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



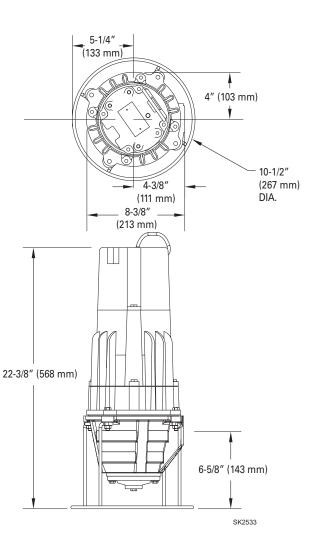
SECTION: 2.25.025 FM2796 0721 Supersedes 0620

# **TECHNICAL DATA SHEET**

SEWAGE WASTE SERIES Models 810, 815 Progressing Cavity Grinder Pumps

# **PRODUCT SPECIFICATIONS**

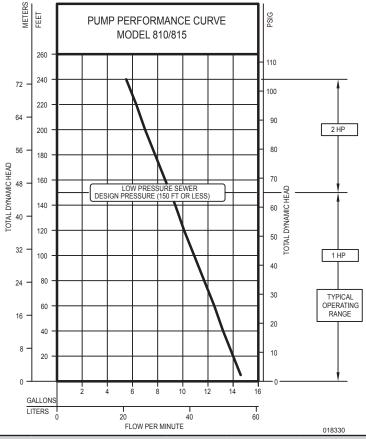
	Horse Power	1 (810), 2 (815)		
	Voltage	230, 200 - 208		
2	Phase	1 Ph		
MOTOR	Hertz	60 Hz		
	RPM	1725		
	Туре	Permanent split capacitor		
	Insulation	Class B		
	Amps	7.0 (810), 10.5 (815-230V), 12(815-200V)		
	Operation	Nonautomatic		
	Discharge Size	1-1/4" NPT horizontal		
	Cord Length	20' (6 m) standard		
<u>م</u>	Cord Type	SOW or SOOW, multi-wire neoprene		
JUMP	Max. Head	810: 150' (45.7 m), 815: 240' (73.2 m)		
P I	Max. Flow Rate	14.6 GPM (55 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		
	Upper Bearing	Ball bearing		
A A	Lower Bearing	Ball bearing		
l H	Mechanical Seals	Carbon/ceramic		
	Hydraulic Rotor	Stainless steel		
MATERIALS	Hydraulic Stator	Buna-N		
	Hardware	Stainless steel		
	Motor Shaft	Stainless steel		
	Gasket & Square Ring	Neoprene		
	Cutter	Hardened stainless steel, Rockwell C55-60		





### 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								
	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
1815	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 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

- 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 10-4012 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

- $\hfill\square$  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

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<sup>o</sup>
- I P/N 10-1950 piggy-back pump switch with set (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

- 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

- 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
- $\hfill\square$  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.

OUTDOOR SYSTEM w/ Z-Rail®

FIBERGLASS BASIN AND COVER

**Z-RAIL® DISCONNECT SYSTEM** 

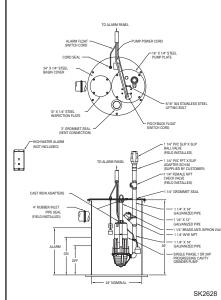
#### INDOOR AND OUTDOOR PACKAGED SYSTEMS - PUMP AND CONTROLS NOT INCLUDED

#### **INDOOR SYSTEM**

#### 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, fieldinstalled

\*Contact factory for other sizes and duplex Configurations.

## 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
- □ 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 8 PIPE SEA HIGH LEVEL ALARM FLC FIBERGLASS ANTI-FLOTAT 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/N 39-0137 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

EIBERGLASS BASIN AND COVER

### 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 Owik 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		OUTDOOR		INDOOR	
	REQ.	REQ.	REQ.	REQ.	REQ.
grinder	P/N (A)	1 810 or 815 grinder	P/N (A)	1 810 or 815 grinder	P/N (A)
el/alarm system	P/N (B)	1 control panel/alarm system	P/N (B)	1 alarm panel	P/N (B)
oump switch	P/N (C)	1 piggyback pump switch	P/N (C)	1 piggyback pump switch	P/N (C)
ch (if required)	P/N (C)	1 control switch (if required)	P/N (C)	1 weight for alarm float	P/N (C)
larm float (if required)	P/N (D)	1 junction box (if required)	P/N (D)	1 basin, cover and hardware	P/N (F)
k (Optional)	P/N (F)	1 basin, cover and hardware	P/N (F)		
	D(N) (E)		4		

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)			