

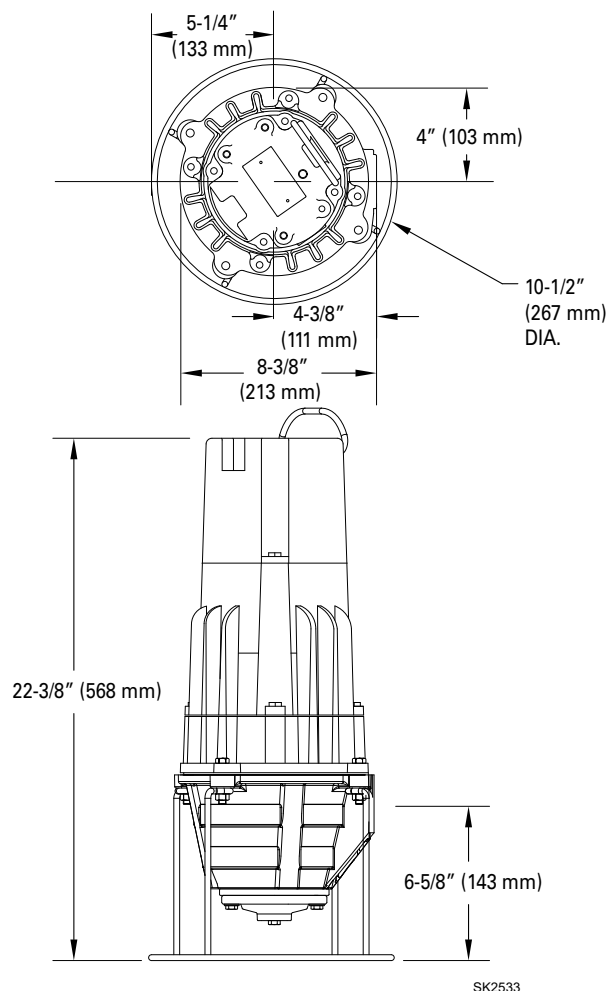
TECHNICAL DATA SHEET

SEWAGE WASTE SERIES

Models 810, 815 Progressing Cavity Grinder Pumps

PRODUCT SPECIFICATIONS

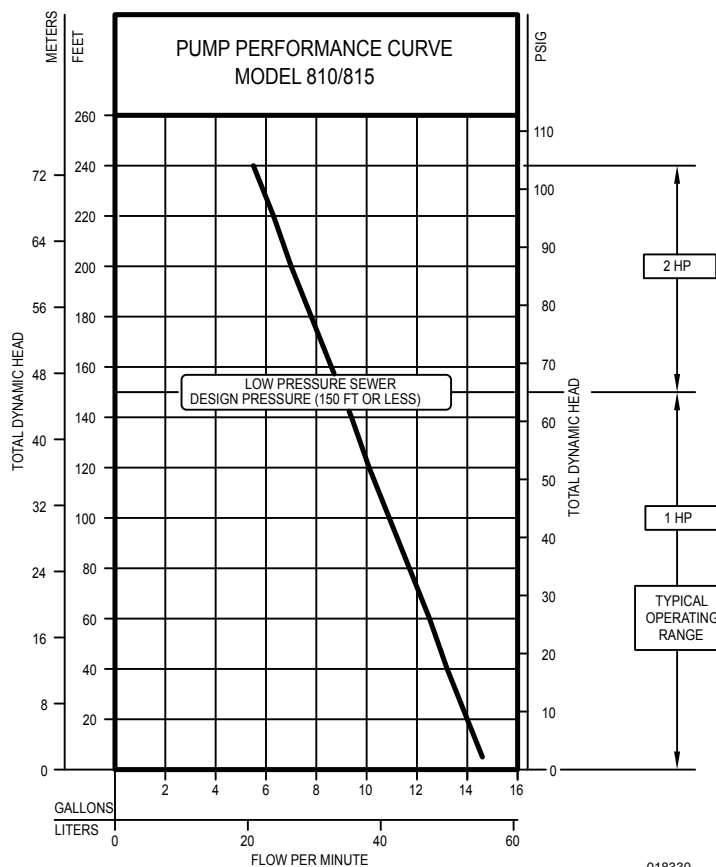
| | | |
|------------------|----------------------|---|
| MOTOR | Horse Power | 1 (810), 2 (815) |
| | Voltage | 230, 200 - 208 |
| | Phase | 1 Ph |
| | Hertz | 60 Hz |
| | RPM | 1725 |
| | Type | Permanent split capacitor |
| | Insulation | Class B |
| | Amps | 7.0 (810), 10.5 (815-230V), 12(815-200V) |
| PUMP | Operation | Nonautomatic |
| | Discharge Size | 1-1/4" NPT horizontal |
| | Cord Length | 20' (6 m) standard |
| | Cord Type | SOW or SOOW, multi-wire neoprene |
| | Max. Head | 810: 150' (45.7 m), 815: 240' (73.2 m) |
| | Max. Flow Rate | 14.6 GPM (55 LPM) |
| | Max. Operating Temp. | 130 °F (54 °C) |
| | Cooling | Oil filled |
| MATERIALS | Motor Protection | Auto reset thermal overload |
| | Cap | Cast iron |
| | Motor Housing | Cast iron |
| | Adapter | Cast iron |
| | Pump Housing | Cast iron |
| | Upper Bearing | Ball bearing |
| | Lower Bearing | Ball bearing |
| | Mechanical Seals | Carbon/ceramic |
| | Hydraulic Rotor | Stainless steel |
| | Hydraulic Stator | Buna-N |
| | Hardware | Stainless steel |
| | Motor Shaft | Stainless steel |
| | Gasket & Square Ring | Neoprene |
| | Cutter | Hardened stainless steel, Rockwell C55-60 |



NOTE: See model comparison chart for specific details.

TOTAL DYNAMIC HEAD FLOW PER MINUTE

| | Feet | Meters | Gal. | Liters |
|-----------|------|--------|------|--------|
| MODEL 810 | 5 | 1.5 | 14.6 | 55 |
| | 10 | 3.0 | 14.4 | 55 |
| | 20 | 6.1 | 14.0 | 53 |
| | 40 | 12.2 | 13.2 | 50 |
| | 60 | 18.3 | 12.5 | 47 |
| | 80 | 24.4 | 11.7 | 44 |
| | 100 | 30.5 | 10.9 | 41 |
| | 120 | 36.6 | 10.1 | 38 |
| | 140 | 42.7 | 9.4 | 36 |
| | 150 | 45.7 | 9.0 | 34 |
| MODEL 815 | 160 | 48.8 | 8.6 | 33 |
| | 180 | 54.9 | 7.8 | 30 |
| | 200 | 61.0 | 7.0 | 27 |
| | 220 | 67.1 | 6.3 | 24 |
| | 240 | 73.2 | 5.5 | 21 |



| Model | MODEL COMPARISON | | | | | | | | |
|-------|------------------|------|-------|----|------|----|----|-----|----|
| | Seal | Mode | Volts | Ph | Amps | HP | Hz | Lbs | Kg |
| E810 | Single | Non | 230 | 1 | 7.0 | 1 | 60 | 88 | 40 |
| E815 | Single | Non | 230 | 1 | 10.5 | 2 | 60 | 91 | 41 |
| I815 | Single | Non | 200 | 1 | 12 | 2 | 60 | 91 | 41 |

CAUTION All installation of controls, protection devices and wiring should be done by a qualified licensed electrician. All electrical and safety codes should be followed including the most recent National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA).

A) GRINDER SYSTEMS

STANDARD FEATURES:

- 1-1/4" NPT discharge
- Carbon/ceramic tandem seals
- Thermal overload protection
- Hydraulic stainless steel rotor and Buna-N stator
- Stainless steel cutter plate / cutter
- Stainless steel shaft
- Stainless steel hardware
- Corrosion-resistant, powder coated epoxy paint
- 20' (6 m) power cord

Options:

- ☐ 25' (8 m) long cords
- ☐ 35' (11 m) long cords
- ☐ 50' (15 m) long cords

CAUTION To ensure proper pump operation, a swing or flapper style check valve must be installed in the pump discharge line. A faulty or non-functional check valve when combined with a pressure sewer may prevent the pump from starting.

Maximum operating temperature 130 °F (54 °C).

Note: All variable level float switches in this section are mechanically activated and do not contain mercury.

| QWIK BOX w/ FLOAT SWITCH | |
|---|--|
| B) ALARM PANEL | |
| <input type="checkbox"/> P/N 10-0623 indoor/outdoor high water alarm with 15' (5 m) control switch. | |
| <input type="checkbox"/> P/N 10-0126 NEMA 4X high water alarm with 15' (5m) control switch and dry contact. | |
| <input type="checkbox"/> P/N 10-4012 Indoor high water alarm with 15' (5m) control switch. | |
| C) PUMP SWITCH AND WEIGHT - | |
| 1 pump switch required | |
| Single piggy-back type 230 volt 13 amp | |
| <input type="checkbox"/> P/N 10-0035 with 15' (5 m) cord | |
| <input type="checkbox"/> P/N 10-0689 weight for alarm float (Indoor systems only) | |
| D) JUNCTION BOX - | |
| 1 required | |
| <input type="checkbox"/> P/N 10-0580 Qwik-Box, NEMA 4X with 230 volt receptacle | |

| PLUGGER PANEL | |
|---|--|
| B) CONTROL PANEL <input type="checkbox"/> P/N 10-2006 Plugger panel, NEMA 4X with high water alarm and 230 volt receptacle. | |
| C) FLOAT SWITCHES - 2 required Pump: One pump switch Alarm: One control switch <input type="checkbox"/> P/N 10-0706 piggy-back pump switch with 20' (6 m) cord <input type="checkbox"/> P/N 10-0311 piggy-back pump switch with 25' (8 m)cord <input type="checkbox"/> P/N 10-1956 piggy-back pump switch with 35' (11 m) cord <input type="checkbox"/> P/N 10-0744 mechanical control switch with 20' (6 m) cord <input type="checkbox"/> P/N 10-1877 mechanical control switch with 25' (8 m) cord <input type="checkbox"/> P/N 10-1878 mechanical control switch with 35' (11 m) cord | |
| D) JUNCTION BOX J-Box not recommended with this type control. | |

| SIMPLEX PANEL | |
|---|--|
| B) CONTROL PANEL <ul style="list-style-type: none"> <input type="checkbox"/> P/N 10-1212 Simplex panel, NEMA 4X, with high water alarm and pump circuit breaker, less float switches. | |
| C) FLOAT SWITCHES - 2 required Pump: One pump switch Alarm: One control switch <ul style="list-style-type: none"> <input type="checkbox"/> P/N 10-0706 piggy-back pump switch with 20' (6 m) cord <input type="checkbox"/> P/N 10-0311 piggy-back pump switch with 25' (8 m) cord <input type="checkbox"/> P/N 10-1956 piggy-back pump switch with 35' (11 m) cord <input type="checkbox"/> P/N 10-0744 mechanical control switch with 20' (6 m) cord <input type="checkbox"/> P/N 10-1877 mechanical control switch with 25' (8 m) cord <input type="checkbox"/> P/N 10-1878 mechanical control switch with 35' (11 m) cord | |
| D) JUNCTION BOX - optional <ul style="list-style-type: none"> <input type="checkbox"/> P/N 10-2145 NEMA 4X with 3 cord seals and conduit connection. | |

INDOOR AND OUTDOOR PACKAGED SYSTEMS - PUMP AND CONTROLS NOT INCLUDED

FIBERGLASS BASIN

***Pump suspended from steel cover**

□ P/N 32-0029 24" x 36" (61 x 91 cm)

• Fiberglass basin w/ AFD

• Rust-resistant steel cover (epoxy coated)

• 3" Adaptaflex vent seal and 4" rubber inlet pipe seal

• 1-1/4" brass anti-siphon device, 1-1/4" NPT brass check valve, and ball valve, field-installed

***Contact factory for other sizes and duplex Configurations.**

OUTDOOR SYS. w/ FLEX HOSE & COVER

FIBERGLASS BASIN AND COVER

1.25" FLEXIBLE HOSE w/ DISCONNECT

☐ P/N 35-0006 24" x 48" (61 x 122 cm)

☐ P/N 35-0007 24" x 60" (61 x 152 cm)

☐ P/N 35-0008 24" x 72" (61 x 183 cm)

☐ P/N 35-0084 24" x 84" (61 x 213 cm)

SK2540

- Fiberglass basin with anti-flotation ring
- Flex-hose discharge with disconnect
- 1-1/4" PVC discharge pipe from disconnect
- 1" Pull rod and 8' (2.4 m) stainless steel lifting cable
- 1-1/4" PVC ball valve(s), 1-1/4" brass check valve(s), and 1-1/4" brass anti-siphon device
- 1-4" Rubber inlet pipe seal (field inst.)
- Solid fiberglass cover with Zoeller imprint

OUTDOOR SYSTEM w/ Z-Rail

FIBERGLASS BASIN AND COVER

Z-RAIL DISCONNECT SYSTEM

- ☐ 24" x 60" (61 x 152 cm) P/N 33-1598
- ☐ 24" x 72" (61 x 183 cm) P/N 33-1597
- ☐ 24" x 84" (61 x 213 cm) P/N 33-1594
- ☐ 24" x 96" (61 x 244 cm) P/N 33-1596

SK3091

- Fiberglass basin with anti-flotation ring
- 1-1/4" Schedule 80 PVC discharge piping
- 1-1/4" H x 1-1/4" Z-rail® P/N39-0137 disconnect system, epoxy coated ductile iron
- 3/4" galvanized rail pipes
- Stainless steel lifting cable
- 1-1/4" brass ball valve
- 1-1/4" brass check valve
- Anti-siphon device
- PVC float tree
- 1-4" rubber inlet pipe seal (field inst.)
- 1-2" pipe seal (field inst.) for electrical conduit
- Solid fiberglass cover with Zoeller imprint

PREPACKAGED AND JOB READY SYSTEMS

ACCESSORIES FOR FIELD-ASSEMBLED SYSTEMS

FLEX-HOSE DISCHARGE ASM.

- ☐ P/N 10-2038 with 30" (76 cm) hose

Z-RAIL® DISCONNECT SYSTEM

- ☐ P/N 39-0137 1-1/4" (3.2 cm) H x 1-1/4" (3.2 cm) V ductile Iron
- ☐ P/N 39-0138 1-1/4" (3.2 cm) H x 1-1/4" (3.2 cm) V with stainless steel upper bracket
- ☐ P/N 39-0139 Intermediate bracket stainless steel

STAINLESS STEEL LIFTING CABLES AND ROD

- ☐ P/N 39-0031 8' (2.4 m) cable
- ☐ P/N 39-0032 12' (3.7 m) cable
- ☐ P/N 39-0069 1' (0.3 m) rod
- ☐ P/N 10-0789 stainless steel lifting bail

PREWIRED CONDUIT

(10-0580 Qwik Box Required)

- ☐ P/N 5100-0016 - 25' (8 m)
- ☐ P/N 5100-0017 - 35' (11 m)
- ☐ P/N 5100-0018 - 50' (15 m)

GALVANIZED 1.25" DISCH. ELBOW

- ☐ P/N 018386

CHECK VALVE

- ☐ P/N 30-0223 1.25" NPT brass

BALL VALVE

- ☐ P/N 30-0165 1.25" PVC
- ☐ P/N 30-0213 1.25" NPT brass

FIELD-MOUNT SYSTEMS

| SIMPLEX | |
|--|--------------|
| REQ. | REQ. |
| 1 810 or 815 grinder | P/N ____ (A) |
| 1 control panel/alarm system | P/N ____ (B) |
| 1 piggyback pump switch | P/N ____ (C) |
| 1 control switch (if required) | P/N ____ (C) |
| 1 weight for alarm float (if required) | P/N ____ (D) |
| 1 junction box (Optional) | P/N ____ (F) |
| 1 optional accessories | P/N ____ (F) |
| | P/N ____ (F) |
| | P/N ____ (F) |
| | P/N ____ (F) |

| OUTDOOR | |
|--------------------------------|--------------|
| REQ. | REQ. |
| 1 810 or 815 grinder | P/N ____ (A) |
| 1 control panel/alarm system | P/N ____ (B) |
| 1 piggyback pump switch | P/N ____ (C) |
| 1 control switch (if required) | P/N ____ (C) |
| 1 junction box (if required) | P/N ____ (D) |
| 1 basin, cover and hardware | P/N ____ (F) |

| INDOOR | |
|-----------------------------|--------------|
| REQ. | REQ. |
| 1 810 or 815 grinder | P/N ____ (A) |
| 1 alarm panel | P/N ____ (B) |
| 1 piggyback pump switch | P/N ____ (C) |
| 1 weight for alarm float | P/N ____ (C) |
| 1 basin, cover and hardware | P/N ____ (F) |