



RPS
WATER PUMPS

TECHNICAL BROCHURE
RPSWP-ST-2021

RPS WATER PUMPS

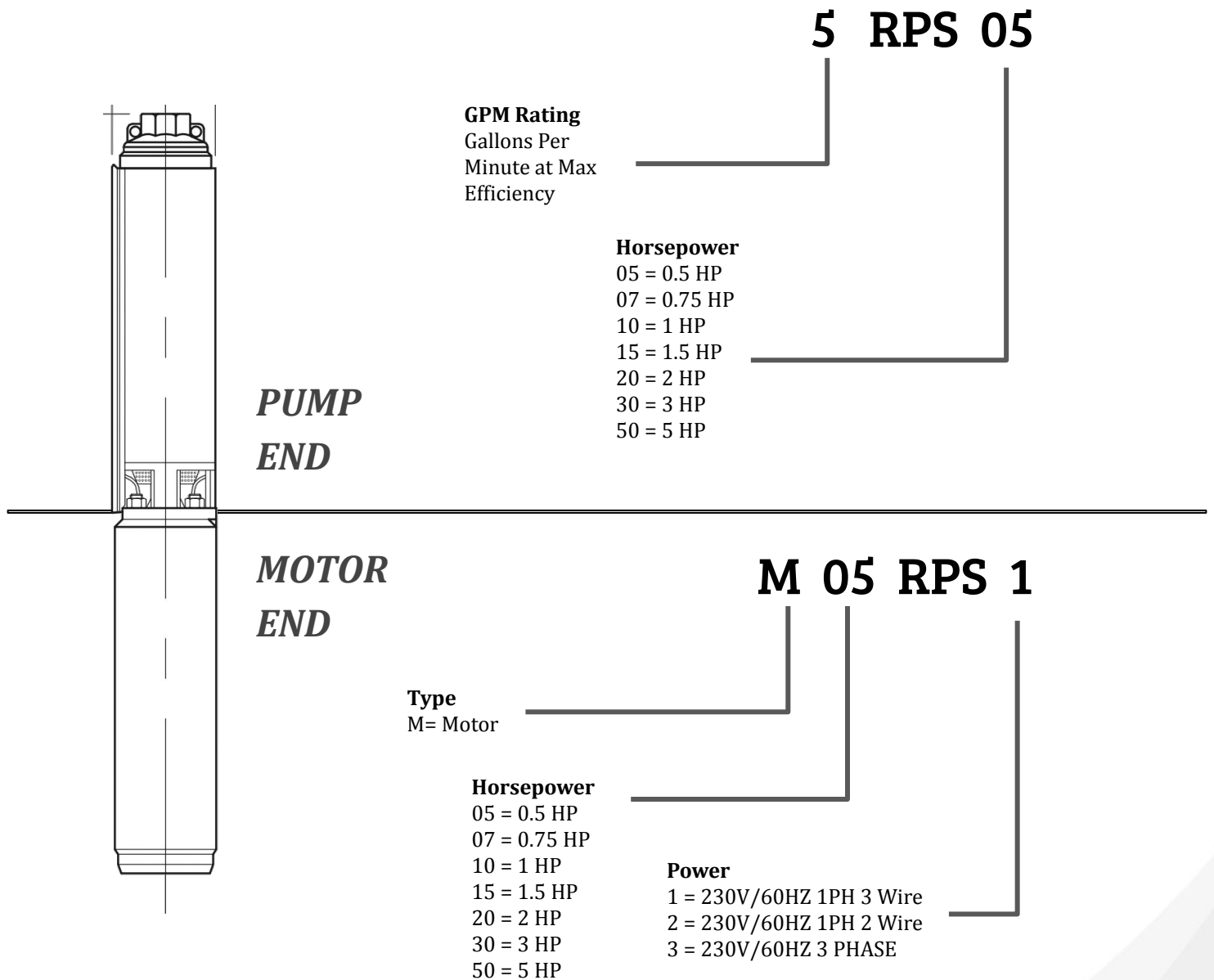
ST Pump Series

SUBMERSIBLE PUMP SERIES | 5 - 300 GPM, ½ - 5 HP, 60 Hz



RPS
WATER PUMPS

RPS Models



Specifications

Voltage Range	110V / 220V / 230V / 240V
Frequency	60 Hz
RPM	3450
Angles of Operation	Vertical (upright) or Horizontal (90 deg)
Liquid Characteristics	pH 5 to 9, Maximum temperature 86F Sand Content: <150g/m ³ for centrifugal
Rotation	CCW
Minimum Well Size	4" (Pump OD 3.85")
Mounting	NEMA Standard Dimensions
Protection Class	IP 68
Max Submersion	656ft
Backflow Preventer	304 SS All Models
Certifications	CSA, NSF/ANSI 61/372 Drinking Water

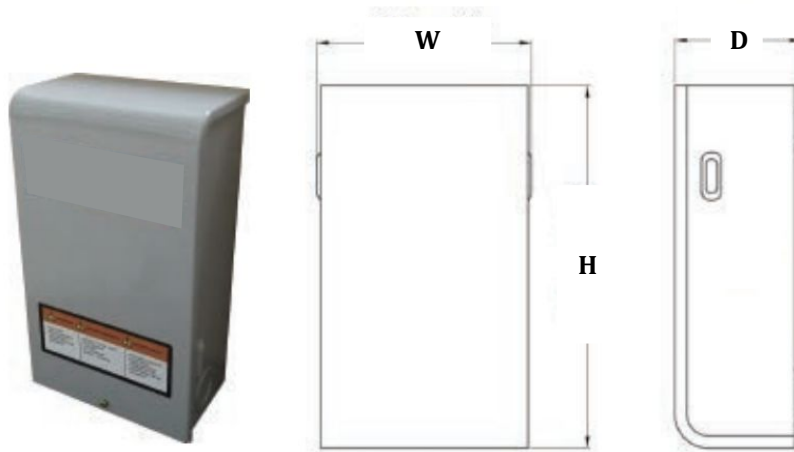
Hermetically sealed stator, Pressure equalizing diaphragm, Removable wire connector, Field serviceable pump ends, Laser welded stainless housing

Solar Compatibility

All RPS Water Pumps can be retrofitted to be powered off of solar panels. The retrofit requires an RPS Solar Pumps VFD controller for operation.

Starter Box Dimensions

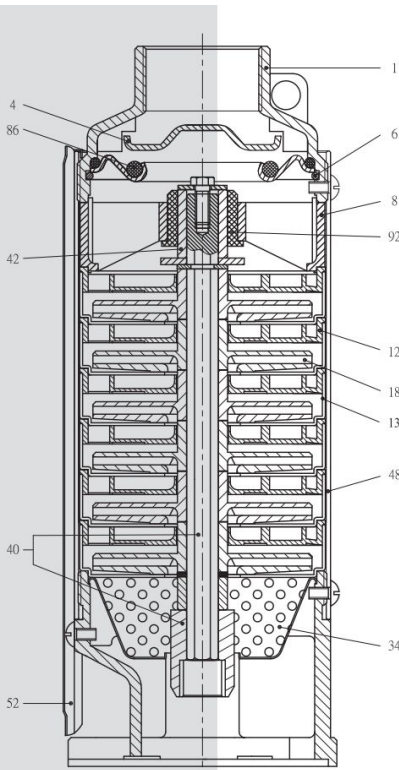
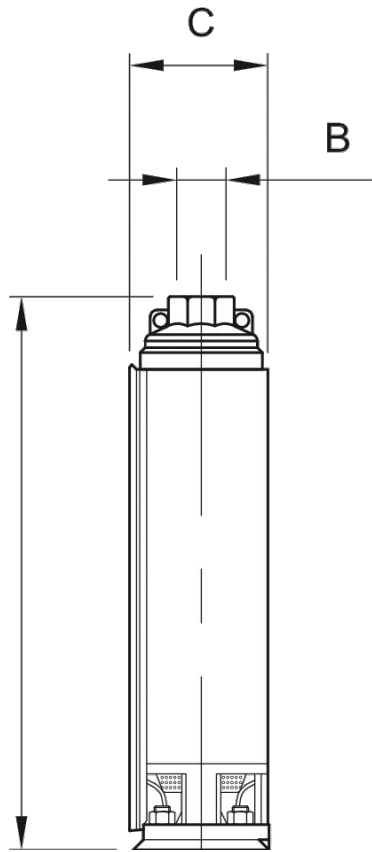
HP	H (in) Length	W (in) Width	D (in) Depth
0.5 HP - 1 HP	9.9	5.5	3.6
1.5 - 5 HP	11.5	8.5	6.5



RPS Water Pumps Single Phase Motor Specifications

Model	HP	Voltage	Wiring	Service Factor	Current (Amps)	Current Max (Amps)	Starting Amps	Thrust
M05RPS1	0.5	220V	3 Wire	1.6	5	5.8	22	2000N
M07RPS1	0.75			1.5	7	7.8	31.6	2000N
M10RPS1	1			1.4	8.1	10	36.4	3000N
M15RPS1	1.5			1.3	8.8	11.3	41.4	3000N
M20RPS1	2			1.25	11.4	13.9	49.4	3000N
M30RPS1	3			1.15	14.4	16.6	70.5	4000N
M50RPS1	5			1.15	24.2	28.1	101.1	6000N
M05RPS2	0.5	110V	2 Wire	1.6	6.8	9.3	26	2000N

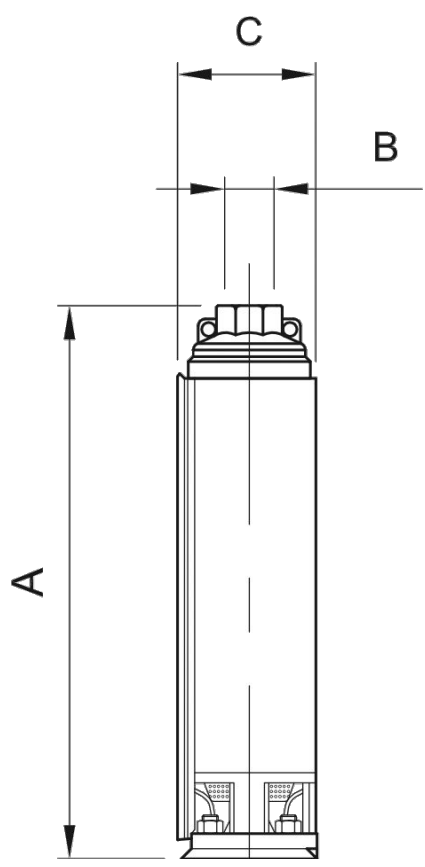
Pump Ends



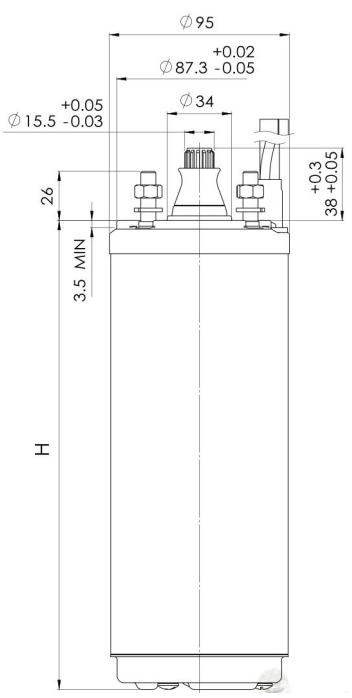
Model	Stages	A (in) Length	B (in) FNPT	C (in) Diameter	Weight (lbs)
05RPS05	12	14.13	1-1/4"	3.86"	7.9
05RPS07	15	16.18	1-1/4"	3.86"	9.0
05RPS10	20	19.65	1-1/4"	3.86"	10.8
05RPS15	26	25.28	1-1/4"	3.86"	12.8
05RPS20	33	31.31	1-1/4"	3.86"	18.3
07RPS05	10	12.99	1-1/4"	3.86"	7.3
07RPS07	13	15.15	1-1/4"	3.86"	8.4
07RPS10	17	17.91	1-1/4"	3.86"	9.9
07RPS15	22	21.45	1-1/4"	3.86"	11.9
07RPS20	27	26.57	1-1/4"	3.86"	14.5
07RPS30	34	32.8	1-1/4"	3.86"	20.5
10RPS05	7	10.67	1-1/4"	3.86"	6.2
10RPS07	10	12.76	1-1/4"	3.86"	7.3
10RPS10	12	14.13	1-1/4"	3.86"	7.9
10RPS15	17	17.59	1-1/4"	3.86"	9.7
10RPS20	20	19.64	1-1/4"	3.86"	10.8
10RPS30	27	25.98	1-1/4"	3.86"	13.2
10RPS50	42	37.56	1-1/4"	3.86"	21.6
13RPS10	10	12.76	1-1/4"	3.86"	7.1
18RPS05	5	10.12	1-1/4"	3.86"	6.0
18RPS07	6	10.98	1-1/4"	3.86"	6.2
18RPS10	8	13.07	1-1/4"	3.86"	6.8
18RPS15	11	15.23	1-1/4"	3.86"	7.9
18RPS20	14	17.8	1-1/4"	3.86"	9.0
18RPS30	19	22.04	1-1/4"	3.86"	10.8
18RPS50	30	34.84	1-1/4"	3.86"	17.8
25RPS05	4	9.72	1-1/4"	3.86"	5.3
25RPS07	5	10.7	1-1/4"	3.86"	5.7
25RPS10	7	12.59	1-1/4"	3.86"	6.8
25RPS15	9	14.56	1-1/4"	3.86"	7.7
25RPS20	11	16.49	1-1/4"	3.86"	8.6
25RPS30	15	20.39	1-1/4"	3.86"	10.4
25RPS50	26	34.01	1-1/4"	3.86"	17.8
35RPS30	13	23.9	1-1/4"	3.86"	12.6

Dimensions

Pump Ends (continued)



Model	Stages	A (in) Length	B (in) FNPT	C (in) Diameter	Weight (lbs)
40RPS15	5	12.79	2"	3.86"	6.8
40RPS20	6	14.01	2"	3.86"	7.5
40RPS30	8	16.45	2"	3.86"	8.8
40RPS50	14	23.78	2"	3.86"	12.6
55RPS10	3	17.05	2"	3.86"	10.8
60RPS15	4	14.88	2"	3.86"	8.6
60RPS20	5	16.93	2"	3.86"	9.7
60RPS30	7	21.02	2"	3.86"	11.7
60RPS50	11	29.21	2"	3.86"	15.9
80RPS30	5	18.58	2"	3.86"	9.7
80RPS50	9	29.25	2"	3.86"	15.2
90RPS30	3	20.6	3"	5.15"	20.5
150RPS50	4	21.96	3"	5.15"	22.2
230RPS30	2	15.07	3"	5.74"	15.2
230RPS50	3	19.52	3"	5.74"	20.3
300RPS50	3	19.52	3"	5.74"	20.3

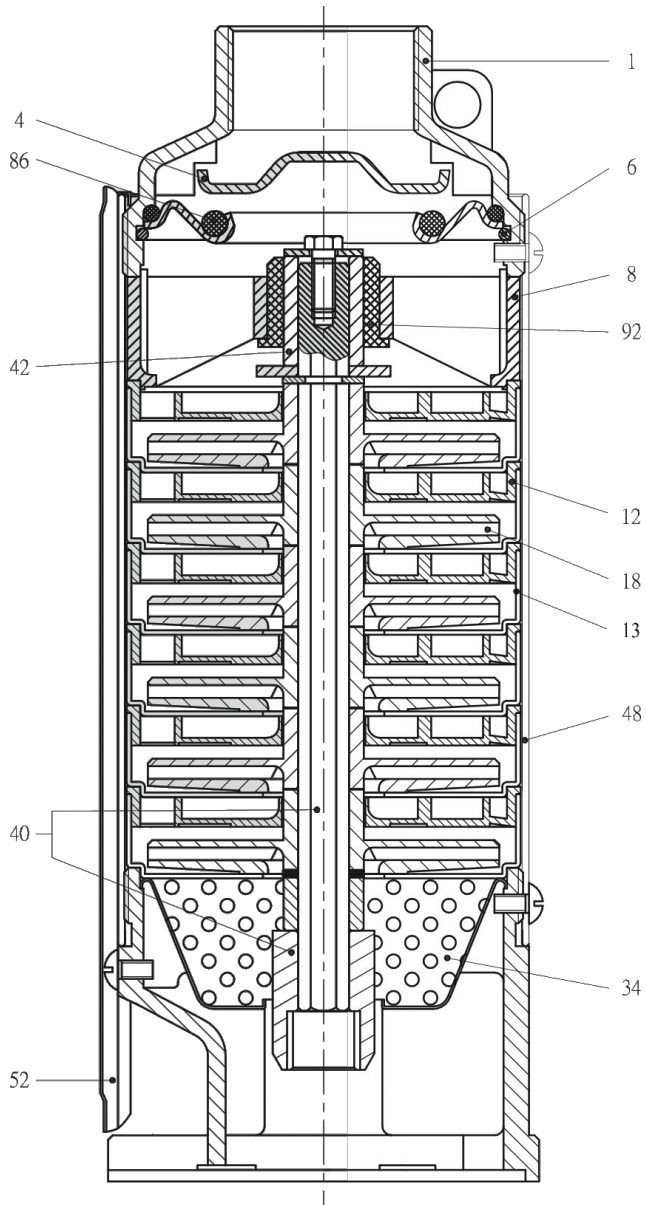


Motors

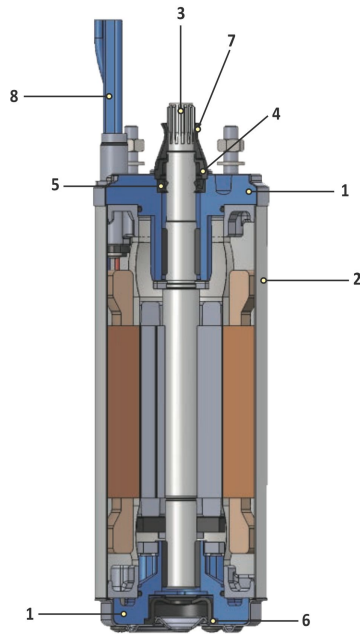
Model	HP	H (mm) Length	H (in) Length	Weight (lbs)
M05RPS1	0.5	346	13.6	19
M07RPS1	0.75	365	14.3	21.8
M10RPS1	1	380	14.9	23.9
M15RPS1	1.5	405	15.9	28.5
M20RPS1	2	440	17.3	31.9
M30RPS1	3	495	19.4	39.7
M50RPS1	5	683	26.8	63.3
M05RPS2 (110V)	.05	294	11.5	13

Materials

PUMP ENDS



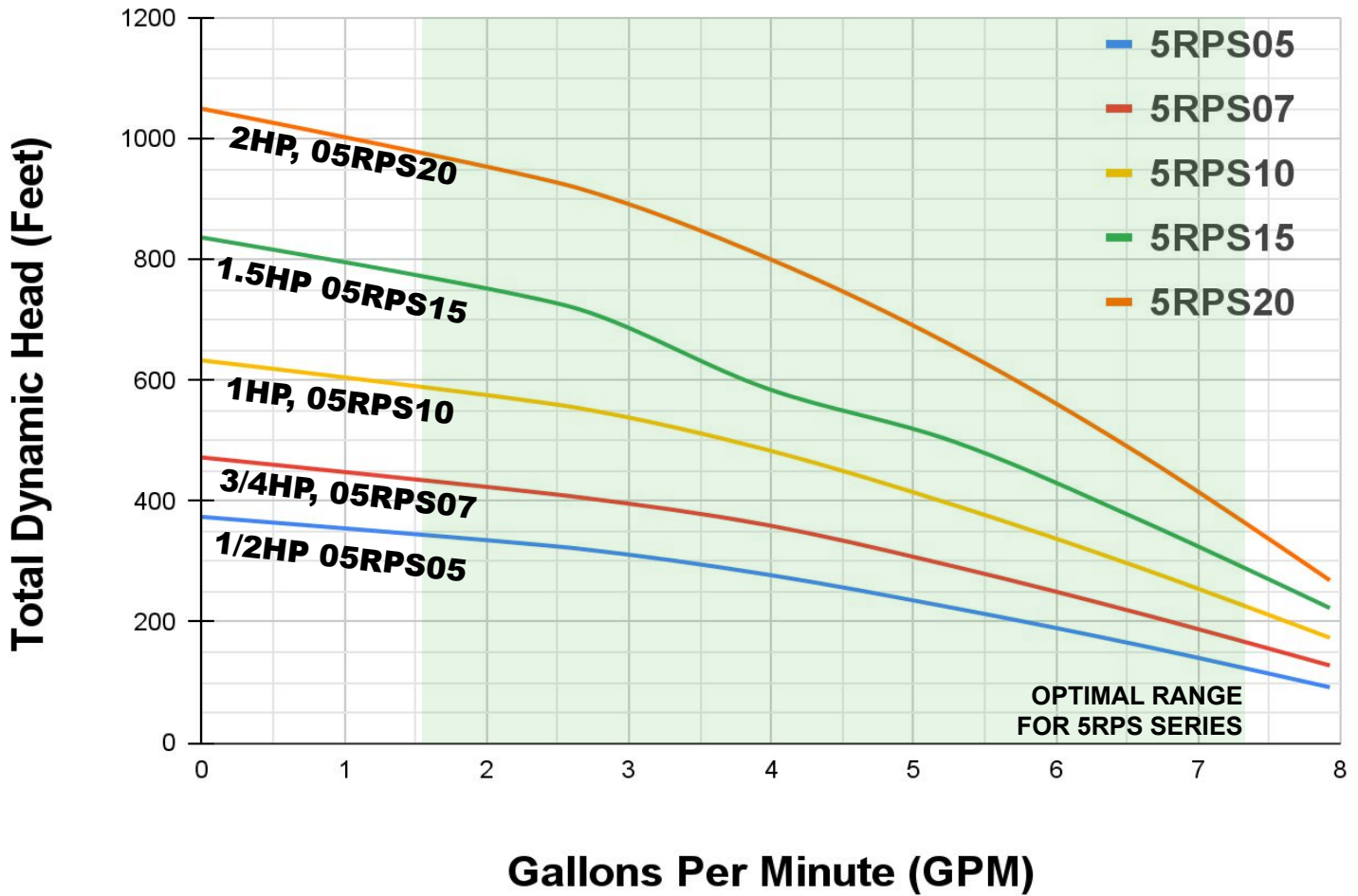
	Part Name	Material
1	Discharge Head	AISI 304 SS
4	Check Valve Cone	AISI 304 SS
6	Check Valve retaining Ring	AISI 304 SS
8	Bearing Spider	Polycarbonate
12	Diffuser	Polycarbonate
13	Bowl	AISI 304 SS
18	Impeller	Noryl
34	Strainer	AISI 304 SS
40	Pump Shaft / Coupling	AISI 304 SS
42	Shaft Sleeve	AISI 304 SS / Noryl
48	Pump Casing	AISI 304 SS
52	Cable Guard	AISI 304 SS
86	O-Ring	NBR
92	Bearing	Polyacetal



MOTORS

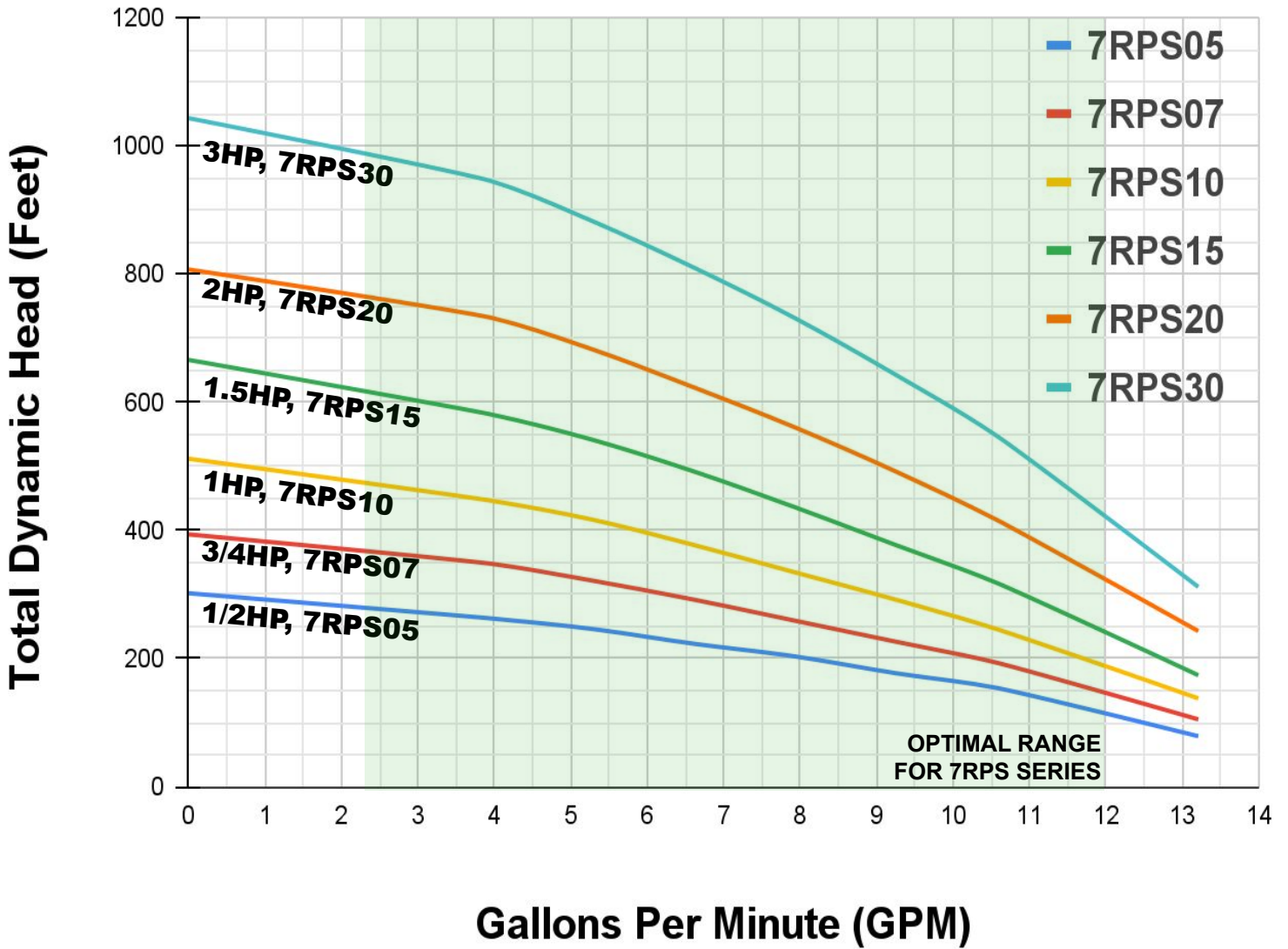
1	Bracket	AISI 304
2	Stator Shell	AISI 304
3	Shaft	AISI 420
4	Seal Cover	Nylon
5	Lip Seal	NBR
6	Diaphragm	NBR
7	Sand Slinger	NBR
8	Wire	XLPE
	Hardware	AISI 304
	Thrust Pad	AISI 420

05RPS Pump Curves, 5 GPM

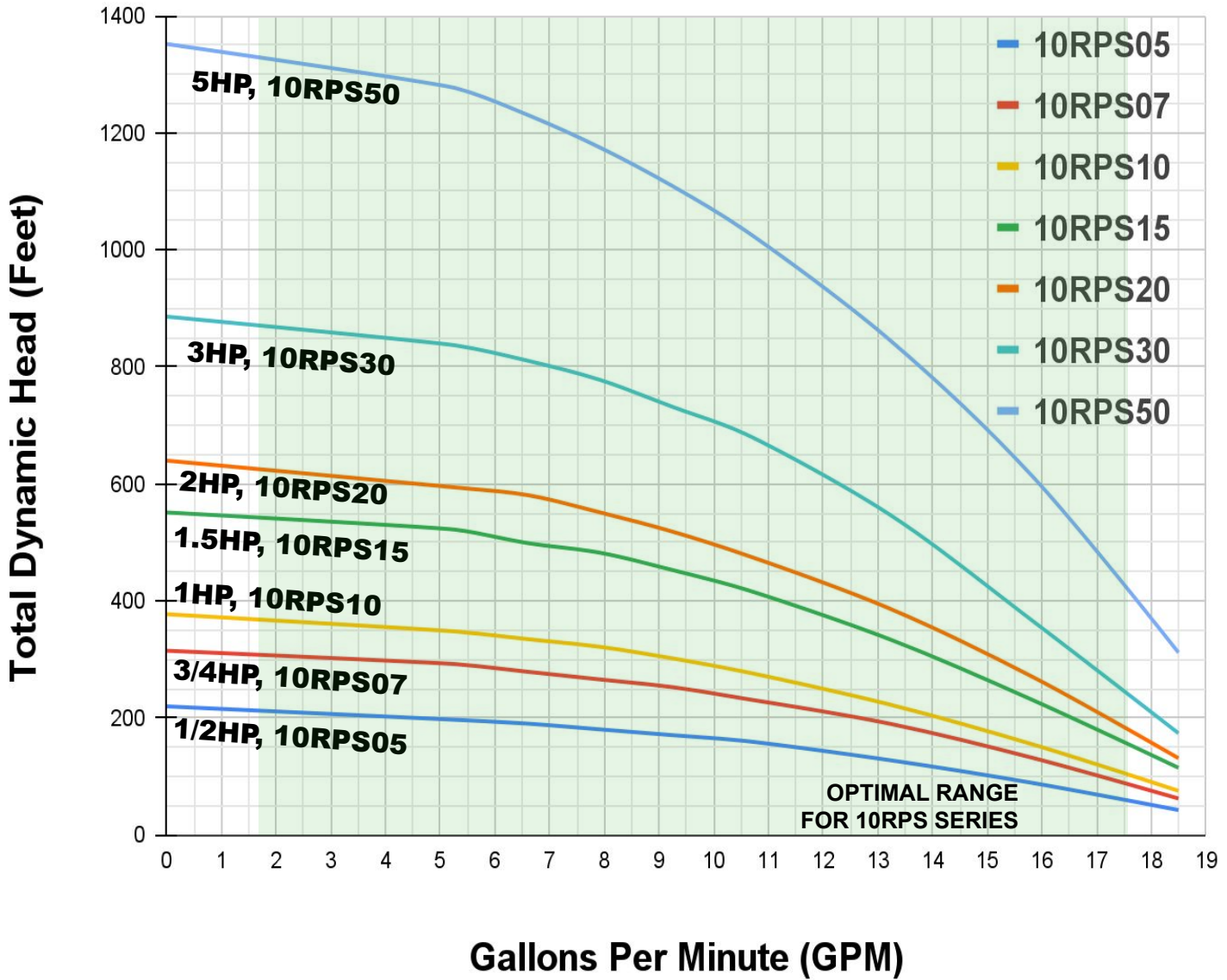


OPTIMAL RANGE
FOR 5RPS SERIES

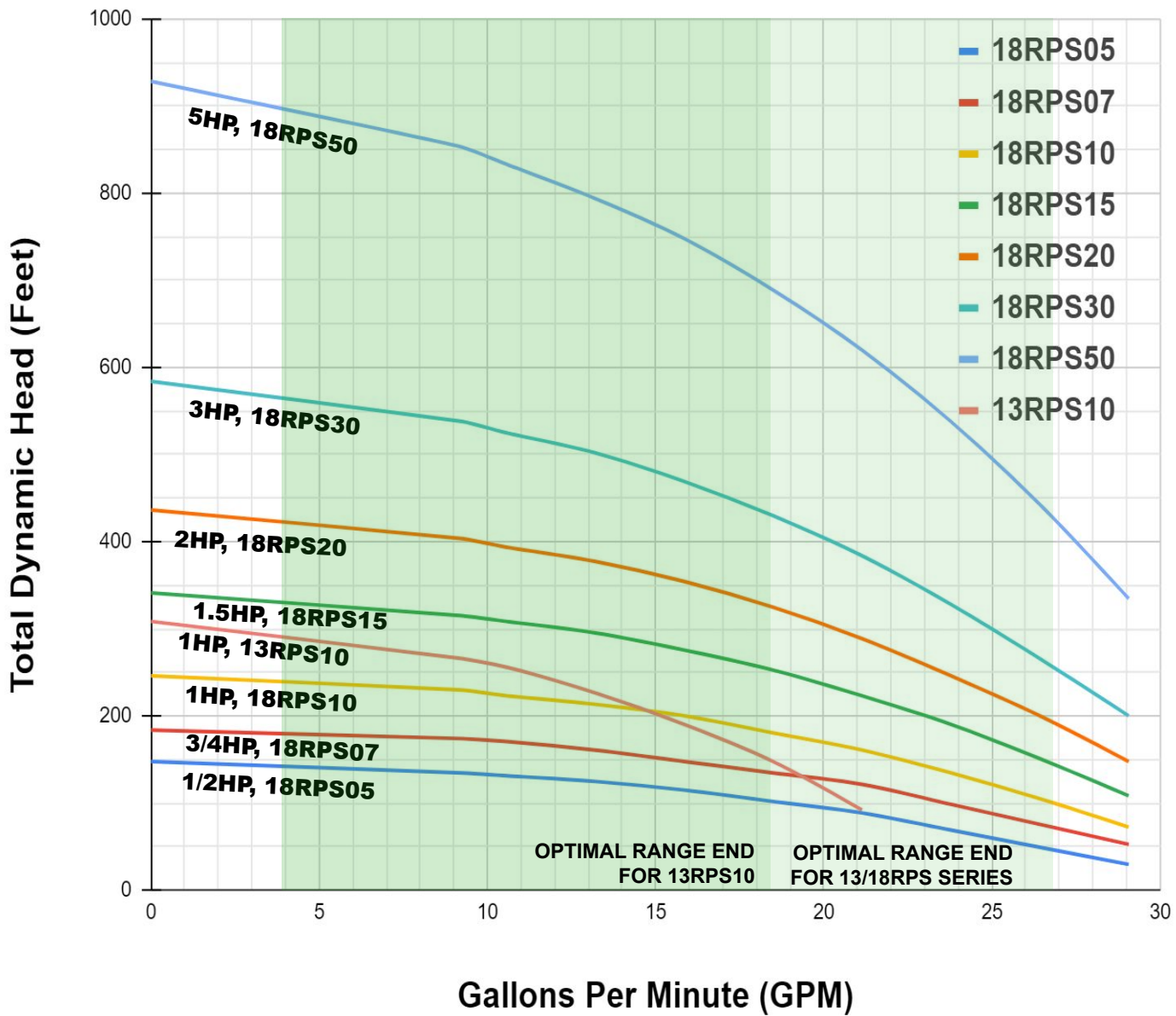
07RPS Pump Curves, 7 GPM



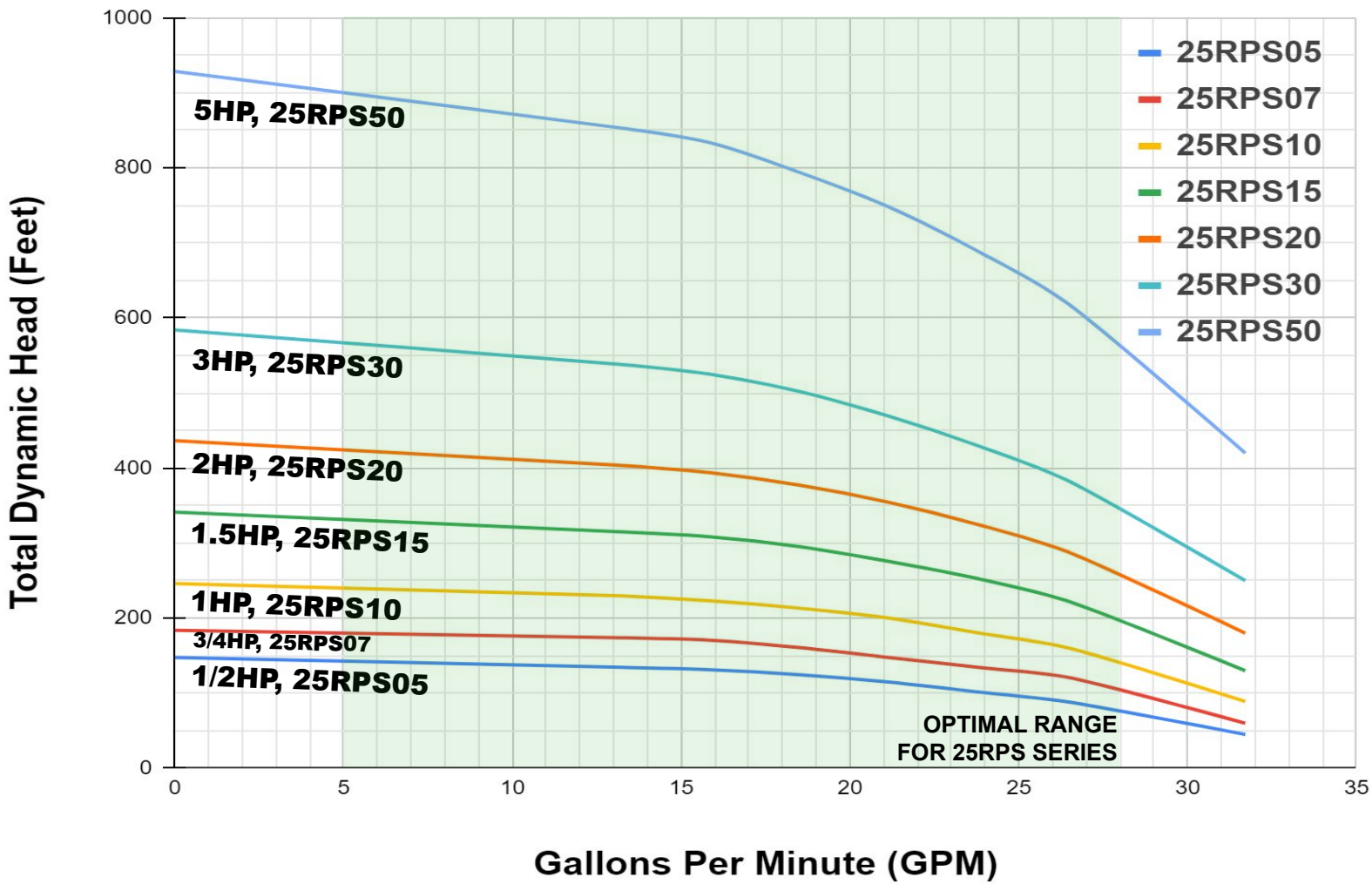
10RPS Pump Curves, 10 GPM



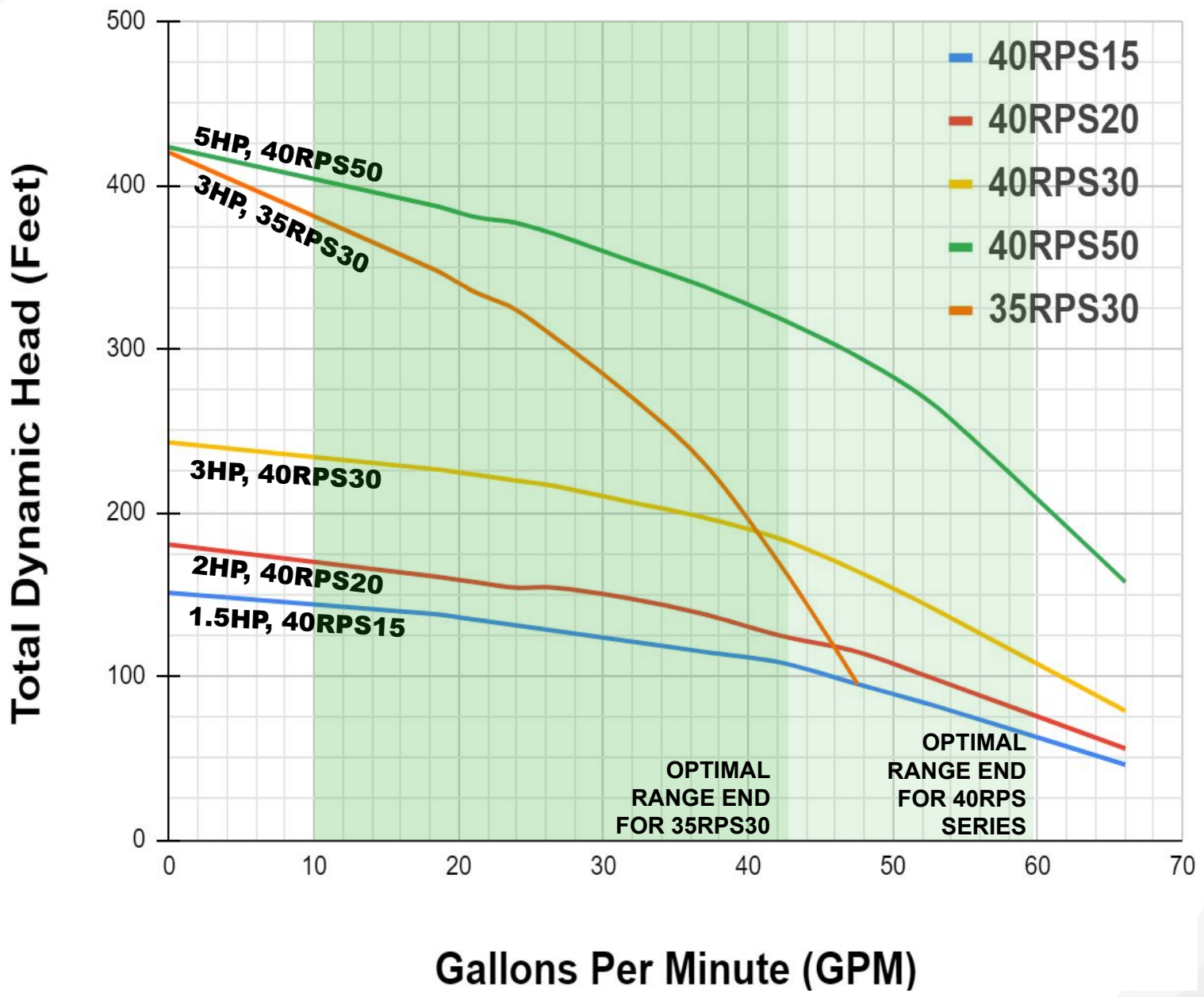
13/18 RPS Pump Curves, 13-18GPM



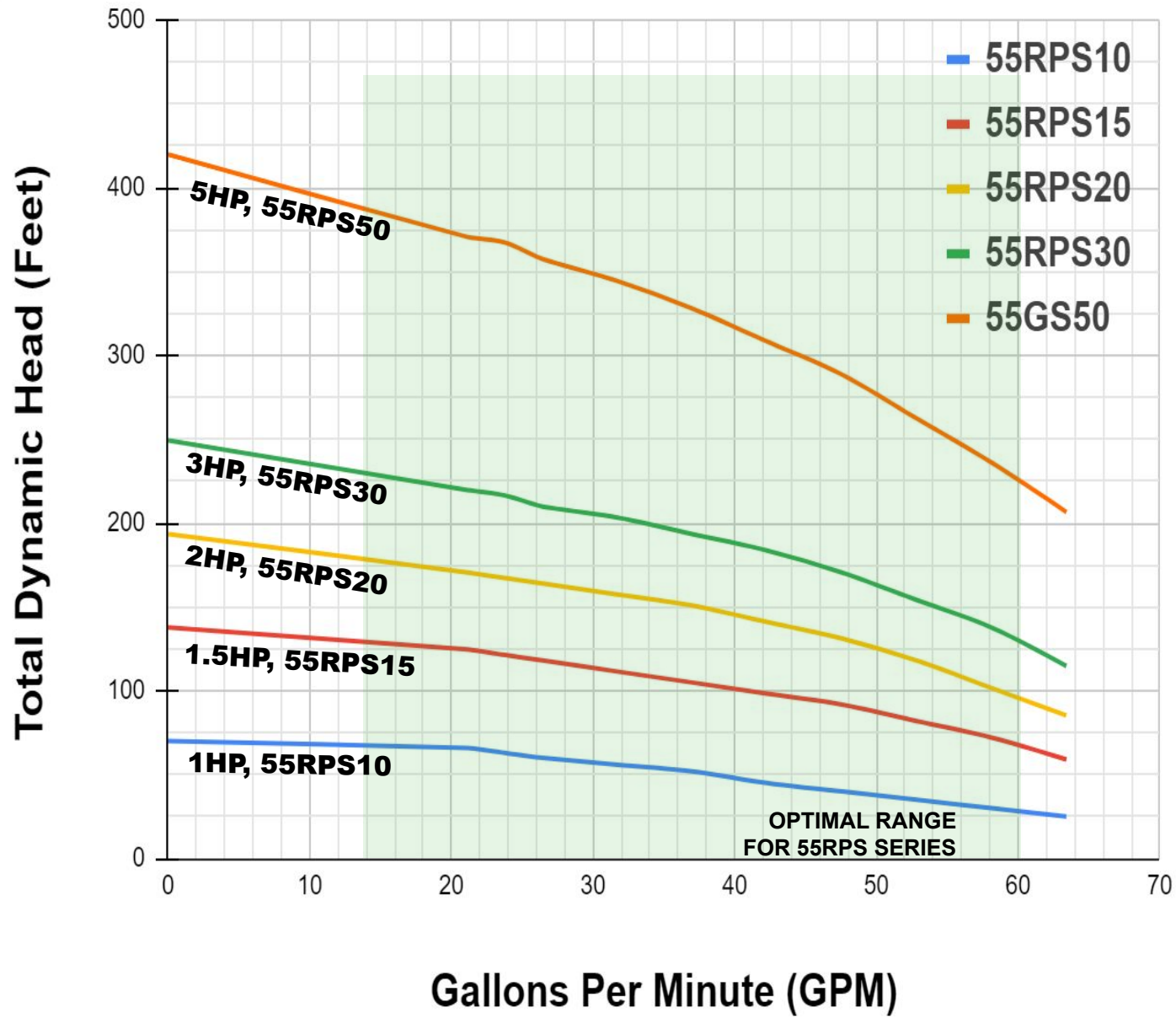
25RPS Pump Curves, 25 GPM



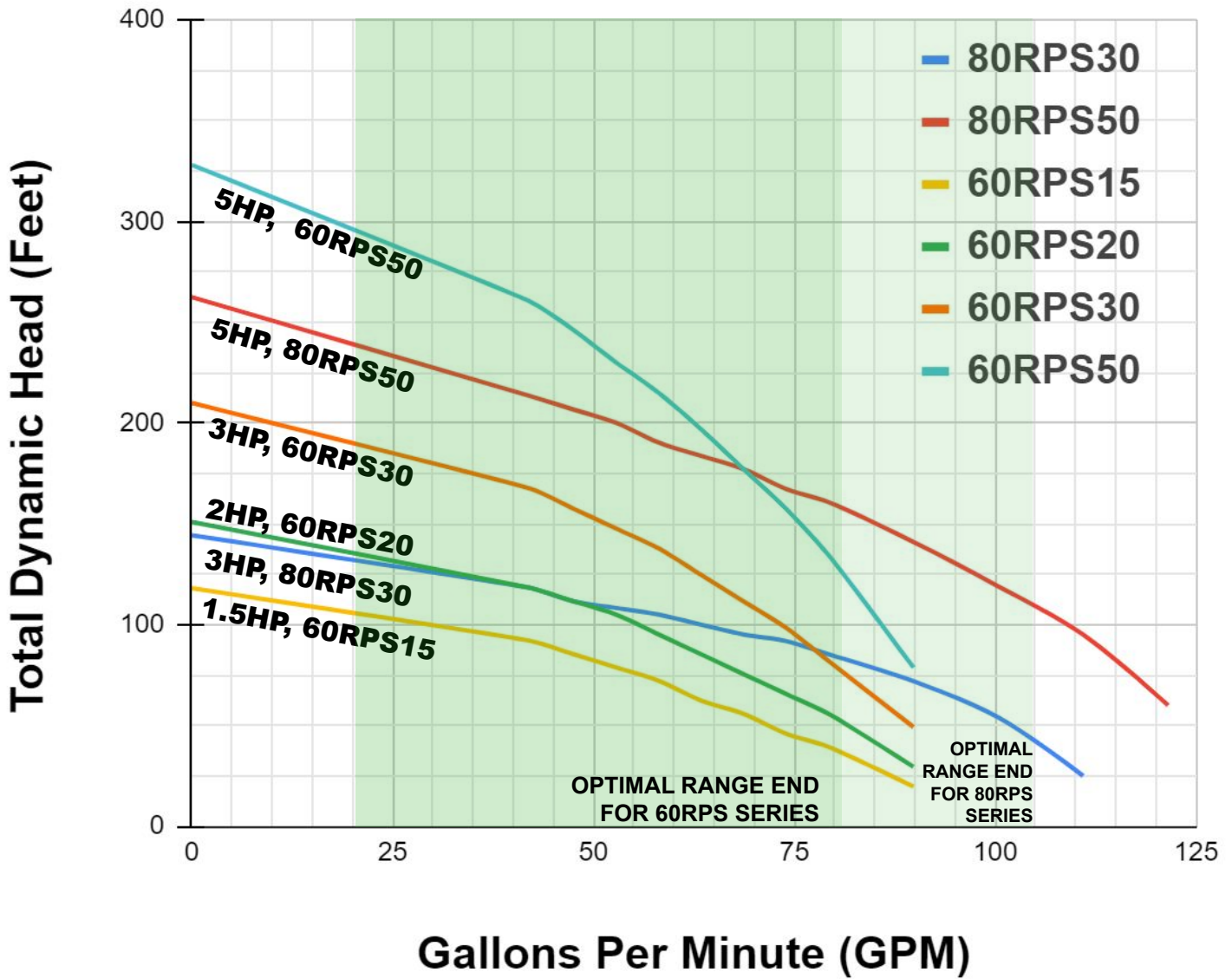
35/40RPS Pump Curves, 40 GPM



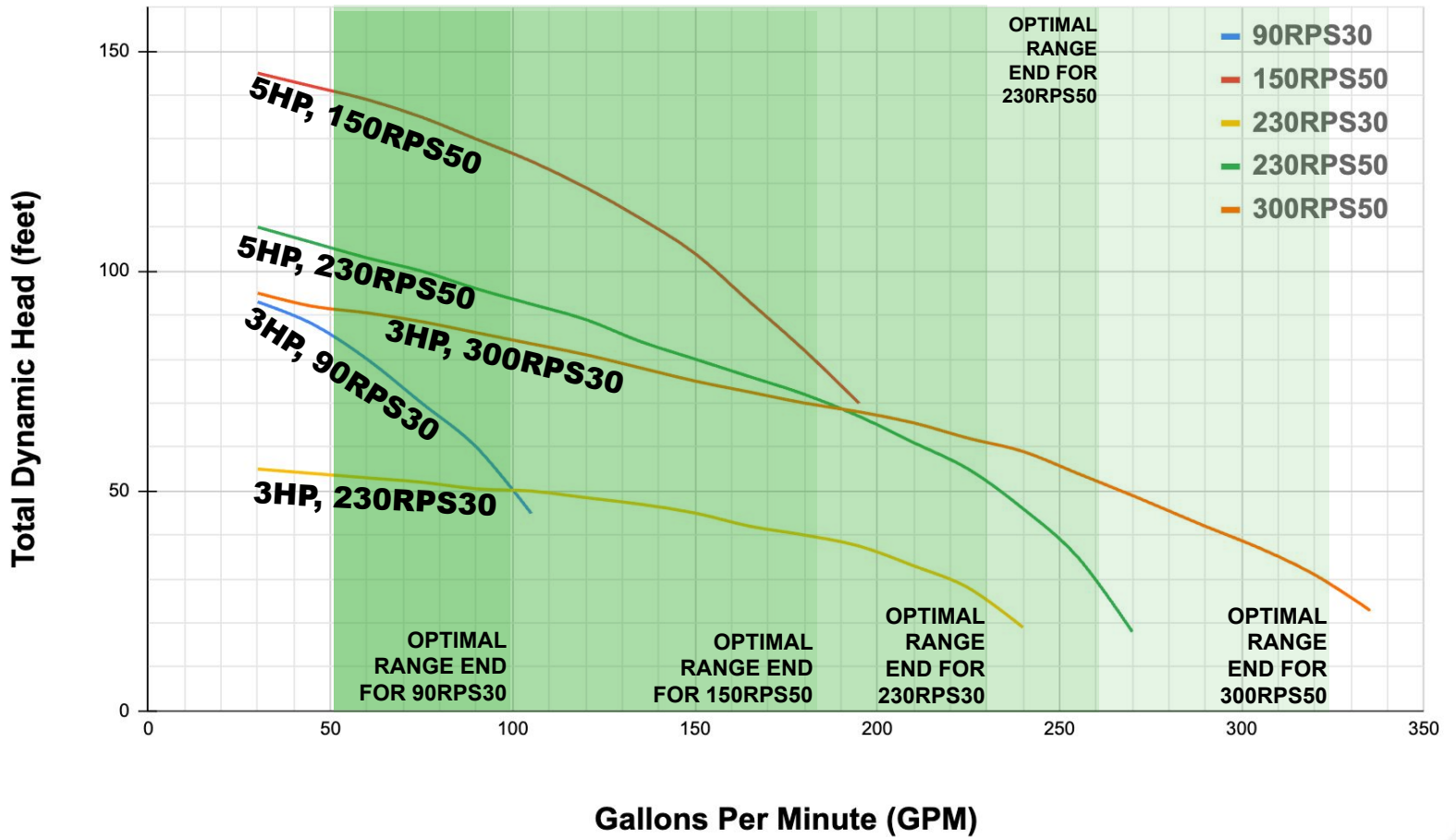
55RPS Pump Curves, 55 GPM



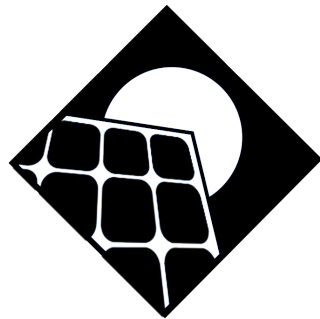
60/80RPS Pump Curves, 60-80 GPM



90/150/230/300 RPS Pump Curves, High Volume



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