Product information presented here reflects conditions at time of publication. Consult factory regarding discrepancies or inconsistencies.



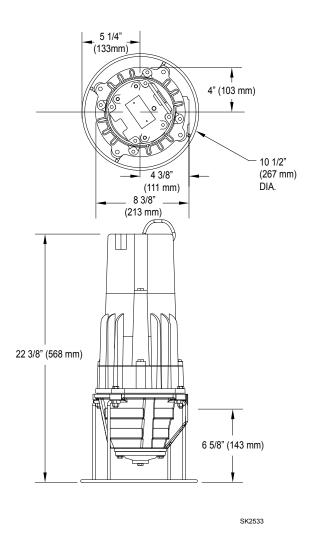
SECTION: 2.25.025FM2796
0515
Supersedes
0514

Zoeller Family of Water Solutions

TECHNICAL DATA SHEET SEWAGE WASTE SERIES Models 810, 815 Progressing Cavity Grinder Pumps

PRODUCT SPECIFICATIONS

	1	1
	Horse Power	1 (810), 2 (815)
	Voltage	230
Ξ.	Phase	1 Ph
2	Hertz	60 Hz
MOTOR	RPM	1725
≥	Туре	Permanent split capacitor
	Insulation	Class B
	Amps	7.0 (810), 10.5 (815)
	Operation	Nonautomatic
	Discharge Size	1-1/4" NPT horizontal
	Cord Length	20' (6 m) standard
₽	CordType	SOW or SOOW, multi-wire neoprene
PUMP	Max. Head	810: 150' (45.7 m), 815: 240' (73.1 m)
<u> </u>	Max. Flow Rate	15.6 GPM (59 LPM)
	Max. Operating Temp.	130°F (54°C)
	Cooling	Oil filled
	Motor Protection	Auto reset thermal overload
	Сар	Cast iron
	Motor Housing	Cast iron
	Adapter	Cast iron
	Pump Housing	Cast iron
MATERIALS	Upper Bearing	Ball bearing
	Lower Bearing	Ball bearing
H H	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
	A.	



NOTE: See model comparison chart for specific details.



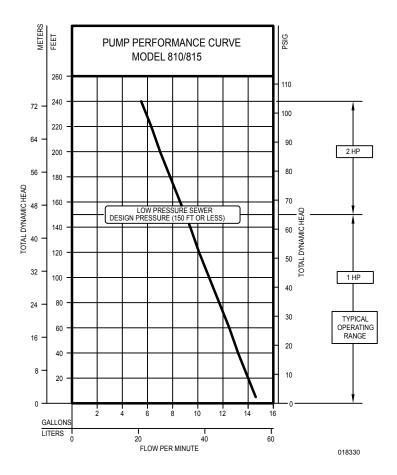






TOTAL DYNAMIC HEAD FLOW PER MINUTE

	Feet	Meters	Gal.	Liters
	5	1.5	14.6	55
	10	3.0	14.4	55
	20	6.1	14.0	53
MODEL	40	12.2	13.2	50
810	60	18.3	12.5	47
010	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
	160	48.8	8.6	33
MODEL	180	54.9	7.8	30
_	200	61.0	7.0	27
815	220	67.1	6.3	24
	240	73.2	5.5	21



Model	MODEL COMPARISON								
iviodei	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

▲ 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).

GRINDER SYSTEMS

(A) GRINDER

STANDARD FEATURES:

- 11/4" 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 cord

Options:

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

A)	A) 810 & 815 PROGRESSING CAVITY GRINDERS 1 OR 2 HP 11/4" N.P.T. DISCHARGE						
P/N WGT. MODEL VOLTS PH HP		AMP					
	810-0004	88 lb (39.9 kg)	E810	230	1	1	7.0
	815-0004	91 lb (41.3 kg)	E815	230	1	2	10.5

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

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.

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

- ☐ P/N 10-0623 Indoor/Outdoor high water alarm with 15' (5 m) control switch.
- ☐ P/N 10-0126 NEMA 4X high water alarm with 15' (5m) control switch and dry contact.
- ☐ P/N 10-1494 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

- $\hfill\Box$ P/N 10-0035 with 15' (5 m) cord
- □ P/N 10-0689 weight for alarm float (Indoor systems only)

D) JUNCTION BOX -

1 required

 $\hfill\Box$ P/N 10-0580 Qwik-Box, NEMA 4X with 230 volt receptacle

PLUGGER PANEL

B) CONTROL PANEL

□ 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

- □ P/N 10-0706 piggy-back pump switch with 20' (6 m) cord
- □ P/N 10-0311 piggy-back pump switch with 25' (8 m)cord
- P/N 10-1956 piggy-back pump switch with 35' (11 m) cord
- ☐ P/N 10-0744 mechanical control switch with 20' (6 m) cord
- ☐ P/N 10-1877 mechanical control switch with 25' (8 m) cord
- □ 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

 $\hfill\Box$ 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

- $\hfill\Box$ P/N 10-0706 piggy-back pump switch with 20' (6 m) cord
- □ P/N 10-0311 piggy-back pump switch with 25' (8 m) cord
- □ P/N 10-1956 piggy-back pump switch with 35' (11 m) cord
- □ P/N 10-0744 mechanical control switch with 20' (6 m) cord
- ☐ P/N 10-1877 mechanical control switch with 25' (8 m) cord
- ☐ P/N 10-1878 mechanical control switch with 35' (11 m) cord

D) JUNCTION BOX - optional

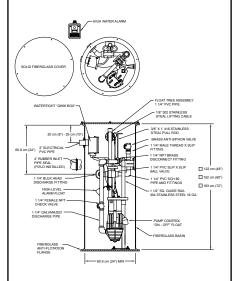
☐ P/N 10-2145 NEMA 4X with 3 cord seals and conduit connection.

E) INDOOR AND OUTDOOR PACKAGED SYSTEMS - PUMP AND CONTROLS NOT INCLUDED

OUTDOOR SYS. w/ SQUARE GRS

FIBERGLASS BASIN AND COVER SQUARE GUIDERAIL SYSTEM

- □ P/N 33-0491 24" x 48" (61 x 122 cm)
- □ P/N 33-0492 24" x 60" (61 x 152 cm)
- $\hfill\Box$ P/N 33-0493 24" x 72" (61 x 183 cm)

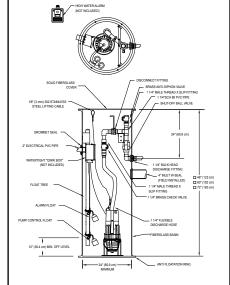


- · Fiberglass basin with anti-flotation ring
- 11/4" galvanized pump discharge piping to disconnect
- 11/4" PVC discharge pipe from disconnect
- 11/4" Adaptaflex discharge pipe seal
- Stainless steel square guide rail system
- 1' (0.3 m) pull rod
- 8' (2.4 m) stainless steel lifting cable
- 11/4" PVC ball valve
- 11/4" brass check valve
- 11/4" brass anti-siphon device
- PVC float tree
- 1-4" rubber inlet pipe seal (field inst.)
- Fiberglass cover

OUTDOOR SYS. w/ FLEX HOSE DC

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)

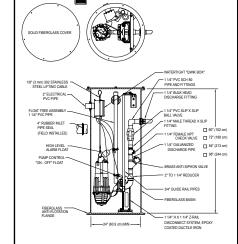


- Fiberglass basin with anti-flotation ring
- Flex-hose discharge with disconnect 11/4" PVC discharge pipe from disconnect
- 1' Pull rod and 8' (2.4 m) stainless steel lifting cable
- 11/4" PVC ball valve(s), 11/4" brass check valve(s), and 11/4" brass anti-siphon device
- 1-4" Rubber inlet pipe seal (field inst.)
- Fiberglass cover

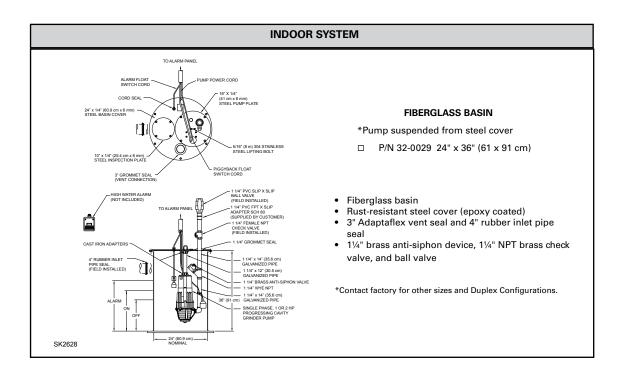
OUTDOOR SYSTEM w/ Z-Rail

FIBERGLASS BASIN AND COVER **Z-RAIL DISCONNECT SYSTEM**

- □ 24" x 60" (61 x 152 cm)
- □ 24" x 72" (61 x 183 cm)
- □ 24" x 84" (61 x 213 cm)
- □ 24" x 96" (61 x 244 cm)



- Fiberglass basin with anti-flotation ring
- 11/4" Schedule 80 PVC discharge piping
- 11/4" H x 11/4" Z-rail disconnect system, epoxy coated ductile iron
- 3/4" Rail pipes
- Stainless steel lifting cable
- 11/4" PVC ball valve
- 11/4" brass check valve
- 11/4" brass anti-siphon device
- PVC float tree
- 1-4" rubber inlet pipe seal (field inst.)
- Fiberglass cover



PREPACKAGED AND JOB READY SYSTEMS

	F) ACCESSORIES FOR FIELD-ASSEMBLED SYSTEM	F) ACCESSORIES FOR FIELD-ASSEMBLED SYSTEMS			
FLEX-HOSE DISCHARGE ASM. □ P/N 10-2038 with 30" (76 cm) hose SQUARE GUIDE RAIL SYSTEM □ P/N 39-0106 - 48" (122 cm) deep basin □ P/N 39-0107 - 60" (152 cm) deep basin □ P/N 39-0108 - 72" (183 cm) deep basin □ P/N 39-0070 - Rail extension bracket	Z-RAIL DISONNECT SYSTEM □ P/N 39-0137 11/4" (3.2 cm) H x 11/4" (3.2 cm) V Ductile Iron □ P/N 39-0138 11/4" (3.2 cm) H x 11/4" (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	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 PREWIRED CONDUIT (10-0580 Qwik Box Required) P/N 5100-0016 - 25' (8 m) P/N 5100-0017 - 35' (11 m)			

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)			

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)			

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)			