

"QUALITY PUMPS SINCE 1939"

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

ZOELLER
PUMP CO.



SECTION: 2.50.040

FM1232

1112

Supersedes

0408

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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

THE SHARK[®]

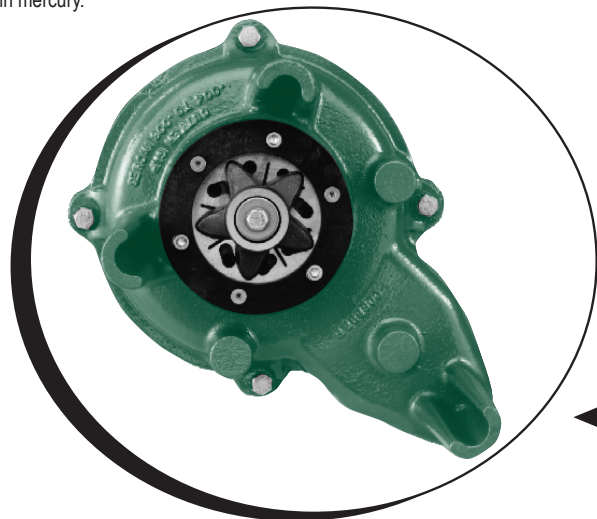
Series

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



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 ϕ	17.2
<input type="checkbox"/> 840-0005	137	I840	200	1 ϕ	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' power cord - 20' sensor cord
- UL listed

OPTIONS:

- ☐ Extended cord lengths
- ☐ Anti-siphon device

**requires circuit in control panel to function

(B) CONTROL PANELS

SIMPLEX			DUPLEX	
NEMA 4X			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
- Thermal cut-out circuit (3 phase only)
- 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 (3 Phase)
- Alternating circuit (duplex)
- Automatic reversing circuit
- High water alarm light
- Internal seal leak light
- HOA switches and pilot light(s)
- Terminal strips
- Padlock hasp
- Capacitors/start relay (single phase)

OPTIONS:

- ☐ Audible high water alarm
- ☐ Flasher for high water alarm light
- ☐ Manual reset of high water alarm
- ☐ Intrinsically safe relays
- ☐ 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

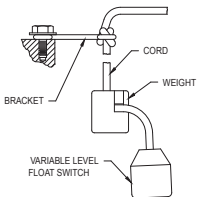
OUTDOOR SYSTEM

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

SIMPLEX REVERSING CONTROL BOXES*

AUTOMATIC			MANUAL	
MODEL	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"/> 10-0353	12	<input type="checkbox"/> 10-0361	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.

(D) CHECK VALVES

1 1/4" Cast iron NPT female

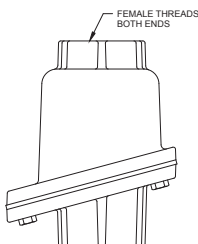
- ☐ P/N 30-0163 wgt. 7.5

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

(E) JUNCTION BOXES - TYPE 4X

SIMPLEX

5 holes with seals for (1) power cord, (1) sensor cord, (3) float switch cords.

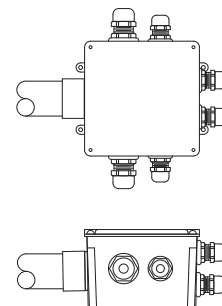
- ☐ P/N 10-0331 Wgt. 2.5 3-float system

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 (epoxy coated only)
- Inspection plate
- Individual pump covers
- 3" Adaptaflex vent seal
- 1½" Adaptaflex discharge pipe seal(s)
- Cord seal(s)
- 1-4" Rubber inlet pipe seal (field installed)
- Pump support hardware
- 1½" Check valve(s)
- Ball valve(s)

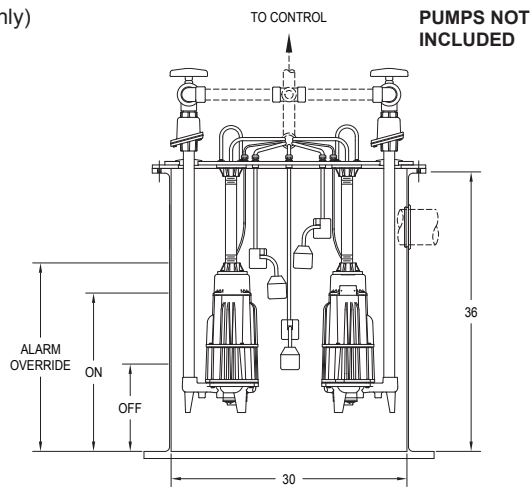
SIMPLEX

□ 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



PUMPS ROTATED 90° TO SHOW FEATURES

SK1326

(I) BALL VALVE

1¼" IPS

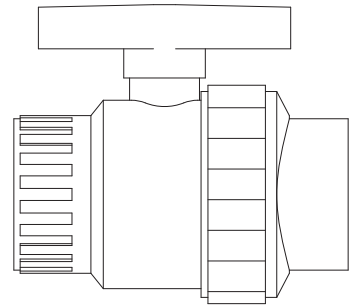
□ P/N 30-0165 Wgt. 2.0

1½" 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
- 1¼" Galvanized pump discharge piping to disconnect
- 1¼" PVC discharge pipe from disconnect
- 1¼" 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")
- 1¼" PVC ball valve(s)
- 1¼" 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

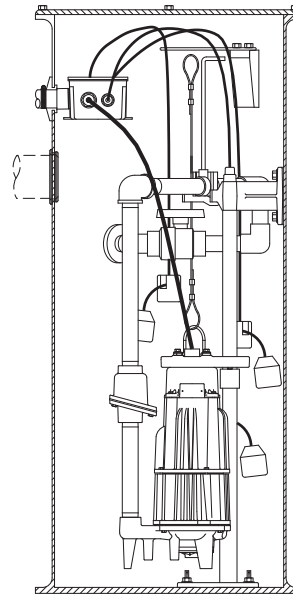
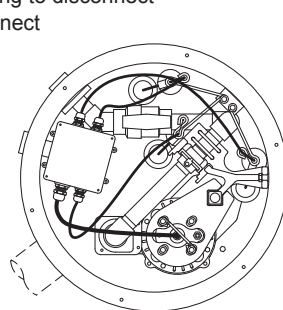
□ 36" x 48" P/N 33-0034 Wgt. 367

□ 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



PUMP NOT INCLUDED

SK1607

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

2½ Ft. "L"

□ P/N 39-0006 Wgt. 1.0

3½ Ft. "L"

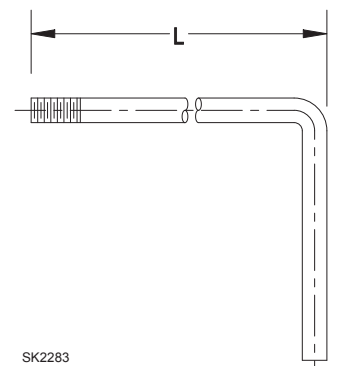
□ P/N 39-0007 Wgt. 1.5

4½ Ft. "L"

□ P/N 39-0008 Wgt. 1.5

5½ Ft. "L"

□ P/N 39-0009 Wgt. 2.0



SK2283

(H) RAIL SYSTEMS - (FIELD INSTALLED)

E-Z out Rail System for 1¼" 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

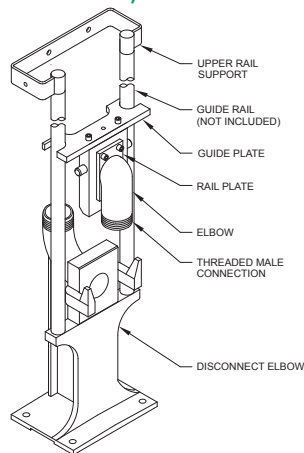
Intermediate Stabilizer Bracket for every 12' of depth.

Galvanized

□ P/N 39-0089 Wgt. 6.0

Stainless Steel

□ P/N 39-0090 Wgt. 6.0



SK1859

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

BASIN DEPTH

□ 48" P/N 39-0054 Wgt. 90.5

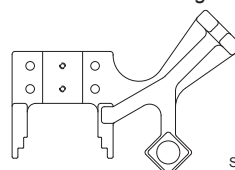
□ 60" P/N 39-0055 Wgt. 94.5

□ 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



SK1626

(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.

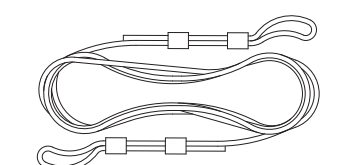
□ P/N 39-0033 Wgt. 1.0

20 Ft.

□ P/N 39-0034 Wgt. 1.0

24 Ft.

□ P/N 39-0035 Wgt. 1.0



SK1335

PREPACKAGED AND JOB READY SYSTEMS

SIMPLEX		INDOOR	DUPLEX	
REQ.		REQ.		
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	
REQ.		REQ.		
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 float 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	
REQ.	
1 Grinder	P/N _____ (A)
1 Simplex control panel	P/N _____ (B)
1 Variable level float 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 Stainless steel lifting cable	P/N _____ (K)

DUPLEX	
REQ.	
2 Grinders	P/N _____ (A)
1 Duplex control panel	P/N _____ (B)
1 Variable level float 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 Stainless steel 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.

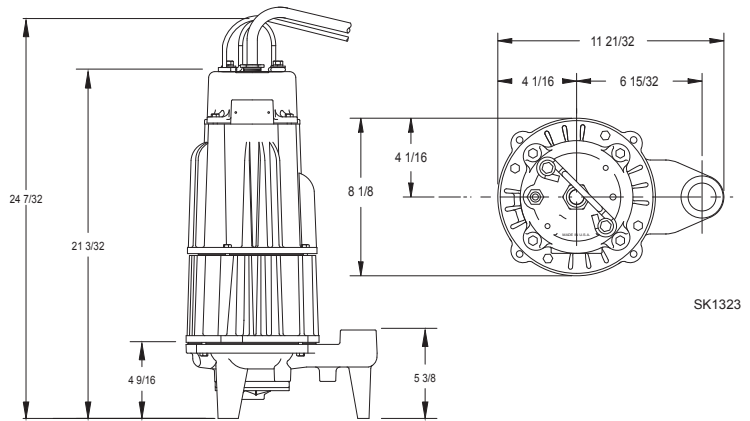
Access doors available on field mount systems - consult factory

Special basin configurations - consult factory

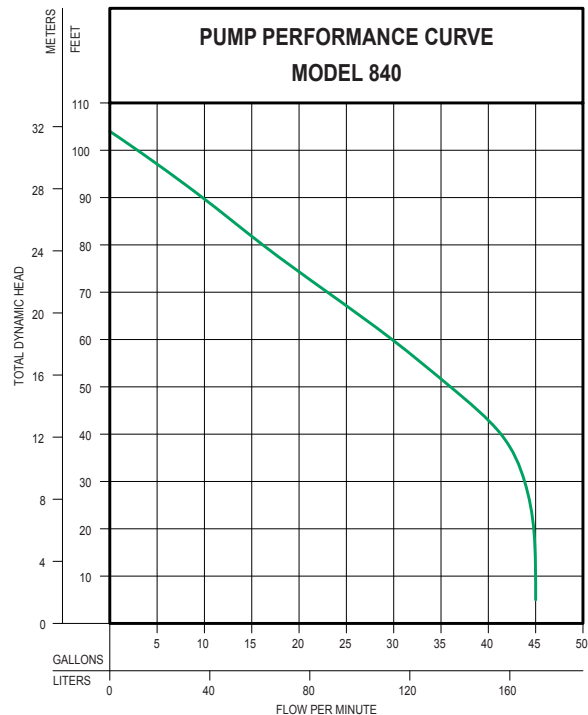
Junction box mounting & assembly - consult factory

Manufacturers of...

"QUALITY PUMPS SINCE 1939"



SK1322



009960A