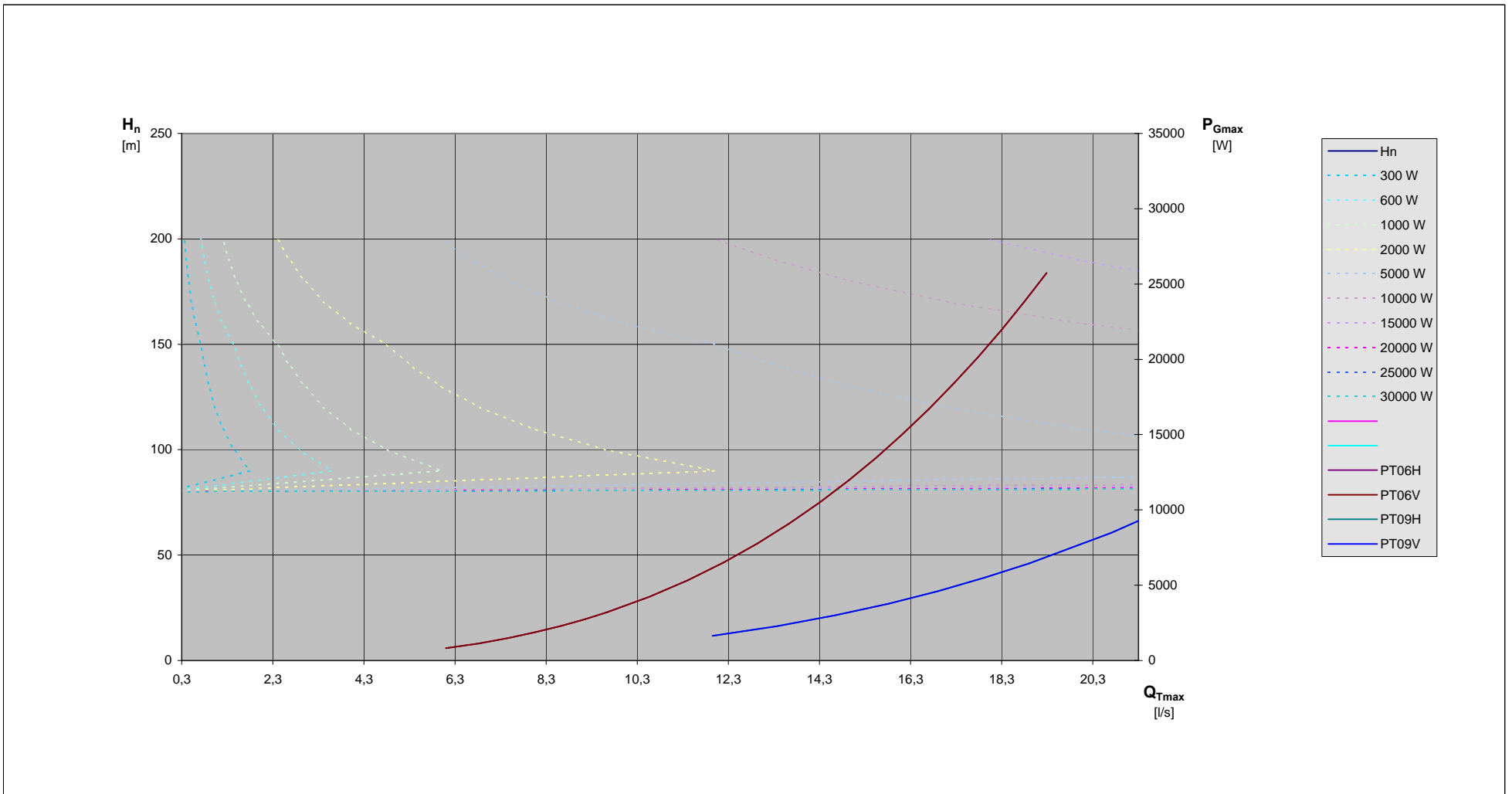
Type	d_o [mm]	n_T	n_G	D_1 [mm]	Q_{max} [l/s]	Number of nozzles max.
PT06H	20	0,85	0,85	250	30	1
PT06V	20	0,85	0,85	250	85	4
PT09H	28	0,87	0,85	315	30	1
PT09V	28	0,87	0,85	315	85	4

Legend:

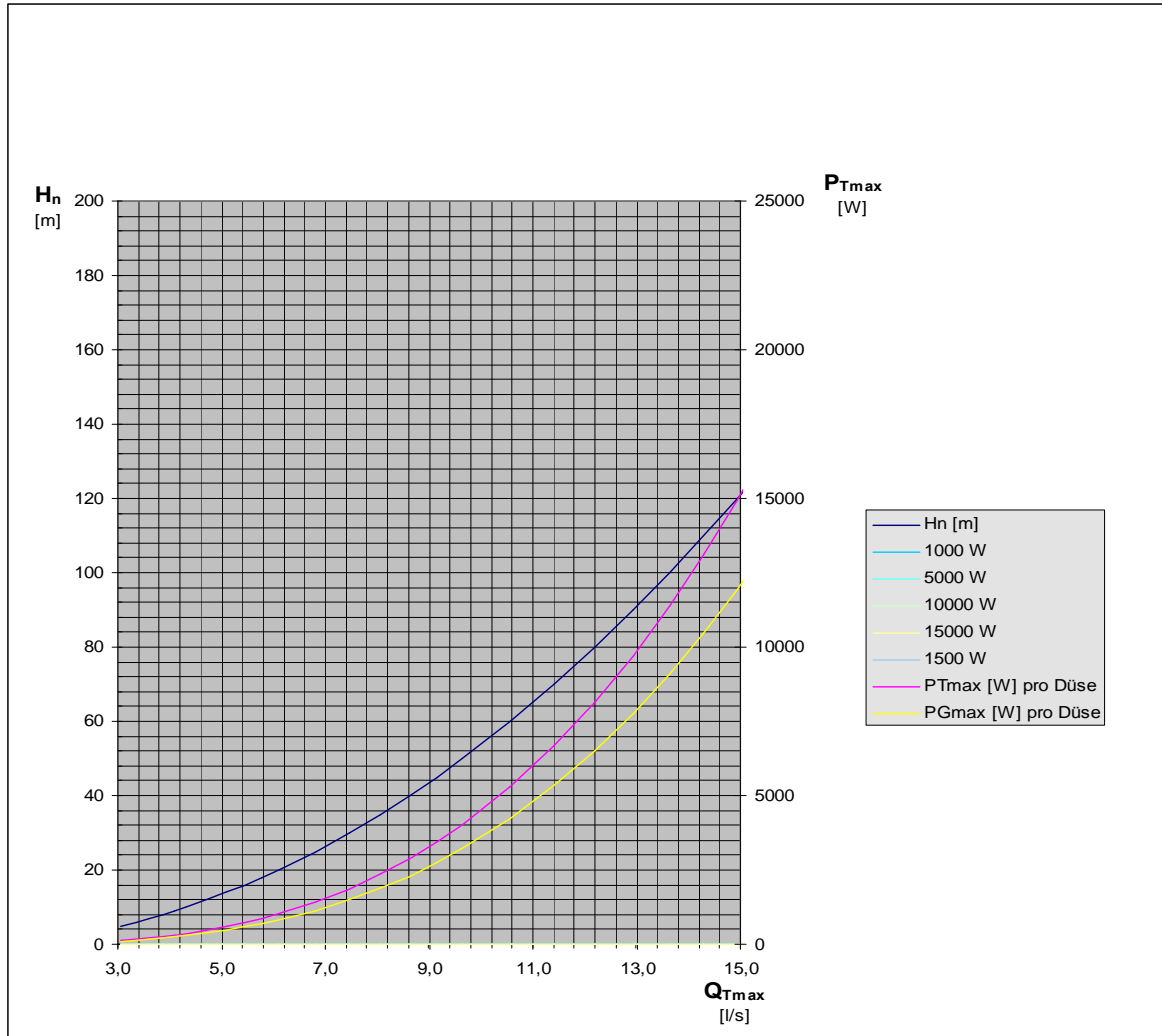
H_n	=	Net head	[m]
Q_T	=	Discharge	[l/s]
P_T	=	Turbine output	[W]
P_G	=	Generator output	[W]
n_1	=	Turbine speed (generator speed)	[min ⁻¹]
v_d	=	Spouting velocity	[m/s]
d_o	=	Jet diameter	[mm]
D_1	=	Pitch circle diameter	[m]
k	=	pulse correction value	
B_1	=	Inner bucket width	[mm]
η_T	=	Efficiency turbine	
η_G	=	Efficiency generator	

H _n [m]	Q _{Tmax} [l/s] per jet				P _{Tmax} [W] per jet				P _{Gmax} [W] per jet				d _o [mm]				n ₁ [min ⁻¹]													
			PT06H	PT06V	PT09H	PT09V			PT06H	PT06V	PT09H	PT09V			PT06H	PT06V	PT09H	PT09V			PT06H	PT06V	PT09H	PT09V						
20			6,1	6,1	12,0	12,0			1017	1017	2040	2040			814	814	1632	1632			20,0	20,0	28,0	28,0			726	726	576	576
25			6,8	6,8	13,4	13,4			1421	1421	2852	2852			1137	1137	2281	2281			20,0	20,0	28,0	28,0			812	812	645	645
30			7,5	7,5	14,6	14,6			1869	1869	3748	3748			1495	1495	2999	2999			20,0	20,0	28,0	28,0			890	890	706	706
35			8,1	8,1	15,8	15,8			2355	2355	4724	4724			1884	1884	3779	3779			20,0	20,0	28,0	28,0			961	961	763	763
40			8,6	8,6	16,9	16,9			2877	2877	5771	5771			2301	2301	4617	4617			20,0	20,0	28,0	28,0			1027	1027	815	815
45			9,1	9,1	17,9	17,9			3433	3433	6886	6886			2746	2746	5509	5509			20,0	20,0	28,0	28,0			1090	1090	865	865
50			9,6	9,6	18,9	18,9			4020	4020	8065	8065			3216	3216	6452	6452			20,0	20,0	28,0	28,0			1149	1149	912	912
60			10,6	10,6	20,7	20,7			5285	5285	10602	10602			4228	4228	8482	8482			20,0	20,0	28,0	28,0			1258	1258	999	999
70			11,4	11,4	22,4	22,4			6660	6660	13360	13360			5328	5328	10688	10688			20,0	20,0	28,0	28,0			1359	1359	1079	1079
80			12,2	12,2	23,9	23,9			8137	8137	16323	16323			6509	6509	13059	13059			20,0	20,0	28,0	28,0			1453	1453	1153	1153
90			12,9	12,9	25,4	25,4			9709	9709	19478	19478			7767	7767	15582	15582			20,0	20,0	28,0	28,0			1541	1541	1223	1223
100			13,6	13,6	26,7	26,7			11371	11371	22812	22812			9097	9097	18250	18250			20,0	20,0	28,0	28,0			1624	1624	1289	1289
110			14,3	14,3	28,0	28,0			13119	13119	26318	26318			10495	10495	21055	21055			20,0	20,0	28,0	28,0			1704	1704	1352	1352
120			14,9	14,9	29,3	29,3			14948	14948	29988	29988			11958	11958	23990	23990			20,0	20,0	28,0	28,0			1779	1779	1412	1412
130			15,5	15,5	30,5	30,5			16855	16855	33813	33813			13484	13484	27050	27050			20,0	20,0	28,0	28,0			1852	1852	1470	1470
140			16,1	16,1	31,6	31,6			18837	18837	37789	37789			15069	15069	30231	30231			20,0	20,0	28,0	28,0			1922	1922	1525	1525
150			16,7	16,7	32,7	32,7			20891	20891	41909	41909			16712	16712	33527	33527			20,0	20,0	28,0	28,0			1989	1989	1579	1579
160			17,2	17,2	33,8	33,8			23014	23014	46169	46169			18411	18411	36935	36935			20,0	20,0	28,0	28,0			2055	2055	1631	1631
170			17,8	17,8	34,9	34,9			25205	25205	50564	50564			20164	20164	40451	40451			20,0	20,0	28,0	28,0			2118	2118	1681	1681
180			18,3	18,3	35,9	35,9			27461	27461	55091	55091			21969	21969	44073	44073			20,0	20,0	28,0	28,0			2179	2179	1729	1729
190			18,8	18,8	36,8	36,8			29781	29781	59745	59745			23825	23825	47796	47796			20,0	20,0	28,0	28,0			2239	2239	1777	1777
200			19,3	19,3	37,8	37,8			32163	32163	64523	64523			25731	25731	51618	51618			20,0	20,0	28,0	28,0			2297	2297	1823	1823

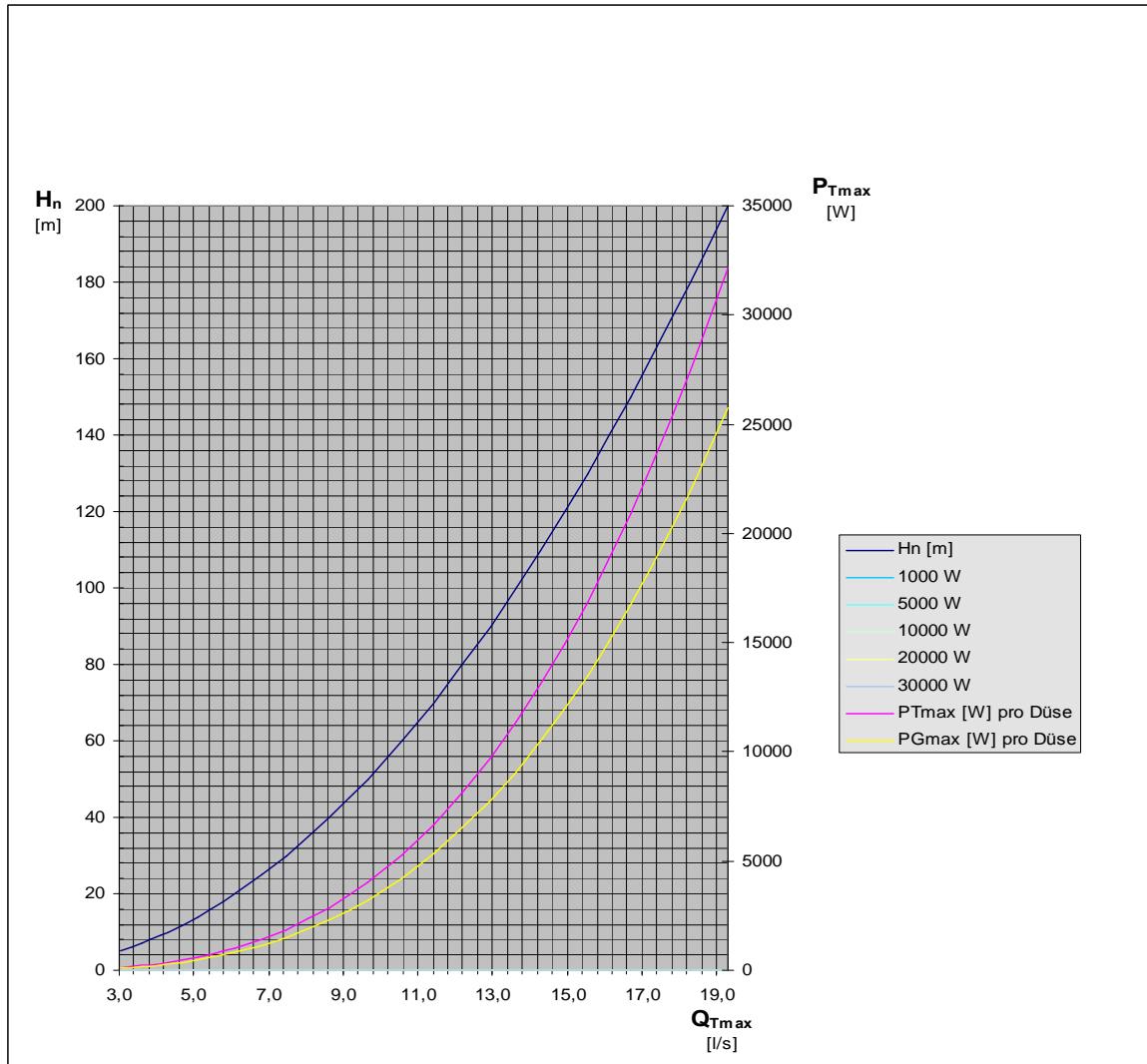
 unsuitable operating speed



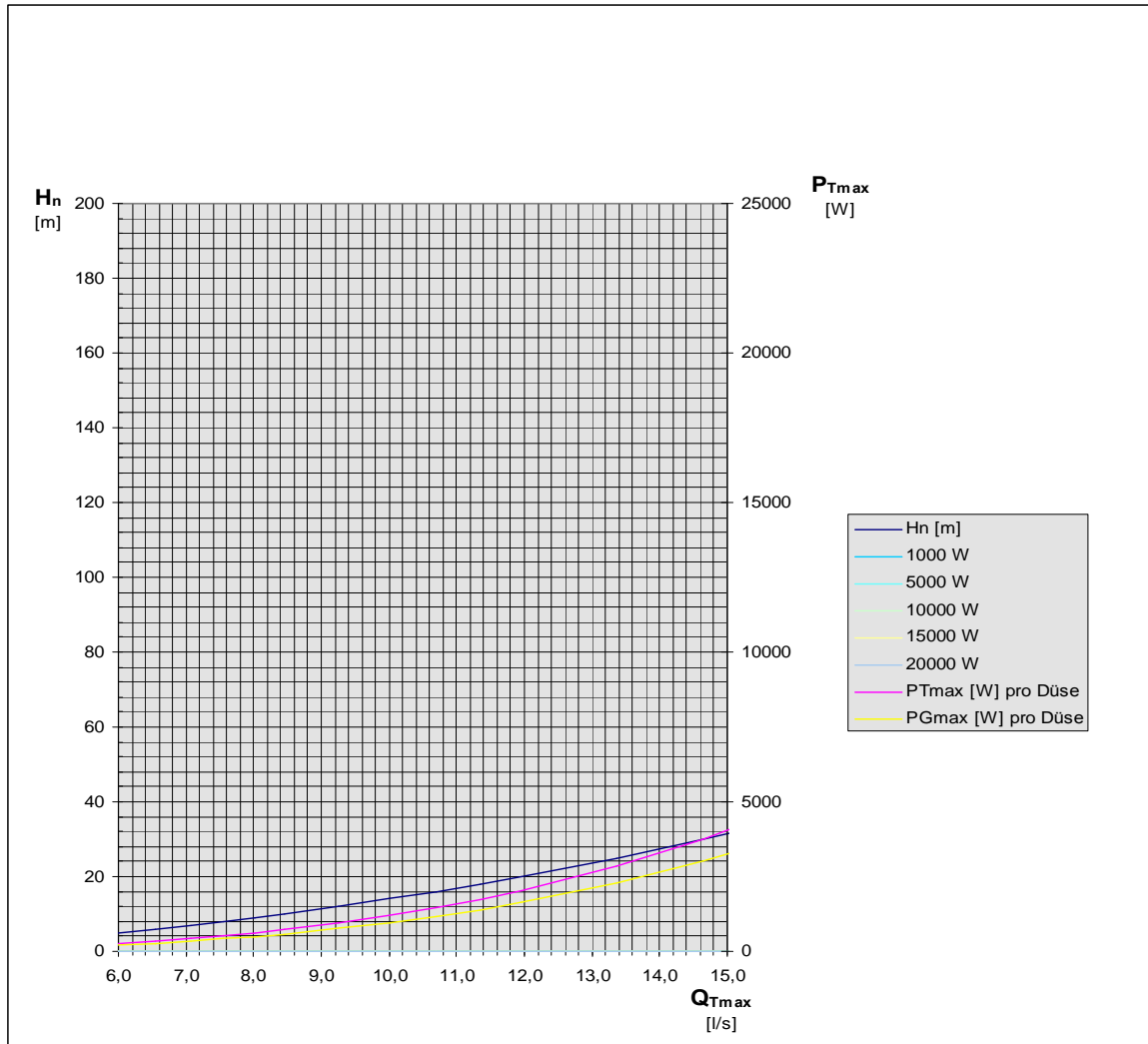
PT 06 H



PT 06 V



PT 09 H



PT 09 V

