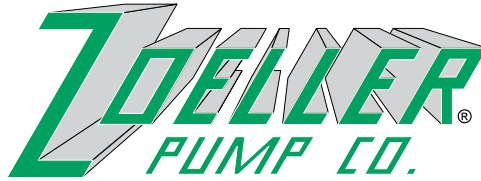


"QUALITY PUMPS SINCE 1939"

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



SECTION: 2.50.040  
FM1232  
0906  
Supersedes  
0106

MAIL TO: P.O. BOX 16347 • Louisville, KY 40256-0347  
SHIP TO: 3649 Cane Run Road • Louisville, KY 40211-1961  
(502) 778-2731 • 1 (800) 928-PUMP • FAX (502) 774-3624

visit our web site:  
[www.zoeller.com](http://www.zoeller.com)

# THE SHARK Series 840 GRINDER PUMP

## FEATURES:

- Durable Heavy Duty Finned Cast Iron Construction.
- 2 HP, 60 Hz, 3450 RPM.
- Oil-Filled - Hermetically Sealed Motor with Class F Insulation.
- Hardened Stainless Steel Cutter and Disc.
- Cutters Protected from Abrasive Solids.
- Cutters can automatically alternate direction to enhance blade life and free hang-ups. (automatic or manually)
- Stainless Steel Screws, Bolts, and Lifting Bail.
- Easily adapts to many existing competitors' rail systems.
- Tandem seals with leak detection.
- Automatic Thermal Overload Protection (Single Phase)
- Thermal Sensor Protection (Standard on 3 Phase)
- Legs provide for free standing installation.
- Preassembled Systems Available.
- Corrosion resistant powder coated epoxy finish.

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



## PUMP SYSTEMS AND REVERSING CONTROLS

### 840 SERIES



POWDER COATED TOUGH™



Tested to UL Standard UL778 and Certified to CSA Standard C22.2 No. 108



Product may not be exactly as pictured.

# GRINDER SYSTEMS

## (A) GRINDER MODEL - 840 2 HP, 1 1/4" N.P.T. VERTICAL DISCHARGE - 20 FT. CORDS

P/N	WGT.	MODEL	VOLTS	PH	AMP
<input type="checkbox"/> 840-0004	137	E840	230	1 $\phi$	17.2
<input type="checkbox"/> 840-0005	137	I840	200	1 $\phi$	20.0
<input type="checkbox"/> 840-0006	132	F840	230	3	10.8
<input type="checkbox"/> 840-0007	132	J840	200	3	12.3
<input type="checkbox"/> 840-0008	132	G840	460	3	5.5
<input type="checkbox"/> 840-0009	132	BA840	575	3	4.5

\* Single phase units require a set of capacitors and relay starting components.

### STANDARD FEATURES:

- Reversible Cutter Action Manual/Auto\*\*
- 1 1/4" NPT Vertical Discharge
- Carbon/Ceramic Tandem Seals
- Thermal Sensors\*\* (O.L. on 1Ph)
- Moisture Probes\*\*
- Balanced Bronze Impellers
- Stainless Steel Cutter and Plate (R-C 55-60)
- Stainless Steel Shaft
- Stainless Steel Lifting Bail
- Corrosion resistant powder coated epoxy paint
- 20 ft. Power Cord - 20 ft. Sensor Cord
- UL Listed

### OPTIONS:

- Extended Cord Lengths
- Anti-Siphon Device

\*\*Requires Circuit in Control Panel to Function

## (B) CONTROL PANELS

SIMPLEX NEMA 4X			DUPLEX NEMA 4X	
MODEL	P/N	WGT.	P/N	WGT.
E or I 840	<input type="checkbox"/> 10-0393	15	<input type="checkbox"/> 10-0397	21
E or I 840	<input type="checkbox"/> 10-0420*	17	<input type="checkbox"/> 10-0512*	23
F or J 840	<input type="checkbox"/> 10-0394	18	<input type="checkbox"/> 10-0398	21
G840	<input type="checkbox"/> 10-0395	18	<input type="checkbox"/> 10-0399	21
BA840	<input type="checkbox"/> 10-0396	18	<input type="checkbox"/> 10-0400	21

\*With Audible and Visible High Water Alarm

### (B) CONTROL PANEL

#### STANDARD FEATURES:

- Nema 4X Outdoor Rating
- Starting, Control, and Alarm Circuits
- Circuit Breaker and Rated Motor Contactor (single phase)
- Capacitors and Motor Starting Relay on Single Phase
- Motor Protective Switch (circuit breaker/adj overloads) and Rated Motor Contactor (three phase)
- Alternating Circuit (Duplex)
- Automatic Reversing Circuit
- High Water Alarm Light
- Internal Seal Leak Light
- HOA Switches and Pilot Light(s)
- Terminal Strips
- Thermal Cut-Out Circuit (three phase only)
- Padlock Hasp
- Capacitors/Start Relay (single phase)
- UL Listed

#### OPTIONS:

- Audible High Water Alarm
- Flasher for High Water Alarm Light
- Manual Reset of High Water Alarm
- Intrinsically Safe Relays
- Manual Reversing Switch
- Elapsed Time Meters
- Dry Auxiliary Contact
- For other options, consult factory

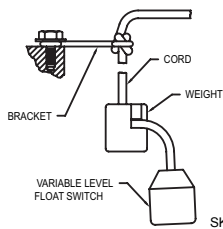
Maximum Temperature  
for Sewage  
130°F (54°C)

## (C)\* VARIABLE LEVEL FLOAT SWITCHES INDOOR SYSTEM

- 3 Switches and Weights without Brackets  
 P/N 10-0347 WGT. 9.5
- 4 Switches and Weights without Brackets  
 P/N 10-0348 WGT. 13.0

### OUTDOOR SYSTEM

- 3 Switches with Weights and Brackets  
 P/N 10-0329 WGT. 10.0
- 4 Switches with Weights and Brackets  
 P/N 10-0330 WGT. 14.0

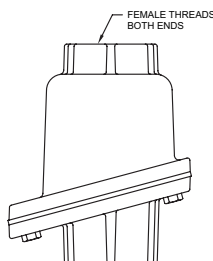


Note: All variable level float switches in this section are mechanically activated and do not contain mercury.

SK1328

## (D) CHECK VALVES

- 1 1/4" Cast Iron NPT Female  
 P/N 30-0163 WGT. 7.5
- 1 1/2" Cast Iron NPT Female  
 P/N 30-0164 WGT. 7.5
- 2" Cast Iron NPT Female  
 P/N 30-0152 WGT. 10.0



SK1330

## SIMPLEX REVERSING CONTROL BOXES\*

MODEL	AUTOMATIC		MANUAL	
	P/N	WGT.	P/N	WGT.
E840	<input type="checkbox"/> 10-0352	8	<input type="checkbox"/> 10-0360	7
I840	<input type="checkbox"/> 10-0352	8	<input type="checkbox"/> 10-0360	7
F840	<input type="checkbox"/> 10-0353	6	<input type="checkbox"/> 10-0361	5
J840	<input type="checkbox"/> 10-0353	6	<input type="checkbox"/> 10-0361	5
G840	<input type="checkbox"/> 10-0354	12	<input type="checkbox"/> 10-0362	5
BA840	<input type="checkbox"/> 10-0355	12	<input type="checkbox"/> 10-0362	5

\* These control boxes consist of the reversing mechanisms and capacitors (1Ph units) only. They will not control pumps. Refer to Section B for complete system controls. For duplex applications use two simplex reversing control boxes. (For pump prefix identification see News & Views 0052)

### FOR GRINDER PUMP ONLY

Single Phase Pump Requires Two Capacitors and a Motor Starting Relay Factory Mounted in a Nema 4X starter pack.

- P/N 10-0379 WGT. 7

Two Capacitors and Motor Starting Relay shipped loose to be mounted in existing panel.

- P/N 10-0380 WGT. 2

### THE MODEL 840 GRINDER WILL FIT ON MYER'S RAIL

P/N RWG125 (1 Required) & RWGD125 (2 required) by using Zoeller's Adapter.

- P/N 10-0381 WGT. 3

Hydro-O-Matic's Hydr-O-Rail® bolts directly to Model 840 by using base adapter.

**Specify when ordering.**

## (E) JUNCTION BOXES - TYPE 4X

### SIMPLEX

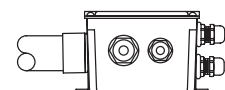
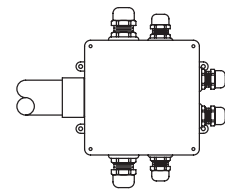
5 Holes with Seals for (1) Power Cord, (1) Sensor Cord, (3) Float Switch Cords.

- P/N 10-0331 WGT. 2.5 3 Float System

### DUPLEX

8 Holes with Seals for (2) Power Cords, (2) Sensor Cords, (3 or 4) Float Switch Cords.

- P/N 10-0332 WGT. 2.5 3 Float System
- P/N 10-0421 WGT. 2.5 4 Float System



SK1331

**(F) INDOOR BASIN, COVER, AND HARDWARE - PREPACKAGED STANDARD EQUIPMENT**

- Fiberglass Basin
- Rust Resistant Steel Cover(s) (epoxy coated only)
- Inspection Plate
- Individual Pump Covers
- 3" Adaptaflex Vent Seal
- 1 1/4" Adaptaflex Discharge Pipe Seal(s)
- Cord Seal(s)
- 1-4" Fiberglass Hub with rubber grommet
- Pump Support Hardware
- 1 1/4" Check Valve(s)
- Ball Valve(s)

**SIMPLEX**

□ 24" x 36" P/N 32-0005 WGT. 107

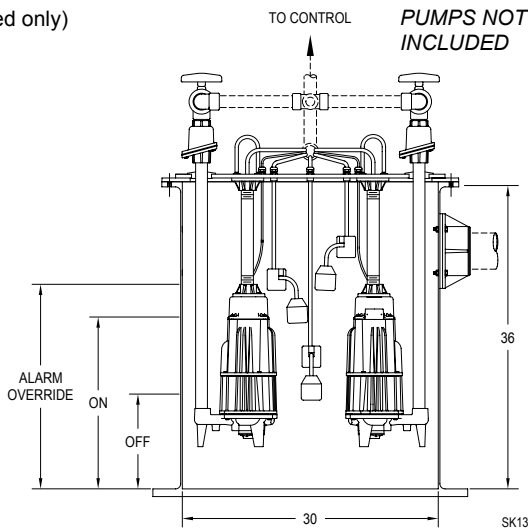
**DUPLEX**

□ 30" x 36" P/N 32-0006 WGT. 154

3-Float System

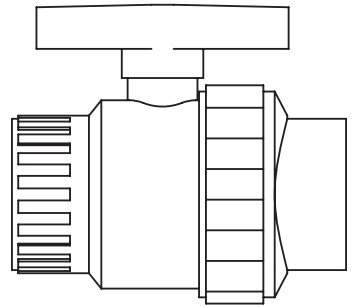
□ 30" x 36" P/N 32-0007 WGT. 154

4-Float System



**(I) BALL VALVE**

- 1 1/4" IPS
  - P/N 30-0165 WGT. 2.0
- 1 1/2" IPS
  - P/N 30-0166 WGT. 2.0
- 2" IPS
  - P/N 30-0167 WGT. 2.5



SK1333

**(G) OUTDOOR BASIN, COVER, AND RAIL SYSTEM ASSEMBLIES - STANDARD EQUIPMENT**

- Fiberglass Basin with Anti-flotation Ring
- 1 1/4" Galvanized pump discharge piping to disconnect
- 1 1/4" PVC Discharge Pipe from Disconnect
- 1 1/4" Adaptaflex Discharge Pipe Seal
- Stainless Steel Square Guide Rail
- 1' Pull Rod
- 8' SS Lifting Cable for basin depths to 84" (12' SS Lifting Cable for basin depths of 96")
- 1 1/4" PVC Ball Valve(s)
- 1 1/4" C.I. Check Valve(s)
- 1-4" Rubber Inlet Pipe Seal (Field Installed)
- Fiberglass Cover

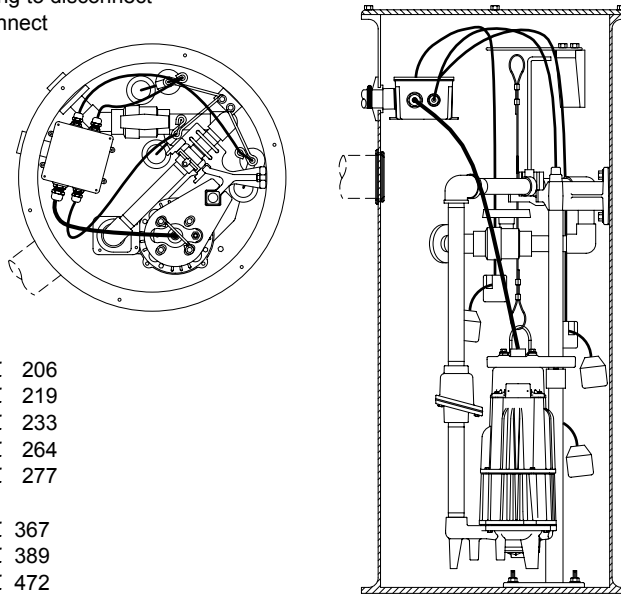
**SIMPLEX**

- 24" x 48" P/N 33-0022 WGT. 206
- 24" x 60" P/N 33-0023 WGT. 219
- 24" x 72" P/N 33-0024 WGT. 233
- 24" x 84" P/N 33-0057 WGT. 264
- 24" x 96" P/N 33-0025 WGT. 277

**DUPLEX**

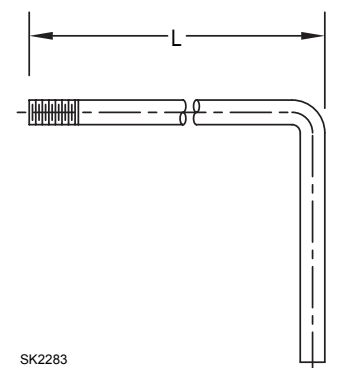
- 36" x 48" P/N 33-0034 WGT. 367
- 36" x 60" P/N 33-0035 WGT. 389
- 36" x 72" P/N 33-0036 WGT. 472
- 36" x 84" P/N 33-0059 WGT. 499
- 36" x 96" P/N 33-0037 WGT. 525

**OPTIONS:** • All SS Fitted • Larger Diameter or Deeper Basins (Allow for Overhead Clearance)



**(J) PULL RODS FOR SQUARE GUIDE RAIL SYSTEMS ONLY (Field Installed Systems)**

- 1 Ft. "L"
  - P/N 39-0069 WGT. 0.5
- 2 1/2 Ft. "L"
  - P/N 39-0006 WGT. 1.0
- 3 1/2 Ft. "L"
  - P/N 39-0007 WGT. 1.5
- 4 1/2 Ft. "L"
  - P/N 39-0008 WGT. 1.5
- 5 1/2 Ft. "L"
  - P/N 39-0009 WGT. 2.0



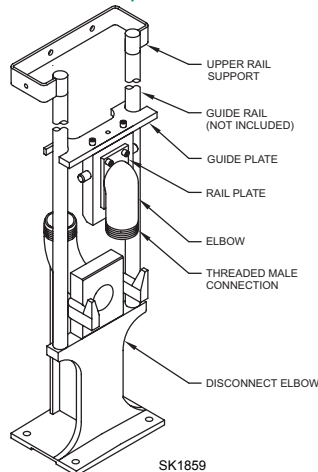
**(H) RAIL SYSTEMS - (FIELD INSTALLED)**

**E-Z out Rail System for 1 1/4" pump discharges (Rail System discharge is 2" NPT male thread)**

- Galvanized Fitted**
  - P/N 39-0087 WGT. 43
- Stainless Steel Fitted**
  - P/N 39-0088 WGT. 43

**Intermediate Stabilizer Bracket for every 12' of depth.**

- Galvanized**
  - P/N 39-0089 WGT. 6.0
- Stainless Steel**
  - P/N 39-0090 WGT. 6.0



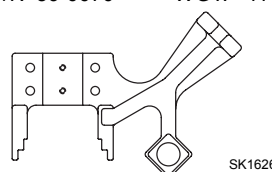
**Square Guide Rail System for systems less than 96" deep**

- BASIN DEPTH**
- 48" P/N 39-0054 WGT. 90.5
  - 60" P/N 39-0055 WGT. 94.5
  - 72" P/N 39-0056 WGT. 98.5

Fits both round and square basins  
Includes Square Guide Rail.

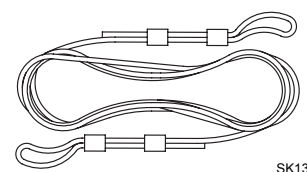
Basins over 72" deep require one additional angle arm bracket.

- P/N 39-0070 WGT. 11



**(K) SS LIFTING CABLE (Field Installed Systems)**

- 8 Ft.**
  - P/N 39-0031 WGT. 1.0
- 12 Ft.**
  - P/N 39-0032 WGT. 1.0
- 16 Ft.**
  - P/N 39-0033 WGT. 1.0
- 20 Ft.**
  - P/N 39-0034 WGT. 1.0
- 24 Ft.**
  - P/N 39-0035 WGT. 1.0



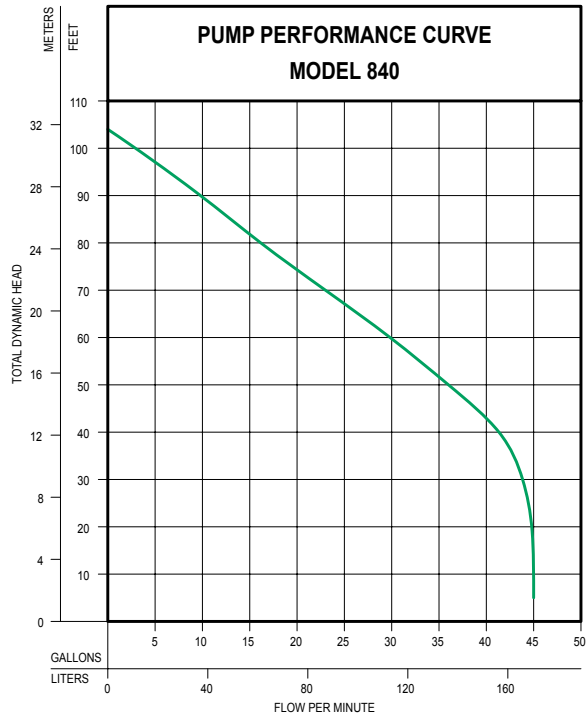
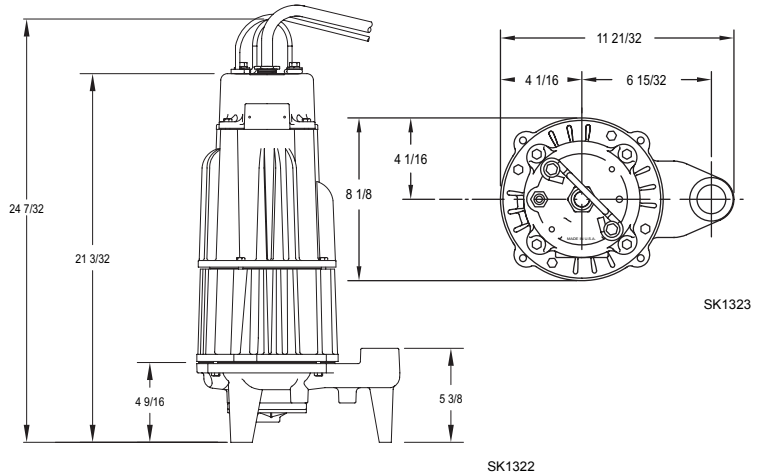
# PREPACKAGED AND JOB READY SYSTEMS

SIMPLEX		INDOOR	DUPLEX	
<b>REQ.</b>			<b>REQ.</b>	
1 Grinder	P/N _____ (A)		2 Grinders	P/N _____ (A)
1 Simplex Control Panel	P/N _____ (B)		1 Duplex Control Panel	P/N _____ (B)
1 Variable Level Fl. Sw. Assm.	P/N _____ (C)		1 Variable Level Fl. Sw. Assm.	P/N _____ (C)
1 Basin, Cover and Hardware	P/N _____ (F)		1 Basin, Cover and Hardware	P/N _____ (F)

SIMPLEX		OUTDOOR	DUPLEX	
<b>REQ.</b>			<b>REQ.</b>	
1 Grinder	P/N _____ (A)		2 Grinders	P/N _____ (A)
1 Simplex Control Panel	P/N _____ (B)		1 Duplex Control Panel	P/N _____ (B)
1 Variable Level Fl. Sw. Assm.	P/N _____ (C)		1 Variable Level Fl. Sw. Assm.	P/N _____ (C)
1 J-Box	P/N _____ (E)		1 J-Box	P/N _____ (E)
1 Basin, Cover and Rail System	P/N _____ (G)		1 Basin, Cover and Rail System	P/N _____ (G)

## FIELD MOUNT SYSTEMS

SIMPLEX	
<b>REQ.</b>	
1 Grinder	P/N _____ (A)
1 Simplex Control Panel	P/N _____ (B)
1 Variable Level Fl. Sw. Assm.	P/N _____ (C)
1 Junction Box	P/N _____ (E)
1 Rail System	P/N _____ (H)
1 Angle Arm/Intermediate Bracket*	P/N _____ (H)
1 Pull Rod**	P/N _____ (J)
1 S.S. Lifting Cable	P/N _____ (K)
DUPLEX	
<b>REQ.</b>	
2 Grinders	P/N _____ (A)
1 Duplex Control Panel	P/N _____ (B)
1 Variable Level Fl. Sw. Assm.	P/N _____ (C)
1 Junction Box	P/N _____ (E)
2 Rail Systems	P/N _____ (H)
2 Angle Arm/Intermediate Bracket*	P/N _____ (H)
2 Pull Rods**	P/N _____ (J)
2 S.S. Lifting Cables	P/N _____ (K)



\* Required for basin depths over 72" (Square Guide Rail) and over 12' (E-Z Out Rail). Allow for overhead clearances.

\*\* For Square Guide Rail only.

Access Doors Available on Field Mount Systems - Consult Factory

Special Basin Configurations - Consult Factory

Junction Box Mounting & Assembly - Consult Factory

Manufacturers of . . .

**"QUALITY PUMPS SINCE 1939"**