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

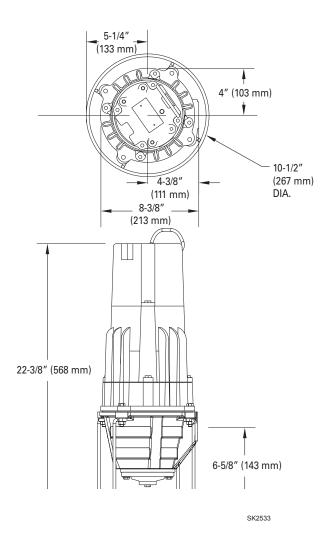


SECTION: 2.25.025FM2796
1216
Supersedes
1015

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

PRODUCT SPECIFICATIONS

Horse Power			7		
Phase 1 Ph Hertz 60 Hz RPM 1725 Type 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 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 Motor Protection Auto reset thermal overload Cap Cast iron Motor Housing Cast iron Pump Housing Cast iron Pump Housing Cast iron Upper Bearing Ball bearing Lower Bearing Ball bearing Hydraulic Rotor Stainless steel Hydraulic Stator Buna-N		Horse Power	1 (810), 2 (815)		
Hertz 60 Hz RPM 1725 Type 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 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 Motor Protection Auto reset thermal overload Cap Cast iron Motor Housing Cast iron Pump Housing 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		Voltage	230		
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 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 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	<u>د</u>	Phase	1 Ph		
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 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 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		Hertz	60 Hz		
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 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 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	0	RPM	1725		
Amps 7.0 (810), 10.5 (815) 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 Motor Protection Auto reset thermal overload Cap Cast iron Motor Housing Cast iron Adapter Cast iron Pump Housing 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	2	Туре	Permanent split capacitor		
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 Motor Protection Auto reset thermal overload Cap Cast iron Motor Housing Cast iron Adapter Cast iron Pump Housing 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		Insulation	Class B		
Discharge Size Cord Length Cord Type SOW or SOOW, multi-wire neoprene Max. Head Max. Flow Rate Max. Operating Temp. Cooling Motor Protection Cast iron Motor Housing Adapter Pump Housing Cast iron Pump Housing Cast iron Pump Housing Cast iron Upper Bearing Ball bearing Mechanical Seals Carbon/ceramic Hydraulic Rotor Hydraulic Stator Buna-N		Amps	7.0 (810), 10.5 (815)		
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 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	Operation		Nonautomatic		
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 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		Discharge Size	1-1/4" NPT horizontal		
Max. Operating Temp. 130°F (54°C) Cooling Oil filled 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		Cord Length	20' (6 m) standard		
Max. Operating Temp. 130°F (54°C) Cooling Oil filled 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	_	Cord Type	SOW or SOOW, multi-wire neoprene		
Max. Operating Temp. 130°F (54°C) Cooling Oil filled 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	_ ≥ [Max. Head	810: 150' (45.7 m), 815: 240' (73.2 m)		
Cooling Oil filled Motor Protection Auto reset thermal overload Cap Cast iron Motor Housing Cast iron Adapter Pump Housing Cast iron Pump Housing Upper Bearing Ball bearing Lower Bearing Ball bearing Mechanical Seals Carbon/ceramic Hydraulic Rotor Hydraulic Stator Buna-N	Z	Max. Flow Rate	14.6 GPM (55 LPM)		
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		Max. Operating Temp.	130°F (54°C)		
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		Cooling	Oil filled		
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		Motor Protection	Auto reset thermal overload		
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		Сар	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		Motor Housing	Cast iron		
Upper Bearing Ball bearing Lower Bearing Ball bearing Mechanical Seals Carbon/ceramic Hydraulic Rotor Stainless steel Hydraulic Stator Buna-N		Adapter	Cast iron		
		Pump Housing	Cast iron		
_	LS	Upper Bearing	Ball bearing		
_	⋖	Lower Bearing	Ball bearing		
_	H [Mechanical Seals	Carbon/ceramic		
	 	Hydraulic Rotor	Stainless steel		
	X	Hydraulic Stator	Buna-N		
Hardware Stainless steel		Hardware	Stainless steel		
Motor Shaft Stainless steel		Motor Shaft	Stainless steel		
Gasket & Square Ring Neoprene		Gasket & Square Ring	Neoprene		
Cutter Hardened stainless steel, Rockwell C55-60		Cutter	Hardened stainless steel, Rockwell C55-60		



NOTE: See model comparison chart for specific details.



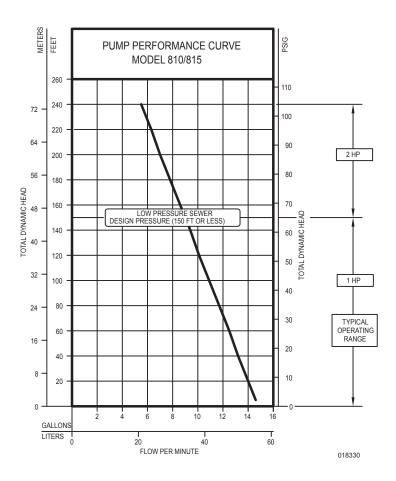






TOTAL DYNAMIC HEAD FLOW PER MINUTE

	Feet	Meters	Gal.	Liters
	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								
Wiodei	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

AUTION 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

A 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

- □ 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 recep-

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

☐ 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.

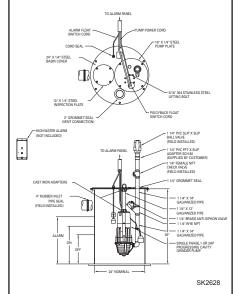
INDOOR AND OUTDOOR PACKAGED SYSTEMS - PUMP AND CONTROLS NOT INCLUDED

INDOOR SYSTEM

FIBERGLASS BASIN

*Pump suspended from steel cover

P/N 32-0029 24" x 36" (61 x 91 cm)

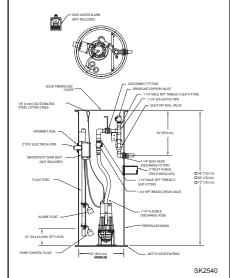


- Fiberglass basin w/ AFD
- Rust-resistant steel cover (epoxy coated)
- 3" Adaptaflex vent seal and 4" rubber inlet
- 1-1/4" brass anti-siphon device, 1-1/4" NPT brass check valve, and ball valve, fieldinstalled
- *Contact factory for other sizes and Duplex Configurations

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)
- □ P/N 35-0084 24" x 84" (61 x 213 cm)

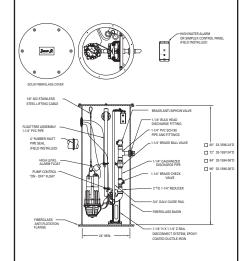


- Fiberglass basin with anti-flotation ring
- Flex-hose discharge with disconnect 1-1/4" PVC discharge pipe from disconnect
- 1' Pull rod and 8' (2.4 m) stainless steel lifting cable
- 1-1/4" PVC ball valve(s), 1-1/4" brass check valve(s), and 1-1/4" brass anti-siphon device
- 1-4" Rubber inlet pipe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



- 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

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

- $\hfill\Box$ 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.					
P/N (A)					
P/N (B)					
P/N (C)					
P/N (C)					
P/N (D)					
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)				