For more pumps, go to Grainger.com® and search for multistage booster pumps.

Booster Pump Selection Guide

(1) Determine pressure boost required above existing pressure.

(2) Determine gpm to be pumped.

(3) Read across top of specification column "GPM of Water @ Discharge Pressure in psi+" for pressure boost required.

(4) Read down column to gpm required.

Example: You have 20 psi supply. You require 40 psi at 10 gpm. Your boost requirement is 20 psi.

Read across pressure boost column to 20 psi. Read down vertical column to gallons required (10 gpm) or next larger size.

Correct pumps are 45MW68, 45MW69, 45MW85, and 45MW86.

Dayton | FLINT & WALLING

45MW84

22W709

Multistage Booster Pumps

- Max. fluid temp.: 140°F
- Max. case pressure: 300 psi
- 65°C temp. rise motors
- ODP motor enclosure

Use to increase pressure from city mains, or pump water from cisterns and private ponds to ensure the proper operation of filtration equipment. 3-phase pumps do not have overload protection, which must be provided by a starter unit sold separately, see page 160.

DAYTON

The multistage design helps provide steady, quiet, and vibration-free operation. Cast-iron housing is ideal for general service, stainless steel for filtration applications. Feature an O-ring casing seal for reliable, high-pressure sealing with easy disassembly for repair or maintenance. Diffusers are glass-filled engineered composite material with a fixed impeller design and high resistance to abrasion and corrosion. Bowls have 300 stainless steel rabbit lock for positive alignment with no gaskets needed. Mechanical seal with carbon/ceramic and Viton parts; stainless steel spring. Pumps are self-priming to 10 ft. when the pump housing and suction line is filled with water and a foot valve is used. cULus Components Recognized for Motor.

FLINT & WALLING

Pumps feature continuous-duty dual-voltage motors with shielded ball bearings. Replaceable pump cartridge has 304 SS radial bearing and Noryl and Delrin impellers and diffusers. 1-phase units have thermally protected capacitor-start motors. Cast-iron housings feature cast-iron suction and discharge; mechanical seal uses Buna N and carbon/silicon. Stainless steel housings feature 304 SS suction and discharge. All are suitable for pressure boosting, pressure cleaning, mist systems, evaporative cooling, reverse osmosis, and water circulation. CSA Certified to UL standards for U.S. and Canada.

For Use With Grainger No.	Item No.
Dayton, Booster Pump Replacement Parts	
Booster Cartridge Assemblies	
45MW66	**41TK76**
45MW67	**41TK77**
45MW68, 45MW69	**41TK78**
45MW72, 45MW73	**41TK80**
45MW74, 45MW75	**41TK81**
45MW78, 45MW79	**41TK83**
45MW80, 45MW81	**41TK84**
45MW82, 45MW83	**41TK85**
45MW84	**41TK86**
45MW85, 45MW86	**41TK87**
45MW87, 45MW88	**41TK88**
45MW89, 45MW90	**41TK89**
45MW91, 45MW92	**41TK90**
45MW93, 45MW94	**41TK91**
O-Ring, Buna	
45MW66 to 45MW94	**41TK92**
O-Ring, Viton	
45MW66 to 45MW94	**41TK93**
Mechanical Seals, Buna	
45MW66 to 45MW94	**41TK94**
Mechanical Seals, Viton	
45MW66 to 45MW94	**41TK95**

No. of Stages	HP	Voltage	Amps	Phase	Inlet Size	Outlet Size	Housing Material*	GPM of Water @ Discharge Pressure in psi+ 10	20	40	60	80	100	120	140	Max. Pressure	Item No.
Dayton																	
7	⅓ hp	115/230V AC	7.5/3.4	1	¾ in NPT	¾ in NPT	CI	9.3	7.8	6.8	5.1	2.9	—	—	—	90 psi	**45MW66**
8	½ hp	115/230V AC	7.8/3.9	1	¾ in NPT	¾ in NPT	CI	9.6	8	7	5.7	4	2	—	—	120 psi	**45MW67**
	½ hp	115/230V AC	7.8/3.9	1	¾ in NPT	¾ in NPT	SS	9.6	8	7	5.7	4	2	—	—	120 psi	**45MW84**
9	¾ hp	115/230V AC	11.1/5.5	1	¾ in NPT	¾ in NPT	CI	13.7	12.8	11.0	10.6	9.4	7.4	4.7	0.9	141 psi	**45MW68**
	¾ hp	115/230V AC	11.1/5.5	1	¾ in NPT	¾ in NPT	SS	13.7	12.8	11.0	10.6	9.4	7.4	4.7	0.9	141 psi	**45MW85**
	¾ hp	208-230/460V AC	3.9-3.6/1.8	3	¾ in NPT	¾ in NPT	CI	13.7	12.8	11.0	10.6	9.4	7.4	4.7	0.9	141 psi	**45MW69**
	¾ hp	208-230/460V AC	3.9-3.6/1.8	3	¾ in NPT	¾ in NPT	SS	13.7	12.8	11.0	10.6	9.4	7.4	4.7	0.9	141 psi	**45MW86**
	2 hp	208-230/460V AC	7.1-6.8/3.4	3	1 in NPT	1 in NPT	CI	31.4	30.1	27.9	25.9	23.8	20.3	16.2	—	134 psi	**45MW79**
	2 hp	208-230/460V AC	7.1-6.8/3.4	3	1 in NPT	1 in NPT	SS	31.4	30.1	27.9	25.9	23.8	20.3	16.2	—	134 psi	**45MW92**
	2 hp	230V AC	10.2	1	1 in NPT	1 in NPT	CI	31.4	30.1	27.9	25.9	23.8	20.3	16.2	—	134 psi	**45MW78**
	2 hp	230V AC	10.2	1	1 in NPT	1 in NPT	SS	31.4	30.1	27.9	25.9	23.8	20.3	16.2	—	134 psi	**45MW91**
	3 hp	208-230/460V AC	10.1-9.2/4.6	3	1 in NPT	1 in NPT	CI	44.0	43.1	41.8	37.9	31.1	23.9	—	—	120 psi	**45MW81**
	3 hp	230V AC	14.5	1	1 in NPT	1 in NPT	CI	44.0	43.1	41.8	37.9	31.1	23.9	—	—	120 psi	**45MW80**
12	1 hp	115/230V AC	13/6.3	1	¾ in NPT	¾ in NPT	CI	15.4	14.8	14.6	13.5	11.7	11.5	10	8.5	171 psi	**45MW72**
	1 hp	115/230V AC	13/6.3	1	¾ in NPT	¾ in NPT	SS	15.4	14.8	14.6	13.5	11.7	11.5	10	8.5	171 psi	**45MW87**
	1 hp	208-230/460V AC	4.3-4/2.0	3	¾ in NPT	¾ in NPT	CI	15.4	14.8	14.6	13.5	11.7	11.5	10	8.5	171 psi	**45MW73**
	1 hp	208-230/460V AC	4.3-4/2.0	3	¾ in NPT	¾ in NPT	SS	15.4	14.8	14.6	13.5	11.7	11.5	10	8.5	171 psi	**45MW88**
13	1 ½ hp	115/230V AC	18.4/8.4	1	¾ in NPT	¾ in NPT	CI	15.5	15.3	14.3	13.3	12.2	10.2	9.6	8.3	194 psi	**45MW74**
	1 ½ hp	115/230V AC	18.4/8.4	1	¾ in NPT	¾ in NPT	SS	15.5	15.3	14.3	13.3	12.2	10.2	9.6	8.3	194 psi	**45MW89**
	1 ½ hp	208-230/460V AC	5.7-5.4/2.7	3	¾ in NPT	¾ in NPT	CI	15.5	15.3	14.3	13.3	12.2	10.2	9.6	8.3	194 psi	**45MW75**
	1 ½ hp	208-230/460V AC	5.7-5.4/2.7	3	¾ in NPT	¾ in NPT	SS	15.5	15.3	14.3	13.3	12.2	10.2	9.6	8.3	194 psi	**45MW90**
	3 hp	208-230/460V AC	10.1-9.2/4.6	1	1 in NPT	1 in NPT	CI	32.5	31.2	29.8	27.5	26.1	24.3	21.2	17.5	172 psi	**45MW82**
	3 hp	208-230/460V AC	10.1-9.2/4.6	3	1 in NPT	1 in NPT	SS	32.5	31.2	29.8	27.5	26.1	24.3	21.2	17.5	172 psi	**45MW94**
	3 hp	230V AC	14.5	1	1 in NPT	1 in NPT	CI	32.5	31.2	29.8	27.5	26.1	24.3	21.2	17.5	172 psi	**45MW83**
	3 hp	230V AC	14.5	1	1 in NPT	1 in NPT	SS	32.5	31.2	29.8	27.5	26.1	24.3	21.2	17.5	172 psi	**45MW93**
Flint & Walling																	
8	⅓ hp	120/240V AC	8.6/4.3	1	¾ in NPT	¾ in NPT	CI	10.2	9.6	8.3	6.5	4.3	—	—	—	96 psi	**22W709**
12	½ hp	120/240V AC	13.0/6.5	1	¾ in NPT	¾ in NPT	CI	10	9.6	8.3	7.1	6	4	2.3	—	132 psi	**22W710**
	¾ hp	120/240V AC	14.0/7.0	1	¾ in NPT	¾ in NPT	CI	14	13.4	12.2	10.9	9.5	8.9	7	4.6	158 psi	**22W711**
14	1 hp	120/240V AC	18.0/9.0	1	¾ in NPT	¾ in NPT	CI	†	†	14.5	13.4	12.3	11.2	9.8	8	183 psi	**22W715**
	3 hp	208 to 240/480V AC	9.8/4.9	3	1 in NPT	1 in NPT	SS	†	†	33	31.5	29.8	27.9	25.6	22.8	187 psi	**22W737**
	3 hp	240V AC	13.5	1	1 in NPT	1 in NPT	CI	†	†	33	31.5	29.8	27.9	25.6	22.8	187 psi	**22W723**
16	¾ hp	120/240V AC	14.0/7.0	1	¾ in NPT	¾ in NPT	SS	9.9	9.5	8.7	8	7.3	6.5	5.8	4.8	175 psi	**22W713**
	1 ½ hp	120/240V AC	21.0/10.5	1	¾ in NPT	¾ in NPT	CI	†	†	15	14.1	13.1	12.1	11	8.2	212 psi	**22W717**
	1 ½ hp	208 to 240/480V AC	5.7/2.85	3	¾ in NPT	¾ in NPT	SS	†	†	15	14.1	13.1	12.1	11	8.2	212 psi	**22W733**

** CI = cast iron, SS = stainless steel. + To convert to feet of head, multiply psi by 2.31. † Operating pump in this pressure range is not recommended.*

4HFA8

Pressure-Booster Pumps

Dayton

- Max. case pressure: 75 psi
- TEFC motor enclosure

For boosting water pressure in a home water system. 2-stage impeller design increases pump performance. Stainless steel body and thermoplastic impellers resist corrosion. Suction lift up to 25 ft.

HP	Voltage	Amps	Inlet	Outlet	GPM @ 15 psi	GPM @ 20 psi	GPM @ 25 psi	GPM @ 30 psi	GPM @ 35 psi	GPM @ 40 psi	Max. Pressure	Item No.
½	115V AC	4.9 A	1"	1"	13.4	10.8	7.7	2.9	—	—	32.8 psi	**4HFA6**
¾	115V AC	6.1 A	1"	1"	15.0	12.7	10.5	7.4	1.8	—	36.7 psi	**4HFA7**
1	115V AC	7.7 A	1"	1"	18.5	16.5	14.4	12	9.1	5.3	45.3 psi	**4HFA8**