EQ SERIES®

HIGH PERFORMANCE COMMERCIAL PUMP

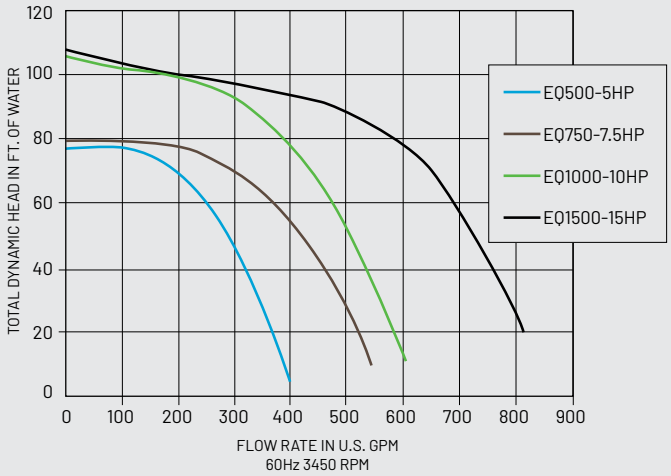
FOR COMMERCIAL SWIMMING POOLS AND OTHER WATER APPLICATIONS

EQ Series Pumps are designed for maximum efficiency and quiet operation in every detail. They are the only non-corrosive, all-plastic pumps designed for the commercial pool and water applications market. The EQ Series Pump impellers are manufactured for true breakthrough performance, allowing for lower loads and longer motor life. The pumps are available with and without the strainer pot and in flows to 800 GPM and from 3–15 HP.

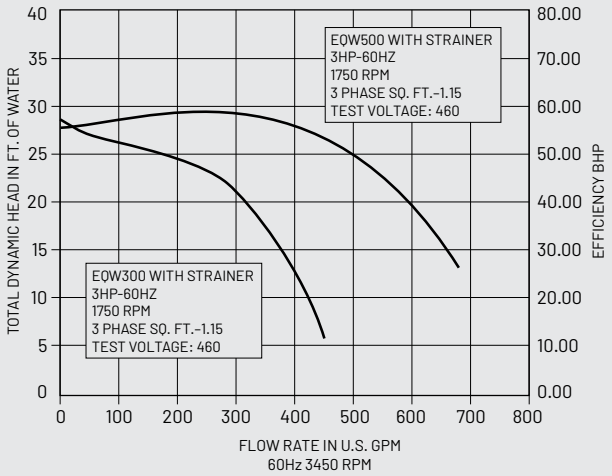
STANDARD FEATURES

- Close-coupled for quiet, stable flow operation.
- Lightweight for easy, one-man installation.
- Clear Cam and Ramp™ Lid for added service convenience.
- Available in single- and three-phase models. TEFC motor available three-phase only.
- Closed impeller for long life and durability.
- 6" suction and 4" discharge with strainer pot.
- Great for use with Acu Drive™ XS Variable Frequency Drives.
- Self-priming under NSF standards; NSF Certified.

EQ Series Commercial Pump Performance Curve



EQ Series WaterFall Pump Performance Curve



MATERIALS AND DESIGN

PUMP BODY

Volute type, back pull-out design.

- Port Size
  - 6" – ANSI Rated 125 bolted flange suction port[1].
  - 4" – ANSI Rated 125 bolted flange discharge port[1].
- Material - Volute & Motor Adapter
  - PPO Resin
- Impeller
  - PPO Resin
- Base
  - 6061 aluminum design, slotted for mounting ease.
- Corrosion Prevention
  - All-plastic pump for maximum hydraulic performance and corrosion prevention.

HAIR AND LINT STRAINER

- Material
  - Separate bolt-on PPO Resin body with plastic basket, Polycarbonate Resin Thermoplastic lid, and stainless steel bolts.
- Size
  - 6" ANSI Rated 125 bolted flange suction and discharge ports.

PUMP MAXIMUM THERMAL LIMITS

- Ambient air temperature: 104˚ F
- Liquid temperature: 104˚ F

MOTOR

Standard JM type. Premium Efficient ODP Class F insulated.
On TEFC options, JMZ type, Premium Efficient, Class F insulated.

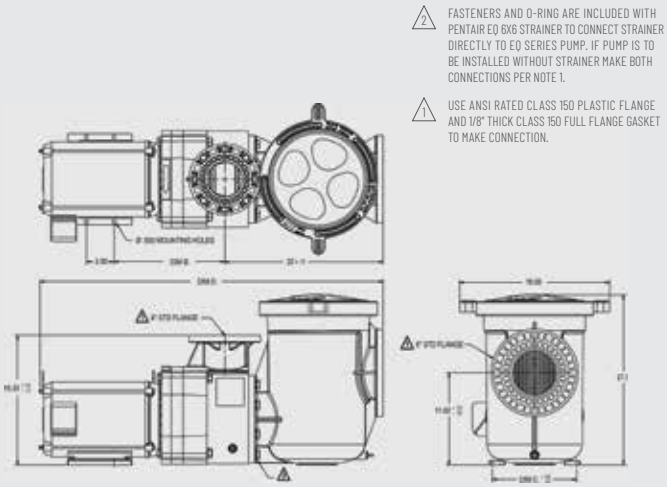
- Frame and Size
  - NEMA Rated "C" flange.
- Shaft
  - 303 stainless steel construction.
- Design
  - 3 to 15 HP, 3500 RPM, JM open drip-proof, continuous duty, three-phase and single-phase (5, 7-1/2 , 10 HP). 5 to 15 HP, 3500 RPM JMZ TEFC, continuous duty three-phase.
- Bearings
  - Double-shielded, single row, deep-groove type, permanently lubricated.
- Thermal Overload Protection
  - All models require external thermal overload protector.

ELECTRICAL

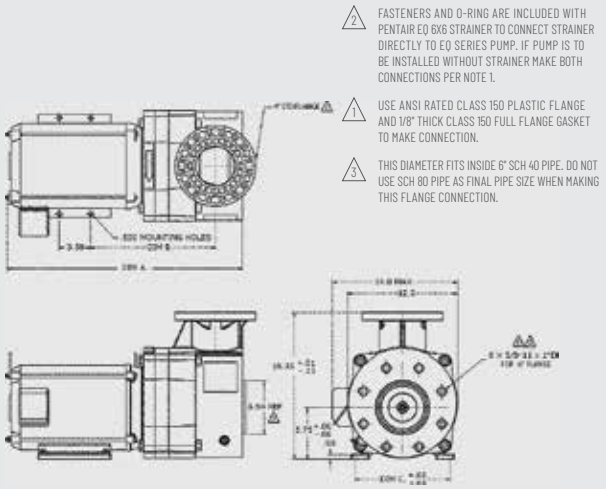
- Power Supply Required
  - Three-phase pumps are 208–230/460. Single-phase models are available in ODP 230v, 60 Hz only.

[1]Use ANSI Rated class 125 plastic flange and 1⁄8" thick class 125 full flange gasket to make connection.

EQ Series Commercial Pump with Strainer Pot 6" x 4"



EQ Series Commercial Pump without Strainer Pot



EQ SERIES COMMERCIAL PUMP WITH STRAINER POT 6" X 4"

Part # ODP Motor	Part # TEFC Motor	Description (ODP Motor/ TEFC Motor)	Voltage	Amps	Phase	HP	Wt	Dim. A-ODP	Dim. A-TEFC	Dim. B	Dim. C	Dim. D-ODP	Dim. D-TEFC
340026	—	EQW 300 WaterFall	208/230	38/19	1	3	126	26.62	N/A	10.03	7.5	43.590	N/A
340027	—	EQWK 300 WaterFall	208–230/460	8.4–7.9/3.9	3	3	106	23.12	N/A	10.16	7.5	40.094	N/A
340028	—	EQW 500 WaterFall	230	23.4	1	5	126	26.62	N/A	13.18	9.7	43.590	N/A
340029	—	EQWK 500 WaterFall	208–230/460	13.6–12.7/6.4	3	5	106	23.12	24.68	13.31	9.7	40.094	41.65
340030	—	EQ500	230	19.6	1	5	126	26.62	N/A	10.03	7.5	43.590	N/A
340031	340604	EQK500/EQKT500	208–230/460	13.5–12.3/6.2	3	5	106	23.12	24.68	10.16	7.5	40.094	41.65
340032	—	EQ750	230	30.4	1	7.5	161	27.53	N/A	10.78	8.5	44.590	N/A
340033	340605	EQK750/EQKT750	208–230/460	20.1–18.3/9.1	3	7.5	116	24.50	28.06	10.16	7.5	41.560	45.12
340034	340606	EQK1000/EQKT1000	208–230/460	27.1–24.3/12.2	3	10	146	26.31	29.81	10.78	8.5	43.290	46.79
340035	340607	EQK1500/EQKT1500	208–230/460	40.0–36.0/17.8	3	15	161	26.31	28.31	10.78	8.5	43.290	45.29
340238	—	EQ1000	230	40.0	1	10	179	29.0	N/A	11.50	8.5	46.29	N/A

340013	Strainer Pot Assembly including Strainer, Lid, Basket and Hardware

EQ SERIES COMMERCIAL PUMP WITHOUT STRAINER POT 6" X 6"

Part # ODP Motor	Part # TEFC Motor	Description	Voltage	Amps	Phase	HP	Wt
340014	—	EQW 300 WaterFall	115/230	38/19	1	3	97
340016	—	EQWK 300 WaterFall	208–230/460	8.4–7.9/3.9	3	3	77
340017	—	EQW 500 WaterFall	230	23.4	1	5	97
340018	—	EQWK 500 WaterFall	208–230/460	13.6–12.7/6.4	3	5	77
340019	—	EQ500	230	19.6	1	5	97
340020	340608	EQK500/EQKT500	208–230/460	13.5–12.3/6.2	3	5	77
340021	—	EQ750	230	30.4	1	7.5	132
340022	340609	EQK750/EQKT750	208–230/460	20.1–18.3/9.1	3	7.5	87
340237	—	EQ1000	230	40.0	1	10	125
340023	340610	EQK1000/EQKT1000	208–230/460	27.1–24.3/12.2	3	10	117
340024	340611	EQK1500/EQKT1500	208–230/460	40.0–36.0/17.8	3	15	132

EQ Series pumps are available in 575V and 50 Hz models. Please contact your local sales representative or Pentair office for details.

EQ SERIES®
HIGH PERFORMANCE COMMERCIAL PUMP

ENGINEERING SPECIFICATIONS

EQ Series Pump

- Recirculation pump shall be Pentair® EQ Series pump Model No. _____ self-priming centrifugal pump, ____ phase, 60 Hz.

General Notes

- Install pump in a cool, dry, well-vented location away from pool heaters and chemical storage.
- Pump should be firmly mounted with pipe supported to prevent vibration and undue operational noise.
- Allow 12" minimum clearance behind motor for servicing.
- Motor overheating may be caused by a voltage drop or excessive voltage. Be sure that wire size and voltage input are properly regulated.

Specifications

- The recirculation pump shall be a self-priming, centrifugal design with a hair and lint strainer as shown in the plans.
- The pump body, seal plate, and attached hair and lint strainer shall be constructed of non-corrosive PPO resin materials and close-coupled to an electric motor by means of an adaptor of the same material. The pump body shall have a single suction port with a 6" ANSI Rated 150 bolt flange to the hair and lint strainer. A centerline discharge port of 4" ANSI Rated 150 bolt flange and a winterizing drain port of 1/4" NPT shall be a part of the design.
- The pump shall be a back pull-out design to allow servicing without disturbing piping. The pump shall have a PPO resin diffuser to aid in priming and it shall contain a replaceable bronze wear ring for the impeller. The impeller shall be of the closed type and PPO resin, non-overloading at any point on the performance curve. The mechanical shaft seal shall be constructed of ceramic and carbon seal faces, with stainless steel and Buna N materials in the spring bellows portion. The impeller shall be secured to the motor shaft by means of a stainless steel key and locking screw into the end of the motor shaft. The pump shall be capable of operating at up to 50 PSI, 104° F continuous water temperature.
- The electric motor coupled to the pump shall be of the NEMA Rated series JM construction with stainless steel shaft inside a removable shaft sleeve of 303 series stainless steel. The motor shall be of an open, drip-proof design (or TEFC JMZ frame) with double-shielded, single row, deep-groove ball bearings. Motors shall be continuous-duty rated at 40° C (or realign better) ambient and be suitable for outdoor installation.
- The pump motor shall be a ____ HP, ____ phase, 60 Hz, 3450 RPM for service on a ____ volt electric supply. The pump shall be rated for _____ GPM at ____ TDH. The pump shall be tested and certified by a nationally recognized testing laboratory to conform to National Sanitation Foundation Standard 50.

Hair and Lint Strainer

- The pump strainer shall consist of a PPO resin body, polycarbonate resin thermoplastic cover with O-ring seal, and Cam and Ramp™ lid, and a strainer basket of mineral-reinforced polypropylene material.
- The strainer body shall be 6" ANSI Rated 150 bolt flanged suction and discharge ports. The strainer body shall have a removable drain plug for winterizing.
- The strainer basket shall be securely positioned below the suction inlet of the trap, with access for inspection and cleaning through a removable trap body lid. The trap body lid shall be secured by means of a locking ring. The strainer basket shall have a perforation which in total open area is 98 square inches.

PENTAIR

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